



ROMÂNIA
MINISTERUL EDUCAȚIEI, CERCETĂRII, TINERETULUI ȘI SPORTULUI
UNIVERSITATEA DE ȘTIINȚE AGRICOLE ȘI MEDICINĂ VETERINARĂ
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SELF EVALUATION REPORT



Tradition and modernity

Cluj-Napoca, 2012



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1. INTRODUCTION

The international institutional evaluation process of the University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca conducted by the European University Association (EUA) is taking place within the context of major reforms in the Romanian higher education system, and specifically in accordance with the provisions of the new Law on Education that came into force in January 2011. The law requires that the national university classification exercise be followed by the institutional evaluation of all universities, carried out by an international agency. The European University Association (EUA) has been selected by the Romanian authorities to carry out this task.

The university's representatives attended the workshop for universities organized in Bucharest on the 10th of January 2012 by the Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI) and the European University Association (EUA). On the 26th of January 2012, the University's Senate was informed on the international institutional evaluation process and about the requirements presented in the "Guidelines for institutions – Institutional Evaluation Program: Performance in Research, Performance in Teaching – Quality, Diversity, and Innovation in Romanian Universities Project - the January 2012 version", issued by the European University Association (EUA) through its Institutional Evaluation Program (IEP) which is on the European Register of Quality Agencies (EQAR).

To ensure the success of the self-evaluation process, on the 7th of February 2012 the University's Administration Council nominated the University's Self-evaluation group appointed to coordinate the self-evaluation process and to provide the University's Self-evaluation report in accordance to the IEP Guidelines. The members of the University's Self-evaluation group (SEG) are as follows:

- Mrs. Carmen SOCACIU, Professor – Vice rector for Research – Chairperson of SEG;
- Mr. Ioan ROTAR, Professor – Vice rector for Academic;
- Mr. Augustin VLAIC, Professor – Vice rector for Institutional Development;
- Mr. Adrian OROS, Lecturer – Vice rector for Social and Students activities
- Mrs. Ioana POP, Lecturer – Vice rector for Quality and Human Resources;
- Mr. Andrei MIHALCA, Lecturer – Vice rector for International Relations;
- Mrs. Roxana VIDICAN, Professor – Dean of the Agriculture Faculty;
- Mr. Radu SESTRĂȘ, Professor – Dean of the Horticulture Faculty;
- - Mrs. Vioara MIREȘAN, Professor – Dean of the Animal Science and Biotechnology Faculty;
- Mr. Cornel CĂTOI, Professor – Dean of the Veterinary Medicine Faculty;
- Mr. Doru SABĂU, Eng. Ph D – Head of the Research Department – Secretary of SEG;

Aiming at a broad view of the University the SEG members represent the major constituencies of the University, and are in a good position to judge the University's strengths, weaknesses, opportunities and threats.

The present Self-Evaluation Report is the result of the process developed within the institution during February – March 2012 by the Self-evaluation group (SEG) and under the responsibility of the Rector. The data collection was performed by SEG in collaboration with all the institutional structures, secretary's offices, university administration, faculties, support departments and offices. The data were analyzed by SEG in a transparent self-evaluation process, including consultation meetings (between February and March 2012) on different topics and at different levels: faculty/chair management structures (for analyzing the academic management and quality assurance/quality evaluation processes); students and academic staff representatives (considering the educational and research departments), and the doctoral school. The participants were invited to disseminate the information within the group members they represent and to formulate the feedback for the discussion points. The collected inputs have allowed the final formulation of the self-evaluation report. The institutional management strongly supported the whole self evaluation process, by outlining the aim and the responsibility of SEG towards the entire university community, within

the Senate meetings and by discussions held with the administrative staff representatives. Consequently, the work of the self-evaluation group was supported by all institutional structures.

2. INSTITUTIONAL CONTEXT

2.1. A brief historical overview

The University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca is the continuer of the prestigious high school of agriculture from Cluj that was founded 143 years ago, based on a long tradition dating back to the fifteenth century with agriculture topics that were taught by Jesuit monks in the *trivium* that was set on the present site of the university campus. The history of the University of Agricultural Sciences and Veterinary Medicine Cluj Napoca began in October 1869 when on the former domain of Mănăștur, one of the oldest European higher schools for agriculture named "The Institute of Agronomic Studies Cluj-Mănăștur" was founded, located within the premises of a former convent. In 1906 the Institute reached the level of academy, becoming "The Academy of Agriculture Cluj". For almost 50 years from when it was founded and until the end of the second decade of the last century, the Academy activity was based on one department only, Agriculture, whose studies lasting for three years and which awarded the title of "Agronomist diplomat" grade. The Academy of Agriculture Cluj continued its activity until the beginning of World War I.

The creation of the Romanian United National State in 1918 marked the beginning of a new stage in the evolution of "The Academy of Agriculture Cluj". Starting with 1921, the studies agronomic academic education in Romania become of four years of study, of which three were for theoretical studies and the fourth year consisted of an internship within farms. Since 1922, the graduates received the degree of "Agronomic engineer". In 1929, following the reorganization and modernization of the Romanian higher agronomic education, the Academy became the "The Academy of High Agronomic Studies Cluj". The duration of studies was increased at that time to five years, and was organized on two cycles: "general education" (core subjects) lasting three and a half years, and "specialized education" extending over one and a half years. Through these studies, the Academy formed both agronomic engineers and researchers in various branches of agricultural sciences.

Following the Vienna Dictate, from 1940 to 1945 the Academy (faculty, students, and part of its inventory) took refuge in Timisoara, where they carried out their activity as the "Faculty of Agronomy Cluj – Timișoara". In 1945 the Academy returned to Cluj and reorganized in 1948 as "Agricultural Institute".

Initially the Institute operated only with a Faculty of Agriculture. In 1935 within the Faculty of Agriculture it was established a department of Animal Science that was transformed, in 1968, into the Faculty of Animal Science. In 1992 new biotechnology studies were developed so the faculty became the Faculty of Animal Science and Biotechnology. The Faculty of Veterinary Medicine was founded in the year 1962 and the Faculty of Horticulture in the year 1977.

Starting with 1990, the Agronomic Institute activity was organized into four faculties: Agriculture, Horticulture, Animal Husbandry and Biotechnology and Veterinary Medicine, having a total of 1,750 students. On the 28th of July 1995 in accordance to the Government Decision No. 586, the institution received its present name as "University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca".

An important historical evidence on the important role of our institution both in the development of the Romanian agricultural education and in that of our society is presented in the volume "*Tradiție și Inovație în Învățământul Agricol din Transilvania – Vol.I De la începuturi până în 1945*" (Tradition and Innovation in Agricultural Education in Transylvania – Volume I From the beginning until 1945), published at the end of the year 2011 and being the first volume of an ample history of The University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca.

Since 1999 Romanian universities started to reform in accordance to the Bologna system, aiming to integrate into the European Higher Education Area. Being aware about the necessity of an international evaluation to assess the university improvement and the status of its quality assurance system, USAMV Cluj-Napoca decided in 2003 to apply for the EUA institutional evaluation. The final Evaluation report issued by EUA in July 2003 (see: [Appendix – Institutional evaluation process](#)), underlined by its conclusion that: "USAMV can be a source

of pride for its members, a pride that they say has characterized staff and students in the past, and which they can rightfully feel also in the future.” The other advices suggested by EUA evaluators were beneficial for the future university strategy and based the new university’s mission assumed in 2005, that of “Research University”. Focusing especially on research activity and funds raising for research investments, the university was awarded by the Ministry of Education, Research and Youth, in 2007, by the *Ministry Order No. 2784/13th of December 2007*, for being the best Romanian research university, running 321 projects with only 268 staff and getting more than half of its budget from research and innovation activities.

In 2009, USAMV Cluj-Napoca decided to apply for an external evaluation performed by ARACIS (Romanian member of the European Association for Quality Assurance in Higher Education – ENQA). After the evaluation ARACIS published the “*Report on external academic quality assessment*” which states that the University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca is rated as “*University of High trust degree*” (the highest rank for a Romanian university). In 2009 USAMV Cluj-Napoca also decided to review its internal management system in accordance to the provisions of the international standards. The implementation of the EN ISO 9001:2008 requirements for teaching, research and administration processes was certified by TUV Austria CERT (see: *Appendix – Institutional evaluation process*).

Two years ago the University lunched a new Charter with a new mission, that of “advanced research and education”, anticipating the new development in Romanian education system and making a step forward to the new Education law and the universities national classification process. After the 2011 National evaluation, coordinated by the Ministry of Education, Research, Youth and Sport, USAMV Cluj-Napoca was classified in the top 12 of the best Romanian universities, being nominated on the 5th position in the first class, of universities of “advanced research and education”. The study programs national classification confirmed the leading position of our university, most of the research domain being ranked in class “A” and USAMV Cluj-Napoca being the best Agriculture (life Science) university in Romania and the only one receiving PhD grants (see: *Appendix – Report on the 2011 National classification exercise*).

Today the university has up to 7.000 students, four times more than 20 years ago, with well known international activities, receiving more than 200 foreign students which study in English and French, having also a branch in Italy, the only such branch evaluated by ARACIS. The new EUA evaluation will be essential for the university’s future roadmap to excellence and for the further quality assurance policy.

2.2. The legal status and autonomy

The University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca is a public higher education institution, member of the Romanian National Higher Education System. By the *Romanian Government Decision No. 916 of 11th of August 2005*, the university was organized in four faculties: Faculty of Agriculture, Faculty of Horticulture, Faculty of Animal Science and Biotechnology, and Faculty of Veterinary Medicine. Using its granted autonomy, the University Senate approved on the 28th of February 2012 the establishment of a new Faculty of Food Science. Based on the opportunities provided by the new Education law, our university has reorganized itself in 14 departments, decentralizing the budget for a better management and quality assurance, and giving a greater responsibility to the academic community for the future national ranking of the study domains.

2.3. Geographical position and location

The University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca is located in Cluj-Napoca, a cosmopolitan city (German: *Klausenburg*; Hungarian: *Kolozsvár*; Medieval Latin: *Castrum Clus, Claudiopolis*), located on the Someșul Mic river. Between 1790–1848 and 1861–1867, Cluj was the official capital of the Grand Principality of Transylvania. Geographically it is roughly equidistant from Bucharest (439 km), Budapest (451 km) and Belgrade (473 km).

Nowadays more than 310,000 inhabitants live within the city limits, while the population of the peri-urban area exceeds 400,000 residents. With its eight universities, Cluj-Napoca receives annually a population of more than 90.000 students, making it the second largest university center in Romania.

The University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca main campus, of about 16 hectares, *is situated in the west part of the city*, including a 6 hectares park and a botanical garden. The second campus, for food science, is close to the central one, making the university one of the most compact campuses in the area. The university owns more than 1.000 hectares of land for teaching and experimental research, and students practice, organized in a Teaching and experimental research Station, with four locations within Cluj neighborhood, where more than 1,000 students practice 10 months out of a year.

Being situated in the central part of Transylvania (85.000 km²) and the only agricultural university in this area, the university receives most of its students (78%) from this important agricultural region. The rest of the students are coming from the other parts of the country, being attracted by the quality of the studies and the city opportunities.

2.4. Current regional and national labor market situation

The Romanian labor market has changed significantly since the 90's, being strongly affected by the transition to the market economy, EU membership, the reduction of the heavy industry and the existing centralized agricultural system. Despite all these inconveniences Cluj county is nowadays one of the most dynamic region of Romania, having a major contribution to the economic development, mainly due of its highly qualified human resources. Cluj-Napoca, a university City with four universities ranked within the first class of "advanced research and education", has a low unemployment rate, of less than 2%, offering for the local agriculture and the private sector new job opportunities. We need to consider that agriculture, even with the dramatically reduction of the agricultural population, from 42% in the 90's to 31% nowadays and probably 15% in 2025, will remain important for Romania. It has to be underlined that one third of our students families own agricultural land.

2.5. Structure, students and staff

USAMV Cluj-Napoca is using for more than ten years the Bologna system, with a particular BSc of four years (4+2+3). The 1st and 2nd study cycles are organized as full-time or long distance/reduced frequency (part-time) study programs, by the four faculties. The 3rd study cycle (PhD), as well as post-doctoral studies, is organized by an Interdisciplinary Doctoral School, with five specializations of full-time study. As a research university, the MS and PhD activities are completed within 23 research centers and laboratories, as well as 3 Research Institutes (The Life Sciences and other two under construction).

The structure of the university is designated to fit the activity for the undergraduate studies (BSc), the graduate studies (MS) and the postgraduate studies (PhD and post-doc). The university's infrastructure was completely renewed in the last 4 years, offering a lot of opportunities and facilities for students and staff, and will include in the near future, a new library, a new student residence, a students' restaurant and other developments that will make the university more attractive and adequate for a capacity of about 7.000 students.

USAMV Cluj-Napoca includes 4 faculties: Agriculture, Horticulture, Animal Science and Biotechnology and Veterinary Medicine. The university's students (the 1st, 2nd and 3rd study cycle) are enrolled into the faculties as follows: 2,166 in Horticulture, 1,882 in Agriculture, 1,427 in Veterinary Medicine, and 745 in Animal Sciences and Biotechnology. The current number of USAMV Cluj-Napoca registered students is of 6,220 students out of which 4,869 are enrolled in the bachelor studies, 1,001 are master students and 350 are doctorate students. Also, 30 young researchers are enrolled in postdoctoral studies (see: [Appendix – Students](#)). The number of students during the last years was of about 6,400 students and we estimate that as a result of the new "A" classification the university will keep this rate in the following five years.

As a result of a good university's strategy and the adaptation to the market requirements, the number of students increased during the past 20 years from 1,720 in 1990, to 3,850 in 2000 and 6,220 in 2011. We emphasize especially the increase in the number of graduate students in the last five years, from 375 to more than 1.000 today, and the facts that USAMV Cluj is nowadays the only Romanian agricultural university qualified for PhD study.

Taking into consideration the demographic decrease registered in Romania in the last 20 years (of about 22%) and the great emigration rate (more than 2 million, i.e. 10% of population), we are aware of the major impact that this can have on the prospective young population. Therefore, the university's strategy was focused in the last year to extend the study in Romanian abroad, by our extension in Italy, and to attract foreign students to study in our university in English and French.

The total number of USAMV Cluj-Napoca staff is of 572 that includes 366 academics, 127 didactic auxiliary staff and 79 persons as administrative staff. Also, 59 persons are employed as research staff: 9 researchers and 50 research assistants. Each faculty has its departments that are structured based on the specific areas of competence and technical domains, specific to each study program. The academic staff is composed of 66 professors, 48 associate professors, 129 lecturers, 115 assistants and 9 preparatory (see: [Appendix – Academic staff](#)).

3. NORMS AND VALUES, MISSION AND GOALS

3.1. Governance and management

The vision of USAMV Cluj-Napoca focuses on Excellence in Research and Education, competitiveness at national and International level, and Societal Integration as an entrepreneurial university connected to the socio-economic environment of the region and at national scale.

As a “first class” university of “advanced research and education” according to the 2011 National classification, the university aims to reinforce its leading role in promoting the *Sustainable Development of the Academic excellence and related activities integrated into the European Higher Education and Research Areas*, for the benefit of the national and international community.

The mission of USAMV Cluj-Napoca as an “advanced research and education” institution aims to secure a knowledge-based development of research, innovation and technology transfer in its specific areas of competence: Life Sciences (agriculture and horticulture, animal science, food science, veterinary medicine), as well as in the related areas of engineering/(bio)technology and economics in agrifood.

USAMV Cluj-Napoca took full advantage of its academic autonomy and, according to the provisions of the Education Law No. 1/2011, produced a renewed and updated Charter of the University that was approved by the newly elected Senate in its first meeting, on the 26th of January 2012. The USAMV Charter includes the mission and the strategy regarding the University development for the next 4 years, the university's objectives, as well as the regulations concerning the management of every compartment of the university (49 regulations). All these documents are known by the university's community and are presented on the [university's website](#).

According to its Charter, USAMV Cluj-Napoca has as mission the professional formation at university level and the scientific knowledge production by research and innovation. The assumed mission is realized by education and advanced scientific research. The University will fulfil its mission by promoting excellence in education, research and innovation, by initial and post-university formative programs, by long-life learning system, and by the integration of the universal values in accordance with the requirements of a knowledge-based society.

The Strategic Plan of USAMV Cluj-Napoca 2012-2016 (see: [Appendix – Strategic plan](#)) sets as main objective the consolidation of the university's position as the best performing academic agricultural institution at the national level by developing and providing advanced knowledge in the areas of competence, fully integrated into the European Higher Education and Research Areas and validated by the international recognition. The strategic plan is different from the earlier ones, due to the profound changes under consideration concerning the current societal era, marked by the effects of the world economic crisis and substantial budgetary decreases in the society.

USAMV Cluj-Napoca organizational structures. The university's organizational chart took into consideration the changes in the election of the university management: the establishment of a delimitation between the Senate, as the main legislative coordinator of the university, and the executive management, represented by the rector, 6 vice rectors, 4 deans, a director for Doctoral Studies and the Administrative General manager

(see: [Appendix – Management and organizational chart](#)). Each faculty has its own management structure that includes 3 vice-deans (for academic programs, research-international relations and for social-student issues), the heads of departments and the representatives of each department in the Faculty council (see: [Appendix – Faculties chart](#)). Each department has responsible staff for each of its activities, reflecting the “up-down university’s management line”. According to the organizational chart, the management for the academic and research, quality assurance, human resources, international relations, institutional development and social-students issues related activities, are comprised in the university management structure, in connection with the administrative and support departments and services (see: [Appendix – Central administration and support services chart](#)).

The coordination of the executive activities is done by the Council of Administration which includes, under the leadership of the rector, the vice-rectors and the faculty deans, the administrative general manager, and the students’ prefect. The Senate, coordinated by the president, assures the control of the activities’ legality and, by its legislative power, takes decisions and may modulate the executive-management power (the Administration Council).

A continuous improvement process, by the de-centralization of the management responsibilities, is envisaged in the next 4 years in order to:

- Consolidate the strategic management that implements the national/EU legislation and the internal USAMV Cluj-Napoca management decisions;
- Increase the decision-making responsibility at faculty and departments levels, by expanding the participatory approach
- Implementation of innovative strategies promoted by the university, including the development of specific entrepreneurial-support entities.

The **Human Resources Policies** in USAMV Cluj-Napoca mainly focuses the following issues:

- Permanent increase in the quality of the academic staff by: recruitment of highly qualified young specialists, full utilization of the extensive array of expertise of the academic staff, and by staff promotion based exclusively on professional performance criteria;
- Continuous improvement of the competencies of the academic, non-academic and administrative staff, including specific courses offered by USAMV Cluj-Napoca (i.e. didactics, IT, foreign languages, quality management, etc.), and support for staff mobility and experience exchanges.

USAMV Cluj-Napoca is relying its own development strategy and policy on a well established framework of internal quality evaluation and assurance system. Having implemented this system for more than 10 years ago, the Quality culture and **Quality Assurance Policy (QAP)** are well defined, in line with the current USAMV Cluj-Napoca development and the national standards, and consider multiple targets (re)formulated according to Education Law 1/2011. According to the international and national context, the university established its own set of internal quality standards and developed the appropriate strategy by a process coordinated by the Rector. Together with the vice-rector for Quality Assurance and Human Resources, the Department of Quality Assurance is responsible for the sustainability of the quality assurance system (QAS) implementation. QAS is yet structured at all levels, from departments, to faculties and university, including the specific quality standards for teaching staff, researchers and postdoctoral scholars, non-academic and administrative staff, as well as for students (including PhD students).

Based on actual management performances, is envisaged a continuing improvement of the flexibility in decision making, transparency and communication, through the development of an extended information system.

3.2. Academic profile

USAMV Cluj-Napoca has full autonomy in defining and implementing its educational strategy and objectives which aims its excellence in the competence areas of agriculture-food-animal science, related

(bio)technologies, veterinary medicine, in order to maintain its competitiveness, at both national and international level.

We aim for a continued **improvement of the content of teaching study programs** by harmonization with the European programs and according to the national and international standards. This represents a key-objective in improving the quality of education, increasing of the national/international competitiveness and collaboration, exchanges by academic mobility.

Based on our previous excellence and performance in research, the **knowledge-based development of innovative research projects** is also a main target of the university, strongly integrated with the education programs, especially at post-bachelor level (post-doc level, PhD and master).

The practical training of students and the services offered to the economic partners at national level and especially in the region of Transylvania, is the third priority target, which needs a special attention in the next period.

In this context, an integrated approach is aimed, to achieve a good balance between teaching and practical training, advanced research, and services for the society.

A good prerequisite for these strategic targets is the acquired performance over the last 8 years. USAMV Cluj-Napoca consolidated its position as a “first class” university with *Advanced Research and Education* and aims a good quality teaching process, from bachelor to interdisciplinary Master and PhD programs. The implementation of Bologna process in our teaching system more than 8 years ago, was essential in changing and harmonizing the study programs at national and international level. All graduate, postgraduate and doctoral study programs offered by USAMV Cluj-Napoca are in line with the Bologna process, as defined by the Romanian legislation. Accordingly, there is a coherent action plan in developing integrated study programs at Bachelor-Master-Doctoral (B-M-D) levels, on areas of competence for each of the university’s faculties (see: [Appendix – Bachelor study programs](#) and [Appendix – Master study programs](#)), and are compatible with the Research-and-Technology Development (RTD) activities developed in the university (see: [Appendix – Research topics](#)).

Complying with the Bologna Process, USAMV Cluj-Napoca aims to widely implement a **student-centered approach**. The variety of academic areas results in a diversity of educational approaches: tutoring small student groups or applied education and problem/project-based teaching, increasing students’ practical works and technological practice, adapted to the “three Bologna cycles” as specific for the Romanian universities belonging to “Engineering Sciences”, 4+2+3 years.

The educational purposes are related to the formation of students’ specific competences in their qualification by a continuous improvement of a **student-centered approach**. This approach is also a main priority for the next years, considering the students personality and their increased responsibility by more independent work and more practical skills. A significant number of our graduates are involved in the decision-making processes, both in public and private sectors, at regional/national level, while many of them are working worldwide, in companies, RTD institutions, or universities.

Special attention will be given to the development of interdisciplinary Master programs, (professional masters, and a specific Research master study program that is useful for the students who want to attend PhD studies). The improvement of Master programs’ quality is essential for us in realizing the integration of the theoretical knowledge (education) acquired during the bachelor studies, with research, innovation and technology transfer. This ensures a good pipeline for the PhD and postdoctoral programs dedicated to young and talented researchers who are working in the university’s Research labs, centers and institutes.

The teachers’ and students’ ability to speak foreign languages is of a special interest for good collaborations at international level, for their mobility by specific Erasmus programs inside or outside Romania, and for the development of their entrepreneurial skills, and represents a prerequisite for an efficient cooperation of the university with other academic or non-academic entities and for a good insertion of our students and *alumni* on the labor market.

At the same time, we have started a process of modernization of knowledge acquisition by advanced IT technologies, knowledge dissemination via e-platforms, and use of new and modern electronic tools for teachers' pedagogical purposes (online courses, online verification). The university's website is improving constantly and offers not only up-to-date information but also new possibilities of interaction between students and teachers, new ways of information concerning publications, PhD dissertations, international and national symposiums.

The University Library is developing its offer, from a good collection of books to the access to scientific on-line databases. The development of the existing eLearning platform is also a target, aiming to be used not only for long-distance learning study programs, but also for more rapid knowledge dissemination to other universities, in Romania or abroad. Some EU-funded projects for educational improvement, e.g. "Quality in Higher Education" (POS DRU) in which USAMV Cluj-Napoca is involved, are contributing to the quality improvement of education at all levels (see: [Appendix – Institutional development projects](#)).

3.3. Academic-related activities

An important goal for USAMV Cluj-Napoca, as the most important academic institution for Agriculture-related areas of competence in Transylvania, is its involvement in the region's social-economic development, and at national level. The valorization of university resources and capability by knowledge transfer, collaborations with external economic partners and the local and regional government, represents key-elements for the development of the academic-related activities. The involvement of the extra-academic entities represents an important component in developing our study programs, joint educational lines, training and research, in collaboration with small and medium size enterprises. These entities partners contribute also at the university development as members in the Council of Institutional development and in other structures of the university governance. They may contribute also to the development of the university infrastructure, as well as by different financial supports as prizes, scholarships provided for the students, and by organizing joint events.

Presently, the university provides lifelong education that will be substantially developed, as the consultancy and technical services.

According to the present situation, USAMV Cluj-Napoca aims to achieve the following objectives:

- **To implement coherent collaborations with the economic, administrative, social and cultural environment of the region** by strengthening the university cooperation with the extra-academic area, by post-university training programs for industry staff, collaboration with the local and county government to attract investors for major development projects of common interest (e.g. the new Park-Botanical Garden "Parvan" established in collaboration with the City Hall of Cluj-Napoca).
- Playing a key role in the major local/ regional projects, as a "*pole of excellence in agrifood, plant/animal nutrition and veterinary research*", especially in the region of Transylvania, but also at a national level.
- To participate actively to new opportunities offered by the Operational Programs financed by EU funds for the regional development (POR), that represent also good opportunities for our university, in the near future, to integrate within Poles of Competitiveness together with other universities, private companies, and the Regional Development Agency (ADR North West)
- **To extend the lifelong learning system and to adjust the educational and practical training offer to the economic beneficiaries needs** by: tailored training offer and resources, attracting and stabilizing human resources at potential employers by scholarships, incentives and financial support, cooperation with employers for implementing a selection and graduates' orientation system, organizing job fairs, etc., by accessing the Lifelong Learning Program (LLP) in pilot projects, and by students practical placement in EU farms, research institutes and industry.
- **To develop partnerships for applied research projects with SMEs or large enterprises, to meet the economy needs** by: joint project subjects involving students at master or PhD level, developing doctoral partnership programs with national/international companies and corporations, providing research and

consultancy, as well technical services to the economic and social partners, to realize effectively the knowledge and the technical transfer of the research results towards the companies.

- **To support the development of new SMEs as university spin-offs**, as they may form an important framework for technology transfer of high-tech products.
- **To ensure permanent connections with the local/regional and national authorities by:** the members of the university management and academic community being elected as members of national councils and ministry boards and commissions (CNFIS, UEFISCDI, ANCS, ARACIS, CNDI, CCCDI)

3.4. Funding

USAMV Cluj-Napoca, as a public higher academic institution, is mainly financed from governmental/public funds, but it has its own resources of self-funding by teaching programs, projects and services, consultancy and technical services, sponsorships, etc. The university total budget had an increasing trend in the last 8 years, in spite of the continued decrease of the public financing. Attracting funds represents a prerequisite for the entrepreneurial attitude of USAMV Cluj-Napoca development.

Considering the balance between the public financing and the self-financing of the university, the average ration in the last 4 years was of around 1 to 1.

Research projects are the best financing source and a value-added know-how. In spite of its “small dimension” among the other Romanian universities, in 2007 USAMV Cluj-Napoca was on the first place in Romania regarding the success rate (nr. of projects/per academic staff) for research projects at national level, especially for PhD students and post-doctoral dedicated projects financed by national programs coordinated by the Research National Agency (ANCS) and National Research Council for Higher Education (CNCSIS) (see: [Ministry Decision No. 2784/13th of December 2007](#)).

USAMV Cluj-Napoca has been successfully involved in a significant number of projects financed by European FP6, FP7 research projects, as well as by participating to COST and Leonardo projects.

3.5. The position of the university at local, regional, national, and international levels

USAMV Cluj-Napoca is aware that, as a key-academic institution in Transylvania, it needs to disseminate not only theoretical knowledge and practical know-how, but also to be a provider and beneficiary of society inputs/outputs by adequate services. The university aims to be a pole of knowledge for the bioeconomy at national level, by its innovation and technology performance.

Therefore, the short term strategy aims to train students from all cycles as professionals in order to satisfy the local/regional needs, to find employment in specific companies, agencies and healthcare, culture and education institutions, as well to provide solutions to international needs. On long term, USAMV Cluj-Napoca is strategically planning to become a leading academic institution, a competitive pole of excellence in education and research for its sustainable development (education and RTD), at local and regional level, a top university in Romanian’s National ranking as well as by the European full recognition.

3.6. Strategic choices made by the institution

By its mission, vision and strategic choices, USAMV CLUJ-NAPOCA is part of the European Higher Education and Research Areas, promoting the values and the action lines of the EU restructuring processes defined by the Bologna and Lisbon Declarations, and considering the Romanian legislation as part of EU requirements. The global changes in higher education, along with local/regional/national needs, were analyzed carefully by USAMV Cluj-Napoca and are included in its strategy and objectives.

Considering its traditional values, the present infrastructure and human resources, the financing, the acquired results and performance, the actual and future society needs, and in connection with the international trends, USAMV Cluj-Napoca formulated its specific vision for Excellence, Competitiveness and Societal Integration. Based on this vision, the next four years strategy will be followed by the university management team, in connection with all internal and external stakeholders, for the university’s sustainable development.

4. GOVERNANCE AND ACTIVITIES

4.1. Governance and management

The effective organization of the governance and activities of USAMV Cluj-Napoca took into consideration the norms and values mentioned above, related to the university strategy, vision and objectives, and were based on the main strategic decisions made during the last 10 years (see: [Appendix – Strategic decisions in the last decade](#)):

- 2004 – First implementation of Quality assurance system in the university, by a SWOT analysis and academic process evaluation
- Since 2004 - Restructuring the educational offer of bachelor diploma, adapted to the society needs, and implementation for ECTS system according to Bologna system
- Since 2005 - Research infrastructure development and implementation of research projects by promoting excellence
- 2009 – Institutional Evaluation and recognition of university to have a “High confidence” for the educational quality, by ARACIS
- 2009 – Management Evaluation, implementation and accreditation of system ISO 9001:2008 by TUV Austria
- 2011 – National classification and recognition of the university to be as an “Advanced research and education” of first class (ranked 5/12)

Analysis of management practice. The USAMV Cluj-Napoca governance and management are formulated according to the strategic goals and objectives, fully respecting the university vision and mission, the specificity of each faculty, and the national and international general context.

Starting with 2011, the new Law of Education empowered the entire academic community in electing the top management structure. The actual management structures of USAMV Cluj-Napoca at the different levels are presented in the Appendices of the Self-evaluation Report (see: [Appendix – Management and organizational chart](#) and [Appendix – Faculties chart](#)). The members in the university’s management structures were elected through a bottom-up process (successive elections at department/faculty council, and university’s Senate, according to the legal provisions of the Education Law No. 1/2011 and the methodology for university’s elections approved by the university’s Senate). The Faculty councils validated at least two candidates for the dean position. The Senate elected its president and the coordinators of Senate commissions.

According to this methodology and to a Referendum among all staff members from the university, the rector was elected by all university’s academic staff and then, by a top-down system, the rector nominated the vice-rectors and selected, upon a public competition, the dean of each faculty from the candidates validated by the faculties councils. Subsequently, the deans nominated the vice-deans.

The University Senate, with democratically elected representatives from each faculty and department (academic staff 75% and students 25%), is the decision making body of USAMV Cluj-Napoca. It also includes, as invited member, the representative of the labor syndicates. The University Senate itself, or by its operative structure - the Senate Board, decides upon the major issues concerning USAMV Cluj-Napoca academic activities and policies, funding issues, the selection and promotion of academic and administrative staff, students admission, development of services towards society.

The operative management structure (Council of Administration) includes the rector, six vice-rectors, the university administrative general manager and the students’ representative (prefect), each member being responsible for specific management activities according to the university strategy and organizational chart.

For teaching activities, e.g. curricula development and revision, selection and promotion of academic staff, students’ admission, the vice-rector for education is responsible. For research related activities, policies, strategies and quality standards, the proposals come from the departments, the research centers and laboratories, and the Scientific Council is proposing the decisions, which have to be validated by the Administration Council.

There are also internal processes concerning the entire institution, such as the selection and promotion of administrative staff, and the development of new services towards society, for which the Senate has to validate the proposals, according to the national and institutional legal regulations and the university's strategic plan.

To support the decision making process and the implementation of the strategic objectives, as well as the quality assurance of the management activities, the following structures operate at university level:

Commissions of the University Senate: Didactic and education commission, Research commission, Administrative and assets commission, Social and students' issues commission, International relations and business environment commission, Ethics commission.

Support departments: **Agriculture Faculty:** Soil science and mechanization, Plant culture, Environmental and plant protection, Food Engineering; **Horticulture Faculty:** Horticulture and Landscape Architecture, Forestry, Economics, Land Measurements and Exact Sciences; **Animal Husbandry and Biotechnology Faculty:** Fundamental disciplines – biotechnology; Technological disciplines - animal husbandry; **Veterinary Faculty:** Preclinical, Animal production and food safety, Paraclinical, Clinics.

University support services: Rector's Office, University Library, Technical and Administration, Finance and Accounting, Social and Student Services, Public Relations. Communication and Public relations are of outmost importance for the academic community and for implementing the university strategy. For that, all the decision of general interest are delivered to the entire community, either on the university intranet, or posted on the university's [website](#).

Student representation. According to the USAMV Cluj-Napoca regulations, the students are considered partners in the academic process, being represented in all the management structures (Faculty Council, University Senate, Academic Council, and Senate Board). In addition, the Ethics Committee and the Committee for Quality Evaluation and Assurance – with its subdivisions at faculty and study program levels – include also members of the student community. The student residences are managed by students and weekly are organized meetings of the vice-deans responsible for students' activities at faculty level with the students' representatives, under the coordination of the Vice-Rector for Social and Students issues. Students are actively involved in promoting the university by educational and sport competitions, e.g. the "Agronomiada" at national level.

Even if important steps have been taken during the last years in order to involve the students into the decision-making process, it seems to be still difficult for the students' federation to communicate with the large students' mass, resulting a limited interest and involvement of the good performing students within the decisions making process, and gaps in disseminating these decisions among the students.

Regarding the **external stakeholders** representing the economic environment, although the USAMV Cluj-Napoca current regulations do not foresee their involvement into the institutional governance, a permanent dialog with the economic and socio-cultural community is carried on, mainly in order to ensure an educational and research offer flexible and updated to the labor market needs.

The university allows distinctions to international and national personalities, i.e. Doctor Honoris Causa and Honorary professor, from other universities, research institutes, economic and socio-cultural environment (local, national, international).

The best academic and administration staff is awarded by the rector at the end of the year, according to the quality of their performance, as evaluated by the department of Quality Assurance.

However, when considering the employability of the graduates and their chances in the labor market according to their competencies, there are still actions to be taken. Periodic surveys concerning the degree of satisfaction of graduates and employers regarding the quality of education delivered by USAMV Cluj-Napoca could be interesting and useful inputs for the academic process and quality improvement. Although a system for collecting the graduates' and alumni opinions on their studies was implemented a few years ago, we

cannot say that it is entirely efficient. USAMV Cluj-Napoca acknowledges it as a weak point and aims to identify ways to improve the situation.

Human Resources. The USAMV Cluj-Napoca specific processes and activities are carried out by 572 employees – 366 academic staff and 206 non-academic staff (didactic auxiliary and administrative staff), quite balanced in terms of gender and age (see: [Appendix – Academic staff](#)). Although the number of students increased constantly over the past five years (see: [Appendix – Students](#)), the number of academic staff has been preserved in certain limits, allowing a balance between the quality assurance of the academic processes and the financial efficiency.

For about 15 years the university has implemented a policy of opening towards the European academic experience, supporting exchange programs for teaching staff in European universities (see: [Appendix – Mobility under ERASMUS Programme](#)), with significant benefits on the quality of education, harmonization of the curricula of study programs and the syllabus at European level, implementation of modern teaching and evaluation methods, etc. Lately, this process was extended at the administrative staff level too.

The recruitment and the promotion of teaching staff is done within the framework of the new national legislation and according to the internal Regulation and Procedure for teaching staff appointment. USAMV Cluj-Napoca annually estimates the current and future need of human resources. It is the responsibility of the vice-rector for Human resources to foresight, in agreement with the faculties' management, the need for teachers in accordance to the quality criteria imposed for obtaining an academic position. Thus, during the past years, the major emphasis lied on attracting the young and valuable graduates towards the academic career, together with defining standards for staff promotion in the academic hierarchy, exclusively based on professional performance criteria. A sensitive point is represented by the national regulations regarding personnel hiring/promoting that are applied in the last years to all the public institutions and providing a drastic hiring limitation (one hire for 7 departures).

The research staff currently consists mainly of members of the academic staff involved in RTD projects financed by international/ national grants and contracts, and 59 research staff out of which: 9 researchers and 50 research assistants. USAMV Cluj-Napoca human resource policy encourages the development of highly qualified professionals, by doctoral and post-doctoral programs, as future full time researchers or academics. The right to organize the 3rd cycle of studies - Doctoral School - in new domains in USAMV Cluj-Napoca, besides the traditional ones, supports this objective.

The USAMV Cluj-Napoca goals in consolidating its position as an advanced research and higher education institution at national level implies the development of the 3rd cycle in *all* the fields of competence/excellence of the first two cycles, and this is an ongoing process. However, the number of the professors entitled to PhD coordination is decreasing as a result of retirements and also because of the new criteria stipulated by the new national regulations “Excellence in Doctoral Schools”. This aspect was identified as a weak point several years ago, consequently the university implements a policy of stimulating the PhD coordinators with competitive results by incentives and special rewards. This is of particular importance since a significant percentage of the current PhD coordinators will retire within the next five years.

Inter-institutional Cooperation. According to its vision and strategy, USAMV is an important stakeholder in the local/regional/national community. USAMV Cluj-Napoca played an active role in formulating the local and regional sustainable development strategies – and is involved in the general effort for local and regional economic growth (including the RTD and education co-working projects with major international industrial partners that choose Cluj-Napoca for opening new branches), and in supporting emergent companies (USAMV Cluj-Napoca is part of the “Technology and Competence Pole”, a project that is developed in collaboration with the Regional Development Agency, SMEs, and Romanian companies interested in the technology transfer). USAMV Cluj-Napoca is also part of the community life, developing continuous collaborations with the Chamber of Commerce, the Agriculture Department of the region, the Schools Regional Inspectorate, as well with many other local entities (Agrifood companies, banks, etc.), enabling a fast response to the community needs. For some years, in collaboration with the French Cultural Centre, the university was co-organizer for the Traditional/Ecologic Food Exhibition, AGRARIA International Fair, Wine and gastronomy fairs,

supporter of Slow Food Concept and Fairs. USAMV Cluj-Napoca is an active member within two university consortium, the local consortium of Cluj- Napoca universities, and the consortium of all USAMV universities across the country.

The option of USAMV Cluj-Napoca towards *Sustainable Development* made it a strong actor in promoting the regional strategy for bioenergy and, together with the *Regional Development Agency*, USAMV Cluj-Napoca formulated the Action Plan for Renewable Energy Implementation: “Towards 2020”.

At the national higher education level, USAMV Cluj-Napoca aims to preserve its position in top 12 best universities, by promoting advanced research and excellence in education.

At international level, USAMV Cluj-Napoca has continuously developed cooperation with other universities (currently USAMV Cluj-Napoca has cooperation agreements with more than 30 universities), RTD structures and companies, all over Europe, in US and Canada (see: [Appendix – International relations](#)), cooperation in education via trans-national projects with USAMV Cluj-Napoca as national leader, promoting integrated pilot projects with significant results in developing modern teaching/learning tools, and international cooperation via Leonardo da Vinci, Comenius and Transnational Networks on specific topics regarding the sustainable development. These projects have represented the starting point for RTD international cooperation, the university being an active partner in some FP6 and FP7 projects.

Management policy as a reflection of mission and goals. USAMV Cluj-Napoca management policy can be characterized by “*long-lasting values, in a flexible approach*”; this approach allowing fast action for capitalization of university’s strong points, finding solutions to correct the weak points, diminishing the risks, considering the threats, and approaching the opportunities. The USAMV Action Plan is related to this management policy, and was produced by an internal analysis that takes place at least once per year and being supported by benchmarking sessions, various external audits and evaluations. As mentioned above, the major decisions in the past 10 years were of high importance for developing new strategies and decisions making for the future. The role of the bottom-up approach of the management structures and their involvement, from departments to faculties and university level, is of high importance for the coherent and transparent decision making and communication processes, and therefore supports the university’s sustainable development.

4.2. Academic profile

Analysis of educational and research approaches. The integrated management resources for quality assurance of the education, training and research processes represent an approach that proved its viability in time. As already mentioned, an integrated approach in education and research activities is the base for the sustainable development of USAMV Cluj-Napoca, aiming to support the quality assurance and continued improvement in education. Curriculum reforms following the Bologna process are necessary and need to be implemented within every curriculum, to improve the quality of education and to accelerate and stimulate the implementation of the internal and external accreditation procedures, according to the national legislation and the ARACIS requirements.

Each study program developed by the 4 faculties of USAMV Cluj-Napoca has a well defined structure and content. The courses at bachelor level (3 or 4 years bachelor - first cycle) and the specific curricula define, through the detailed syllabus, the content, the outcomes, the evaluation method, for each course, and assigned ECTS (see: [Appendix – ECTS system in USAMV Cluj-Napoca](#)). Harmonizing the curricula content represents an ongoing process, where the teaching staff and the students are invited to contribute every 3 years.

An academic year consists of 2 semesters, 14 weeks each, followed by a four-week examination period and a supplementary two-week examination period, in September. The total number of credits required to graduate from a bachelor’s degree program, varies between 180 (study program: Biology) and 240 (all study programs for Engineering Sciences – Plant and animal Resources) credits, while for a master degree program the total number of credits is of 90 or 120.

The curricula content, outcomes and evaluation methods, are presented to the students at the beginning of each semester. Usually, one mid-term and one final examination are evaluating the outcomes of a course. Besides, complementary methods of evaluation (projects, individual home work, etc.), are applied. Optional courses are offered, being one of student-centered learning characteristics. USAMV Cluj-Napoca supports all faculties to stimulate the student-centered education and the continued improvement of the curricula by new knowledge, modern didactical tools (multi/media, team working groups, projects, problem-solving based learning), by registering the course feedback by students' surveys and by benchmarking with other higher education institutions.

The results of the students' assessment regarding to courses quality and content are very important, being managed by the Department of Quality Assurance. Unfortunately, the students' answers are rather weak, and a specific action is being planned to improve this situation.

Specific attention is dedicated to reduce the relatively high abandon rate of students suspending or leaving the university before graduating. This problem is in direct relation with another sensitive point: the admission procedure in the university. Although the admission forms and criteria are considered to be part of university autonomy, the decision must also consider the national trend and the options of other Romanian universities with similar profile.

USAMV Cluj-Napoca aims to attract good candidates, therefore wants to have some good selection criteria, considering the former performance of candidates, by their marks in the secondary school and their results at an entrance examination.

A top-priority for the university strategy is the improvement of master programs' quality. The number of Master programs is related to the number of graduating students, and the general aim of the university was to attract at least 50% of the graduating students for Master programs. Over for the past 8 years, at national and university level, it was noticed an increasing trend and a permanent effort in diversifying the educational offer and to enlarge the number of Master programs. So that, there are situations when were proposed and authorized a too large diversity of study programs, with overlaps of courses and redundant information. Unfortunately the success of these programs was limited, due to their low quality. We intend to restructure the master programs and to have fewer, but stronger, master programs with relevance for the labor market, and especially compatible with similar programs taught in European universities. Especially International Masters taught in English are encouraged to be promoted, with modules which allow the mobility of teachers and students between the partner universities.

We believe we have some weak points in Master programs strategic development and especially in running sustainable curricula for really interested students.

One key point in developing efficient and sustainable study programs is the good balance between students and academic staff (see: [Appendix – Students](#)). The proposal of a new study program is generally done by a department, according to the national standard criteria (defined by ARACIS), forwarded to the Faculty Council and, after approval, to the University Administration Council. The Senate approves or rejects the proposal. If the University Senate approves the program, the external evaluation follows, performed by ARACIS evaluators. The study program is temporarily authorized, if a confidence grade is obtained by the first external evaluation. After graduation of three generations of students, the program needs to obtain the accreditation by ARACIS. For keeping the accreditation, a periodic external evaluation is carried on, each 5 years. The relevance of a new program is validated, among others, by the number of candidates. In this context we can mention that newly developed study programs which attracted a significant number of candidates are: Control and Expertise of Food Products, Engineering of Food Products, Veterinary medicine.

Finally, each study program is validated by the number of graduates able to find a job in the labor market in accordance to his/her specialty. In this respect, USAMV Cluj-Napoca still has limited information on the graduates' career track. Unfortunately, the risks and threads of the actual economic situation in Romania affected too the jobs' offer in the fields of agriculture, animal science, food technology, and in almost all areas

of our competence. If it is not attractive for the prospective students, a study program without enough candidates will be suspended.

An important university asset is its very good ranking, supporting its capability in attracting students from all over the country and from abroad. Foreign students are enrolled in the university in full programs or for specific study periods, by the exchange international projects. Increasing the number of study programs taught in foreign languages represents an action starting to be implemented especially at master levels. USAMV Cluj-Napoca is part in the Erasmus Program since 1998. ECTS information packages are available for Romanian and for foreign students (see: [Appendix – ECTS system in USAMV Cluj-Napoca](#)). In addition, Diploma Supplement works have also been completed, involving the reorganization of ECTS credits, thus the obstacles in students' mobility have basically been eliminated. During the last academic year, 59 students have benefited from this program. While the yearly outgoing students' number is around 37, the incoming students' number is about 22. About 33 of the USAMV Cluj-Napoca academic staff participate annually in teaching and training mobility program in EU universities. Details on the evolution of this program are presented in [Appendix – Mobility under ERASMUS Programme](#). The number of foreign students outside the Erasmus program is quite low; the causes are complex (legislation, international recognition and competition), but recognizing them lead to a set of actions for increasing the university international visibility. Many pilot projects were/are developed and implemented under the Socrates, Leonardo da Vinci, Erasmus and, starting with 2007, under the LLP framework, by working groups coming from more faculties, with good results for the entire academic community (as it is the eLearning platform, the ICT education and training tools and methods, virtual laboratories, etc).

One strong point in the USAMV Cluj-Napoca development is represented by *teaching staff* with certified competencies and international experience, willing to deliver their knowledge by modern teaching methods, as well as evaluation methods.

The regulation for **doctoral programs** is currently revised to be in line with the new Law of Education, No. 1/2011. This activity is managed by the Interdisciplinary Doctoral School of the university (see: [Appendix – Doctoral School](#)). The doctoral and postdoctoral programs received strong financial support by the EU Sector Operational Program - Human Resources Development. As a result, 100+45 PhD students and post-doctoral researches received EU financial support for their research activity. In 2011, USAMV Cluj-Napoca runs a large number of structural funds projects (17 projects) for human resources development. By these projects there were developed new study programs and new modules for PhD students, postdocs (4 projects), for practice (4 training modules), and lifelong learning addressing a wide range of topics (see: [Appendix – Institutional development projects](#)).

Extended results can be obtained by increasing the number of PhD supervisors. USAMV Cluj-Napoca also recognizes the value of enriching students' possibilities to balance the theoretical and practical dimensions of their education through curricular and extra-curricular activities.

Research. All activities related to research and innovation, consultancy and technical services, technology transfer, are performed in USAMV Cluj-Napoca by the research staff (59 persons are employed as research staff: 9 researchers and 50 research assistants), and by academic staff, postdoctoral fellows, and PhD students. The coordination of these activities is done by the Scientific Council, coordinated by the vice-rector for Research, and connected with vice-deans for research from each faculty. The management of RTD activities, including monitoring and evaluation, dissemination and valorization of research results, is also in charge of the vice-rector for Research, under the direct coordination of the Rector, and represents one of the major strategic points in the university strategy. The doctoral and post-doctoral studies involving advanced research are coordinated by an Interdisciplinary Doctoral School, which is closely related to research activities.

Since 2004, the RTD activities and performance developed significantly, due to the increased national funding and the international context. An initial analysis, evaluating the resources, the topics, the results and performances in publications and conferences participation, revealed certain polarization and scattering in terms of topics and excellence, of competitiveness, and visibility. In spite of good funding resources obtained until now, it is obvious the need for increasing the scientific excellence, a coherence on topics, an efficient use

of infrastructure and human resources, updated information and documentation as well increasing the international partnerships.

The actual university's infrastructure for research (laboratories, centers of research and institutes) (see: [Appendix – Research infrastructure](#)) is a good result of the university investments, being realized in a percent of 40% by university's own resources (grants obtained by national competitions).

The Research topics (see: [Appendix – Research topics](#)), reflect the competencies of university's researchers, academic staff, PhD, postdoctoral fellows) and the research performance. The success in obtaining funding, shows clearly that USAMV is one of the best academic institutions which promote advanced research (see: [Appendix – Research performance](#)).

To describe the performance in valorizing the infrastructure and the human resources in the RTD activities, the example describing The Institute of Life Sciences is relevant (see: [Appendix – The Institute of Life Science](#)). The Institute of Life Sciences is located in the main Campus, and includes excellent laboratories (6 Centers of Research, a Knowledge-based Platform for Biotechnology, laboratories with accreditation for services), reaching the European standards. The concentration of best research resources in this institute and creating a research entity of excellence, allows performance in interdisciplinary research, the sustainability of a high-level infrastructure and organization of international scientific events (conferences and workshops), increasing university's competitiveness in the European Research Area. USAMV Cluj-Napoca is also actively involved in consulting and technical services offered to economic partners (see: [Appendix – Consultancy and technical services](#)).

University's strategic plans are focusing on developing the technology transfer towards the enterprises and farms, establishing spin offs, business Incubators, an Intellectual property office and a Business Centre. Also, advanced human resource training for entrepreneurial skills are encouraged and supported by the strategic university projects.

To increase its international visibility, the university management stimulates publications in well known ISI journals with impact factors, and the participation in international scientific meetings. Yearly, international conferences are organized by USAMV Cluj-Napoca with the participation of personalities from partner universities, researchers, international professional bodies and decision makers in RTD (e.g., [The 11th International Symposium "Prospects for the 3rd Millennium Agriculture"](#)).

The international cooperation represents a main strategic objective of the RTD policy in USAMV Cluj-Napoca, aiming the integration within European consortia and platforms, and by developing joint projects with RTD entities (institutes and companies), in Europe and worldwide, based on the specific topics of expertise.

In the last 3 years, the economy crisis strongly affected RTD financing, resulting in an almost complete lack of RTD competitions at national level, confirming the need for enhancing the university's RTD international cooperation, and that with the social/societal and economic partners.

Infrastructure. The IT, library resources, and multimedia infrastructure, are vital for any didactic and research activity. The currently infrastructure found in USAMV satisfies the needs but, considering the dynamic in the university's specific areas, USAMV Cluj-Napoca will continue to update these resources, and train the technical staff accordingly. The high quality library services for information-documentation, results in a rapid access to information, online catalogues, methodological guidance, information/research reference data bases, on-line inter library loans, using national and international information resources through the Internet, etc. The library has a large number of publications, for all the university's study programs, which is continuously enriched and supplemented by subscriptions to scientific and educational publications. The University library allows access to scientific data bases, like: ISI Web of Knowledge, Science Direct, Scopus, Thomson ISI, SpringerLink, Oxford Journals, EMBASE, EBSCO, MEDLINE, and CABI Databases. Scientific documentation resources purchased through grants and projects (located in the departments) are also purchased by the university library, expanding the resources available for students (see: [Appendix – The Library](#)).

4.3. Academic-related activities

The technology transfer as a result of the research results (see: *Appendix – Technology transfer*), is a key target for the university management. The economic partners of the university are not only providers of sponsorships, but they also host students for practice (see: *Appendix – Students practice*) and to get new competences and qualifications. Some of the more important partners are selected as members of the Council for Institutional development.

The future strategy of the USAMV Cluj-Napoca includes a more coherent policy regarding the stimulation of researchers' patents creativity, including the financial support for their submission and evaluation. Part of this policy is the establishment of a *Department for Intellectual Property* that will include specific consultancy to the members of the research community.

The university's **Didactical & Research Station** is located in Cluj-Napoca (research Station for Horticulture), and in Cluj-Napoca neighborhood, at 14 km and 20 km far from Cluj city (see: *Appendix – The teaching and experimental research station*).

The Lifelong learning represents another field of activity continuously developed during the last years. Since 2005 this process is coherently coordinated by the *Lifelong Learning Department*, which has adopted the correct strategy for promoting and strengthening the USAMV Cluj-Napoca lifelong learning offer. Thus, the threat of demographic decrease and, as a consequence, the diminishing of young student population, may be balanced by a wise lifelong learning policy, attracting students for completing and/ or updating their education by different specialized courses. Currently USAMV Cluj-Napoca offers courses to approximately 150 trainees, which is significantly higher than five years ago. Joint projects with regional authorities allowed the expansion of the university's lifelong learning offer across 8 counties in Romania (see: *Appendix – Long life learning programs*).

New cooperation opportunities have been materialized based on agreements and contracts with well-known national and international companies in the area. However, USAMV Cluj-Napoca is aware of the weak point, generally discussed when it comes to the higher education in Romania, related to organizing and running of the students' practical training. Thus, through partnerships with companies at regional/national and international level, the University aims to achieve the students practical training genuinely integrated in the economic, social and cultural environment characteristic for the student's qualification.

European projects as the Erasmus Practical Placement or the LLP European project *A model for Quality of transnational student PlacemeNts in EnTerprises Q-Planet*, support this objective and can develop cooperation models among universities and companies. Following this approach, several projects financed by Structural Funds are currently running in USAMV Cluj-Napoca supporting the student practical training within companies from Romania and Europe.

In 2006, the **ALUMNI - Alma Mater Cluj-Napocaensis Association** was set up, aiming at initiating activities to support and guide recent graduates as well as to develop a legal framework to promote relationships with the university graduates. Today the university has an operational on-line platform for ALUMNI and, as partner of a national strategic project on tracer studies, it benefits from the know-how and tools developed for intensifying this activity. USAMV Cluj-Napoca is aware about its limitation in this direction, and we know that there is still plenty of work to do for reaching the relation that the European universities have with their ALUMNI. For an efficient communication with the graduates and an increased visibility of the university, additional resources should be involved, for significant long-term benefits.

4.4. Student support services

The University has a number of student support services and is constantly striving to improve them and add new ones, according to the strategic objectives. Ensuring adequate education as well as consistent student support is seen as a strategic objective by itself.

The *online access to the eLearning Platform*, developed as a comprehensive database, is available to all students. Students can log in and access learning instruments, their grades and various national and

international research papers and journals; the University has provided 307 internet rooms (with 50 computers each) opened for students free access, in the Campus and in the university's Library. Increasing the use of the eLearning platform in the teaching activity represents a target which can be fulfilled by a joint effort of the teaching staff (by providing more learning material and involving the platform's facilities in the teaching process), of the students, and of the administration (by making the platform more user-friendly).

Investments in the development of *modern laboratories and teaching rooms* provide students with access to up-to-date concepts, methods and tools, creating a support network for students. *Publication and documentation resources* are available through the University library, as well as through individual faculty resource centers, with basic subscriptions constantly renewed. There is also useful information related to opportunities and services offered by the university, published on the [university web site](#).

The Student Guide offers comprehensive information about all the university facilities, and useful informations about the city.

The University is constantly investing in increasing the comfort in the students' residences. Currently, *the students' residences* are located closely to University Campus and in the *Agronomia* students' residence, offering over 1047 accommodation places, fully refurbished in the past four years, with video-surveillance systems and Internet connection in each room. *The sports facilities* (Sports Halls and Grounds) are constantly developed; a University Sports Club, a folkloric music team "Traditii", is also part of USAMV Cluj-Napoca. *The Students' Club and Pub* are very active and visible throughout the academic community (see: [Appendix – Facilities for students](#)).

The Student associations are active components concerning the support services provided for the students. They are self funded, by student programs, and provide a wealth of information, communication sessions, competitions, debates, cultural activities, trainings (sales, marketing, and fundraising), festivals and cultural exchanges. They are flexible organizations in which any student can be part. The student associations offer information on professional and career development, mainly through career events in which companies participate. The student associations' network is one of the major factor that contribute to the enhancement of students' achievements by all the services they provide. It is felt, however, that the University could support these associations even more, maybe by a more active involvement of the faculties and the study program tutors.

International exchange programs for students (Erasmus, Leonardo) represent excellent opportunities for students to acquire educational and research experience abroad, and are actively promoted, including those managed by the students associations.

The University developed a *Career Orientation Information and Consultancy Centre*, in 2006, offering career advice and specialized consultancy (e.g. the Student Guide in relation to career opportunities), and organizes periodical Job Fares; still, the students ask for more support in career and professional orientation services.

Other support services that aim to enhance student development are the USAMV Cluj-Napoca and the faculties' sites, a financial support system for the financially disadvantaged students (social scholarships, tax reduction), as well as for top performers (who are also rewarded by the University by a special excursion to partner EU universities and foreign country visits), public transportation subventions (the local bus network and national railway service), as well as the student medical health centre.

4.5. Funding

USAMV Cluj-Napoca is financed based on public funding, and on funds resulted from students' fees, RTD and education & training grants and contracts, sponsorship, etc.

The public financing is yearly allocated based on: (1) the number of budget-funded students and (2) on quality criteria. The percentage of financing based on quality criteria is yearly increasing, being 30% in 2010. Therefore, the public share of the university budget is carefully designed by a steady increase in the number of budgetary students (with a focus on master and doctoral students), while continuously enhancing in the quality of the academic processes according to the standards and indicators defined by the assessment bodies

(CNFIS and CNCISIS). The amount of attracted funds in this national competition among the state universities continuously increased in the past four years. The dedicated funds for investments in infrastructure and refurbishing are also partially covered by governmental funds. The university funds are used for covering the regular expenditures (personnel costs, investments in infrastructure development and refurbishing, utilities, etc.), and for financing strategic priorities.

In 2011, the total university budget was of 57,640,811 ROL, out of which 38,37% from governmental financing, 47,53% from RTD (research projects; education and training grants and contracts; technological, educational and career development projects) and 14,10% from other funds. The evolution of financing during 2007-2011 is detailed in [Appendix – Funding](#), outlining that, while the total university budget increased in the last years, the percentage of the governmental funds is constantly decreasing. Faced with this challenge it was needed a sound financial management, combining quality assurance and the efficient use of funds in accordance to the university strategic options. The financial evaluation of the teaching/ training programs in faculties (and starting with 2010, in the B-M-D training lines), is one significant part of this management.

The funds attracted through research projects are spent according to the approved budget of each project. The level of overheads in grants and contracts is yearly voted by the University Senate, and is used to support the projects' development. Starting with 2008, 15% of the overheads are returned to the RTD departments where the projects were developed, and can be used for equipment purchase and maintenance, materials, consumables, mobility, conference fees.

Yearly, part of the budget is used by the university management for implementing new initiatives. The initiatives are discussed and validated in the University Senate and are covering topics of interest for the entire academic community. Some examples are: the University Library refurbished and fully modernized during 2007-2008; multi-media in all the university lecture halls; Internet rooms with free access for students; Internet access in the students' residences. Beginning with 2012, the university finances internal research grants for young teachers, in different priority areas, established by the RTD department.

Every year, in December, the Rector presents the "Annual Report" as a "university status", including all aspects of the university activity, from teaching, to research and strategic developments, human resources performances, students, services for the community, financial outputs.

The Report is validated by the Senate and represents one point considered in the decision-making process for the next year. To be dependent on public funding is unavoidable for a state university but, heavily depending on public funding represent a continuous risk of under-financing and consequently of limited progress. Therefore, the management decisions made aims for increasing the amount and share of attracted funds. The decisions are formulated by the university Senate Board, are validated by the Senate and are implemented at the levels of faculties, chairs, RTD departments and university's departments.

The staff that has to face these challenges and the new legislation (for higher education, employment, human resources, accounting, etc.), is trained.

5. QUALITY ASSESSMENT PRACTICES

USAMV Cluj-Napoca is recognized, at national level, as a representative higher education institution in developing and implementing quality assurance, being *one of the first universities in Romania* that implemented and certified a quality management system (QMS) based on the ISO 9001 model, since 2004. The QMS implementation was systematically approached within the university, and recognized by national authorities. USAMV Cluj-Napoca implemented adequate tools for the internal quality assurance and the evaluation of the study programs, for academic staff evaluation, for research, and for the administration performance.

The continuous improvement of education and research quality and effectiveness, the students' involvement into the internal quality assurance process, their active participation into the decision making process at university/faculty level, and into the evaluation of teaching activity, represent key-elements of the university sustainability.

The university approach to the quality acquired a new relevance and dimension since 2008, when the QMS was harmonized with the new requirements and its *efficiency extended and increased*. The Department of Quality Assurance (DAC), the Commission for Quality Evaluation and Assurance at the university level (CEAC), and the faculty representatives, were set up, and at the same time the students' representatives were involved, as partners within the quality evaluation and assurance processes.

The role of the *Quality Assurance Department (DAC)* was re-assessed, currently operating under the direct supervision of the Vice-Rector's for Quality Assurance. The activity of the quality structures is analyzed yearly and the report is published on the university's website. In this respect, it should be stressed that the implication of the CEAC members is less extended as targeted, resulting in their limited participation in the quality evaluation actions, staff training and quality data communication at the faculty and study program level.

The QMS processes have been defined, covering all the activities of the university: education, research, administration, relations with the extra-academic environment, students' services and last, but not least, the management processes (see: [Appendix – QMS documents](#)). Processes, mechanisms, procedures and instruments for quality planning, management and assurance have been developed and published on the [university's web site](#).

The priority has been addressed to the learning and research processes, therefore it is a current need for completing the administrative and management instruments for quality assurance. The procedures are developed by the DAC in cooperation with CEAC, are approved by the University Senate, are published on the university website, and operate complementary to the University Internal Regulations. Every year new procedures are completed and the existing ones are updated/ improved. This is an on-going process since the legislation is changing and the procedures permanently need to be updated, and improved.

An important role in quality assurance has the *quality internal audit*, in multiple ways:

- Institutional internal evaluation is yearly performed by CEAC, with the support of DAC, resulting into a report presented to the University Senate and published on the website. The conclusions are further used by the top management in developing a SWOT analysis, aiming to address the identified weak points within the action plan, for quality improvement.
- Internal evaluation of the study programs is performed annually, under the coordination of the study program coordinator and with the support of the quality structures.
- External evaluation of study programs is performed by ARACIS. During the academic year 2009-2010, the Institutional Evaluation was done, as well as a number of 5 study programs were externally evaluated (4 bachelor study programs and 1 master program), all of them receiving the *high confidence* qualification.
- The evaluation of the research activity performed by the academic staff is annually performed, using online evaluation software, based on national evaluation criteria and on internal standards.
- An online tool is also used for the evaluation of the academic staff by students, after each exam session, but a weak involvement of students in evaluating teachers/ courses performance was registered until now. Further positive developments are expected based on feedback actions to the students' ideas formulated during the evaluation process.
- The overall evaluation of teaching staff is annually performed within the university chairs, by the head of the chair, including self-assessment, peer review and assessment by students. Individual assessment results are used at the department, faculty and university level, to establish corrective measures and decisions making on the teaching staff reward/ forfeit.

An increased pro-active attitude of the Alumni Association is also expected to improve the external evaluation process. In order to enhance the functionality of the ALUMNI Association, USAMV Cluj-Napoca has developed a database of contact information for its graduates and an *Alumni Panel* will follow.

Data collection, processing and analysis on quality evaluation are developed in a systematic way; the CEAC and their branches at study program level are in charge with data collection and analysis. The results of evaluation

are subject to discussions within the Faculty Councils and University Senate and corrective measures are formulated.

Being developed within the university, these IT applications can be enhanced and re-formulated, keeping pace with the university management and strategy.

University and all faculties provide public information on study programs, diploma degrees, the processes organization, and procedures, etc. The main information paths are the university's website, as well as brochures, open day events, other promoting activities. Providing access to public information is regulated by an internal procedure, according to the Law No. 544/2001.

Positive Impact of Quality Management System Implementation. The QMS has created an organizational framework and the tools necessary to implement the strategies adopted by the USAMV Cluj-Napoca. The results presented below follow the main activity areas:

Educational Processes. There have been implemented procedures for initiating, designing, monitoring and periodic evaluation of study programs, as well as instruments for: communication with the economic, social and cultural organizations; evaluation of financial efficiency for the didactic processes; students/ graduates/ employers feedback, etc. The results are embedded in novel structures (B-M-D training lines integrated with research), or novel instruments (the eLearning platform).

Research Processes. In the field of research, the university QMS consists of monitoring and evaluation mechanisms and instruments for: identifying the priorities in research of excellence at university level; identifying the strategy and research objectives at institutional/ RTD departments/ individual level; quality assurance of research resources; valorization of the research results at institutional/ research departments/ individual level, research quality evaluation.

Human resources. Quality assurance and improvement of human resource is achieved by processes and instruments for: planning the personnel structure according to the specific needs at university/ faculties/ RTD departments/ students services levels; competences development; promotion of academic staff and of other personnel categories; performance evaluation; ensuring the labor security and health.

Infrastructure. From the quality management perspective, during the past five years the focus has been on developing instruments for: planning the resources required considering the existent ones; performing public acquisitions according to the regulations in force; quality evaluation. For ensuring the infrastructure efficient use, management instruments were developed: procedures and software applications for acquisition progress and control, software application for assigning the lecture/ seminar rooms and laboratories, monitoring the load of each location and at faculty level.

Cooperation with the extra-academic community. The development of mechanisms and instruments supporting the development of an interface between the university and the economic, social and cultural environment has been one of the QMS priorities during the past years.

Management processes. The university management is aware of the climate and culture created for quality assurance in the university, involving all levels, the academic and non-academic staff, the students, in all processes related to quality assurance and quality improvement. The internal evaluation processes allow an extended result analysis and outlines the strengths and the weaknesses, as tools for management decisions.

The society and economic changes and the competition in the Higher Education and Research Areas continuously raise new challenges. Comparing challenges with previous results, the internal quality evaluations lead to the (re)formulation of the university action plans and strategy.

6. STRATEGIC MANAGEMENT AND CAPACITY FOR CHANGE

The USAMV Cluj-Napoca strategy for the 2012-2016 period of time is based on a realistic SWOT analysis. This approach, considering the resources and the weaknesses, the opportunities and the unavoidable threats, is yearly updated and supports the Action Plans formulation, with a focus on minimizing risks in implementing

the Strategic Plan. A specific Action Plan to correct the weak points is presented in the Action Plan designed to undertake corrections according to the SWOT Analysis outcome (see: [Appendix – Action plan](#)).

The SWOT Analysis refers to the main aspects of the university activity, such as:

1. Teaching/training resources opened to the bachelor, MSc, PHD students
2. Research resources and performance
3. Social, cultural and sports facilities for the students
4. Management resources for quality assurance of the education, training and research processes

STRENGTHS

1. USAMV Cluj-Napoca has been accredited by the EUA, ARACIS, it is ISO-TUV certified, and the Faculty of Veterinary Medicine has been accredited by the EAEVE;
2. Many study programmes are ranked in Class A by the MECS classification
3. The educational programs extensions in distance learning system for Agriculture, Horticulture, Animal Husbandry and Biotechnology, in Viterbo, Italy;
4. The University is a regional leader in the fields of studies and by its programmes and research contracts;
5. The University offers a variety of study programs included in the following branches of science: Plant and Animal Resources Engineering, Engineering Sciences, Veterinary Medicine, various hierarchy areas: Agronomy, Horticulture, Forestry, Biotechnology, Food Engineering, Animal Science, Environmental Engineering, Engineering and Management, Veterinary Medicine;
6. The University provides all the three cycles of education for full-time, part time and distance learning studies;
7. For undergraduate and master courses, the University offers lines of study in English and French;
8. Stimulating management competition and performance at department level, as a result of decentralization and the distribution of budgets according to the hierarchy of study programmes;
9. Research in the University is at the top, with national recognition, transparent in the classification of the University among the top universities of advanced scientific research, based on a number of research contracts, ISI scientific publications, investment in infrastructure and involvement of young researchers, PhD students, post-docs, large-scale collective projects;
10. Existence of nationally and internationally rated scientific journals issued within the university;
11. The initiation of internal competitions for research grants, dedicated to young teachers, funded by university's funds;
12. USAMVCJ develops an internal system of quality assurance for the education and research activities and for the human resources stimulation. The general principles on the quality in higher education take into consideration transparency, compatibility and convertibility. In the Strategic Plan of the University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca quality is central and is permanently under a continuous improvement;
13. The University teaching staff are dedicated to education and research, well trained, and they provide the students with course supports that meet the international standards, and are compatible with the European programmes developed through Socrates Erasmus mobility;
14. The material base, characterized by the existence of appropriately equipped modern education and research areas, provides the optimal conditions for teaching, as well as for the practical work for the students in pilot units and experimental teaching stations;
15. All students have access to academic library services, databases, Internet, accommodation in university's own students' dormitories, social programmes, sports facilities, and a restaurant.

WEAKNESSES

1. Some study programmes are not represented in the third cycle of University studies. Out of the ten areas of undergraduate studies, only five fields are active at Ph.D. level.
2. Some curricula are disproportionate and deficient, lack of harmonization with European standards
3. The quality control of the educational activity is deficient (class assistance, control);
4. The graduation works and master dissertation often have a theoretical content, not focusing on research

and case studies are not always as results of practical activities carried out during the students' practical activity.

5. Research weaknesses: Lack of full-time research staff; small number of European projects, low ratios between the number of teachers and ISI publications, and small number of inventions and patents; Small number of Master and PhD students involved in research projects and contracts.
6. Low efficiency of technology transfer of the research results (with low financial incomes), into the real economic environment; No organizational structure at the university level handle the technology transfer, consulting, outsourcing;
7. Insufficient visibility: Small number of interdisciplinary, transdisciplinary research with other universities in Cluj-Napoca, other USAMV in the country, and EU universities;
8. Decreasing number of exchanges via Erasmus programs (teachers and students, from and to Romania)
9. Limited information on the labor market needs and on the graduates' career track, poor involvement of the ALUMNI Association.
10. Deficiencies in the management and attitude of administration services: need for training, procedures' follow-up, and quality assessments

OPPORTUNITIES

1. The USAMVClj classification among the "first class" category is a good pre-requisite for additional funding in education and research;
2. Development of new collaborative networks and partnerships with foreign universities;
3. Accessing specific grants for student practice;
4. Collaboration with the economic environment for possible technology transfers, service offerings, consulting;
5. The interest of young people from different countries and from outside the European space for the undergraduate and master educational programmes we offer.
6. Valorization of HORIZON 2020 strategy to encourage and support University research programs
7. Allocation of significant financial support by the new Common Agricultural Policy, to finance the specific innovation programs in agriculture and farm-level transfer;
8. Development of new European programmes type "Long Life Learning" and E-Platforms
9. Development of new National priority programs, e.g. human resources improvement, regional technology parks, poles of competitiveness ,
10. Development of existing partnerships with public institutions and the private sector, generating new sources of funding.

THREATS

1. **The Governmental financing for higher education and research** decreasing in the past year may result in insufficient funds for the academic processes. The answer of the university consists of a permanent struggle to increase the efficiency of these processes, while maintaining or increasing quality, and by developing specific activities for attracting funds, valorizing the resources (lifelong learning programs, RTD projects financed at national or EU level, RTD projects and research services developed for companies).
2. **National and international competition:** open competition for attracting students, quality resources and funds. The university's answer is in the permanent effort for increasing the quality of the educational and training offer, in launching new study programs requested by the labor market, in developing research programs, and attractive, high-level programs, for advanced human resources training. The aggressive policy of the important universities in attracting graduate students and post doctoral students; Competition from other universities through tender based on the more developed material, accommodation, sports facilities, sponsorship;
3. The **National legislation** which is not (yet) highly stimulating for attracting foreign students (outside EU). The national legislation also raise threats related to the crisis measures which strongly limit new employment within budgetary institutions. Short term measures to counterbalance this threat are possible by increasing the efficient use of the existent resources.

4. The demographic decrease trend with a negative impact on the dynamics of the students number and the gradual increase of the cost of living, leads to a decrease of the living standards and lack of interest of high school graduates for University;
5. The current economic context, with few medium-sized and large economic agents who can execute and support the placing of students in internships, which affects the training of future graduates who will not have a minimum experience in the profession gained;
6. The significant reduction of national research funding during the last 3 years, concomitant with the increase of the standards for minimum eligibility criteria, for attracting research grants at national level as a project director;
7. Lack of an active research market in Romania (which is inducing the decrease of doctoral and postdoctoral studies);
8. Unable to promote the teaching staff based on the strong performance criteria imposed by the law, especially for young teachers;
9. Payment of state employees does not allow financial incentives for the research activity;
10. The downward trend of revenues from students (study fees), the high abandon rate of students in the first years of study.

7. CONCLUSIONS

Over the 143 years of history, *USAMV Cluj-Napoca* has developed as a major academic institution, at regional and national levels. After 1990, and especially after the acceptance of Romania as EU member, major changes in the Higher Education Area were adopted and therefore, *USAMV Cluj-Napoca* adapted its strategy for development.

The Bologna and Lisbon processes supported the university didactic and research restructuring; increasing the quality and the efficiency of all the academic processes is now understood as a continuing action, prerequisite for international recognition and competitiveness.

The university strategy is formulated for four years, and the targets set for the next years are considering Excellence, Competitiveness and Societal Integration, placing *USAMV Cluj-Napoca* as an advanced research and education university, according to the Law of Education No. 1/2011. The requirements stated by this new law open opportunities for the university restructuring, strengthening the already existent strong points: in education, research, academic community and management. Accessing the highest ranking at national level is supported by a set of results that individualize the university in Romania, and are in good agreement with the developments in EU universities of reference.

The Integrated education (at all levels) and advanced research, giving and efficient and effective use of the existent, and developing resources (human, infrastructure, documentation, etc.), further developments, considering that the teaching lines can bring significant changes in the university faculties/education/departments structure.

The integrated approach linking high-tech products' development (Sustainable Energy), environmental issues (Natural Resources Conservation and Use), Quality of Life and Education and Economic Development, gives the possibility for complex approaches in large projects, actively involving the RTD departments. Specific structures for strengthening the role of the Institute in promoting RTD of excellence and technology transfer are now under *consideration*.

The student facilities for learning and living open new opportunities in the next years, including a training offer for horizontal competencies (e.g. entrepreneurship, didactics).

The large number of projects for human resources development that are now running in the university, further support this trend and enhance the knowledge and skills of our graduates. Strong involvement in the community and economic area of the region, resulting in academy-industry partnerships - considering in the future the development of these partnerships under the new law of public-private partnerships.

Extended cooperation with EU higher education institutions and research institutes for a stronger competitiveness at the international level.

A proactive management at all levels (educational-research-administration), and in all departments and faculties, as a coherent development, supporting a synergistic management decision and strategic action. The quality assurance is a key element in improving the university management by a continue Plan-do-check-act improvement cycle, risk estimations and reformulations of action plans.

The USAMV Cluj-Napoca top management surveys periodically the weak points and take actions especially on aspects related to PhD programs, adaptation of study programs to more pragmatic and recent aspects of science and technology, student-centered education based on more practical skills and improved competences, consideration of students' opinions in improving curricula, gain in reciprocal confidence for a gain in quality and responsibility for the relation teacher-student.

The risks related to the change of legislation, changes in labor market and local economy performances under current European economic crisis can be minimized by a flexible management and a coherent strategy.

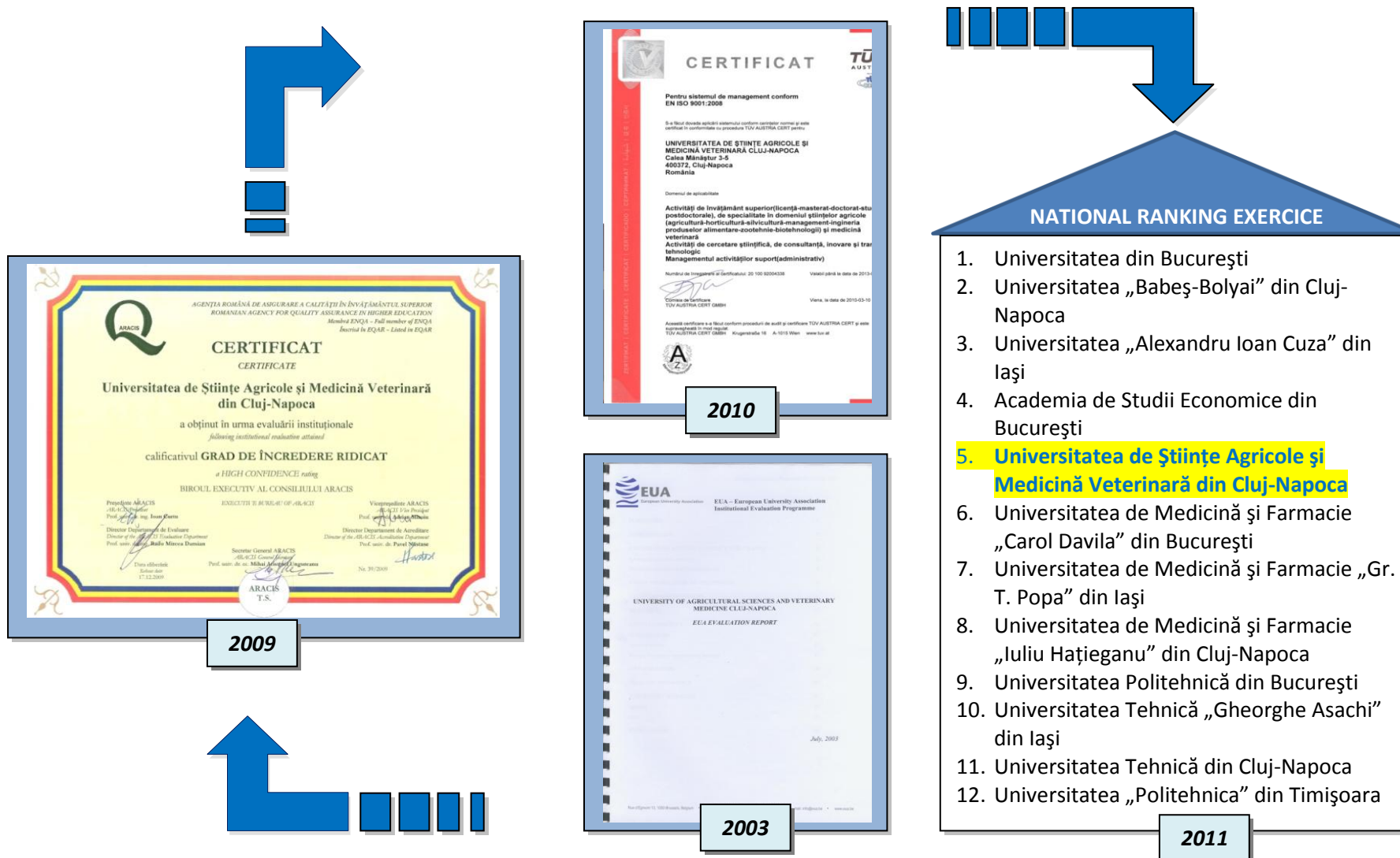
Considering the strong and weak points of the University actual performance, as well the opportunities and risks, we consider that this self evaluation process, followed by the external evaluation by EUA, is a necessary step for further improvements targeting our international competitiveness in the European higher education and research area, as a competitive Higher Education Institution of "Advanced Research and Education".

Cluj-Napoca, 28th of March 2012

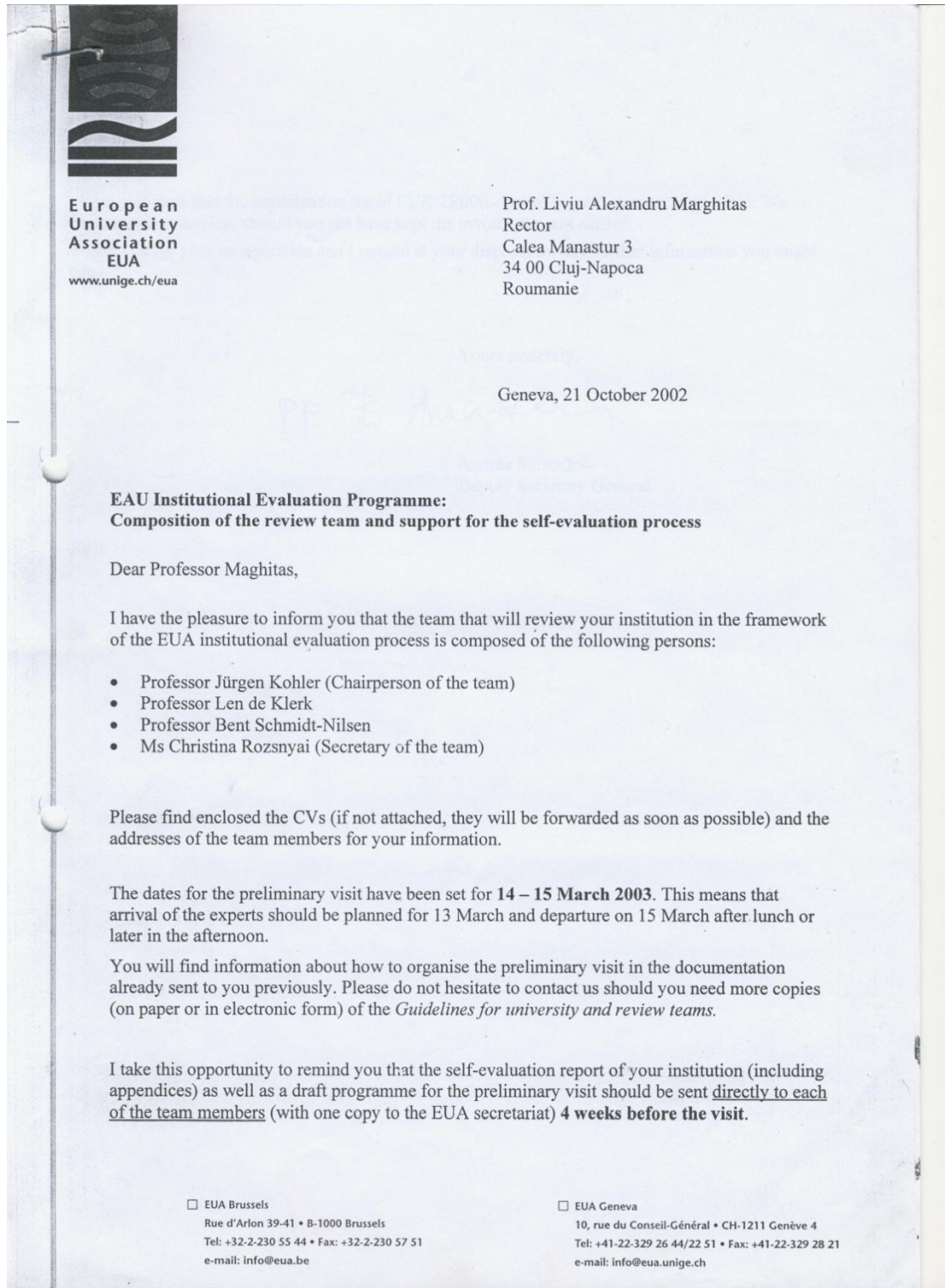
R E C T O R,


Prof. Dr. Ing. Doru PAMFIL

Appendix – Institutional evaluation process



The EUA Institutional Evaluation, in 2003





EUA
European University Association

**EUA – European University Association
Institutional Evaluation Programme**

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**UNIVERSITY OF AGRICULTURAL SCIENCES AND VETERINARY
MEDICINE CLUJ-NAPOCA**

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July, 2003

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priority concurrently with improving financial possibilities. The retention of talent could be ensured via various incentives, including fair pay for PhD students involved in teaching and/or research.

Conclusion

The University's Self-Evaluation Report states that "...university management cannot depend on the past and tradition any longer. Instead, it has to be future-oriented in the appropriate planning of strategies...". The EUA Review Team has seen that the USAMV leadership is serious about implementing this approach. The University leadership's decision to ask for an EUA review is but one of many actions in this direction. The Team hopes that its Review Report, in addition to the personal discussions between the Team and the University members, on top of the entire production process of the Self-Evaluation Report, together help USAMV to gain a clearer vision of the steps it can take toward improving the institution as a teaching and learning and research organisation.

USAMV possesses a strong academic core and reputation, as testified also by the alumni whom the Team was able to meet. The University can seize the opportunity, which the "Bologna process" offers, to enter the necessary changes with great confidence. The University members seem to be well aware of the challenges ahead. Given a strategy that will help meet these challenges and offer solutions to overcome them, USAMV can be a source of pride for its members, a pride that they say has characterised staff and students in the past, and which they can rightfully feel also in the future.

Signed:

Jürgen Kohler, Review Team chairman

Freddy Coignoul, Review Team member

Bent Schmidt-Nielsen, Review Team member

Christina Rozsnyai, Review Team secretary

The Certificate released by ARACIS, in 2009

The Certificate released by TÜV Austria CERT GmbH, in 2010


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Appendix – Report on the 2011 National classification exercise

In accordance to the provisions of the “Assessment methodology for the universities classification and the study programs ranking”, approved by the Government Decision no. 789/2011, during the 2011 summer, USAMV Cluj-Napoca participated to the national evaluation exercise managed by UEFISCDI, filling the “*Evaluation form*” with data regarding the period 2006 to 2010, both for institutional assessment and for each of the 10th areas of the University study programs.

THE UNIVERSITIES CLASSIFICATION

As by the *Ministry Order No. 5.262/2011* on ascertaining the results of the universities classification, issued by the Ministry of Education, Research, Youth and Sports, USAMV Cluj-Napoca was ranked on the 5th place within the "Advanced research and teaching universities group".

Regarding the “Cluj universities consortium” all the 6 member universities are situated on very prestigious positions, as follows:

The Advanced research and teaching universities group:

- Place No.2 – The “Babeş-Bolyai” University of Cluj-Napoca;
- Place No.5 -The University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca;
- Place No.8 – The University of Medicine and Pharmacy "Iuliu Hațieganu" of Cluj-Napoca;
- Place No.11 – The Technical University of Cluj-Napoca;

The Teaching and artistic/creative universities group:

- Place No.6 – The Art and design University of Cluj-Napoca;
- Place No.7 – The Academy of Music “Gheoghe Dima” of Cluj-Napoca

Regarding the “USAMV universities consortium”, the 4 member universities are situated as follows:

The Advanced research and teaching universities group:

- Place No.5 -The University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca;

The Teaching and scientific research universities group:

- Place No.9 – USAMV Iași;
- Place No.10 – USAMV București;
- Place No.11 – USAMV Timișoara;

THE STUDY PROGRAMS RANKING

In accordance to *Document issued by the MECTS*, “Regarding the study programs ranking organized by the accredited universities from the national education system according to the Article 193 of the National Education Law No. 1/2011 and the provisions of the Government Decision No. 789/2011 for the approval of the Assessment methodology for the universities classification and the study programs ranking”, the 10th domains of the USAMV Cluj-Napoca study programs were ranked as follows:

Within Category A:

- Domain: Agronomy, horticulture, forestry, forest engineering
- Domain: Animal Husbandry
- Domain: Biotechnologies
- Domain: Food products engineering
- Domain: Veterinary medicine

Within Category B:

- Domain: Biology
- Domain: Engineering and management

Within Category C:

- Domain: Geological engineering, geodetic engineering
- Domain: Environment engineering

Within Category E:

- Domain: Chemical engineering

Appendix – Students

NUMBER OF STUDENTS ENROLLED IN THE UNIVERSITY, AS AT THE 1ST OF JANUARY EACH ACADEMIC YEAR

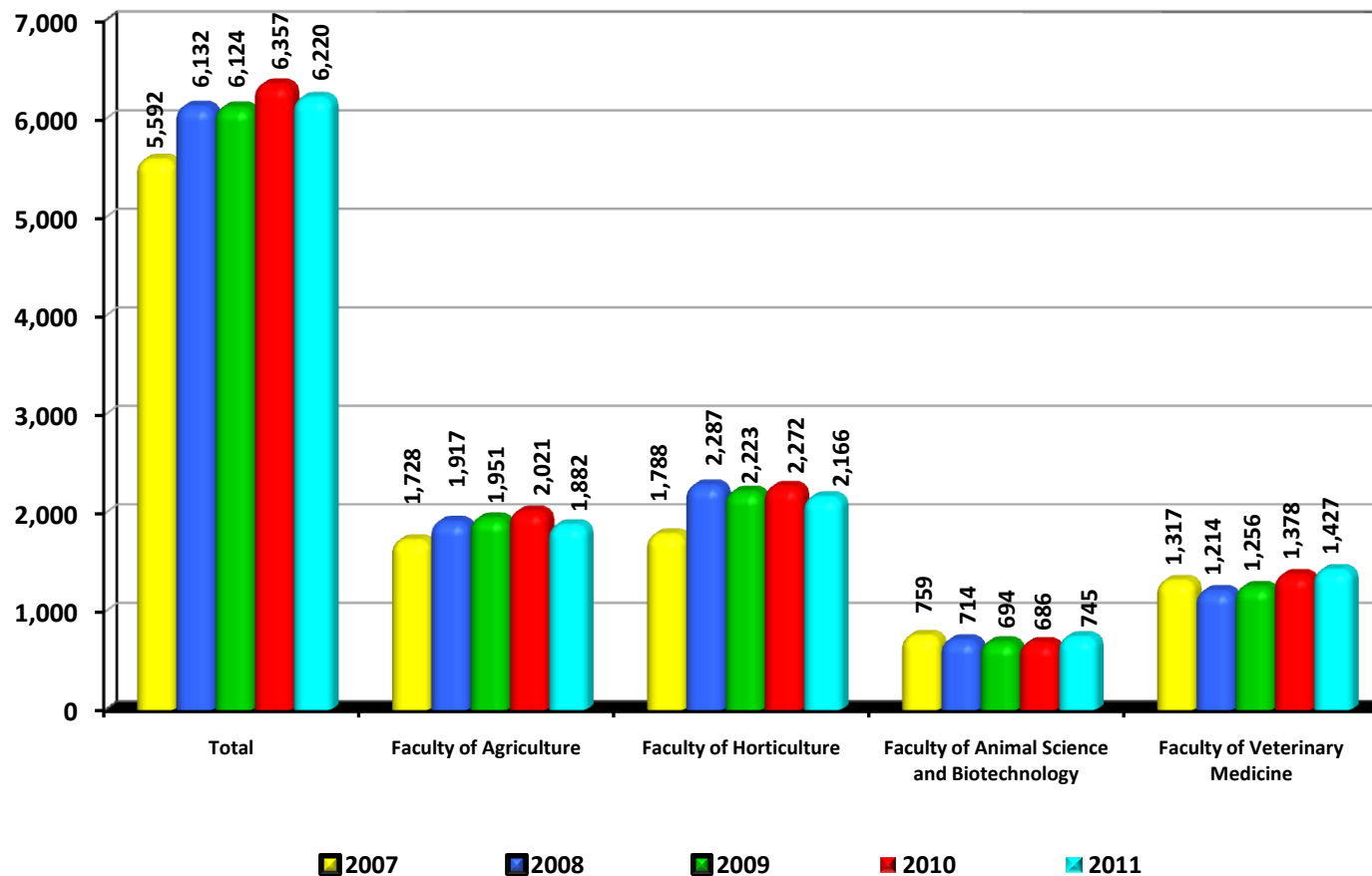
FULL-TIME STUDY PROGRAMS							
	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Bachelor degree*	3995	3841	3958	4225	4059	4332	4426
Master degree	319	386	507	682	1005	1084	976
Doctorate	182	178	169	136	146	166	207
Post-doctorate	2	2	3	0	0	20	30
Total (Cycle 1, 2, 3)	4496	4405	4634	5043	5210	5582	5609
TOTAL	4498	4407	4637	5043	5210	5602	5639
PART-TIME STUDY PROGRAMS							
Bachelor degree*	143	131	119	126	92	53	55
Master degree	12	63	58	45	20	8	8
Doctorate	425	463	429	384	328	242	143
Post-doctorate	0	0	0	0	0	0	0
Total (Cycle 1, 2, 3)	580	657	606	555	440	303	206
TOTAL	580	657	606	555	440	303	206
DISTANCE LEARNING STUDY PROGRAMS							
Bachelor degree*	369	404	453	545	426	392	388
Master degree	8	3	11	6	48	80	17
Doctorate	0	0	0	0	0	0	0
Post-doctorate	0	0	0	0	0	0	0
Total (Cycle 1, 2, 3)	377	407	464	551	474	472	405
TOTAL	377	407	464	551	474	472	405
TOTAL (Cycle 1, 2, 3)	5453	5469	5704	6149	6124	6357	6220
TOTAL	5455	5471	5707	6149	6124	6377	6250

* Time to graduation: 4 years (engineering domains); 3 years (biology domain); 6 years (veterinary medicine)

STUDENTS/ACADEMIC STAFF RATIO

FACULTY	Agriculture			Horticulture			Animal Science and Biotechnology			Veterinary Medicine			USAMV Total		
	Year	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010
TOTAL ACADEMIC STAFF	92	90	96	93	102	113	43	44	44	76	90	113	304	326	366
TOTAL STUDENTS NUMBER (Cycle 1, 2, 3), out of which:	1951	2021	1882	2223	2272	2166	694	686	745	1256	1378	1427	6124	6357	6220
Female	1017	1042	988	836	845	824	269	258	284	587	641	674	2709	2787	2770
Male	934	979	894	1387	1427	1342	425	428	461	669	737	753	3415	3570	3450
STUDENTS /TOTAL ACADEMIC STAFF RATIO	21.2	22.5	19.6	23.9	22.3	19.2	16.1	15.6	16.9	16.5	15.3	12.6	20.1	19.5	17.0

TOTAL STUDENTS NUMBER EVOLUTION (CYCLE 1, 2, 3), PER FACULTIES



DROPPED OUT RATE - Full time Bachelor study, by faculty and year of study, as for 2010-2011 academic year

FACULTY		Year of study					
		I	II	III	IV	V	VI
Agriculture	Total number of students	345	344	242	231		
	Dropped out number	62	33	5	1		
	Dropped out rate (%)	17.97%	9.59%	2.07%	0.43%		
Horticulture	Total number of students	475	449	414	316		
	Dropped out number	81	37	18	8		
	Dropped out rate (%)	17.05%	8.24%	4.35%	2.53%		
Animal Science and Biotechnology	Total number of students	152	131	104	74		
	Dropped out number	46	14	14	5		
	Dropped out rate (%)	30.26%	10.69%	13.46%	6.76%		
Veterinary Medicine	Total number of students	318	229	134	162	114	98
	Dropped out number	57	26	7	7	2	0
	Dropped out rate (%)	17.92%	11.35%	5.22%	4.32%	1.75%	0.00%

DROPPED OUT RATE – Distance learning Bachelor study, by faculty and year of study, as for 2010-2011 academic year

FACULTY		Year of study					
		I	II	III	IV	V	VI
Agriculture	Total number of students	56	63	58	59		
	Dropped out number	9	7	6	5		
	Dropped out rate (%)	16.07%	11.11%	10.34%	8.47%		
Horticulture	Total number of students	30	32	53	57		
	Dropped out number	7	4	4	5		
	Dropped out rate (%)	23.33%	12.50%	7.55%	8.77%		
Animal Science and Biotechnology	Total number of students	24	13	0	0		
	Dropped out number	2	6	0	0		
	Dropped out rate (%)	8.33%	46.15%				
Veterinary Medicine	Total number of students	318	229	134	162	114	98
	Dropped out number	57	26	7	7	2	0
	Dropped out rate (%)	17.92%	11.35%	5.22%	4.32%	1.75%	0.00%

DROPPED OUT RATE – Full time Master study, by faculty and year of study, as for 2010-2011 academic year

FACULTY		Year of study	
		I	II
Agriculture	Total number of students	185	238
	Dropped out number	8	3
	Dropped out rate (%)	4.32%	1.26%
Horticulture	Total number of students	167	175
	Dropped out number	13	7
	Dropped out rate (%)	7.78%	4.00%
Animal Science and Biotechnology	Total number of students	75	65
	Dropped out number	10	7
	Dropped out rate (%)	13.33%	10.77%
Veterinary Medicine	Total number of students		97
	Dropped out number		0
	Dropped out rate (%)		0.00%

DROPPED OUT RATE – Part time & Distance learning - Master study, by faculty and year of study, as for 2010-2011 academic year

FACULTY		Year of study	
		I	II
Agriculture	Total number of students	17	60
	Dropped out number	0	2
	Dropped out rate (%)	0.00%	3.33%
Horticulture	Total number of students		3
	Dropped out number		3
	Dropped out rate (%)		100.00%
Animal Science and Biotechnology	Total number of students		
	Dropped out number		
	Dropped out rate (%)		
Veterinary Medicine	Total number of students		
	Dropped out number		
	Dropped out rate (%)		

Appendix – Academic staff

NUMBER OF FULL TIME ACADEMIC STAFF, AS AT THE 1ST OF OCTOBER EACH ACADEMIC YEAR

	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Preparator	9	6	5	6	10	10	8
Assistant	47	51	47	52	48	49	49
Lecturer	75	73	68	65	77	75	85
Associate Professor	48	42	44	48	49	49	48
Professor	66	77	91	98	84	77	66
TOTAL	245	249	255	269	268	260	256

NUMBER OF PART TIME ACADEMIC STAFF, AS AT THE 1ST OF OCTOBER EACH ACADEMIC YEAR

	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Preparator	0	0	0	0	0	0	0
Assistant	17	9	13	14	10	38	44
Lecturer	27	38	32	32	26	28	66
Associate Professor	0	3	1	0	0	0	0
Professor	0	1	0	0	0	0	0
TOTAL	44	51	46	46	36	66	110

TOTAL NUMBER OF ACADEMIC STAFF, AS AT THE 1ST OF OCTOBER 2011

Academic position	Faculty of Agriculture		Faculty of Horticulture		Faculty of Animal science and Biotechnology		Faculty of Veterinary Medicine		TOTAL	
	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time
Preparator	2	0	4	0	0	0	2	0	8	0
Assistant	16	7	12	20	8	3	13	36	49	66
Lecturer	26	11	25	24	7	3	27	6	85	44
Associate Professor	12	0	14	0	8	0	14	0	48	0
Professor	22	0	14	0	15	0	15	0	66	0
TOTAL	78	18	69	44	38	6	71	42	256	110

FULL TIME ACADEMIC STAFF, BY GENDER, AS AT THE 1ST OF OCTOBER 2011

Academic position	TOTAL	Out of which:	
		Women	Men
Preparator	8	4	4
Assistant	49	24	25
Lecturer	85	38	47
Associate Professor	48	19	29
Professor	66	20	46
TOTAL	256	105	151

NUMBER OF YOUNG FULL TIME ACADEMIC STAFF OF LESS THAN 35 YEARS OF AGE, AS AT THE 1ST OF OCTOBER EACH ACADEMIC YEAR

2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
48	53	64	81	74	74	73

NUMBER OF DIDACTIC AUXILIARY AND ADMINISTRATIVE STAFF, AS AT THE 1ST OF OCTOBER EACH ACADEMIC YEAR

	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Didactic auxiliary staff	105	116	137	158	159	135	127
Administrative staff	103	103	113	124	126	84	79
TOTAL	208	219	250	282	285	219	206



ROMÂNIA
MINISTERUL EDUCAȚIEI, CERCETĂRII, TINERETULUI ȘI SPORTULUI
UNIVERSITATEA DE ȘTIINȚE AGRICOLE ȘI MEDICINĂ VETERINARĂ
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STRATEGIC PLAN OF USAMV CLUJ-NAPOCA 2012 - 2016



Tradition and modernity

Cluj-Napoca, 2012

1. PREAMBLE

The University of Agricultural Sciences and Veterinary Medicine (USAMV) of Cluj-Napoca is a higher education institution of advanced research and education who enjoys a tradition of over 140 years, which managed to respond successfully to the outstanding requirements concerning education, research and innovation for the national and regional agriculture.

For the future, USAMV Cluj-Napoca has to exist and develop within the new context of the European Higher Education Area (EHEA) and the European Research Area (ERA). Also very challenging is the new frame of the globalized market, where the prospects and programs are permanently renewed, where geographical barriers are blurring, the informational technologies are offered to students beyond the conventional boundaries and the research is developed by international partnerships and utilizes most of the community's financial resources. In that newly created space, the Mission of our University of having an advanced research and education must be supported by a realistic strategic plan, essential in adapting to the new challenges of the society trends and of the academic world today; a world characterized by dynamism, inventiveness and spirit of competition, to which the Romanian society must answer according to the new aspirations of a knowledge-based civilization.

In order to face those new challenges, the criterion of excellence has to hold the central role for our University but, similarly to the other European higher education institutions we have also to promote a strategy in line with the current stage of an, unfortunately, deep global economic crisis. A pragmatic approach is thus essential for our strategy, to be able to aspire to the goal of maintaining our University ranked among the best universities in Romania and as a model of success, considering the synergy of education, agricultural research and innovation, with impact at regional, national and international level.

The current Strategic Plan presents the mission and the essential objectives of USAMV Cluj-Napoca in its main fields of activity: education, research, services for the society, and proposes the adequate policies to support the achievement of those objectives. The sector specific strategies will be defined within the framework of the Annual Operational Plans that include detailed actions and measures to be taken at the level of the University, faculties and departments.

The current Strategic Plan was developed in accordance with the Management Plan and the Management contract signed by the Rector with the University Senate, and takes into account the four-year period of the mandate. It was elaborated after a broad consultation of the members of the Administration Board and the Council for University Strategies, in order to find the most suited answers to the four fundamental questions in defining sustainable goals and finding the most effective approaches to achieve them: who we are as an organization? Where we want to go? How do we get where we proposed? How do we know that we ended up where we aimed to be?

2. VALUES AND VISION

The current Strategic Plan is different from the earlier ones, due to the profound changes under consideration of the current societal era, marked by the effects of the world economic crisis and substantial budgetary decreases of the society. We cannot neglect this situation, even if we are expecting changes in the system, but we have to face these problems and seek solutions with confidence in the Albert Einstein's remark: "in the middle of difficulty lies opportunity". We believe that if we succeed to focus on a realistic strategic vision, we can promote the University at a level of efficiency and quality superior to that existing in this moment, so that we will educate and teach our students, researchers and specialists to become

citizens with a broader vision about the current economic, cultural and social realities and able to contribute to the building of a sustainable future.

In this context, as a higher education institution, we want to focus on the formation of solid skills to our students, needed as base for on solving the global problems in the spirit of social responsibility. As an advanced research University, we will promote an innovative education, in which research will bring a major contribution to the intellectual and professional formation, oriented to complex problems of the Romanian agriculture, but also to the new orientations in the European life sciences.

Being aware of these challenges, we assumed a strategic vision that cope successfully with these trends, allowing the University to become more attractive by its academic quality and services, at the level and requirements of the European standards. We also aim, at a greater extent, to satisfy the professional, material and social requirements of our academic community, which we represent and serve.

In supporting that vision, in the future development of our University a special importance will be granted to the financial sustainability of the Strategic Plan aiming the increasing the University's budget by increasing the collecting of the financial resources from our main processes: education, research and services. We also rely on a large mobilization of the available human and material resources and on a greater responsibility and involvement of the staff in realizing the proposed strategic objectives.

The whole academic community needs to be aware about the compulsory need of reaching together the Strategic Plan's objectives. This will be an assessment parameter for every community member, according to his contribution brought to their fulfillment, along with the compliance to the basic values of USAMV Cluj-Napoca:

1. Excellency - promoted in all competence fields
2. Tradition - for professional, scientific and cultural values of the University
3. Innovation - in research and education, for a knowledge-based society
4. Responsibility - for individual actions and for the society
5. Respect - towards nature and for intellectual and cultural diversity of the academic community

3. MISSION

According to its Charter USAMV Cluj-Napoca has as mission the professional formation at university level and the scientific knowledge production by research and innovation. The assumed mission is realized by education and advanced scientific research. The University will fulfill its mission by promoting excellence in education, research and innovation, by initial and post-university formative study programs, by long-life learning system, and by acceding to the universal values, in accordance with the requirements of a knowledge-based society.

By the promotion height quality bachelor studies, master's studies, PhD programs and postgraduate education, based on knowledge development, on research and innovation, the University will provide an academic education aiming for its graduates to be specialists of high qualification in the fundamental fields of life sciences, e.g. agricultural and forestry sciences, engineering sciences, veterinary medicine and Natural Sciences.

Through the quality of the educational activity, by dialogue with society and adaptation to its current needs, the University aims to contribute to the local, regional, national and European development in terms of social, economic and cultural life. The education and research aims to promote the universal

knowledge values, and this process involves a correct evaluation and self-evaluation, a constructive dialogue and mutual respect in the expression of opinions, as well as the recognition of the human rights and the human fundamental freedom, respect and tolerance towards diverse opinions, ideologies and religions, respect towards all living and environmental issues.

USAMV Cluj-Napoca, according to its specificity, needs to answer the market economy demands, its entire activity being focused on the efficiency and performance criteria.

By master, PhD, postdoctoral studies, by the continue formation and specialization, and by the knowledge improvement of the pre-university teaching staff and the academic staff, the University is defined as an active participant in the lifelong learning and in the professional reconversion of the labor force. Through its policies of recruitment, promotion and training of teachers and researchers, the University will assure the necessary human resources for professional training at university and post-university levels, as well good models for professional and civic behaviors.

The University aims to have an active role in the elaboration and implementation of policies and educational programs, for research, technology transfer and employment, at national and international levels. Through a sustained development, the USAMV Cluj-Napoca wishes to affirm its role of “pole of excellence” for academic education and research, for culture and technology transfer related to life sciences and specific fields, in the South-East and Central European area.

4. OBJECTIVES

The Institutional objectives of European universities have been clearly defined in Community documents from Bergen (2005), London (2007), Berlin (2011) and by the National Education Law No. 1/2011, assumed by the USAMV Cluj-Napoca and the other universities in Romania, as members of the EHEA. The recent classification has ranked our university on the 5th place within the advanced research and teaching universities in the country, and our main objective is to maintain our position in this category and to assert our academic prestige at international level. In this regard, the following **institutional objectives** were defined to be promoted to achieve these performances:

- consolidating the educational system and promoting a stronger partnership “educator-student”, the student-centered education, and the knowledge-based curricular programs;
- maintaining the current number of students in the three cycles of training with a more focused orientation towards master and PhD studies in order to ensure a minimum of 40% from the total students;
- to initiate new courses and specializations in French and English for all the three cycles of higher education in the agricultural and veterinary fields;
- teaching internationalization and its orientation towards the new trends in the life sciences and fostering the promotion of the cooperation programs finalized with a double diploma or co-tutela;
- developing a comprehensive and functional system of lifelong learning;
- continuing the institutional adaptation to the new international quality standards imposed by MECTS, ANCS and ARACIS;
- encouraging the student’s and teachers’ mobility , as well for the administrative staff;
- integral recognition of studies carried out by students in international cooperation programs;

- increasing the staff responsibility and competitiveness and promoting equal chance for all community members;
- consideration of research as being inextricably linked to the educational mission by each member of the teaching staff;
- establishing of a specific Research Institute for each faculty;
- ensuring the sustainable development of the university, funded both by government budget and by non-budgetary sources;
- increasing the funding sources by partnerships with the private economic environment;
- increasing the university's offer for services, consulting, technological transfer, to be supplied to the community by the university in order to increase the number of beneficiaries;
- increasing of the publications' number in peer-reviewed ISI journals with impact factor and high influence scores, aiming as well a greater number of citations for the publications of the academic community members of our University;
- the integration of scientific research within the European Research Area (ERA) and refining the priorities in the areas of research where the university may consolidate its national and international visibility;
- promoting the excellence in all areas of university's activities;
- supporting the university's competitiveness at the European level by positioning of education and research processes on the education-research-innovation axe, as the engine of the social and economic development;
- increasing the university's involvement in solving the social and cultural needs of the local and regional community.

4.1. EDUCATIONAL OBJECTIVES

Among the main actions to achieve **strategic objectives for education** it has to be underlined the followings:

- inclusion in the teaching activity of new methods for teaching and learning and promotion of initiatives which improve the communication between teachers and students;
- continuing the modernization and synchronization of the teaching plans and the university curricula with new trends in the European education;
- bringing the focus of whole university's academic activity on competence formation;
- supporting and financially rewarding the academic community members which, by personal or group initiatives, improve the teaching quality;
- supporting the educational projects considered by the members of departments, as priorities and having perspectives, and that necessitate sustainable costs;
- performance-based recruitment of new young teachers, and stimulation of the PhD students involvement in educational activities and students practice placements;
- promote a spirit of cooperation at institutional level and beyond, by maintaining constructive relationships within the academic community and in the dialogue with university's partners;

- regular student involvement in the assessment of educational activities at all levels, including bachelor, master's, doctoral and postdoctoral studies;
- expanding the training process of students by promoting moral values and love for nature, art and sports;
- implementing the new European system of academic self-analysis (*self-study*) by presenting within the department staff meeting, every two years, the CV and the main activities of each teacher member of the department;
- financial rewarding with merit graduation and increasing of the employment coefficient for proven successful teachers.

These actions designed for **improving the teaching process** will be supplemented by an action plan for long-term academic structure, focusing on:

- orientation of bachelor professional specializations towards the labor market requirements, mainly the emergent one, with a real growth potential;
- higher valorization of educational potential of the university by supporting the qualified training activities, e.g. master and doctoral level;
- organizing the research-oriented MSc and the PhD study programs/modules, within doctoral schools with specific focus, that will be specified in accordance with the European norms and the regulations in force;
- institutional and financial support for teachers to achieve the CNATDCU habilitation standards, for increasing the potential of university's doctoral schools;
- restructuring the department of distance learning education in order to increase the attractiveness for this form of study and for a significantly increase in the number of students;
- establishing of the university's educational system dedicated to continue education, defining its clear mission and the functioning rules;
- designing of modules, specializations and new MSc programs, in French and English, to balance the international exchange of students and teachers and increase the teachers' responsibility for increasing the teaching internationalization.

The implementation of the above actions is within the responsibility of the Educational Vice-rector and the Vice-rector responsible for quality assurance and human resources.

One of the elements that define the evolution of Romanian universities in recent years is the new approach concerning the partnership with students into the academic construction, as stated in the new Law of National Education that considers the student as an equal member within the academic community, both in relation to educators and in comparison with other students.

The recognition, in the university strategy, of the principles stipulated in the University Charter, namely to promote the student-centered education, opens the way for considering the teacher-student partnership as a defining element to achieve the proposed performances. This view, properly understood by both partners, can lead to substantial and productive dialogue in order to achieve the actions previewed by the educational and research strategy.

4.2. RESEARCH OBJECTIVES

To achieve the above-mentioned objectives, we propose an action plan including the main key support policies for research, education, and services areas.

Among the main actions to achieve **strategic objectives for research** we point out the following:

- increasing the valorization of the research and innovation university's potential and the scientific production outcomes created due to the excellent university's human resources and modern facilities available at the Institute of Life Sciences and in the university's research centers and laboratories;
- developing new research projects within the new research institutes that will be established for each faculty;
- applying for the former national evaluation of the university's research centers by ANCS (National Agency for Scientific Research);
- finalizing the accreditation of the existing laboratories as well the initiation of establishing new research laboratories and service units for economic partners;
- increasing the efficiency of the Research Department by providing additional specialized staff to reduce bureaucracy and increase the services provided for supporting the research;
- promoting the didactical stations from Cojocna and Jucu as excellence pilot farms and their integration in the research, study and practice of students;
- integration of Horticultural Research Institute in the university activity structure;
- developing the collaboration with other research stations in the region, in particularly with the Agricultural Research and Development Station of Turda.

In addition to these actions dedicated to ensure the development of the university's research activities, it's needed to have in view the **mobilizing of significant financial resources** needed to support the implementation of the above action plan, by:

- maintaining a high rhythm for the research projects' offer and with an increased chance of success, for the national competitions;
- initiating of new research projects - interdisciplinary and in partnership – in order to reevaluate university's expertise and facilities at national and European level;
- involving of the university's experts in the internal assessment of the research projects proposals, before submission, to enhance the competitiveness and quality of the submitted projects and to increase their chance of success;
- involvement of MSc and PhD students in the research and in publishing activities, and supporting them to apply for individual projects and grants;
- extension of the research facilities use for the community services and economic partners, by contracting research topics on demand;
- increasing the exploitation of research results by publications in scientific journals rated and indexed in famous international databases (especially the ISI, Scopus, etc.), or in national assessed and recognized scientific journals;
- increasing the valorization of the applied research outcomes by submitting inventions, innovations and technology transfer;
- increasing the number of teachers, researchers and PhD students involved in the projects evaluation by their comprising within the National register of evaluators;

- increasing the number of PhD and MSc students within the research programs contracted by the teachers;
- ensuring the financial support for permanent or indefinite full time research positions;
- ensuring the financial support for the priority research projects, or the co-financing;
- increasing the participation of the university's members to professional associations in the country, including as members of ASAS and / or Romanian Academy;
- supporting public scientific conferences presented by our academic staff in the community benefit;
- increasing the impact of the research on the educational process by integrating the its outcomes and results within the lectures and laboratory applications;
- involving university staff in the European scientific expert evaluations comities and boards;
- increasing the visibility of university's teachers and researchers by participating in activities and in the boards of associations, academia and international scientific organizations, as recognition of their scientific prestige.

For a permanent **increase in the quality of scientific production**, the objectives achievement will be ensured by the following actions:

- stimulating the permanent increase in the number of publications in ISI scientific journals with impact factor and score of influence, and of the number of citations of the scientific papers having authors from our university;
- ensuring the financial support for teachers to publish articles in ISI publications with impact factor and score of influence, to fulfill the eligibility criteria for programs *Ideas* and *Partnerships*;
- stimulating the participation to scientific events in the country and abroad, with original papers or as moderator, visiting lecturer and member of scientific board;
- organizing the Annual International Symposium "Prospects for the Third millennium agriculture" and increase the international visibility of the four specific university's Bulletins;
- increase the visibility and impact factor above 0.5 of the main journal published by the university, "Notulae Botanicae Horti Agrobotanici Cluj";
- increase the Library book fund and establishing of an electronic library;
- encouraging the teachers who have valuable publications, to apply for awards and distinctions (ANCS, ASAS, Romanian Academy, etc.).

The implementation of these actions is within the responsibility of the Vice-rector for research and the Vice-rector responsible for quality assurance and human resources.

4.3. INFRASTRUCTURE DEVELOPMENT AND FINANCIAL MANAGEMENT

Among the main actions to achieve these **strategic objectives for the infrastructure development** we point out the following actions:

- completion and inauguration of the new "Advanced Horticultural Research Institute of Transylvania" (ICHAT);
- completion of the new design project for the "Institute of Nutrition and Pathology of large animals" (INP) and launching of the infrastructure project;
- completion and inauguration of the "Didactical and Research Biobase for Animal Husbandry";

- establishment of the “Agricultural Research Institute” in cooperation with ARDS Turda;
- continuing the investment for the “Teaching and Research Center for Food Science and Technology” and the establishment of the new “Faculty of Food Science and Technology”;
- integration of “Fruit Growing Research Station” within the university’s infrastructure and its rehabilitation as “Center of excellence for teaching and experimental horticulture”;
- launching the project for the “Incubator for agricultural business” in association with the University of Maryland, USA in the location of the “Fruit Growing Research Station” Cluj;
- initiation of the new project: “Someșul Cald Didactical Center”, for teaching and research in forestry, mountain science and hunting, situated in Someșul Cald location;
- inauguration of the Students’ Hostel “Agronomy II”;
- completion and inauguration of the new building for the “Central University Library”;
- reorganization of the “Center for distance learning and continue education”;
- inauguration of the “ Teachers Club”;
- completion and inauguration of a restaurant within the university campus
- inauguration of “Agronomia” kindergarten;
- initiation of the project design for the exhibition “Dealul Craiului”;
- organizing the “University Museum”;
- optimization of energy sources in the university campus.

An important condition to achieve these ambitious goals and objectives is for the university to obtain the needed financing, but the planned investment terms are structured in such a manner to allow the university to hold for long term one of the best and complex campuses in the country, provided with all the facilities needed to achieve the scientific and educational performance at the level of European excellence. It is envisaged that these objectives will be achieved by budgetary funding, attracted funds by the university incomes and funds for financing dedicated projects, so that the university staff remuneration budget to be kept unaffected.

The implementation of these actions is within the responsibility of the Vice-rector for institutional development and the General Administrative Director.

Increasing the university international visibility is an ongoing strategic goal and our current national rank position will facilitate this process, as the current institutional and organizational structures relations already provides a broad accessibility to about 40 foreign universities and higher education institutions that have signed bilateral agreements with our university. The university is also an active member, initiator or leader, within a number of international partnerships and organizations were the university’s prestige and its representatives work are widely known and appreciate. Presently, the university is ensuring the consolidation of existing international partnerships and relationships and the development of new profitable ones.

4.4. INTERNATIONAL RELATIONS

Among the main actions for achieving the **strategic objectives concerning the international relations** it has to be underlined the following:

- increasing the university's prestige by the active participation within consortia and associations and by European and international academic affiliations;
- involvement of teachers in the exchange programs with partner universities from EU and non EU countries;
- increasing the international visibility for a more active European involvement in education by increasing the attractiveness of our extension studies in Viterbo - Italy, and also by increasing the number of foreign students for university's study programs;
- ensuring the financial support by special programs dedicated to the foreign students, university's teachers and those invited from abroad, because they can become the best ambassadors for the future university performance and its international visibility.

The implementation of these actions is within the responsibility of the Vice-rector responsible for International relations.

4.5. PARTNERSHIP WITH STUDENTS

Among the main actions to achieve the strategic objectives related to the **partnership with the students**, we notice the following:

- defining as "student" all the people studying within the university, either at undergraduate, master's, doctoral or postdoctoral levels;
- granting the non-discrimination of students, regardless of the above categories, regardless they belong or not to the structures of students organizations;
- continue promotion of an open dialogue and a constructive relationships with student representatives in the university's Senate and faculties Councils, as well as those representing the students organizations;
- increase of the quality standards in education through a more active participation of the students in the teachers' evaluation process, at all levels of study, and effective use of the evaluation outcome to correct the revealed deficiencies;
- improving of the *tutoring* and *mentoring* programs for effective identifying and solving of the students real problems;
- identifying and solving the professional and financial students problems that may lead to the school abandon, in all years of study;
- improvement of accommodation and meals and ensuring of a stronger discipline in the administration and functioning of student hostels;
- implementation of the future "*Student code of rights and obligations*" and monitor the compliance with its terms and requirements;
- establishment of a special and effective communication channel for the Administration Board dedicated to student problems;
- support the activities organized by students within the joint programs for the promotion of educational, scientific, cultural, social, sports or humanitarian values;
- consolidating the mutual trust relationship between teachers and students, and promotion the mutual respect for the values, religion, dialogue and real partnership.

The implementation of these actions is within the responsibility of the Vice-rector for Social problems and Students, the vice-rectors for Education and Research, and the Vice-rector with Quality assurance and Human resources.

5. CONCLUSIONS

In accordance to the strategic decision made in the last decade (see: *Appendix – Strategic decisions in the last decade*), our university has, as duty, to continue for the future to ensure a modern and diverse infrastructure to serve the mission and strategy assumed and allowing a better use of the university's teachers and researchers' skills and for the better professional training of the students. In accordance to that it is aimed to increase the comfort for the academic community by providing new services in the university campus, including the academic community family members.

At present, the university is considered a national leader in some fields of education, performance which is confirmed by their positions within the official hierarchy established by MECTS concerning the ranking of the higher education study programs. The above strategy aims to continue those achievements and to expand and to formulate objectives and an action plan in accordance with new requirements of the European higher education system. It has to be underlined that all the resources needed to achieve the declared objectives of this strategy for the period 2012-2016 were estimated, based on sustainable budgets, consistent with the university development needs. There were evaluated also the risks of a period of deep economic crisis and financial instability and there are to be considered also Contingency Plans to overcome the unexpected situations.

The proposed strategy is very ambitious, aiming to face a major challenge regarding the ensuring of a sustainable development and affirmation of national and international prestige of the university, while maintaining a large number of students on a competitive market where excellence, wanted by every university, can bring the difference. To achieve the expected results, this strategy has to be implemented in all five directions underlined in the Action Plan. The operational annual plans will detail the resources and financial measures to support the strategic objectives and the Action Plan.

Will that strategy be a success? Will the university be able to keep the same favorable situation as today? Could we say that excellence was promoted here, more than in other universities? Do we have an attractive university for students? Can we keep the great number of students we have today? Would they be able to become employed after graduation? Might we have the expected international recognition in research and education? Just some questions and if the answer will be "yes" it means that the university's management and its academic community efforts succeeded. Designing the Strategic Plan is only the first step towards implementing the Action Plan. The mobilization of all the academic community's efforts and consensus regarding the goals and objectives is the second important step towards success.

This Strategic Plan should be considered a "living" document, adaptable during its implementation process in accordance to the multitude of variables that shape the today environment. We share an optimistic vision regarding the future and, in same time, we are aware that the settled targets are very ambitious. If we will find the best way to implement an efficient management and to diversify the income sources for the sustainable university's development, the implementation of the Action Plan will certainly be an strategically and successfully investment into a future that "sounds good" for USAMV Cluj-Napoca.

RECTOR,

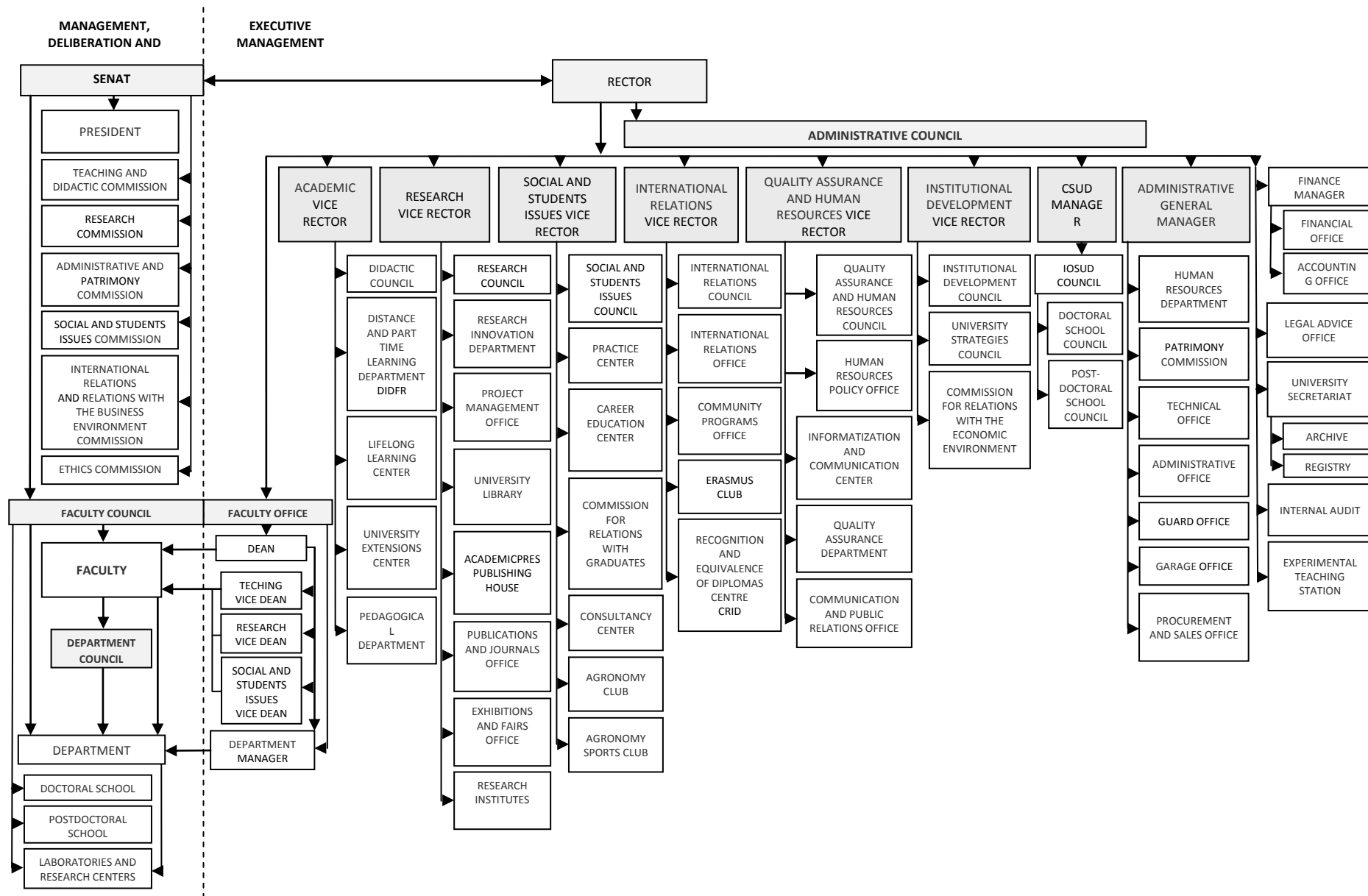
Prof.dr. Doru Pamfil

Appendix – Strategic decisions in the last decade**Strategic decisions of USAMV Cluj-Napoca made in the last 10 years**

Year	The Strategic decision	Supporting instruments	Action	Results	Timing
2002	A new publishing strategy for Academicpres Publishing House, and the modernization of the publishing infrastructure	- Investments in the printing equipment - Redesign of the university journals	- Start to publish only in English - Introducing a compulsory peer review for publications	- USAMV Bulletin included in ISI Proceedings - Notulae Botanicae ranked by ISI Web of Science - Impact Factor for 2010 = 0,463	2006 2011
2003	University international evaluation	The institutional evaluation program carried out by EUA	Developing the Self-evaluation process and the evaluation procedure	- Improved activity and education programs - Strategic decision making for internationalization and RTD	Ongoing
2004	Internationalization of study programs	Intensive English courses for the teaching staff and aboard stages	Young assistant trained in USA and Europe (graduating MS degrees)	- Agribusiness MS degree (En) - Food Quality MS degree (En) - Veterinary medicine (En & Fr) - Rural Development MS (Fr) - Agriculture BCs (Fr)	2006 2007 2008, 2012 2011 2011
2005	Research restructuring for competitiveness	Investment projects in research infrastructure, utilities and human resources	- New research departments - New postdoc programs	- CNCISIS evaluation of the research centers - First place at the National level in research activities, awarded by MEC	2006 2007
2006	Restructuring the study programs to better adapt to the society needs	New study programs for BSc, Ms and PhD (4+2+3 Bologna system)	- Labor market analysis - EU oriented studies - ARACIS accreditation of all study programs	- Increase in the students number - Increase in the student/staff international exchange - Increase in the study programs number	Ongoing
2007	Changing the mission as research university	Reviewing the university Chart	Compulsory research activity and ISI publication for all staff	- Increase of the RDT activities and financing - Increase of the RDT visibility	Ongoing
2008	QA portal for internal staff evaluation and activities	- Self evaluation for staff - Student evaluation of staff	Compulsory evaluation of all staff & compulsory evaluation by students	- Implemented QA frame for USAMVCN - Differentiated salary payments and salary bonus, based on performance	Ongoing

Year	The Strategic decision	Supporting instruments	Action	Results	Timing
2009	Changing mission for advances research and education in life sciences	Changing the university Chart	Define the research strategy for excellence in the priority areas Selecting the best research teams for investment support	- Increase the access and competitiveness to the national and international research programs - Lunch of Life Science Institute and Biodiversity Centre	Ongoing 2009 2010
2010	University reaccreditation	Accreditation program carried by ARACIS	Accreditation procedure	- University certification with maximum ARACIS standards: high assurance - Increased students confidence	Valid till 2015
2011	ISO 9001 accreditation	Accreditation program carried by AQA	Accreditation procedure for education, research and administration	Identification of the weak areas of activity and increase the QA standards for all activities	Valid till 2015
2011	MECTS classification and study programs ranking	University classification and study programs ranking program provided by MECS	University report for national classification and study programs ranking	- Classified in top 12 advances research and education universities, as the fifth, and - ranked for the majority of the program studies in the Class A	Valid till 2015 Annually
2012	Implementation of a new entrepreneurship management for a sustainable excellence at the university level	- Management contracts between rector and the Senate and between rector and the Administrative council members - Restructuring the departments	Decentralizing the budget and responsibilities at faculties and departments level	- Increased responsibilities and initiatives of the staff members Increase the budget - Better staff payment system, by performance and excellence - Annually report of activity	Ongoing
2012	University international reevaluation	The institutional evaluation program carried by EUA	Developing the Self-evaluation and the evaluation procedure	- Confirm our classification as advanced research and education university - Improve all activities	Ongoing

Appendix – Management and organizational chart



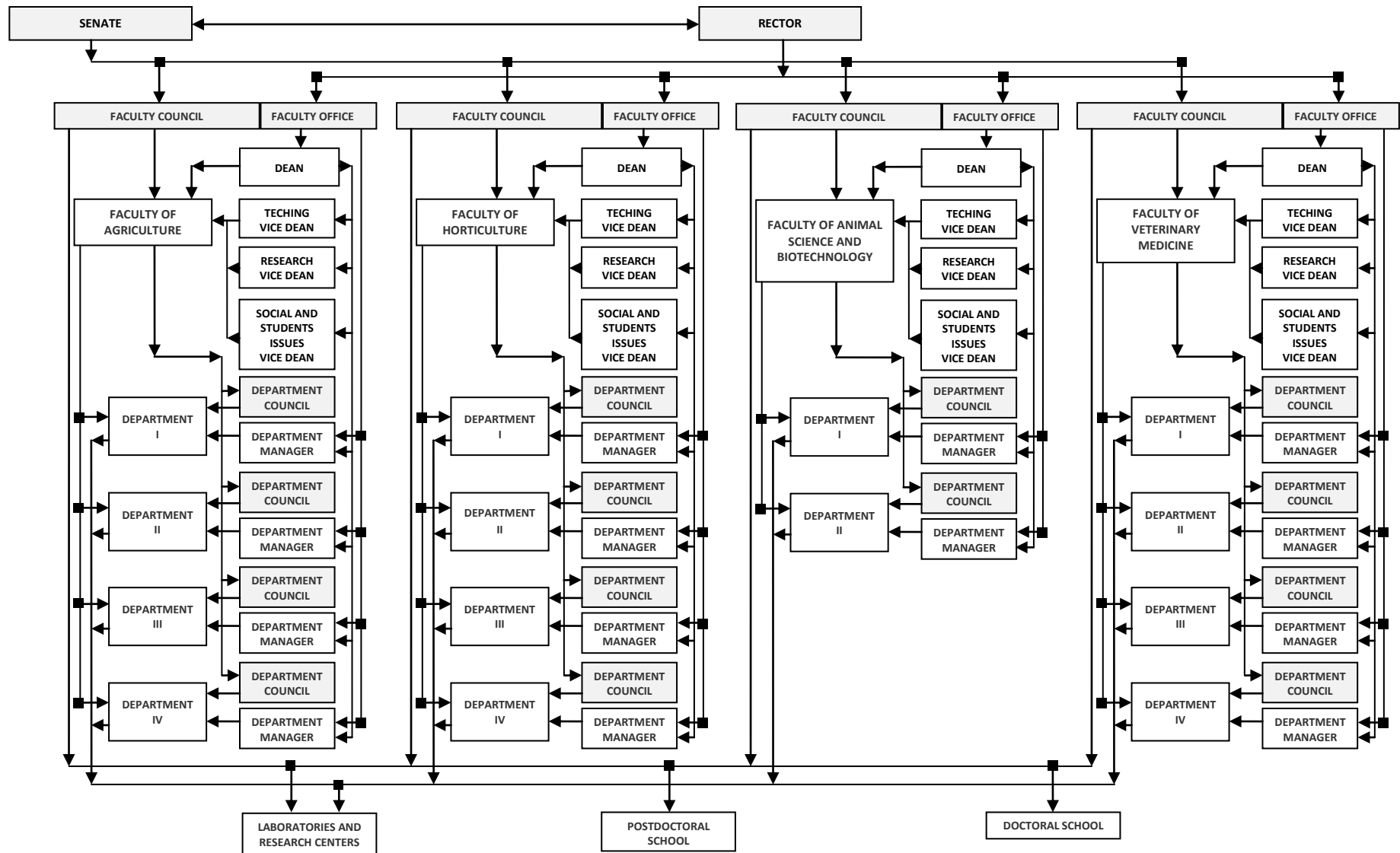
THE UNIVERSITY SENATE

1. Mr. Liviu Al. MĂRGHITAȘ, Professor – Senate President
2. Mrs. Ileana BOGDAN, Professor, Faculty of Agriculture – Senate Vice-president, Chairperson of the TEACHING AND DIDACTIC COMMISSION
3. Mrs. Sevastița MUSTE, Professor, Faculty of Agriculture – Senate Vice-president, Chairperson of the RESEARCH COMMISSION
4. Mrs. Adriana PĂUCEAN, Lecturer, Faculty of Agriculture – Senate Member
5. Mr. Ioan HAS, Professor, Faculty of Agriculture – Senate Member
6. Mr. Ion OLTEAN, Professor, Faculty of Agriculture – Senate Member
7. Mr. Marcel DUDA, Professor, Faculty of Agriculture – Senate Member
8. Mrs. Carmen PUIA, Professor, Faculty of Agriculture – Senate Member
9. Mr. Ovidiu RANTA, Lecturer, Faculty of Agriculture – Senate Member
10. Mrs. Mirela CORDEA, Associate Professor, Faculty of Horticulture – Senate Member
11. Mrs. Rodica SIMA, Associate Professor, Faculty of Horticulture – Senate Member
12. Mrs. Ana CIOTLĂUȘ, Professor, Faculty of Horticulture – Senate Vice-president, Chairperson of the ADMINISTRATIVE AND PATRIMONY COMMISSION
13. Mrs. Florica MATEI, Associate Professor, Faculty of Horticulture – Senate Member
14. Mr. Ioan TĂUT, Associate Professor, Faculty of Horticulture – Senate Member
15. Mrs. Marioara ILEA, Lecturer, Faculty of Horticulture – Senate Member
16. Mr. Alexandru TODEA, Lecturer, Faculty of Horticulture – Senate Member
17. Mrs. Adriana CRISTE, Lecturer, Faculty of Animal Science and Biotechnology – Senate Member
18. Mr. Marius ZĂHAN, Lecturer, Faculty of Animal Science and Biotechnology – Senate Member
19. Mr. Gheorghe MUREȘAN, Professor, Faculty of Animal Science and Biotechnology – Senate Vice-president, Chairperson of the INTERNATIONAL RELATIONS AND RELATIONS WITH THE BUSINESS ENVIRONMENT COMMISSION
20. Mr. Viorel MICLĂUȘ, Professor, Faculty of Veterinary Medicine – Senate Member
21. Mr. Adrian GAL, Lecturer, Faculty of Veterinary Medicine – Senate Member
22. Mr. Gheorghe BRUDAȘCĂ, Professor, Faculty of Veterinary Medicine – Senate Member
23. Mr. Liviu OANA, Professor, Faculty of Veterinary Medicine – Senate Vice-president, Chairperson of the ETHICS COMMISSION
24. Mr. Iancu MORAR, Associate Professor, Faculty of Veterinary Medicine – Senate Vice-president, Chairperson of the SOCIAL AND STUDENTS ISSUES COMMISSION
25. Mrs. Adela PINTEA, Associate Professor, Faculty of Veterinary Medicine – Senate Member
26. Mr. Adrian MACRI, Lecturer, Faculty of Veterinary Medicine – Senate Member
27. Mrs. Simona CHIȘ, Student, Bachelor level, Faculty of Agriculture – Senate Member
28. Mrs. Diana COȚA, Student, Bachelor level, Faculty of Horticulture – Senate Member
29. Mr. Cristian FELVINȚI, Student, Bachelor level, Faculty of Animal Science and Biotechnology – Senate Member
30. Mrs. Timea HITTER, Student, Bachelor level, Faculty of Horticulture – Senate Member
31. Mr. Radu MANDEAL, Student, Bachelor level, Faculty of Veterinary Medicine – Senate Member
32. Mrs. Ștefania DOBRICAN, Student, Master level, Faculty of Horticulture – Senate Member
33. Mrs. Adriana OPINCARIU, Student, Master level, Faculty of Agriculture – Senate Member
34. Mrs. Mihaela POPA, Student, Bachelor level, Faculty of Agriculture – Senate Member
35. Mr. Flaviu TABARAN, Student, Doctoral level, Faculty of Veterinary Medicine – Senate Member

THE UNIVERSITY ADMINISTRATION COUNCIL

1. Mr. Doru PAMFIL, Professor – Rector of the University
2. Mrs. Carmen SOCACIU, Professor – Vice rector for Research
3. Mr. Ioan ROTAR, Professor – Vice rector for Academic
4. Mr. Augustin VLAIC, Professor – Vice rector for Institutional Development
5. Mr. Adrian OROS, Lecturer – Vice rector for Social and students activities
6. Mrs. Ioana POP, Lecturer – Vice rector for Quality and Human resources
7. Mr. Andrei MIHALCA, Lecturer – Vice rector for International relations
8. Mrs. Roxana VIDICAN, Professor – Dean of the Faculty of Agriculture
9. Mr. Radu SESTRĂȘ, Professor – Dean of the Faculty of Horticulture
10. Mrs. Vioara MIREȘAN, Professor – Dean of the Faculty of Animal Science and Biotechnology
11. Mr. Cornel CĂTOI, Professor – Dean of the Faculty of Veterinary Medicine
12. Mr. Viorel PORUȚIU – General administrative manager of the University
13. Mr. Adrian MORARIU, Student, Master level, Faculty of Horticulture – Students Prefect

Appendix – Faculties chart



THE FACULTIES DEANS

1. Mrs. Roxana VIDICAN, Professor – Dean of the Faculty of Agriculture
2. Mr. Radu SESTRĂȘ, Professor – Dean of the Faculty of Horticulture
3. Mrs. Vioara MIREȘAN, Professor – Dean of the Faculty of Animal Science and Biotechnology
4. Mr. Cornel CĂTOI, Professor – Dean of the Faculty of Veterinary Medicine

THE UNIVERSITY DEPARTMENTS MANAGEMENT

FACULTY OF AGRICULTURE

Departament I: Soil sciences and Mechanization

Mr. Ioan DROCAȘ, Professor – Head of department

Departament II: Plants culture

Mr. Gavrilă MORAR, Professor – Head of department

Departament III: Plants and environmental protection

Mr. Ioan OROIAN, Professor – Head of department

Departament IV: Food Engineering

Mrs. Maria TOFANĂ, Professor – Head of department

FACULTY OF HORTICULTURE

Departament I: Horticulture and Landscape

Mr. Dănuț MĂNIUȚIU, Professor – Head of department

Departament II: Forestry

Mr. Liviu HOLONEC, Associate Professor – Head of department

Departament III: Economics

Mr. Felix ARION, Associate Professor – Head of department

Departament IV: Land Measurements and exact sciences

Mr. Mircea ORTELECAN, Associate Professor – Head of department

FACULTY OF ANIMAL SCIENCE AND BIOTECHNOLOGY

Departament I: Fundamental sciences - biotechnology

Mrs. Augusta LUJERDEAN, Professor – Head of department

Departament II: Fundamental sciences - Animal Science

Mr. Grigore ONACIU, Professor – Head of department

FACULTY OF VETERINARY MEDICINE

Department I: Preclinical Education

Mr. Aurel DAMIAN, Professor – Head of department

Department II: Animal production and food safety

Mr. Marian MIHAIU, Professor – Head of department

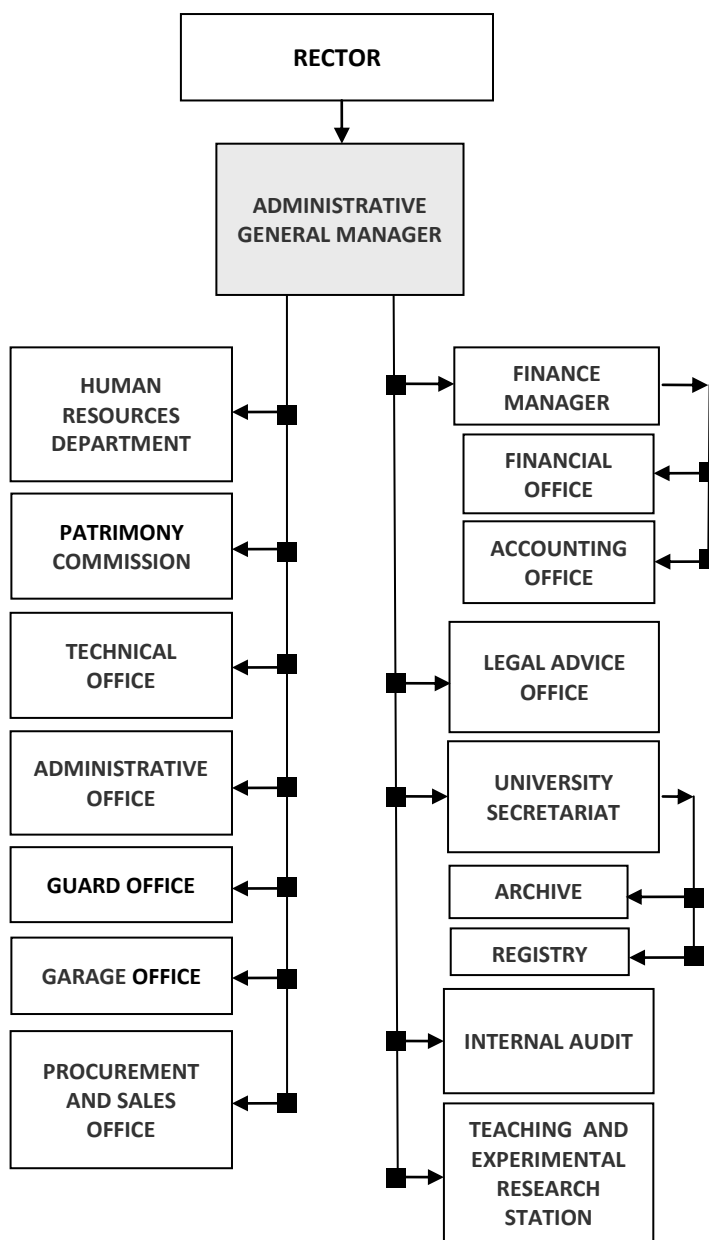
Department III: Paraclinical subjects

Mr. Nicodim FIȚ, Associate Professor – Head of department

Department IV: Clinics

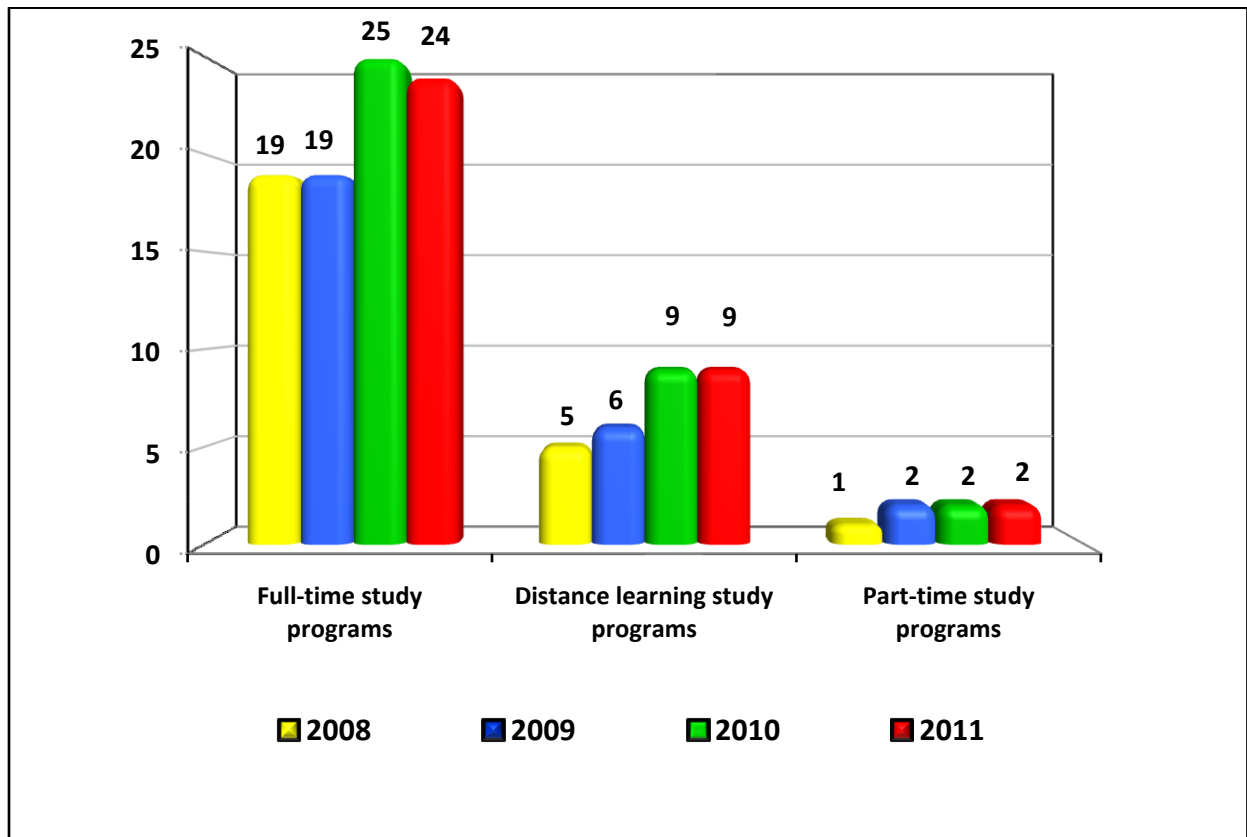
Mr. Ioan GROZA, Professor – Head of department

Appendix – Central administration and support services chart



Appendix – Bachelor study programs

Evolution of the bachelor study programs' number, per year



Full-time bachelor study programs, for the academic year 2011/2012

FACULTY	STUDY PROGRAM	PROGRAM CHARACTERISTICS	LEGAL STATUS	Program ranking category, in 2011 ²⁴
FACULTY OF AGRICULTURE	Agriculture	<u>Duration of studies:</u> 4 years <u>Academic degree:</u> Bachelor of Science <u>Title:</u> Engineer	Accredited, since 1995	A
	Agriculture (in French)		Accredited, since 2010	A
	Mountain Science		Accredited, since 2002	A
	Biology	<u>Duration of studies:</u> 3 years <u>Academic degree:</u> Bachelor of Science <u>Title:</u> Biology graduate	Accredited, since 2007	B
	Utilization of Machines and Equipments for Agriculture and Food Industry	<u>Duration of studies:</u> 4 years <u>Academic degree:</u> Bachelor of Science <u>Title:</u> Engineer	Provisional authorized, since 2010	A
	Technology of Agri-Food Processing		Accredited, since 2002	A
	Control and Expertise of Food Products		Accredited, since 2010	A
	Environment Engineering and Protection in Agriculture		Accredited, since 2009	C
	Food Engineering		Provisional authorized, since 2010	A
FACULTY OF HORTICULTURE	Horticulture	<u>Duration of studies:</u> 4 years <u>Academic degree:</u>	Accredited, since 1995	A
	Landscape Science		Accredited, since 2010	A

²⁴ In accordance to document published by the MECS, regarding the study programs ranking organized by the accredited universities from the national education system according to the Article 193 of the National Education Law No. 1/2011 and the provisions of the Government Decision No. 789/2011 for the approval of the Assessment methodology for the universities classification and the study programs ranking: http://chestionar.uefiscdi.ro/docs/programe_de_studii.pdf

	Economic Engineering in Agriculture	Bachelor of Science <u>Title:</u> Engineer	Accredited, since 2005	B
	Engineering and Management in Public Food and Agri-tourism		Accredited, since 2010	B
	Engineering and Management in Tourism industry		Provisional authorized, since 2010	B
	Forestry		Accredited, since 2009	A
	Land Measurements and Cadastre		Provisional authorized, since 2010	C
FACULTY OF ANIMAL SCIENCE AND BIOTECHNOLOGIES	Animal Science	<u>Duration of studies:</u> 4 years <u>Academic degree:</u> Bachelor of Science <u>Title:</u> Engineer	Accredited, since 1995	A
	Fish Farming and Aquaculture		Accredited, since 2009	A
	Agricultural Biotechnologies		Accredited, since 2002	A
	Biotechnologies for Food Industry		Provisional authorized, since 2008	A
	Veterinary Biotechnologies		Provisional authorized, since 2011	A
FACULTY OF VETERINARY MEDICINE	Veterinary Medicine	<u>Duration of studies:</u> 6 years <u>Academic degree:</u> Bachelor of Science <u>Title:</u> Veterinary physician	Accredited, since 1995	A
	Veterinary Medicine (in English)		Provisional authorized, since 2008	A
	Control and Safety of Food Products		Provisional authorized, since 2010	E

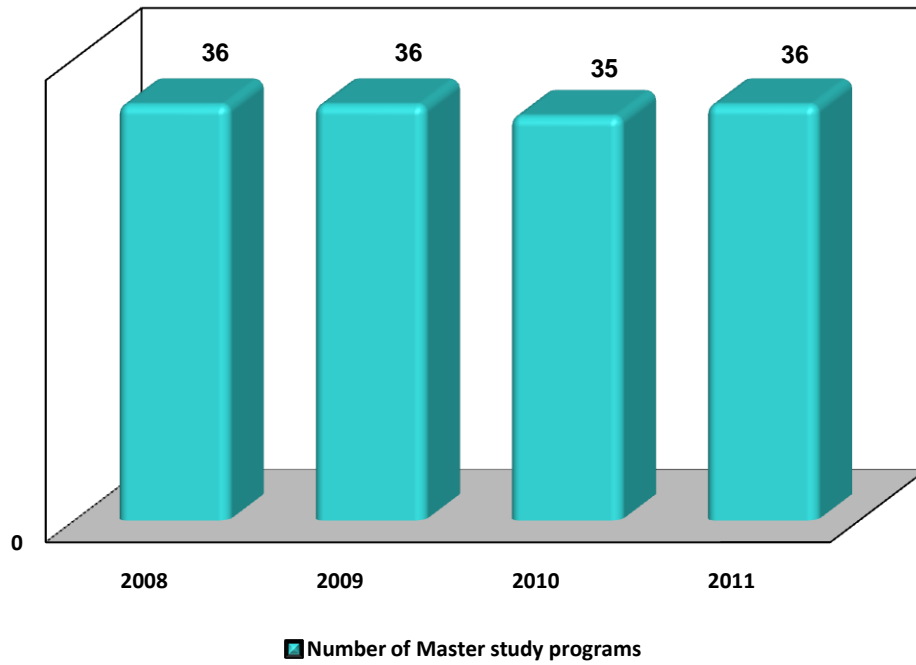
Distance learning/part-time bachelor study programs, for the academic year 2011/2012

FACULTY	STUDY PROGRAM	PROGRAM CHARACTERISTICS	LEGAL STATUS	Program ranking category, in 2011 ²⁴
FACULTY OF AGRICULTURE	Agriculture (DL ²⁵)	<u>Duration of studies:</u> 4 years	Accredited, since 2009	A
	Agriculture – Viterbo, Italy, Extension (DL)	<u>Academic degree:</u> Bachelor of Science <u>Title:</u> Engineer	Provisional authorized, since 2010	A
	Mountain Science (DL)		Provisional authorized, since 2009	A
	Technology of Agri-Food Processing (DL)		Accredited, since 2009	A
	Biology (PT ²⁶)	<u>Duration of studies:</u> 3 years <u>Academic degree:</u> Bachelor of Science <u>Title:</u> Biology graduate	Accredited, since 2009	B
	Environment Engineering and Protection (DL)	<u>Duration of studies:</u> 4 years <u>Academic degree:</u> Bachelor of Science <u>Title:</u> Engineer	Provisional authorized, since 2009	C
FACULTY OF HORTICULTURE	Horticulture (DL)	<u>Duration of studies:</u> 4 years <u>Academic degree:</u> Bachelor of Science <u>Title:</u> Engineer	Accredited, since 2009	A
	Horticulture – Viterbo, Italy, Extension (DL)		Provisional authorized, since 2010	A
	Economic Engineering in Agriculture (PT)		Accredited, since 2010	B
FACULTY OF ANIMAL SCIENCE AND BIOTECHNOLOGIES	Animal Science (DL)	<u>Duration of studies:</u> 4 years <u>Academic degree:</u> Bachelor of Science <u>Title:</u> Engineer	Accredited, since 2009	A
	Animal Science – Viterbo, Italy, Extension (DL)		Provisional authorized, since 2010	A

²⁵ Distance learning²⁶ Part-time

Appendix – Master study programs

Evolution of the Master study programs' number, per year



Full-time Master study programs, for the academic year 2011/2012

FACULTY	STUDY PROGRAM	PROGRAM CHARACTERISTICS	The year of MECTS approval
FACULTY OF AGRICULTURE	Organic Agriculture	<u>Studies duration:</u> 2 years <u>Postgraduate qualification:</u> Master Diploma	2008
	Management of Natural and Agro tourism Resources		2008
	Rural Development		2008
	Biology of Agro Ecosystems		2009
	Plant Protection		2008
	Management of Food Product Quality (in English)		2008
	Processing and Quality Control Systems, for Food		2008
	Food Safety and Consumer's Protection		2009
	Protection of Natural and Atrophic Systems in Agriculture		2009
FACULTY OF HORTICULTURE	Horticultural Sciences	<u>Studies duration:</u> 2 years <u>Postgraduate qualification:</u> Master Diploma	2008
	Management of Horticultural Production in Controlled Climate		2008
	Design, Organization and Maintenance of Green Spaces		2008
	Biodiversity and Bio-conservation		2009
	Genetic Engineering in Plant Amelioration		2009
	Technology of Production and Commercial Exploitation of Special Wines and Derived Products		2009
	Agribusiness (in English)		2010
	Agri-alimentary Economics		2008
	Management of forest ecosystems		2011
	FACULTY OF ANIMAL SCIENCE AND BIOTECHNOLOGIES		The Management of Animal Breeding and Aquaculture
The Management of Animal Product Quality		2009	
Applied Biotechnologies		2009	
FACULTY OF VETERINARY MEDICINE ²⁷	Veterinary Clinic and Radiology	<u>Studies duration:</u> 1.5 years <u>Postgraduate qualification:</u> Master Diploma	2001
	Animal Pathology and Public		2000

²⁷ For the veterinary medicine master study programs where the first two academic cycles are merged within a six years study program the graduating diploma granted is equivalent to a master diploma. Accordingly in 2010 it was organized the last admission exam for the veterinary medicine master program. As a consequence the data bellow are referring to the master study programs that were active until 2010 plus the last two years needed for the study programs closure.

	Safety		
	The Control and Expertise of Animal Origin Products		2001
	Veterinary Stomatology		2001
	Animal Nutrition and Nutritional Pathology		2001
	Biotechnologies in Animal Reproduction		2003
	Applied Veterinary Epidemiology		2001
	Morpho pathologic and Laboratory Diagnosing		2000
	Veterinary Pharmacy		2001

Distance learning/part-time Master study programs, for the academic year 2011/2012

FACULTY	STUDY PROGRAM	PROGRAM CHARACTERISTICS	The year of MECTS approval
FACULTY OF AGRICULTURE	Plant protection (PT ²⁶)	Studies duration: 2 years Postgraduate qualification: Master Diploma	2009
	Management of Food Product Quality (DL ²⁵)		2009
	Processing and Quality Control Systems, for Food (DL)		2009
FACULTY OF HORTICULTURE	The Management of Horticultural Production in Controlled Climate (PT)	Studies duration: 1.5 years Postgraduate qualification: Master Diploma	2009
FACULTY OF VETERINARY MEDICINE	Biotechnologies in Animal Reproduction (PT)	Studies duration: 1.5 years Postgraduate qualification: Master Diploma	2005
	Veterinary Stomatology (PT)		2005

Appendix – Research topics

NOTE: the data below are color marked, by faculty:

- Faculty of Agriculture
- Faculty of Horticulture
- Faculty of Animal Science and Biotechnology
- Faculty of Veterinary Medicine

RESEARCH TOPICS AND RESULTS OF THE RESEARCH ACTIVITIES CARRIED OUT/IN PROGRESS (2007 - 2011)

Crt. No.	The research area identified by Faculty: AGRICULTURE HORTICULTURE ANIMAL SCIENCE AND BIOTECHNOLOGY VETERINARY MEDICINE	Research infrastructure (Research centers/ Laboratories), carrying research activities on topics within the specific research area	Research projects undertaken / in progress, concerning the specific topics	Relevant publications (articles, books), that presents the results of the specific research activities on the specific topic	Coordinator / partner or collaborating institutions, which are carrying out specific research activities on the specific topic	Other significant results (patents, conferences, etc..) for capitalization of the research activities carried out on the specific topic
1.	E.2.2.1. Clean energetic technology, for reduceing gass emissions, to capture and stock CO ₂ ; PNII2.1.4 Promoting clean energy technology, environment protection and reduceing gass emissions with greenhouse effect	Research Laboratory for Optimization and Development of sustainable Technologies in crops Director: Ioan Drocas	PN II PARTENERIATE No.21046/2007: Studies concerning the use of vegetable oil based fuels as renewable energy source for agricultural farms – Ergoecofarm; (2007-2009), Responsible USAMV: Naghiu Alexandru	1. NAGHIU, AL., Baza energetica pentru agricultura, horticultura si silvicultura, Editura: Risoprint, Cluj-Napoca, 2008, (507 pg.), (ISBN 973-751-098-4) 2. NAGHIU, LIVIA, Baza energetica pentru horticultura, Editura Risoprint, Cluj Napoca, 2008, ISBN 978-973-751-811-82 3. NAGHIU, AL., TRIPȘA, I., CHINTOANU, M., APOSTU, S., Considerations upon a method for superior energy recovery of urban and agri-forestry solid cumbersome waste for obtaining second generation biofuels, in: ACTA TECHNICA NAPOCENSIS – AMMA 2007, 50 vol. V, pg.. 343-348	1. Technical University of Cluj-Napoca-INOE 2000 2. INCD Branch Research Institute for Analytical Instrumentation Cluj 3. SC NORALY AGROSERV Ltd	

2.			PN II PARTENERIATE No.71041/2007: Obtained Biodiesel by treatment with hydrogen acids and their esters and glycerides gas rich in fatty Responsible USAMV: Naghiu Alexandru		Technical University of Cluj-Napoca	
3.			PN II PARTENERIATE, No. 22- 099/2008 4 Energy efficient technology for the integrated production of biogas and of electricity from biomass for agricultural farms from Romania (2007-2010) Responsible USAMV: Naghiu Livia		Technical University of Cluj-Napoca	
4.			PN II PARTENERIATE No.22- 094/2008: Enzymatic transesterification technology intended for the generation biofuels 2 - Carezni (2008-2011) Responsible Livia Naghiu		Technical University of Cluj-Napoca	
5.			Proiect MEF 35/2008 Strategic Approach to Harnessing the potential of biofuels production. Use of action for development of biomass 92008- 2010) Responsible USAMV: Naghiu Alexandru			
6.			CEEX M1 No 38/2006 Valorification of modern, New technologies, unconventional biomass of superior-achieving biogasoline – BIOBENZ; (2006- 2008), Coordinator: Alexandru Naghiu		1. SC ZECASIN SA 2. Technical University of Cluj-Napoca	

7.	E.2.2.1. Clean energetic technology, for reducing gas emissions, to capture and stock CO ₂ and 2.1.4 Promoting clean energy technology, environment protection and reducing gas emissions with greenhouse effect	E 2.2.1 si RO 2.1.4 Laboratory of mathematical modelling and life science phenomena implementation in IT systems - conf director dr. Matei Florica;	PN2. The obtaining technology, structural and electronic characterization of metal catalysts supported with direct applications in environmental protection - TOCSEM - Director Conf dr. Matei Florica PN2. Reducing emissions of greenhouse gases using metal catalysts. Technology for obtaining, preparing and physical and chemical characterization – REGES – director Conf dr. Matei Florica	<p>1. Aldea, N.; Pinte, S.; Rednic, V.; Matei, F.; Xie Yaning, Comparative study of EXAFS spectra for close-shell systems, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, Volume: 11 Issue: 12, Pages: 2167-2171 Published: DEC 2009.</p> <p>2. Aldea, Nicolae; Turcu, Rodica; Nan, Alexandrina; Craciunescu, Izabella; Pana, Ovidiu; Yaning, Xie; Wu, Zhonghua; Bica, Doina; Vekas, Ladislau; Matei, Florica, Investigation of nanostructured Fe(3)O(4) polypyrrole core-shell composites by X-ray absorption spectroscopy and X-ray diffraction using synchrotron radiation, JOURNAL OF NANOPARTICLE RESEARCH Volume: 11, Issue: 6, Pages: 1429-1439 DOI: 10.1007/s11051-008-9536-3 Published: AUG 2009</p> <p>3. Pinte, Stelian; Rednic, Vasile; Marginean, Petru; Aldea, Nicolae; Tiandou, Hu; Wu, Zhonghua; Neumann, Manfred; Matei, Florica, Crystalline and electronic structure of Ni nanoclusters supported on Al(2)O(3) and Cr(2)O(3) investigated by XRD, XAS and XPS methods, SUPERLATTICES AND MICROSTRUCTURES Volume: 46 Issue: 1-2 Pages: 130-136 DOI: 10.1016/j.spmi.2009.01.003 Published: JUL-AUG 2009</p> <p>4. Aldea, Nicolae, Rednic, Vasile, Pinte, Stelian; Marginean, Petru; Barz, Bogdan; Gluhoi, Andreea; Nieuwenhuys, Bernard E.; Neumann, Manfred; Xie Yaning; Matei, Florica Local, global and electronic structure of supported gold nanoclusters determined by EXAFS, XRD and XPS methods, SUPERLATTICES AND MICROSTRUCTURES Volume: 46 Issue: 1-2 Pages: 141-148 DOI: 10.1016/j.spmi.2008.12.033 Published: JUL-AUG 2009</p> <p>5. Aldea, N.; Kolipaka, K. L.; Rednic, V.;</p>	INCDTIM Cluj-Napoca, ICSI-Rm Valcea	Software designing
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8.	<p>E 3.2.1. The management of industrial, animal and vegetable waste</p> <p>PN II 3.2.1 Methods for capitalizing the sludge resulted from of biodegradable waste (from hydro storage tanks and wastewater treatment plants) in order to reduce environmental pollution</p> <p>E 3.2.1/ 3.2.1</p>	<p>RESEARCH CENTER - Advanced Research Centre for quality assurance of life and environmental protection</p> <p>Director : Prof.univ. Ioan Oroian</p>	<p>PN II PARTENERIATE No.32-105/2008: Methods for capitalizing the sludge resulted from of biodegradable waste (from hydro storage tanks and wastewater treatment plants) in order to reduce environmental pollution – Agricolnam; (2008-2011), Responsabil : Conf. univ. Paullete Laura</p>	<p>1. Dumitraş Adelina, V.Singurean, I. Oroian, D.Zaharia, L.Holonec, 2008 – Concepte, soluții și modalități de reducere a poluării mediului, ISBN 978 – 973 – 647 – 636 -5, Editura Napoca Star Cluj – Napoca</p> <p>2. Oroian I., Antonia Odagiu, I. Brașovean, P. Burduhos, 2009 - The Waste Management in Romania. A Case Study: WMS Implementation, ProEnvironment/ProMediu, vol. 2 (4), pISSN 1844 – 6698, eISSN 2066 – 1363, pag. 145 – 151 (235 – 241)</p> <p>3. Brașovean, I., I.Oroian, C.Iederan, C.Mihai, P.Burduhos, 2009 – Current environmental policy for development of waste management plan in Northwest Region 6, Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj – Napoca, Agriculture, pISSN 1843 – 5246, eISSN 1843 – 5386, pag. 537</p> <p>4. Oroian I., Antonia Odagiu, I. Brașovean, C. Iederan, P. Burduhos, 2009 - Unconventional Energy - a Romanian Perspective, Proceedings of the 3rd International Conference on Sustainable Energy & Environmental Protection (SEEP), 11- 15 September Dublin/Irlanda, pag. 151 – 156</p>	<p>1.Polytechnic University Bucuresti</p> <p>2.Research Station - Valcea Fruit Development</p> <p>3.Research Institute of Energy and Design Bistrita</p> <p>4.SC Oskar von Miller - Research Design Institute of thermal power equipment design.</p>	

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9.	E 3.2.2. Ecological protection and reconstruction	E 3.2.2. Research Laboratory: Landscape designing and preparing using sustainable concepts – MANAGER conf dr. Adelina Dumitras	<p>Project PN2: Rationale and design methodologies of experimental models to exploit the green areas and degraded land, reducing the environmental pollution impact in the context of the European platform for sustainable resource management and ecological restoration in accordance with EU norms and standards – director Adelina Dumitras</p> <p>Project PN: Implementation of modern design concepts and solutions, development and rehabilitation of green areas and restoration of degraded lands for the conservation of natural biodiversity, with an impact on reducing environmental pollution – ECOLAND – director conf dr. Adelina Dumitras</p> <p>Project: research on the development and modernization of green areas in Romania with positive impact on the environment and the human environment – director prof dr. Maria Cantor.</p> <p>Project: Improving the techniques of multiplication and conservation of dendro-flower species germplasm used in ornamental ecosystems planning – project manager - Conf dr. Adelina</p>	<p>1. Cantor Maria, Adelina Dumitras, Zaharia D., Pop Rodica, Pop Ioana, 2007. Monitoring of floral species in collection of USAMV Cluj for preservation and utilization on the landscape. HortScience. Volume: 42, Issue: 4, Pages: 951-951.</p> <p>2. Cantor Maria, Adelina Dumitras, Zaharia D., Pop Rodica, Pop Ioana, 2007. Monitoring of floral species in collection of USAMV Cluj for preservation and utilization on the landscape. HortScience. Volume: 42, Issue: 4, Pages: 951-951, Supplement: Suppl. S.</p>		

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10.	E 3.3.2. Putting to good use environmental resources through agrotourism	3.3.2 si E 3.3.3 Research Laboratory: Business Administration and Rural Development –manager Conf dr. Felix ARION	Project PD. Economic values use impact in the management plans of national and natural parks of Romania – director lector dr. Diana Dumitras Project: Estimating the economic values of the national and natural parks of Romania – director lector dr. Diana Dumitras	1. Dumitras Diana E.; Arion Felix H.; Merce Emilian, 2011. A Brief Economic Assessment on the Valuation of National and Natural Parks: the Case of Romania. NOTULAE BOTANICAE HORTI AGROBOTANICI CLUJ-NAPOCA. Volume: 39 Issue: 1 Pages: 134-138 2. Kimberly S. Rollins, Diana Dumitras and Anita Castledine, 2008. An Analysis of Congestion Effects Across and Within Multiple Recreation Activities. CANADIAN JOURNAL OF AGRICULTURAL ECONOMICS-REVUE CANADIENNE D AGROECONOMIE. Volume: 56, Issue: 1, Pages: 95-116	University of Reno, Nevada	
11.	E 3.3.3. Protecting areas and conserving the biodiversity PN II 3.3.1 Biological, geological and ecological diversity at a local, regional and national level	RESEARCH CENTER - Ensuring the quality of life and the environmental protection Director : Prof.univ. Ioan Oroian	PN II PARTENERIATE No. 31-025/2007: Scientific substantiation for the inclusion of the Cusma area (Bistrita-Nasaud county) in the European ecological network Natura 2000; Coordinator : PROOROCU MARIAN	1. Marian PROOROCU, 2008: Protectia rezervatiilor naturale, (Arii naturale protejate)- editia revizuită, Ed. Academic Press, Cluj-Napoca, ISBN 978-973-744-057-0 2. Marian PROOROCU, Antoanela POPOVICI, 2008: Impactul industriei asupra mediului, Ed. Academic Press, Cluj-Napoca, ISBN 978-973-744-124-9 3. Proorocu M., Hategan R., Popovici A., 2008: Waste management planning in 6 N-W Region, Romania, 35th International Conference of SSCHE, 115, Slovacia 4. Proorocu M., Popovici, Hategan R., Oroian I., 2008: Air pollution monitoring in non-ferrous industry, case study Romplumb Baia Mare, Buletinul Universității de Științe Agricole și Medicină Veterinară Cluj-Napoca, 65(2): 150-155 5. Proorocu M., Beldean P., Fehete-Radu L., Oroian I., 2008: Scientific fundamentation of including the Cusma area within the ecologic network Nature 2000- creation of the premises for project development, ProEnvironment 1, 126 – 129	1. Enviromental Agency Cluj-Napoca 2. Babes-Bolyai University, Cluj-Napoca 3. Enviromental Agency Bistrita NASAUD	Marian Proorocu- EU regulations of sustainable development, between opportunity and restriction" - Conference on Entrepreneurship, Business Environment and Sustainable Development– AMDD 2011

12.	E 3.3.3. Protecting areas and conserving the biodiversity PN II 3.3.3 Eco-technologys to reconstruct and rehabilitate; technologys to remedy contaminated soils	RESEARCH CENTER - Ensuring the quality of life and the environmental protection Director : Prof.univ. Ioan Oroian RESEARCH LABORATORY for QUALITY OF LIFE ENVIRONMENTAL and PLANT PROTECTION Director : Antonia Odagiu	PNII- Parteneriate No. 51-045/2007: Sustainable exploitation of soil resources from protected areas by implementing green technologies and the development of monitoring and analysis methods compatible with European Union standards; Responsible USAMV Cluj: Paullete Laura	1. Miclean Mirela, Levei Erika, Gog Adriana, Ferenczi Ludovic, Majdik Cornelia, Puia Carmen, Roman Cecilia,2010. DETERMINATION OF TOTAL PETROLEUM HYDROCARBONS IN CONTAMINATED SOIL BY FTIR AND GC-FID METHODS, STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA, Volume: 55, Issue: 3, Pages: 83-91 1. Erzsebet BUTA, Laura PAULETTE, Tania MIHĂIESCU, Mihai BUTA, Maria CANTOR, 2011.The Influence of Heavy Metals on Growth and Development of Eichhornia crassipes Species, Cultivated in Contaminated Water, NOTULAE BOTANICAE HORTI AGROBOTANICI CLUJ-NAPOCA,Volume: 39 Issue: 2 Pages: 135-141 2. OROIAN I., Laura PAULETTE, C. IEDERAN, I. BRASOVEAN, P. BURDUHOS, Claudia BALINT, 2009. Modalities of PM10 and PM2.5 Quantification in Environmental Air Using the Standardized Method, ProEnvironment 2,68 – 72 3 Gheorghe BLAGA, Laura PAULETTE, Ioana CĂTINAS, Ioan PĂCURAR, Mihai BUTA, Anca SOTROPA, Mihaela MĂRGINEAN, 2009.Enzymatic Activity of Soils and Waste Dump Material (Entiantrosoil) from Letca Surface	1.University Alexandru Ioan Cuza Iasi 2 Statione for Vegetable Researchand development BACAU 3.Institut for Biological Research IASI	
13.			PNII PARTENERIATE No. 31-080/2007: Bioremediation of soils contaminated with products from the petroleum industry for reintegrating them into the socio-economic circuit; (2007-2010), Coordinator USAMV CLUJ: CARMEN PUIA	Exploitation, Sălaj District, Bulletin UASVM Agriculture, 66 (1)/2009 4. Laura DOBOS, Carmen PUIA, 2009. The Methodology of Identification Bacteria Types from Oil Polluted Soils,Bulletin UASVM Agriculture, 66 (1)/2009 5. Vasile Mihai CRIȘAN, Carmen PUIA, 2009. The Efficiency of the WWTP Zalau for the Parameters Chemical Oxygen Demand (COD), Biological Oxygen Demand (BOD) and Suspension Solids (SS),Bulletin UASVM Agriculture, 66 (2), 76-79 1. Dumitras Adelina, Pop-Boanca Paunita, Oroian I., Singureanu V., Ilca Suciu T.,	1.INCD-INOE2000 Branch Research Institute for Analytical Instrumentation Cluj 2 National Research Institut and Development for Optoelectronics INOE 2000 - Bucharest 3.Regional Major Center Prevention for Industrial Accidents Ploiesti ROMANIA 4.NORWEST Agency Cluj-Napoca	
14.			PN II CAPACITĂȚI - Modul III, Bilateral Cooperation project ROMOLAND, nr.425/15.06.2010: Rationale and design methodologies of experimental models to exploit the green and degraded with impact on reducing pollution in the context of European integration platform for management and ecological sustainable resource restoration, in accordance with EU norms and standards; Director: Adelina Dumitras	1. Dumitras Adelina, Pop-Boanca Paunita, Oroian I., Singureanu V., Ilca Suciu T.,	1. Research Station for Fruit Growing CLUJ 2. Forest Research Institute Bucharest Partners: 1.University Babes-Bolyai, Cluj-Napoca 2. SC ELECTRONIC APRIL Special Electronic Devices SRL ROMANIA: U.S.A.M.V. Cluj-Napoca and MOLDOVA: Chisinau Botanical Garden (Institute).	

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15.	<p>4_HEALTH E.4.1.Researching experimental biomedicine E.4.1.4. Nano- and micro inovating structures and materials used in molecular diagnostics and therapy (targeted drug delivery) 4.1.1 Developing the knowledge of the human beeing's integrative biological systems</p>	License laboratory: Cell cultures	<p>4.1./E.4.1.4./4.1.1. The contribution of imaging in assessing the effectiveness of regenerative therapies based on nanotechnology and medical and economic implications; Miclea Ileana - Responsible partner; E 4.1.1. Farm animals genotyping - Prof. Vlaic Augustin</p>		<p>Proposal project: Responsible partner USAMV Cluj-Napoca Coordinating UMF Cluj-Napoca</p>	
16.	E 4.1.3 /4.1.3 Investigation and interventional methods based on genomics and	RESEARCH CENTER FOR FOOD BIOCHEMISTRY AND BIOTECHNOLOGY Director: Professor.	PN II-RU-TD 456/2007: Evaluation In vitro of cytotoxic action / or genotoxic properties of plant protection products and food additives; (2007-2008);	1 Pinteia Adela, Rugina Dumitrita, Pop Raluca, Bunea Andrea, Socaciu Carmen, Diehl Horst A., 2011. Antioxidant Effect of Trans-Resveratrol in Cultured Human Retinal Pigment Epithelial Cells, JOURNAL	Babes-Bolyai University from Cluj-Napoca Medical University Cluj-Napoca Oncology Institute Cluj-	

	proteomics molecular and cellular medicine	Carmen Socaciu	CEEX M1 180/2006: Developing an understanding biological molecular models involved in prostate cancer; Coordinator: Ramona Laslo	OF OCULAR PHARMACOLOGY AND THERAPEUTICS, Volume: 27, Issue: 4, Pages: 315-321 2. CORNELIA BRAICU, IOANA BERINDAN- NEAGOE, VERONICA SANDA CHEDEA, LOREDANA BALACESCU, IOANA BRIE, OLGA SORITAU, CARMEN SOCACIU, ALEXANDRU IRIMIE, 2010. INDIVIDUAL AND COMBINED CYTOTOXIC EFFECTS OF THE MAJOR FOUR AFLATOXINS IN DIFFERENT IN VITRO STABILIZED SYSTEMS, Journal of food biochemistry, Volume 34, Issue 5, pages 1079–1090 3. Dragan S., Socaciu C., Gergen I., Mancas S., Ursoniu S., Velirnirovici D., Otiman G., Rada M., 2007. Study of reversibility of the metabolic syndrome and insulin resistance: The ANTIATERO-ALIM study, NEW HORIZONS IN CORONARY ARTERY DISEASE, Pages: 259-263 4. CORNELIA BRAICU, DUMITRITA RUGINA, VERONICA SANDA CHEDEA, OANA TUDORAN, OVIDIU BALACESCU, IOANA NEAGOE, CARMEN SOCACIU, 2010. PROTECTIVE ACTION OF DIFFERENT NATURAL FLAVAN-3-OLS AGAINST AFLATOXIN B(1)-RELATED CYTOTOXICITY, Journal of food biochemistry, Volume 34, Issue 3, pages 595–610 5. PINTEA ADELA, RUGINĂ DUMITRIȚA, PÂRLOG RALUCA, SOCACIU CARMEN, 2011. Catechin-rich green tea extract modulates the oxidative status of human retinal pigment epithelial cells, ROMANIAN BIOTECHNOLOGICAL LETTERS, Vol. 15, No.1, 2010, p. 4964-4978	Napoca University of Oradea	
17.	4.1.1. 4. Relationships between environment - human-animal - parasite in zoonotic diseases	Research Center: The surveillance, diagnosis and control of zoonoses Director: Prof. dr. Vasile Cozma	- Establishing a national network for studying parasitic zoonoses and food safety implications; Program CEEX, Modul 3 (2006- 2007) - Interdisciplinary evaluation and optimization methods of screening, diagnosis and treatment	- Helminth parasites of reptiles (Reptilia) in Romania., Mihalca AD, Gherman C, Ghira I, Cozma V., Parasitol Res. 2007 Jul;101(2):491-2. - Trichinella spp. infection in horses of Romania: serological and parasito-logical survey., Blaga R, Cretu CM, Gherman C, Draghici A, Pozio E, Noeckler K, Kapel CM,	USAMV CN USAMV TIMISOARA UMF CN	

			of human and animal cystic echinoco-cosis and trichinellosis in the center and north-western Romania; Grant CEEEX, Modul 1 – (2006-2008). Prof. dr. Vasile. Cozma	Dida I, Cozma V, Boireau P., Vet Parasitol. 2009 Feb 23;159(3-4):285-9.		
18.	4.1.2.1. The Vector diseases and their impact on the human health. 4.1.3.2. Diagnostic of parasitic and vectorial diseases with molecular methods(Real Time PCR)	Laboratory of biology and molecular cell in parasites Laboratory of biology and molecular cell in parasites Director: Prof. dr. Vasile Cozma	- Establish a research center and a reference laboratory in the diagnosis and control of parasitic zoonoses in Transylvania; PN II Capacități Modul I; Director (2008-2009): Prof. Vasile Cozma - Molecular epidemiology studies in humans and animals echinococcosis/ hydatidosis in southern and north western Romania. Strategic program and management disease; PN II PC – Resp USAMV Cluj-Napoca (2008-2011). - Connecting Romania to the European research, monitoring and control of the communicable, emerging diseases from wildlife protected; Grant CEEEX Modul 3 Prof. dr. Vasile. Cozma	- Trichinella spp. infection in horses of Romania: serological and parasito-logical survey., Blaga R, Cretu CM, Gherman C, Draghici A, Pozio E, Noeckler K, Kapel CM, Dida I, Cozma V, Boireau P., Vet Parasitol. 2009 Feb 23;159 (3-4):285-9. - First identification of Trichinella sp. in golden jackal (Canis aureus) in Romania., Blaga R, Gherman C, Seucom D, Cozma V, Boireau, J Wildl Dis. 2008 Apr;44(2):457-9.	USAMV CN USAMV TIMISOARA UMF CN	
19.	4.1.3.6. Developement and application of new immunological diagnostic tests in parasitic diseases.	Laboratory of Immunoparasitology Director: Prof. dr. Vasile Cozma	- Immunodiagnosis (ELISA), molecular epidemiology, phytotherapy and immuno-prophylaxis in eimeriosis chickens and quail; Director project CNC SIS (2007-2008): Prof. Vasile Cozma Implementation and application an immunological test in the sheep diagnosis cestodoze; PN II Capacities Module III – bilateral (2009-10); Director: Dr. Radu Blaga Development of prevention improved strategies helmintox for two major zoonoses in animals: trichinellosis and hydatidosis; CNC SIS cod 51 Tip A, Director of project: Conf. Dr. Călin Gherman.	- Serological reactivity to Borrelia burgdorferi sensu lato in dogs and horses from distinct areas in Romania. Kiss T, Cadar D, Krupaci AF, Bordeanu A, Brudașcă GF, Mihalca AD, Mircean V, Gliga L, Dumitrache MO, Spînu M., Vector Borne Zoonotic Dis. 2011 Sep;11(9):1259-62. - A dramatic increase in the incidence of human trichinellosis in Romania over the past 25 years: impact of political changes and regional food habits; Blaga R, Durand B, Antoniu S, Gherman C, Cretu CM, Cozma V, Boireau P., Am J Trop Med Hyg. 2007 May; 76(5):983-6. - Severe granulomatous lesions in several organs from Eustrongylides larvae in a free-ranging dice snake, Natrix tessellata.,	USAMV CN USAMV TIMISOARA UMF CN	

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20.	4.1.1.1 Knowledge development of the integrative biological systems in the field of veterinary medicine 5.1.1.2. Integrated systems of control of parasitic zoonoses transmitted by animal's and vegetal food	Laboratory of Imaging parasitic diseases	- Optimising Toxoplasma gondii surveillance infection in some species of animals and humans, as public health problem in central and western Romania; PN II PC – Director (2007-2010): Prof. Vasile Cozma - Epidemiological investigations, diagnosis, pathogenesis and immunological neosporoză in cattle and dogs in northwest, central and southern Romania; PN II PC, (2008-2011), Director: Prof. Vasile Cozma	- Prevalence and risk factors of Giardia duodenalis in dogs from Romania., Mircean V, Györke A, Cozma V., Vet Parasitol. 2012 Mar 23;184(2-4):325-9 - Prevalence of Giardia species in stool samples by ELISA in household cats from Romania and risk factors., Mircean V, Györke A, Jarca A, Cozma V., J Feline Med Surg. 2011 Jun;13(6):479-82. - First identification of Neospora caninum by PCR in aborted bovine fetuses in Romania., Suteu O, Titilincu A, Modry D, Mihalca A, Mircean V, Cozma V., Parasitol Res. 2010 Feb;106(3):719-22.	USAMV CN USAMV TIMISOARA UMF CN	
21.	4.1.3.7. Molecular typing methods and study of genetic variation in different types of pathogen bacteria and parasites. 4.1.4. 4. Development of modern gene and cellular therapy in pathology. 5.1.13.1. Investigation and conservation of genetic variability in wild and domestic animals in Romania.	Laboratory of Proteomics and Genomics in parasites Laboratory of Proteomics and Genomics in parasites prof. Vasile Cozma	- Neosporoză in Romania epidemiological and diagnostics research in cattle, goats and dogs Sectoral Operational Programme for Human Resources Development (HRD), "Postdoctoral school of agriculture and veterinary medicine", Postdoc: (2010-2013) - Fundamental and applied studies of ecology-epidemiology, biology and molecular genetics of the Lyme disease vector; Proiect PN II IDEI PCCE, Contract 7/2010 – Director of the project Conf. Dr. Călin Gherman. -Analysis of genetic diversity of Trichinella populations in Romania and identify the genetic markers in specific animal species; Human Resources, Project RP., Dr. Radu Blaga	A new species of Isospora Schneider, 1881 (Apicomplexa: Eimeriidae) in Ruppell's agama Agama rueppelli (Vaillant) (Sauria: Agamidae) from East Africa, with a review of this genus in agamid lizards., Mihalca AD, Jirků M, Malonza PK, Modry D., Syst Parasitol. 2009 Nov;74(3):219-23. - Prevalence and intensity of blood apicomplexan infections in reptiles from Romania, Mihalca AD, Racka K, Gherman C, Ionescu DT., Parasitol Res. 2008;102(5):1081-3 - Prevalence of endo-parasites in household cat (Felis catus) populations from Transylvania and association with risk factors. Mircean V, Titilincu A, Vasile C., Vet Parasitol. 2010 Jul 15;171(1-2):163-6. - Seroprevalence of Toxoplasma gondii and Neospora caninum in dairy goats from Romania., Iovu A, Györke A, Mircean V, Gavrea R, Cozma V., Vet Parasitol. 2011 Nov 25. - Toxoplasma gondii in Romanian household cats: evaluation of serological tests, epidemiology and risk factors.,	USAMV CN USAMV TIMISOARA UMF CN UBB CN IO CN	

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22.	<p>4.1.4.2. Autograft associated neuromodulation in spinal cord injuries –regenerative medicine.</p> <p>4.1.6.3. Stem cells - a new model of study of the degenerative diseases</p>	<p>Research Center: Biotechnologies in Veterinary Medicine Director: Prof. dr. Ioan Groza</p>	<p>- Biotechnology mouse embryonic stem cells obtain and their differentiation in the heart line; PN TD/2008</p> <p>- Isolation, characterization and in vitro differentiation of cells embryonic type of the animal and human adult; TET 88/2008-2009; Prof. Ioan Groza</p> <p>- Evaluation of the combined therapeutic effect of calpain inhibitors and of trophic vascular factors in spinal cord traumatic injuries; PN II PARTENERIATE, 42109/2008 – 2011; Director: Prof. Ioan Groza</p>	<p>- Jessica L. Skopal-Chase, Pixley J.S., Torabi A., Cenariu M.C., Bhat A., Thain D.S., Frederick N.M., Daria M. Groza, Zanjani E.D. (2009) - <i>Immune ontogeny and engraftment receptivity in the sheep fetus</i>, <i>Fetal Diagnosis and Therapy</i>; 25:102-110</p> <p>- Bogdan L., I. Groza, Sanda Andrei, Adela Pinte, Simona Ciupe, M. Cenariu, Ileana Bogdan, I. Pașca, Sidonia Bogdan, Anamaria Petrean, A. Macri (2009) – <i>Therapeutic and immuno-modulatory effect of two complex homeopathic products used against chronic endometritis in Simmental cows</i>, <i>Journal of Food, Agriculture and Environment</i> Vol. 7 (2),</p> <p>- Goodrich A.D., Ersek A., Varain N.M., Groza D., Cenariu M., Thain D.S., Almeida-Porada G., Porada C.D., Zanjani E.D. (2010) - <i>In vivo generation of beta-cell-like cells from CD34(+) cells differentiated from human embryonic stem cells</i> - <i>Experimental Hematology</i>; 38:516–525</p> <p>- Groza I., M. Cenariu, Daria Groza, Eموke Pall, C. Peștean (2009) - <i>Flow Cytometrical Identification and Characterization of Human Cord Blood Derived Hematopoietic Stem Cells Engrafted in Sheep Bone Marrow Following In Utero Transplantation</i> - <i>Romanian Biotechnological Letters</i> Vol. 14, No. 6, 2009, pp. 4798-4803</p>	<p>USAMV CN USAMV BUCURESTI UMF CN IO CN</p>	

23.	4.1.6.5. The study of natural and synthetic steroid influence on gametogenic function in different animal species.	Laboratory of In vitro fertilization (IVF-LAB) Dir. Lect. Simona Ciupe	- Implementation of modern techniques of the identification of the sex in bovine embryos and fetus; PN II RU PD 180/2010; Prof. Ioan Groza	- Cenariu Mihai, Ioan Groza, Pall Eموke, Liviu Bogdan, Iancu Morar, Simona Ciupe, Raul Pop (2011) - Sexing of Bovine Embryos Using Polymerase Chain Reaction (PCR) and Fluorescent In Situ Hybridization (FISH), Romanian Biotechnological Letters Vol. 16, No. 2, 2011, pag 6056-6061 - Paşca I, L. Al. Mărghitaş, I. Groza, Dana Pusta, R. Morar, T. Oroian, A. Cîmpean, L. Bogdan, I. Morar, D. Dezmirean, M. Cenariu, Ileana Bogdan, Sidonia Bogdan, R. Oroian (2009) - <i>The importance of probiotics administration to sucking pigs</i> , Journal of Food, Agriculture and Environment Vol. 7 (3&4). - Cenariu M., Pall Eموke, Groza I. (2012) - The influence of biopsy method on the survival rates of sexed and cryopreserved bovine embryos, African Journal of Biotechnology Vol. 11(19), pp. 4459-4462		
24.	4.1.3.1. Development of investigation methods based on molecular biology in comparative and experimental pathology.	Research Center: Comparative and Experimental Pathology Director: Prof. Cornel Cătoi	- Expert system for the evolution forecast of invasive chronic liver diseases by analyzing biological and haemo-dynamic parameters; Parteneriate Contract 12-131/01.10.2008; Prof. Cornel Cătoi	- Clichici S, Cătoi C, Mocan T, Filip A, Login C, Nagy A, Daicovicu D, Decea N, Gherman C, Moldovan R, Muresan A, Non-invasive oxidative stress markers for liver fibrosis development in the evolution of toxic hepatitis, ActaPhysiol Hung. 2011;98(2):195-204. - Filip A, Daicovicu D, Clichici S, Bolfa P, Cătoi C, Baldea I, Bolojan L, Olteanu D, Muresan A, Postescu ID, The effects of grape seeds polyphenols on SKH-1 mice skin irradiated with multiple doses of UV-B, J PhotochemPhotobiol B. 2011 Nov 3;105(2):133-42. Epub 2011 Aug 26.	USAMV CN UMF CN IO CN	
25.	4.1.1.1 Development of new experimental models for the basic and applied studies of epidemiology, biology and molecular genetics	Research Center: Comparative and Experimental Pathology Director: Prof. Cornel Cătoi	- Evaluation and Modulation of the biodistribution and cytotoxicity of carbon nanotubes with biomolecular applications; Parteneriate Contract nr. 42-112/01.10.2008; Resp. USAMV CN, Prof. Cornel Cătoi	- Iancu C, Mocan L, Bele C, Orza AI, Tabaran FA, Cătoi C, Stiufiuc R, Stir A, Matea C, Iancu D, Agoston-Coldea L, Zaharie F, Mocan T, Enhanced laser thermal ablation for the in vitro treatment of liver cancer by specific delivery of multi-walled carbon nano-tubes functionalized with human serum albumin, Int J Nanomed. 2011 17;6: 129.	USAMV CN UMF CN IO CN	

	in pathology.					
26.	<p>4.1.1.3. Animal models for the study of degenerative chronic diseases (cancer, obesity, diabetes mellitus, cardiovascular diseases).</p> <p>4.1.6.2. Study of the mammary tumors: vasculogenic mimicry in mammary carcinomas.</p> <p>4.1.5.1. Identifying the new therapeutic opportunities based on natural compound in the treatment of chronic degenerative diseases</p>	<p>Research Center: Comparative and Experimental Pathology</p> <p>Director: Prof. Cornel Cătoi</p>	<p>- Investigation of transmission, pathogenicity and phytotherapy of the infections with prototheca in humans and animals; Director Project Bouari (Cuc) 2010-2012, Contract CNCIS tip, PD, nr.175, Cosmina Boari Cuc.</p> <p>- Study of mammary tumors: vasculogenic mimicry in dogs mammary tumors, tumor stem cells - a new hypothesis model of tumorigenesis, the implication of oxidative stress in Breast chemical carcinogenesis; Grant CNCIS, cod. 364</p> <p>Obtaining and characterization of new targeted-nanodrugs with naphthoquinonic active substance (NANOQMED). PNCDI II. Grant nr. 61-002/2007 (2007-2010)</p>	<p>Bouari (Cuc) M. C., N. Fiț, S. Răpunțean, G. Nadăș, A. Gal, P. Bolfă, M. Taulescu, C. Cătoi, (2011), <i>In vitro evaluation of the antimicrobial properties of some plant essential oils against clinical isolates of Prototheca spp.</i>, Romanian Biotechnological Letters, Vol.16, nr.3, 6146-6152.</p> <p>Adrian F. Gal, Alecsandru I. Baba, Viorel Miclaus, Adriana Titilincu, Cosmina Cuc, Marian Taulescu, Cornel Cătoi, (2011), <i>Aspects regarding intratumor angiogenesis and vasculogenic mimicry in canine mammary tumors.</i>, Revista Romană de Medicină de Laborator, Vol. 19, Nr 3/4 :289-303.</p> <p>MARCUS I, IULIA PRODAN, SEVASTRE B, SARPATAKI O, MANALACHIOAIE R, TAMAIA R, 2011, In vivo testing of the biological effects of new synthesized 2-cloro-3-nicotinamido -1,4 – naphthoquinone (CNNQ) and 2-mercapto-3-nicotinamido -1,4-naphthoquinone (MNNQ), International Conference of Animal Pathophysiology, St. Petersburg State Academy of Vet Med, Russia, 139-141</p>	<p>USAMV CN</p> <p>UMF CN</p> <p>IO CN</p> <p>ICSI R. Valcea</p>	<p>Patent Application (CBI) A/01250 dated 30.11.2010</p> <p>Protocol (technique) of administration of a derivative naftalendionic used in the control of the tumor growth</p> <p>Patent Application (CBI) A/01251 dated 30.11.2010</p> <p>Derived naftalen-dionic used in the control of the tumor growth.</p>
27.	<p>4.1.3.10. Identification, isolation and characterization of molecular biomarkers with diagnostic and prognostic value in animal pathology</p> <p>4.1.6.1. The role of the inflammation and endothelial progenitor cells in the neovasculatization of adipose tissue in obesity</p>	<p>Research Laboratory: Laboratory of Veterinary Medical Diagnosis</p> <p>Director: Prof. Marina Spanu</p>	<p>- Full achieve and extracts fractionated with high bioavailability and adjuvant potential for economic interest species; Proiect CEEX</p> <p>- Antibacterial character and stimulating regeneration tissue of biomaterials, phosphate; PN II Idei simple</p> <p>- The study of the influence of housing and practices management on the welfare of dairy cows; PN II, Idei simple</p> <p>- Fundamental and applied studies of epidemiology, biology and molecular genetics of vector</p>	<p>Immune response to fleas in a wild desert rodent: effect of parasite species, parasite burden, sex of host and host parasitological experience, Khokhlova IS; Spinu M; Krasnov BR; et al., 2004, JOURNAL OF EXPERIMENTAL BIOLOGY Vol: 207 Issue: 16 Pages: 2725-2733 DOI: 10.1242/jeb.01090</p> <p>- Human type M. tuberculosis expresses increased immune-pathogenic effects in Guinea pigs after corticosteroid treatment,</p> <p>Spinu Marina, Pop Carmen Monica, Brudașcă F., Anca Opreș, Șandru Carmen – 2003, European Respiratory Journal, vol.22, supplement 45, p.397</p> <p>- Evaluation of diagnostic value of</p>	<p>USAMV CN</p> <p>PLANTA MEDICA</p>	

			<p>lyme disease; PN II – Idei complexe</p> <p>- Quantitative and qualitative modeling biomolecules inter-relationship cytokines - avian leukocyte culture systems suspended</p>	<p>leukocyte migration inhibition test in experimentally infected Guinea pigs and naturally infected bovine, Brudașcă F., Spînu Marina, Pop Carmen Monica, Opreș Anca – 2003, European Respiratory Journal, vol.22.</p> <p>- Lamiaceae essential oils and alcoholic extracts and their effects on zoonotic multi rug- resistant bacteria, Niculae M; M Spinu; Sandru D et al., Conference: 55th International Congress and Annual Meeting of the Society-for-Medicinal-Plant-Research-and-Natural-Product-Research, Geneva, SWITZERLAND 2009 Sponsor(s): Soc Medicinal Plant & Nat Prod Res, PLANTA MEDVolume: 75 Issue: 9 Pages: 1051-1052 Published: 2009.</p> <p>- The bioactivity of herbal essential oils and ethanol extracts against Escherichia coli of animal origin, Niculae M.; Spinu M.; Sandru C.; et al. Conference: 7th Tannin Conference/58th Annual Meeting of the Society-for-Medical-Plant-and Natural-Product-Research: Berlin, 29-SEP 02, 2010 Sponsor (s): Soc Med Plant Nat Prod Res, PLANTA MEDICA, 2010, Vol: 76 , Issue: 12.</p>		
28.	<p>4.1.3.11. Modern approach through non-invasive techniques of the heart diseases in the pets.</p> <p>4.1.5.2. Surgical and palliative treatment of morbid obesity.</p>	<p>Research Laboratory: Imaging diagnosis in the pathology and the clinic of the surgical, internal and reproductive diseases in animals Director: Prof. dr. Aurel Muste</p>		<p>- KRETSCHMER WB, BACIUT G, DINU C, BACIUT M, BARBUR I, MUSTE A, DIETZ K. 2010 - The influence of expansion on intraoperative bone blood flow in multisegmental maxillary osteotomies: an experimental study, International Journal of Oral and Maxillofacial Surgery, vol. 39(nr. 3): p. 282-286. Epub 2010 Jan 25, Factor de impact 1.444</p> <p>- DONISĂ ALINA, M.MUSTE, M.M.MUSTE, 2010,Diagnosis of asteroid hyalosis in dogs. European College of Veterinary ophthalmologists, Annual scientific meeting, Berlin, Germany, 28-29 may 2010, pag. 8. Factor impact 1.516</p> <p>- DONISĂ ALINA, M.MUSTE, M.M.MUSTE,</p>	USAMV CN	

				2010, Incidence of chorioretinitis of different etiology in dogs. European College of Veterinary ophthalmologists, Annual scientific meeting, Berlin, Germany, 28-29 may, pag. 63, Factor impact 1.516		
29.	E 5.1.1. Improving fertility and vegetal production, ecological agriculture, OMG PN II 5.1.1 Evaluating, exploiting, protecting and improving the natural resources to increase the security and safety of agricultural and alimentary production	RESEARCH CENTER PLANT CULTURE Director: Professor. Ion Rotar RESEARCH CENTER Ensuring the quality of life and the environmental protection DIRECTOR: Professor. Ion Oroian RESEARCH LABORATORY APPLIED BIOLOGICAL SCIENCES Director Prof. Roxana Vidican	PN II PARTENERIATE No.51-061/2007: The biological diversity and ecological study of the perennial plant species and their multiple re-usability (culinary, medicinal, decorative, etc.), in the context of socio-economic sustainable development aligning with European Union trendst alignment (2007-2010) Responsible : Marcel Duda PNII PARTENERIATE No.51-026/2007: Assessing the impact of ecosystems organic production in forage quality of agricultural, animal and biological value in products in order to increase economic efficiency of farms and food security Responsible: Ioan Rotar		1.USAMV IASI. 2.National Research and Development Institut for biological Sciences - INSB Bucharest 3. Sc Pharmacy Nature SRL Bacau Research and Development Institute for lawns Brasov	1.Variety of Festuca arundinacea Schreber 2. Variety Cluj of echinacea purpurie (Echinacea purpurea L. (Moench.) 3. Variety of hops named „SUPERALFA”, 4.Variety of Echinacea pallida Nutt. Named Napoca
30.			PS - MADR 339/2006: Evaluation of potential production of grassland and ESTABLISHMENT OF GREEN GROWTH TECHNOLOGICAL MEASURES OF MASS PRODUCTION (2006-2010) Responsible USAMV :Ioan Rotar PN II TD: Study the influence of major diseases and quality of alfalfa forage on yield; Coordinator USAMV: Florian Vasile PN II-PD: Conventional and unconventional integrated control of pest Diabrotica virgifera virgifera, production losses, methods and measuring		Resort for Research and development for vegetable Bacau Institute of Chemistry Raluca Ripan S.C. Biotehos S.A.	

			<p>quantitative and qualitative: Coordinator USAMV : Florian Teodora</p> <p>PN II- TD Diabrotica virgifera virgifera Le Conte spreading, morphology, biology, control and influence on the attack of diseases of the corn in the ecological conditions from Transylvania Teodora Florian</p> <p>PN II PARTENERIATE: Study of biological ecological diversity and perennial plant species and their multiple re-usability (culinary, medicinal, decorative, etc.), In the context of EU trends sustainable development of socio – economic; Responsible USAMV: Duda Marcel</p> <p>PN II PARTENERIATE: Biomimetic strategy to combat pests in fruit trees using the latest biocide Responsible USAMV: Ioan Oltean</p> <p>PNII PARTENERIATE: Implementation of herbal raw standardization of materials to increase competitiveness in medicinal plants recoverable in pharmaceutical and cosmetic; Responsible USAMV :Dan Varban</p> <p>PNII _RU_TD 431/2007: RESEARCH ON MAIN Parasitic Diseases of corn and development of a modern complex integrated protection; (2007 --2008), Director: Suci Loredana</p> <p>CEEX: Sustainable use of herbs and hops to obtain bioactive preparations; Coordinator: Duda Marcel</p>		
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31.	E 5.1.1. Improving fertility and vegetal production, ecological agriculture, OMG PN II 5.1.13 Improving, protecting and conserving animal and vegetal genetic resources	RESEARCH CENTER PLANT CULTURE Director: Prof.univ. Ioan Rotar RESEARCH LABORATORY APPLIED BIOLOGICAL SCIENCES Director: Prof.univ. Roxana Vidican	PNII – TD: Research on molecular markers assisted selection for resistance of wheat (<i>Triticum aestivum</i>) to common sides (<i>Tilletia</i> spp); Responsible: Cota Laura Cristina PN II TD: Research on molecular markers assisted selection for resistance of wheat (<i>Triticum aestivum</i>) to septorioza (<i>septoria tritici</i>); Responsible: Bota Dana Maria PN II IDEI: Research on molecular markers assisted selection for resistance of potatoes (<i>solanum tuberosum</i>) to phytophthora infestans; Coordinator: Botez Constantin	1. Laura Cristina COTA, Doru PAMFIL, Constantin BOTEZ, Mircea GRIGORAS, 2010. Preliminary Studies on Microsatellite Marker Analysis of Resistance to Common Bunt in several Wheat Genotypes (<i>Triticum aestivum</i> L.) , NOTULAE BOTANICAE HORTI AGROBOTANICI CLUJ-NAPOCA , Vol. 38 (3) 2010, pp. 69-75 2. Constantin BOTEZ, Doru PAMFIL, Dana CURTICIU, Laura COTA, Nicolae N. SAULESCU, 2009. Marker Assisted Selection for Septoria tritici Resistance in Wheat Dihaploid Lines, NOTULAE BOTANICAE HORTI AGROBOTANICI CLUJ-NAPOCA , Volume 37, Issue 1, pp.253-255 3. Muntean L., Muntean S., Duda M., Varban D, 2009. Assessment of somaclonal variation in purple coneflower (<i>Echinacea purpurea</i> (L.) Moench) by RAPD (Random Amplification of Polymorphic DNA) fingerprinting analyses, <i>Planta Medica</i> , Vol. 75, Topic B, Poster PB27, pp.934, 4. Voichita HAS, Rodica POP, Ioan HAS, Ana COPANDEAN, 2011. Genetic Variability in a Set of Early Maize Inbred Lines, <i>Bulletin UASVM Agriculture</i> , 68(1)/2011, 155-164 5. Camelia RACZ, Ioan HAS, Voichita HAS, Teodora ŞCHIOP, I COSTE , 2011. The Cytoplasm Origin Influence, the Teser Influence and the Nucleus-Cytoplasm Interactions Influence on Agronomic Traits for Maize Isonuclear Lines, <i>Bulletin UASVM Agriculture</i> , 68(1)/2011, 298-307		
32.	E 5.1.2. Ecological agriculture, natural alternatives for fertilizers, pesticides and biocontrol PN IIS.1.7 Ecological agro-alimentary		PS 5.2.6. No.358/2006: Contributions to human health by promoting increased consumption of diversified and high nutritional value organic food; (2006-2010), Director: Fitiu Avram	1. Dale, L. M., Rotar, I. Florian, V., Vidican, R., Théwis, A., Fernández Pierna, J. A. & Baeten, V. (2011). Research on crude protein contents in <i>Medicago sativa</i> hay harvest during 2008-2009 using FT-NIR spectrometry 2. Fitiu, A., 2010. Researches Concerning the Impact of Food Consumption for the		

	products			Human Health, Bulletin UASVM Agriculture, 67(2)/2010,233-237 3. Fitiu, A.2010. RESEARCHES REGARDING THE ACCEPTABILITY GRADE OF THE CONSUMERS OF CLUJ NAPOCA ABOUT THE CONSUMPTION OF TRADITIONAL PRODUCTS, Bulletin UASVM Cluj Agriculture, 65(2), 233-236		
33.	<p>5 VEGETAL AND ANIMAL BIORESOURCES AGROALIMENTARY SCIENCE AND ENGINEERING, ALIMENTARY SAFETY AND SECURITY</p> <p>5.1. Agriculture efficient systems producing and using bioresources (vegetal and animal)</p> <p>E 5.1.1. Improving fertility and vegetal production, ecological agriculture, OMG</p>	Research Centre: Bee and sericicole products Mărghitaş Liviu	5.1./E 5.1.1./5.1.1. Using bees as biomonitors in the risk assessment of the gene flow from GM plants to other honey producing plants that have not been genetically modified; CEEX I, 30, 2006-2008; Mărghitaş Liviu, Project Manager, USAMV Cluj-Napoca	<p>Bodea Monica et al., 2007. The efficiency of different DNA isolation protocols in six cultivars of oilseed rape (<i>Brassica napus</i>). 1st International Conference “Apiculture – from Science to Agribusiness and Apitherapy”, Cluj-Napoca, ISBN 978-973-744-072-3.</p> <p>Mărghitaş L.Al. et al., 2008. Use of RAPD technique for molecular characterization of some <i>Brassica sp.</i> cultivars and <i>Brassica rapa campestris</i> in order to analyse gene flow pollination due to <i>Apis mellifera</i>. Simp. St. Intern.–Stiinta, calitate, diversitate, armonie. Lucrari stiintifice, Anul LI, Vol. 51, Seria Horti, 57-62.</p> <p>Coroian C. et al., 2008. Molecular characterisation of some cultivars of <i>Brassica sp.</i> and <i>Brassica wild</i> relative by RAPD and sequencing in order to analyze horizontal gene flow pollination due to <i>Apis mellifera</i>. XXXVIIIth Annual Meeting European Society for New Methods in Agricultural Research, Krakovia, Polonia.</p> <p>Aurori, C.M., et al., 2008. The analysis of stability in constitutively expressed transgenes <i>gfp</i> and <i>nptII</i> in tobacco used as markers for possible horizontal gene transfer to honeybees and their microflora. 1st Global Conference on GMO Analysis, Villa Erba, Como, Italia.</p> <p>Mărghitaş L.Al. et al., 2008. Genetic similarity of some cultivars of <i>Brassica sp.</i> tested by sequencing in order to analyze gene flow due to pollination by <i>Apis mellifera</i>. EUCARPIA 18th General Congress, Valencia, Spain.</p>	USAMV Cluj-Napoca	

34.	5.1.3. New technologies for animal rising 5.1.13. Improving, protecting and conserving animal and vegetal gen	License laboratory: Genetics and Genetic engineering	5.1./E 5.1.3./5.1.13.1. Production of hybrids by crossing the Țigaie and Suffolk breeds to increase sheep meat quantity and quality; CNC SIS Tip A, 1145, 2006-2008; Vlaic Augustin, Project Manager, USAMV Cluj-Napoca	Vlaic A. et. al., 2008. Results concerning the growing dynamics in young sheep hybrid Laitier Belge X Tsigai and Tsigai, from lambing to weaning. Bull. USAMV C-N, Animal Sciences and Biotechnologies, 65(1-2), 224-228. Vlaic A. et. al., 2008. Result concerning the growing dynamics in young sheep hybrid Suffolk X Tsigai and Tsigai from lambing to weaning. Scient. Papers Anim. Sci. and Biotech. Timișoara, 41(2), 799-804.	USAMV Cluj-Napoca	
35.		Research Centre: Bee and sericicole products Mărghitaș Liviu	5.1./E 5.1.3./5.1.13.3. Sericulture, from tradition to the top of biotechnology FP7, Seris-Tech ; CEE X III, 230, 2006-2008. 5.1./E 5.1.3./5.1.13.4. Conservation of the genetic potential and biodiversity of local sericicole resources. 7.1.1.1.1 Dezmirean Daniel, Project Manager, USAMV Cluj-Napoca	Bojan Cristina, et al., 2007. Quantitative characters study for silkworm hybrids. Bull. USAMV-CN, 63-64, 214-218. Dezmirean D., Mărghitaș L.AI., 2008. Sericultură - prezent și viitor la Universitatea de Științe Agricole și Medicină Veterinară din Cluj Napoca. The Proceedings of the First International Conference "Sericulture - from tradition to modern Biotechnology" Cluj-Napoca, 7-10. Dezmirean D., Mărghitaș L.AI., 2008. Sericulture – present and future at University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. The Proceedings of the First International Conference "Sericulture - from tradition to modern Biotechnology" Cluj-Napoca 11-14. Matei Alexandra, et al., 2008. Study of some physical-chemical traits of silk fiber in the hybrid combinations by different tested origins in Romania. The Proceedings of the First International Conference "Sericulture - from tradition to modern Biotechnology" Cluj-Napoca 53-61. Bența M. et al., 2008. Research concerning some productive parameters of four <i>Bombyx mori</i> L. Monohybrids. The Proceedings of the First International Conference "Sericulture - from tradition to modern Biotechnology" Cluj-Napoca,	USAMV Cluj-Napoca	<u>Conference:</u> Sericulture - from tradition to modern Biotechnology" Cluj-Napoca 17-18 Apr 2008

36.		<p>Research Laboratory Regional laboratory for genotyping of farm animals -Vlaic Augustin</p> <p>Research Laboratory Animal germplasm Certification and cryopreservation laboratory Zăhan Marius</p>	<p>5.1./E 5.1.3./5.1.13.4. Study of genetic variability for creating lines in cyprinid populations in northwestern Transylvania by using genetic markers and related biotechnologies for sustainable conservation of the genetic fund; CEEX Modul I 45, 2005-2008; Oroian Teofil, Project Manager, USAMV Cluj</p> <p>5.1./E 5.1.3./5.1.13.5. Ex situ conservation of the genetic potential of the Țurcaia breed reised in Transilvania; PN II, UEFISCDI, 2008-2011, Miclea Vasile – Coordinating USAMV Cluj-Napoca</p>	<p>168-171.</p> <p>Oroian T. et al., 2006. Description d'un noyau élargi de sélection dans une population de carpe (Cyprinus Carpio) du Nord-Ouest de la Transylvanie, Bull. USAMV-CN, vol. 62,189-194, cod CNCIS 468.Oroian T. et al., 2006, Station mobile de couvaison pour les poissons, Bull. USAMV-CN vol. 62, 195-200, cod CNCIS 468.</p> <p>Oroian T. et al., 2007. Efectele utilizării hormonilor în reproducția la crap (Cyprinus carpio), Simpoz. Biotech, Cluj-Napoca.</p> <p>Oroian T. et al., 2008, Phenotypical performances at 5 Cyprinus carpiolines resulting from Galitian variety genitors selectend on ADN figerprinting at 45 and 145 days; Scient. papers Anim. Sci. Biotech. Timișoara, 41(2), 98–104, cod CNCIS 265.</p> <p>Oroian T. et al., 2008, Phenotypical performances at 5 Cyprinus carpiolines resulting from Lausitz variety genitors selectend on ADN figerprinting at 45 and 145 days; Scient. papers Anim. Sci. Biotech. Timișoara, 41(2), 105–111, cod CNCIS 265.</p> <p>Miclea Vasile, et al. 2010, Researches concerning semen quality in Tsigai rams. Bull. UASVM-CN, 67(1-2), 414-417.</p> <p>Miclea V., 2009, Morphological and productive characteristics of two Tsigai ecotypes, used as genetic stock. Scientifically papers Animal sciences and Biotechnologies, Ed Agroprint, Timișoara, 42 (2), 477-484.</p> <p>Miclea V., 2009, Reproductive performances of Tsigai sheep. Bull. UASVM-CN 66(1-2), 86-89.</p> <p>Miclea, V., 2011, Freezing of spermatozoa from Tsigai rams belonging to the hill ecotype, USAMVB Timișoara, Sci. Papers, Anim. Sci. and Biotech. 44 (1): 294-296.</p>	<p>USAMV Cluj Partner: USAMV București, USAMVB Timișoara, C. Parinis, Cosma S.R.L. Baia Mare</p> <p>USAMV Cluj-Napoca Responsible partner: SCDA Turda SCDCOC Reghin</p>	
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44.	E 5.1.1. Improving fertility and vegetal production,ecologic al agriculture, OMG	E 5.3.1 and RO 4.1.4 Research Centre for Agricultural Biotechnology – manager prof. dr. Doru Pamfil.	Valuable study of potato genotypes (Solanum tuberosum L.) in Romania with molecurare RAPD technique - Project Director Eng.PhD Katalin Kovacs	1. IOANA PETRICELE, PAMFIL DORU, DANIELA DONESCU, OLTEANU GHEORGHE, MARIA IANOȘI, KATALIN KOVÁCS, 2007. The vegetation interruption for the seed potato in accordance with the maximal flight of the aphids and the seed fraction accumulation. Simpozion internațional „Performanțe și competitivitate în producția animală”, USAMV „Ion Ionescu de la Brad” Iași. Lucrări Științifice, Seria Zootehnie, vol. 50, 121. 2. IOANA PETRICELE, PAMFIL DORU, KATALIN KOVÁCS, 2007, The maximal flight of the aphids and the seed fraction accumulation as criteria for interruption of vegetation for the seed potato. Lucrare publicată în Buletinul USAMV-CN, Seria Horticultură, vol.64.		

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		<p>RO 5.1.3 and RO 5.1.7 Horticultural Research Center of Transylvania – manager prof dr. Radu Sestras</p>	<p>Project: Advanced horticultural research institute of Transylvania – director prof dr. Doru Pamfil</p> <p>Project PN2: Recurrent selection application in interspecific hybrid populations to create ornamental varieties and identification of genotypes resistant to the attack of the main diseases – director prof dr. Radu Sestras</p> <p>Project: Investigation of ornamental plant germplasm and exchange of breeding technology – director prof dr. Cantor Maria</p>	<p>1. SESTRAS, R., D. PAMFIL, A. SESTRAS, L. JANTSCHI, S. BOLBOACA, C. DAN (2009). Inheritance of Vigour Tree in F1 Apple Interspecific Hybrids, <i>Notulae Botanicae Horti Agrobotanici Cluj-Napoca</i>, 37(1):70-73.</p> <p>2. SESTRAS, R., C. DAN, D. PAMFIL, A. SESTRAS, L. JANTSCHI, S. BOLBOACA (2010). The Variability of Juvenile Period, Fruits Size and Response to Diseases Attack on F1 Interspecific Apple Hybrids and the Efficiency of Selection. <i>Notulae Botanicae Horti Agrobotanici Cluj-Napoca</i> 38(1):234-240.</p> <p>3. SESTRAS A.F., PAMFIL D., DAN C., BOLBOACA S.D., JANTSCHI L., SESTRAS R.E. (2011). Possibilities to improve apple scab (<i>Venturia inaequalis</i> (Cke.) Wint.) and powdery mildew [<i>Podosphaera leucotricha</i> (Ell. et Everh.) Salm.] resistance on apple by increasing genetic diversity using potentials of wild species. <i>Australian Journal of Crop Science</i> 5(6):748-755.</p> <p>4. SESTRAS R., D. PAMFIL, M. ARDELEAN, A. SESTRAS (2010). Response of F1 Interspecific Hybrids, Belonging to Different Ornamental Apple Species, to Apple Scab and Powdery Mildew Attack. <i>Acta Hort.</i> 885:343-348.</p> <p>5. DAN, C., R. SESTRAS, A. SESTRAS, D. PAMFIL, S.D. BOLBOACA, L. JANTSCHI (2010). Heritability and Genetic Parameters Estimated for Fruits Size in F1 Interspecific Apple Hybrids. <i>Bulletin of University of Agricultural Sciences and</i></p>	<p>Universitatea Agrara de Stat din Moldova, Chisinau, Facultatea de Horticultura Centro per la Sperimentazione Agraria e Forestale, Laimburg, Italia Universitat Politècnica de València, Valencia, Spain</p>	

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	E.5.1.1., RO 5.1.3., RO 5.1.13 Genetics and horticulture and forestry plant breeding laboratory – manager prof dr. Radu Sestras	Project: Rendering efficient the system of certification of fruit tree planting material free of viruses - from plums - and the preservation of pre-basic and BASIC material in the context of sustainable agriculture – project manager Prof dr Doru Pamfil Project: Study of genetic determinism of sexes and genetic variability using molecular markers in the species dioica hippophae RHAMNOIDES L. SSP. CARPATICA – director dr. Gotea Ionut; Project: Promoting the participation of the romanian horticultural research to european and international programmes in the field of germplasm cryopreservation – director Prof Dr. Maria Cantor		1. Maria Cantor, Rodica Pop, Erzsebet Buta, 2008. Studies of use of new Canna indica cultivars for improved student floral collection. HortScience.ol.43 (4), Jul 1 2008, Abstracts (Poster Sessions), pp. 1178. 2. Maria Cantor, Corina Catana, Erszebet Buta, 2009. Introduction of new roses cultivars into ornamental collection and their behavior in Transylvania conditions. HortScience. Volume 44, Issue 4, July 2009, Abstracts (Poster Sessions), pp. 1155. 3. Maria Cantor, Erszebet Buta, 2009. Researches Concerning the Behavior of New Callistephus Chinensis Varieties for Enrich the Romanian Floral Assortment. Supplement to HortScience, Volume 45(8) August 2010, Sect. Genetics/Germplasm/Plant Breeding: Floriculture (002), pag S159 4. Cantor Maria; Buta Erszebet, 2010. Research Concerning the Behavior of New Callistephus chinensis Varieties for Enriching the Romanian Floral Assortment. HORTSCIENCE. Volume: 45, Issue: 8, Supplement: S, Pages: S159-S159. 5. Erzsebet BUTA, Laura PAULETTE, Tania MIHĂIESCU, Mihai BUTA, Maria CANTOR, 2011. The Influence of Heavy Metals on Growth and Development of Eichhornia crassipes Species, Cultivated in Contaminated Water. NOTULAE BOTANICAE HORTI AGROBOTANICI CLUJ-NAPOCA. Volume: 39 Issue: 2 Pages: 135-141.			
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47.	E 5.3.1. Genomica, proteomica, metabolomica, bioinformatica aplicata in evaluarea si exploatarea biodiversitatii (plante, animale, microorganisme) RO 5.1.12 Conservarea potentialului genetic al resurselor naturale si biodiversitatii	Research Centre for Agricultural Biotechnology – Manager prof. dr. Doru Pamfil	CEEX: USE SELECTION GENETICS marker assisted (MAS) THE EMPHASIS OF PLANTS FOR DISEASE RESISTANCE GENE - Director Prof. Dr. Doru Pamfil	1. Monica BODEA, D. PAMFIL, R. SESTRĂȘ, Bianca PĂTRAȘCU, Ioana PETRICELE, Rodica POP, Iulia Francesca POP, Use molecular markers for revealing apple F1 hybrids monogenic resistance to scab (Venturia inaequalis), Lucrări Științifice vol 50. Seria Zootehnie, USAMV „Ion Ionescu de la Brad” Iași vol.50, 71-77.		
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48.	E 5.3.2. Improving the good-function of the soil, reducing pollution	E 5.3.3. Research Laboratory for Land improvement, land measurements and exact sciences – Prof dr. Marcel Dirja	Project: Research on the dynamics of water infiltration into the soil and its influence on landslides – director Conf dr. Matei Florica Project: Research on the behaviour of agricultural land works degraded by landslides and depth erosion – director Viorel Budiu; Project: Research on surface, depth erosion risk, active landslides and means of their rehabilitation, to prevent potential hydrological disasters in the nw part of Transylvania – director prof dr. Dirja Marcel	1. Marcel DIRJA, Tudor SALAGEAN, Adela HOBLE, 2010. Facts about the Evaluation Process required to Establish the Market Estimation of the Sport Hotel Land, Cluj-Napoca. Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Horticulture. Vol. 67(2)/2010, p. 353-359. 2. Marcel Dirja, Tudor Salagean, Viorel Budiu, Florica Matei, Ioan Pacurar, Alexandru Colisar, Danut Dan, 2010. Research Regarding the irrigation Regime and Water Consumption of Lettuce Cultivated in Protected Areas. Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Horticulture. Vol 66(2)/2009, pp. 937. 3. Marcel DIRJA, Alexandru COLISAR, Adrian CECLAN, Viorel BUDIUI, Ioan PACURAR, Danut DAN, 2009. RESEARCH REGARDING HIDRO-PHYSICS SOILS INDICATORS ON FITTING OUT IN TERRACES FROM TÂRNAVE VINEYARD. Bulletin of University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca. Horticulture. Vol 65, No 2 (2008), pp. 502-507.		

49.	E 5.4.3. Inovating systems for quality management, marketing of alimentary products	Research Laboratory Business Administration and Rural Development – manager Conf dr. Felix ARION	Project PD: Technical-economic analysis of beekeeping in the north west of romania to ensure its sustainable development – director lector dr. Cristina Bianca Pocol Project: Management and marketing of bee products in romania and the european union – director lector dr. Cristina Pocol. Project: Modern management tools for decision-making fundamenting on farms director asist. Dr. Simu Alexandru;	1. POCOL Cristina Bianca, 2011. Modelling the honey consumption behaviour in Romania by using socio-demographic determinants. AFRICAN JOURNAL OF AGRICULTURAL RESEARCH. Volume: 6 Issue: 17 Pages: 4069-4080. 2. POCOL Cristina Bianca, 2010. Evaluation of Honey Consumption in Cluj Napoca. Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Horticulture. Vol. 67(2)/2010, p. 286. 3. POCOL Cristina Bianca, 2009. Benefit-Cost Analysis of Apiculture Farm. Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Vol 66(2)/2009, pp. 529.		
50.	E 5.5.1. Contributions to the concept of food chain (from fork to fork), and environmental impact of pollutants on the quality and food safety E 5.5.2. Modern methods for assessing food and feed safety and quality, authenticity, traceability RO. 5.1.8. Food chain traceability	E.5.3.1 and RO 5.1.12 Research Center for Agricultural Biotechnology – Manager prof. dr. Doru Pamfil.	Project: Study of the genetic polymorphism in cultivated grape varieties to determine the genetic print of wine – director prof dr. Doru Pamfil	1. Monica Harta, Doru Pamfil, Rodica Pop, Iulia Francesca Pop, 2010, Identification of Romanian Vitis vinifera L. Cultivars in Must Using Nuclear Microsatellite Markers, Bul. of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, seria Horticulture, vol. 67 (1), 198-203. 2. Monica Bodea, Doru Pamfil, Rodica Pop, Iulia Francesca Pop, 2009, Use of Random Amplified Polymorphic DNA (RAPD) to Study Genetic Diversity among Romanian Local Vine (Vitis vinifera L.) Cultivars, Bulletin of USAMV, seria Horticulture and Forestry, Vol. 66(1), 17-22. 3. Monica HÂRȚA, Doru PAMFIL, Rodica POP, Simona VICAȘ, 2011, DNA Fingerprinting Used for Testing Some Romanian Wine Varieties, Bulletin of USAMV, seria Horticulture and Forestry, Vol. 68(1),143-148. 4. Monica HÂRȚA, Doru PAMFIL, Rodica POP, Iulia Francesca POP, A Review of the genetic diversity study of Romanian Vitis vinifera L. cultivars by molecular markers, Bulletin of Szent Istvan University, Special	USAMV Iasi Genetic Lab SRL Bucuresti	

		E 5.1.1. and RO 5.1.1. National reference laboratory for the evaluation and certification of plant products containing genetically modified organism - Manager prof dr. Doru Pamfil	Project: Study of the genetic polymorphism in cultivated grape varieties to determine the genetic print of wine – director prof dr. Doru Pamfil Project: Study of the content of genetically modified organisms in some soy and corn based food products – director dr. Sisea Cristian.	Issue, 206, ISSN 1586-4502 1. Sisea, C. R., D. Pamfil, Ioana Virginia Petricele, Iulia Francesca Pop, Oana Ciuzan, 2010, GMO testing for the presence of Roundup Ready soybean, Romanian Biotechnological Letters. 2. Sisea, C. R., D. Pamfil, 2009, Testarea OMG, Ed. Bioflux, Cluj-Napoca, ISBN 978-606-92029-5-1. 3. Sisea, C. R., Ioana Virginia Petricele, Iulia Francesca Pop, L. A. Vescan, D. Pamfil, 2009, Integrated procedure for GMO testing in specialized laboratories, Bulletin of the University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Horticulture, 66, 647. 4. Sisea, C. R., D. Pamfil, 2008, Preparation of DNA samples for GMO analysis of soybean-derived foodstuffs, Volumul omagial Lucrari stiintifice. Horticultura, Seria B-LI, 714-720. 5. Sisea, C. R., D. Pamfil, 2008, Comparison of DNA extraction methods for GMO analysis of food products, Book of abstracts. 43rd Croatian and 3rd International Symposium on Agriculture, 116.		
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53.	<p>5.1.6.4. Food-borne diseases and their impact on the human health.</p> <p>5.1.8.1. Assurance of traceability and quality in the food industries.</p> <p>5.1.9.1. Optimizing production techlonogy and implementing the European concept of food safety in dairy farms.</p> <p>5.1.10. 1. Quick evaluation methods of parasitic contamination of the food and water.</p>	<p>Research Laboratory: Animal production and Food safety; Director: Prof. Mihaiu Marian</p>	<p>- Identification of germs and pathogens in food.</p> <p>- Research on chain of buffalo milk, quality markers and traceability IDEAS project final report 1083/2009,</p> <p>- Model Food functional for prevention of atherosclerotic cardiovascular disease with an intelligent risk analysis – MACS PARTNERSHIPS, No. 52135/2008.</p>	<p>- Mihaiu M., C. Bele, Alexandra Lapusan, Romolica Mihaiu, S. D. Dan, Carmen Taulescu, Cristian Matea, 2010, Seasonal variations in the biochemical composition of buffalo milk, Studia Universi-tatis Babes-Bolyai, Seria Chemia Vol. 55 (3), ISSN 1224-7154, ISSN : 2065 – 9520, 197-205</p> <p>- Mihaiu M., Alexandra Lapusan, C. Bele, Romolica Mihaiu, S. D. Dan, Carmen Taulescu, Cristian Matea, 2011, The assesment of the quality and traceability biomarkers in the buffalo milk primary production, Roumanian Biotechnological Letters, ISSN 1224-5984, vol.16 (5): 5548-5555.</p> <p>- Marian Mihaiu, Alexandra Lapusan, Romolica Mihaiu, Sorin Daniel Dan, Carmen Jecan, Anamaria Cozma, 2012, <i>Protein characte-rization of romanian buffalo milk compared to cow milk</i>, Studia UnivBabes-Bolyai, Seria Chemia Vol. 56 (4), ISSN 1224-7154, ISSN: 2065 -77</p>	USAMV CN	

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55.		Research Centre: Bee and sericicole products; Mărghitaş Liviu	5.2./E5.2.2./5.1.14.1. Developing a regional monitoring and diagnostics bee laboratory; CEEX IV, 270, 2006-2008; Mărghitaş Liviu - Project Manager, USAMV Cluj-Napoca		USAMV Cluj-Napoca	
56.		License laboratory: Sequencing laboratory	5.2./E 5.2.2 /5.1.14.2. Research on the polymorphism of the PRN-P prion protein encoding gene associated with sensitivity / resistance to scrapie in domestic sheep breeds; CEEX M1 28, 2006-2008; Coşier Viorica - Project Manager, USAMV Cluj	Books published: Coşier Viorica (coord) si colab, 2007. Creşterea rezistenţei la scrapie în populaţiile de ovine din România prin selecţia asistată la nivel molecula Vol Ir, Ed. Risoprint Cluj-Napoca, ISBN: 978-973-751-578-0; ISBN specific: 978-973-571-579-7 (150 pag). Coşier Viorica (coord) si colab, 2008.	USAMV Cluj Napoca Partners: USAMVB Timişoara, ICDOC Palace Constanţa	Workshop Increased resistance to scrapie in sheep populations in Romania by the assisted selection molecular; 11

				<p>Creșterea rezistenței la scrapie în populațiile de ovine din România prin selecția asistată la nivel molecular, vol II, Ed. Risoprint Cluj-Napoca, ISBN: 978-973-751-578-0; ISBN specific: 978-973-751-815-6 (165 pag).</p> <p>Coșier Viorica, C. Coroian, S., Dărăban, S. Voia, 2007. Increasing food chain security for scrapie by marker assisted selection in sheep population, <i>Lucr. Șt. Zoot. și Bioteh. Timișoara</i>, 40(1), 53-58.</p> <p>Cosier Viorica, Vlaic A, Padeanu I, Daraban S, Voia S., Catoi C, Constantinescu R, Vicovan G, 2008. The primer extension technique for the polymorphism detection at ovine Prn-P locus, <i>Lucr. Șt. Zoot. și Bioteh.</i>, vol. 41, 40-44.</p> <p>Coșier V., A. Vlaic, V. Mireșan, R. Constantinescu, 2011. The genetic resistance of rams from Turcana breed to ovine transmissible spongiform encephalopathy (scrapie). <i>Romanian Biotechnol. Letters</i>, 16-4, 6328-6335.</p>		<p>iulie 2008; Laboratory services Method for genotyping for sensitivity analysis in scrapie the PrP locus. Results genotyping of Turcana race-variety Bistrita Bala included in the approval documentation</p>
57.	E 5.3.1. Genomica, proteomica, metabolomica, bioinformatica applied in the evaluation and exploiting the biodiversity (plants, animals, microorganisms) 5.1.12 Conserving the genetic potential of native natural resources and biodiversity	Research Laboratory: Regional laboratory for genotyping of farm animals; Vlaic Augustin	E 5.3.1/5.1.12.1. Crearea, dezvoltarea, implementarea sistemului calității și acreditarea unui laborator zonal de genotipizare a animalelor de fermă ; CEEX Modul IV-7578, 2006-2008; Vlaic Augustin - Director proiect USAMV Cluj-Napoca		USAMV Cluj-Napoca	
58.		Research Laboratory: Regional laboratory for genotyping of farm animals; Vlaic Augustin	E 5.3.1/5.1.12.2 Characterization of milk protein polymorphisms in farm species and study of the possibility of their use as genetic markers to identify	Bâlțeanu V.A. et al., 2010. A comparative study of major milk protein polymorphism in six Romanian cattle breeds. <i>Bull. USAMV-CN</i> , 67: 345–350. Bâlțeanu V.A.. 2010. Development of a	USAMV Cluj-Napoca Partners: USAMVB Timișoara USAMV Iași SCDCOC Caransebeș	

			the declared authenticity of the dairy products; PN II ID PCE (IDEI), 2545, MECTS, 2008-2010; Vlaic Augustin - Project Manager, USAMV Cluj-Napoca	PCR-RFLP test to discriminate between beta-casein B and C ^{BT} allele in Romanian Buffalo. Bull. USAMV-CN, 67: 482. Bâlțeanu V.A. et al., 2009. PCR-RFLP genotyping of whole Romanian Grey Steppe cattle population for α_{s1} casein I ^{RV} allele. Bull. USAMV-CN, 66: 473. Bâlțeanu V.A. et al., 2010. Characterization of the α_{s1} -casein I ^{RV} allele provides evidence for phylogeny of the ancient Romanian Grey Steppe cattle, Moldavian strain. Lucr. Șt. Zoot. Iași, 53: 315-320. Șuteu M. et al., 2011. Evidence of alternative splicing of porcine β -casein (CSN2). Animal Genetics. doi: 10.1111/j.1365-2052.2011.0281.		
59.		Research Laboratory Regional laboratory for genotyping of farm animals; Vlaic Augustin	5.3./E 5.3.1./5.1.12.3. From rustic to improved: the study of polymorphism of the key genes involved in the lactogenous capacity and development of the mammary gland in cattle and goats; PN II –Resurse Umane TE, nr.113/2010, cod CNC SIS 224, 2010-2013 ; Carșai Crina Teodora – Coordinating, USAMV Cluj-Napoca	Carsai T. Crina, V. Balteanu, 2010. Key genes involved in development and lactation capacity of mammary gland in cattle and goats. Bull. UASVM-CN, 67(1-2), 480. Carsai T. Crina, V. Balteanu, 2010. The polymorphism of some key genes involved in some lactation traits, Scient. papers, Seria d, Liii Anim. Sci. The 39th intern. session, scient. comm. Faculty Anim. Sci. București, 45-49. Carsai T. Crina et al., 2011. The study of growth hormone Alu I polymorphism in two Romanian cattle breeds. Bull. UASVM-CN 68(1-2), 108-113. Carsai T. Crina et al., 2011. The study of prolactin RsaI polymorphism in Romanian Grey Steppe cattle breed. Bull. UASVM-CN 68(1-2), 417. Carsai T. Crina et al., 2012. The polymorphism of pituitary factor 1 (POU1F1) in cattle. USAMVB Timisoara, Scient. Papers Anim. Sci. Biotech., 45 (1).	USAMV Cluj-Napoca	
60.		Research Laboratory: Regional laboratory for genotyping of farm animals; Vlaic Augustin	5.3./E 5.3.1./5.1.12.4. From DNA to cheese: Study the impact of alpha-s1 polymorphism genetic marker on milk quality at the Carpathian breed goats,	Vlaic A. et al., 2010. Milk protein polymorphisms study in some Carpathian goat populations reared in the central part of Romania. Bull. USAMV-CN, 67(1-2): 54-59.	USAMV Cluj-Napoca	

			production efficiency cheese and sensory properties.PN II - Parteneriate, 52104, 2008-2011 ; Vlaic Augustin - Project Manager, USAMV Cluj-Napoca	Pop F.D. et al., 2009. Preliminary results concerning the effect of alpha S1-CN polymorphism on cheesemaking efficiency in Carpathian goat breed. Bull. USAMV-CN, 66: 474. Pop F.D., et al., 2008. A comparative analysis of goat α 1-casein locus at protein and DNA levels in Carpathian goat breed. Bull. USAMV-CN, 65: 474. Bâlteanu V.A. et al., 2010. Identification of three possible new casein alleles in Carpathian goat. Sci.Papers, Bucuresti, Anim. Sci, LIII, 50-54. Bâlteanu V.A. 2010. The study of α S1-casein genetic marker polymorphism in Carpathian goat breed. Lucr. Șt. Zooteh. Iași, 53:321-325.		
61.		Research Laboratory: Animal germplasm Certification and cryopreservation laboratory; Zăhan Marius	5.3./E 5.3.1./5.1.12.5. Animal germplasm Certification and cryopreservation laboratory; CEEX Modul IV; 2006-2007; Miclea Vasile, Zăhan Marius – Coordinating, USAMV Cluj-Napoca	Book published: Miclea V., M. Zăhan, 2006. Reproducția Peștilor Ed. ACCENT, 232 p. Miclea V. et al., 2007. Influence of harvest frequency on the quality of boar semen. Bull, USAMV-CN, 63-64, 95-98, Dascăl A. et al., 2007. The results of cervical artificial insemination at sheep in SCDP Jucu conditions. Bull. USAMV-CN, 63-64, 90-94. Hettig A. et al. 2007. The influence of some aminoacides on in vitro maturation of swine oocytes. The 36th Intern. session of sci. comm. sci. papers, Faculty Animal Science, București, 165-168.	USAMV Cluj-Napoca	
62.	5.1.16 Protecting and developing gunting and trout resources	Research Laboratory: Regional laboratory for genotyping of farm animals; Vlaic Augustin	5.3./E 5.3.1./5.1.16.1. Phenotypic assessment and genetic characterization using molecular techniques on wild boar populations <i>Sus Scrofa ferus</i> while identifying the impact factors on the ecosystems in the area, in order to avoid the genetic vulnerability of the species; PN II 52105, 2008-2011; Oroian Teofil - Project Manager, USAMV Cluj	Book published: Oroian Teofil, 2011. Mistrețul (<i>Sus scrofa ferus</i>) umbră tăcută și mister genetic al pădurilor românești. Ed. RISOPRINT Cluj-Napoca, ISBN 978-973-53-0672-4.	USAMV Cluj Partners: UBB Cluj.Napoca ICAS București Stațiunea Brașov	

63.		Research Laboratory in fisheries; Ladoși Daniela	5.3./E 5.3.1./5.1.16.2. Study of HSP genes in fish species with great economic value to improve them; PC 51-056, 2007-2008 ; Bud Ioan - Project Manager, USAMV Cluj-Napoca	Ladosi Daniela, et al., 2007. Research concerning possibilities of rearing and accommodation of <i>Oncorhynchus mykiss</i> in a recirculator system using urban water source. Bull. USAMV-CN, 63-64, 250-255, cod CNCSIS 468. Boaru Anca et al., 2008. Characterization of the biological material of rainbow trout (<i>Oncorhynchus mykiss</i>) used for artificial reproduction at sexual maturity age. The Intern. Sci. Symp. "Opportunities and perspectives in animal production", Lucr. Șt. seria Zoot., vol 51, 1095-1099, cod CNCSIS 399.	USAMV Cluj-Napoca	Patent Application – OSIM A/00774 din 09.11.2007. USAMV Cluj-Napoca (Titular), PETRESCU-MAG I. V., I. BUD, PETRESCU-MAG R. M., C. SISEA, M. BURA, A. GROZEA, M. BOTHA, V. COSIER (Autori) Process for obtaining a fish ornamental line criorezistente guppy (<i>Poecilia reticulata</i>)
64.		Research Laboratory in fisheries; Ladoși Daniela	5.3./E 5.3.1./5.1.16.3. Study of genetic variability for creating lines in cyprinids (<i>Cyprinus carpio</i>) populations of in north-western Transylvania by using genetic markers and related biotechnologies for sustainable conservation of genetic fund; Program Cercetare de Excelență tip Cercetare-Dezvoltare, 2005-2008; Bud Ioan - Project Manager, USAMV Cluj-Napoca	Bud I. et al., 2008. Studiu privind aprecierea calității de pește în funcție de specia considerată. The Intern. Sci. Symp. „60 de ani de cercetare științifică în domeniul creșterii animalelor”, Bull. USAMVB Timișoara, 41(1,2), CNCSIS 265.	USAMV Cluj-Napoca	Patent Application – OSIM A/00775 din 09.11.2007. USAMV Cluj-Napoca (Titular), PETRESCU-MAG I. V., I. BUD, PETRESCU-MAG R. M., D. C. PAMFIL, L. D. GORGAN, B. PĂȘĂRIN, R. G. ȘTEFAN (Autori) Biotechnological process of ornamental fish for increasing body size in male guppy species (<i>Poecilia reticulata</i>).

65.	5.1.17 Interdisciplinary research analyzing the correlations soil, plant, animal, nutrient and human	Licence Laboratory: Evaluating the propagation of xenobiotics in agricultural environments; Georgescu Bogdan	5.3./E 5.3.2./5.1.17.1. Clinical and experimental research on persistent organic pollutants with endocrine disrupting function in human and animal biological environments, and their involvement in insulin resistance / metabolic syndrome; PNCDI II, 4 Parteneriate, 41-068, 2007-2010 ; Georgescu Bogdan - Responsible USAMV Cluj-Napoca	Georgescu B. et al., 2010. Assessment of persistent organic pollutants acting as endocrine disruptor chemicals in animal fat, cow milk and lacteous sub-products from Cluj County, Romania. Anim. Biology & Anim. Husbandry – Int. J. Bioflux Society, 3(1):1-9.	Responsible partner: USAMV Cluj-Napoca Project Manager: UMF Cluj-Napoca Partners : Institute of Public Health Cluj-Napoca Institutul Pasteur București	
66.		License laboratory: Construction Laboratory and microclimate control	5.3./E 5.3.2./5.1.17.2. Integrated database application for the adjustment and restructuring of the natural and artificial environmental protection factors in agricultural farms; CEEX 6108, 2005-2008; Tănăsescu Ioana - Project Manager, USAMV Cluj-Napoca	Tănăsescu Ioana, Marcela Sirbu, 2009. Researches regarding the thermographic evaluation in cattle breeding farms by integration of environment factors, vol."Zootehnia modernă – știință, creativitate și inovare" Facultatea de Zootehnie USAMV IAȘI Tănăsescu Ioana , Marcela Sirbu, 2009. The effect of micro-climate conditions upon forage quality in animal breeding farms. Vol. "Research People and Actual Tasks On Multidisciplinary Sciences" Lozenek, Bulgaria,.4-9. Sirbu Marcela, Ioana Tănăsescu, 2009. Pollution sources in livestock farms - case studies. Vol. "Research People and Actual Tasks On Multidisciplinary Sciences" Lozenek, Bulgaria, 10-14. Tănăsescu Ioana, 2009. Study regarding the environmental degradation factors and qualitative detection of thermal irregularities in agricultural buildings envelopes. 3 rd Intern. Conf.on Integrity, Reliability and Failure, Faculty of Engineering, University of Porto, Portugalia. REF: A0407.	USAMV Cluj-Napoca	
67.		License laboratory: Pratologie Laboratory/ Laboratory for Quality Seed and Propagating Material	5.3./E 5.3.2./5.1.17.3. Establishing a range of annual and perennial forage in Transylvania Plain for conditions to limit the negative effects of drought on feed production; IDEI 1107, CNCISIS UEFISCSU, 2009-2011;	Sima N. et al., 2009. Strategies for farmers in setting up of some structures of fodder cultures with the object of best capitalization of existing direct payments – economic and environmental benefits. Lucr. Șt., 51, USAMV Iași. Sima N. et al., 2009, The influence of	USAMV Cluj-Napoca Partners: INCDTIM Cluj-Napoca ICDP Brașov	

			Sima Nicușor - Project Manager, USAMV Cluj-Napoca	<p>temperature and humidity on germination energy and length of embryonic roots at some C4 type of fodder plants. Bull. UASVM-CN, 66(1-2) 282-287.</p> <p>Sima N. et al., 2010. Evolution of the botanical composition and forage yield of several perennial fodder legume and grass mixtures in the year of establishment. Notulae Botanicae Horti Agrobotanici, 45-50.</p> <p>Sima N. et al., 2010. The settlement of some perennial fodder plant mixtures in ecological conditions of Transylvanian plain. Bull. UASVM-CN, 67(1-2), 339-344.</p> <p>Sima N. et al., 2010. The test of some annual and perennial fodder cultures for fresh matter production in ecological conditions of Cojocna. Bull. UASVM CN, 67(1-2), 475.</p>		
68.	<p>5.4. Inovating products, technologys and services integrated in the agroalimentar chain</p> <p>E 5.4.3. Inovating systems for quality management, marketing of alimentary products</p> <p>5.1.5 The managemet of producing agro-alimentary products (size optimal of farms, integrated systems to ensure food activities)</p>	Research Centre: Bee and sericicole products - Mărghitaș Liviu	<p>5.4./E 5.4.3./5.1.5. 1.</p> <p>Modernizing the information system in agriculture; MAKIS, Banca Mondială, 2008-2010 ; Mărghitaș Liviu - Project Manager, USAMV Cluj-Napoca</p>	<p>Pocol Cristina, Mărghitaș L.Al., 2007. Market study about honey consumption in Romania. Bull. USAMV-CN, 63-64, 191-194.</p> <p>Mărghitaș L.A., et al., 2010. The development of a biochemical profile of Acacia honey by identifying biochemical determinants of its quality, Notulae Botanicae Horti Agro Botanici Cluj-Napoca, 38(2), Special Issue, 9-13.</p>	USAMV Cluj-Napoca	
69.		Research Centre: Bee and sericicole products - Mărghitaș Liviu	<p>5.4./E 5.4.3./5.1.5. 2.</p> <p>Genetic variability of the Apis mellifera population living in Transylvania; CNCSIS-TD, 2007-</p>	<p>Teleky Orsolya Reka, et al., 2007. Ecotypes differentiation within honeybee (<i>Apis mellifera carpatica</i>) from Transylvania. Bull. USAMV-CN, 63-64, 195-200.</p>	USAMV Cluj-Napoca Mentor USAMV Cluj-Napoca	

			2008 ; Teleky Orsolya - Project Manager; Mărghitaş Liviu - Mentor	Mărghitaş L. Al. et al., 2009. Biodiversity testing of Transylvanian honeybee populations using mtDNA Markers. Bull. USAMV-CN, 66 (1-2), 402-406.		
70.	5.5. Alimentary quality, safety and security, health and well-being E 5.4.5. Modern methods of evaluation for the quality and safety for nutrients and fodders, authentic	Research and fodder quality control laboratory – Sara Aurel	5.5./E 5.4.5. Developing, implementing quality control and accreditation a feed area laboratory quality certification; CEEX, Modul IV, 166, 2006-2008; Şara Aurel - Project Manager, USAMV Cluj-Napoca	Books published: Şara, A., Septimiu Borbil, 2007. Miceţi şi micotoxine. Ed. Risoprint, Cluj- Napoca. Şara A., Benţea M., 2011. Alimentaţia animalelor. Ed. Risoprint, Cluj- Napoca. Şara A. et al., 2007. Effects of Sel-Plex organoselenium on performance of laying hens. The New Energy Crisis: Food, Feed, or Fuel? Nutritional Biotechnology in the Feed and Food Industries Abstracts of posters presented. Proceeding of Alltech’s 23rd Annual Symposium, Lexington, Kentucky, USA, p.34. Şara, A. et al., 2008. The influence of the organic selenium (Sel- Plex) administered in broiler chickens’ feeding on meat quality. Lucr. al 7-lea Simpoz. Intern. Book of abstracts, IBNA, Baloteşti, 45. Şara A. et al., 2010. Mycotoxins impact on the bulls productions and health. Lucr. Simpoz. „Perspective în prevenirea şi combaterea micetilor şi micotoxinelor” Sângeorgiu de Mureş, 35-42.	USAMV Cluj-Napoca	<u>Conference</u> : The 4th Seminar organized by HYBRIMIN Germany and Nutrition and Food discipline, with the topic Program for calculation of recipes as a tool to increase sales growth; Location USAMV Cluj- Napoca, Research and fodder quality control laboratory 2008
71.	5.1.6 Functional food for mentaining health and preventing illness	License laboratory: Laboratory of Biochemistry	5.5./E 5.4.5./5.1.6.1. Testing the antioxidant, antiproliferatie and proapoptotic properties of the polyphenolic extract of blueberries on tumor cell culture; PN II, TE-168, Cod 109/2010, UEFISDI, 2010-2013; Bunea Andreea - Project Manager, USAMV Cluj-Napoca	Bunea A. et al., 2011. Comparative Polyphenolic Content and Antioxidant Activities of Some Wild and Cultivated Blueberries from Romania, Not Bot Hort Agrobot Cluj, 39 (2). Bunea A. et al., 2011. Carotenoids and fatty acids profile and their quantification in some wild and cultivated blueberries from Romani, Chem. Listy, 1037.	USAMV Cluj-Napoca	<u>Conference</u> : Chemistry and Life, Brno, Cehia, 2011
72.		Research Centre: Bee and sericicole products - Mărghitaş Liviu	5.5./E 5.4.5./5.1.6.2. Evaluation of the biological activity of bee bread and monofloral bee pollen through comparative investigation of specific monofloral sources and the study of bee bread	Stanciu O.G. et al., 2011. A comparison between the mineral content of flower and honeybee collected pollen of selected plant origin (<i>Helianthus annuus L. And Salix sp.</i>). Romanian Biotechnological Letters, 16(4), 6291-6296. Stanciu O.G. et al., 2010. Flavonoid	USAMV Cluj-Napoca	

			fermentation processes; PN II-RU-PD 256, 2010-2012 ; Stanciu Oltica - Project Manager, USAMV Cluj-Napoca	content of unifloral bee pollen harvested from Transilvania, evaluated spectrophotometrically by ZrOCl ₂ reagent. Proceedings of the 1 st Intern. Animal Health Science Conf.: The Beekeeping Conference, Addleton Academic Publishers New York, 108-113.		
73.		Research Centre: Bee and sericicole products - Mărghitaș Liviu	5.5./E 5.4.5./5.1.6.3. Research study on royal jelly compounds bioactive; CNCISIS-TD, 2007-2009; Popescu Olimpia - Project Manager, USAMV Cluj.Napoca	Popescu Olimpia et al., 2008. A study about physicochemical composition of fresh and lyophilized royal jelly, Simp. St. Intern. Timișoara, 41(1,2), 244-248. Popescu Olimpia et al., 2008. Characterization about phisico-chemical composition of royal-jelly, USAMV-CN, 65(1-2), 244-248. Popescu Olimpia et al., 2008. Studies on the physico-chemical parameters of honeydew honey from Transilvania. 1st World Honeydew honey symp., Tzarevo, Bulgaria. Popescu Olimpia et al., 2009. Sugar profile and total protein content of fresh royal jelly. Bull. USAMV-CN, 66(1-2), 265-269.	USAMV Cluj.Napoca	
74.	5.1.10 Methodologys with high acuracy, sensitive, fast to detect waste and contaminating particles	Research Centre: Bee and sericicole products - Mărghitaș Liviu	5.5./E 5.4.5./5.1.10.1. Assessment methods for romanian propolis quality validated; PN II-RU-PD 249, 2010-2012 ; Stan Laura - Project Manager	Stan L. et al., 2011. Quality criteria for propolis standardization. Scientific Papers Animal Science and Biotechnologies, Timișoara, 44(2), 137-140.	USAMV Cluj-Napoca	
75.		Research Centre: Bee and sericicole products - Mărghitaș Liviu	5.5./E 5.4.5./5.1.10.2. Development of the Aphis laboratory capacity to authenticate bee products using modern methods and technologies; PN II Capacități ECERC 105, 2007-2009 ; Dezmirean Daniel - Project Manager, USAMV Cluj-Napoca	Stanciu O. et al., 2009. Macro si oligo-mineral elements from honeybee collected pollen and beebread harvested from Transilvania (Romania). Bull. USAMV-CN, 66(1-2). Mărghitaș L.Al. et al., 2007. Evaluation of antioxidant capacity of bee pollen and beebread collected from Transilvania area. 3rd CIGR-Sec.VI Symposium, Naples, Italy, P110. Mărghitaș, Al.L et al., 2007. Validated method for estimation of total flavonoids in Romanian propolis. Bull. USAMV-CN, 63-64, 164-169.	USAMV Cluj-Napoca	

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76.		Research Centre: Bee and sericicole products - Mărghitaş Liviu	<p>5.5./ E 5.4.5./5.1.10.3. High accuracy methodologies to detect food valuable residues and contaminants in bee products; PN II Parteneriate 51070, 2007-2010 ; Mărghitaş Liviu - Project Manager, USAMV Cluj-Napoca</p>	<p>Book published: Mărghitaş L.A. 2010. Metode moderne de determinare a reziduurilor si contaminantilor din miere si produse apicole. Ed. AcademicPress, ISBN 978-973-744-216-1, 204 p</p> <p>Bonta Victorita et al., 2007. Optimization of HPLC method for quantifying Tetracycline residues in honey. Bull. USAMV-CN, 63-64, 186-190.</p> <p>Bonta V. et al., 2009. Determination of six sulfonamide residues in honey by HPLC with fluorescence detection Bull. USAMV-CN, 66.</p> <p>Mărghitaş L.A. et al., 2010. Determination of chloramfenicol in honey by liquid chromatography-mass spectrometry with photodiode array detection Bull. USAMV-CN 67(1-2), 36-42.</p>	USAMV Cluj-Napoca	

77.		Research Centre: Bee and sericicole products - Mărghitaş Liviu	5.5./E 5.4.5./5.1.10.4. Investigation of biologically active properties of bee products; CEEX II 5917, 2006-2008 ; Mărghitaş Liviu - Project Manager, USAMV Cluj-Napoca	Stanciu Oltica Giorgiana, et al., 2008. Correlation between the phenolic content and antioxidant capacity of declared honeydew produced in Transilvania. Bull. USAMV-CN, 65(1-2), 249-254. Mărghitaş L.A. et al., 2009. <i>In vitro</i> antioxidant capacity of honeybee-collected pollen of selected floral origin harvested from Romania. Food Chem, 115(3), 878-883/Elsevier Science ISI factor 3,05. Mărghitas L.Al. et al., 2009. Physico-chemical and bioactive properties of different floral origin honeys from Romania. Food Chem. 112, 863–867/Elsevier Science ISI factor 3,05. Bobis O. et al., 2009. Biologically active compounds from different herbs used as additives in honeybee feeding, Bull. USAMV-CN,66(1-2). Bobiş O. et al., 2010. Beehive products: source of nutrients and natural biologically active compounds J. Agroalim. Proc. And Technol., 16(2), 104-109.	USAMV Cluj-Napoca	
78.	E 5.3.1. Genomica, proteomica, metabolomica, bioinformatica applied in the evaluation and exploiting the biodiversity (plants, animals, microorganisms) PN II 5.1.12 Conserving the genetic potential of native natural resources and biodiversity	RESEARCH CENTER PLANT CULTURE Director: Prof.univ. Ioan Rotar RESEARCH LABORATORY APPLIED BIOLOGICAL SCIENCES Director Prof. Roxana Vidican	PN II IDEI Arnica montana ecosystems Biodiversity preservation through sustainable use; Coordinator USAMV: Ioan Rotar	1. Reif Albert, Rusdea Evelyn, Rotar Ioan, Pacurar Florin, Brinkmann Katja, Goia Augustin, Auch Eckhard, Buehler Josef, 2008.A traditional cultural landscape in transformation - The quest for sustainable development options in the Apuseni Mountains, Romania, MOUNTAIN RESEARCH AND DEVELOPMENT, Volume: 28, Issue: 1, Pages: 18-22 2. Vintu Vasile; Samuil Costel; Rotar Ioan; Moisuc Alexandru; Razec Iosif , 2011.Influence of the Management on the Phytocoenotic Biodiversity of Some Romanian Representative Grassland Types, NOTULAE BOTANICAE HORTI AGROBOTANICI CLUJ-NAPOCA, Volume: 39 Issue: 1 Pages: 119-125 3. Lucien CARLIER, Ioan ROTAR, Mariana VLAHOVA, Roxana VIDICAN, 2009. Importance and Functions of Grasslands,		
79.			PS – MARD: Conservation Biodiversity mountain agroecosystems; Responsible USAMV: Ioan Rotar	3. Lucien CARLIER, Ioan ROTAR, Mariana VLAHOVA, Roxana VIDICAN, 2009. Importance and Functions of Grasslands,	Research and Development Institute for lawns Brasov	

80.			PN II IDEI: New approaches to preserve specific cultural landscape for sustainable use of secondary grasslands; Coordinator USAMV: Florin Pacurar	NOTULAE BOTANICAE HORTI AGROBOTANICI CLUJ-NAPOCA, Volume 37, Issue 1, pp.25-30 4. Rotar Ioan - The grasslands of Apuseni Mountains Roamnia. In Grasslands in Europe, KNNV Publishing, 2009, Olanda		
81.			PNII PARTENERIATE: Research on the inventory and conservation of genetic diversity of different species of vegetables - essential premise for the expansion of organic agriculture in Romania and long-term food security; Responsible USAMV: Maxim Aurel	5. Ioan Rotar si Lucien Carlier- Cultura pajistilor, Editura Risoprint, 2010.	1. UBB University Cluj Napoca 2. Research and Development Statione for Fruit of Cluj-Napoca 3. TURDA STATIONE Agriculture Research and Development	
82.			PN II PARTENERIATE: Romanian Carpathians mountain flora Study in order to optimize biodiversity conservation with strategies and interspecific genetic – Carpatobiodiv; Responsible USAMV: Stoie Andrei		Institute of Biological Research Cluj	
83.	E 5.3.2. Improving the good-function of the soil, reducing polution E 5.3.3. Sustainable systems for keeping the quality of soil (water-air, reucing gase emissions) see Energy domain 5.1.17 Interdisciplinary research analyzing the corrlations soil, plant, animal, nutrint and human	RESEARCH CENTER MINIMUM SYSTEM AND SUSTAINABLE TECHNOLOGIES Director: Prof.univ. dr. Teodor Rusu RESEARCH LABORATORY CONTROL AND MONITORING SOIL FERTILITY Director: Prof.univ. Marilena Marghitas LABORATORY RESEARCH AND DEVELOPMENT TECHNOLOGY OPTIMIZATION SUSTAINABLE CROP Director: Prof.univ. Ioan Drocas	PN II IDEI: Biodiversity preservation and the study of properties and enzymatic activity of histosols from Romania in the context of sustainable management of soil resources, water and carbon seizure; Coordinator USAMV: Ioan Pacurar	1. Teodor Rusu, Paula Ioana Moraru and Ioan Rotar, 2011. Effect of soil tillage system on soil properties and yield in some arable crops , JOURNAL OF FOOD AGRICULTURE & ENVIRONMENT, Volume: 9 Issue: 3-4 Pages: 426-429 Part: Part 1 2. Moraru Paula Ioana, Rusu Teodor, 2011. Evolution of soil properties influenced by soil usage and soil tillage system, JOURNAL OF FOOD AGRICULTURE & ENVIRONMENT, Volume: 9, Issue: 2 , Pages: 710-713, Part: Part 2 3. RUSU Teodor; GUS Petru; BOGDAN Ileana; MORARU Paula Ioana; POP Adrian Ioan; SOPTEREAN Mara Lucia; POP Lavinia Ioana, 2010. Influence of infestation with Echinochloa crus-galli species on crop production in corn, Journal of Food Agriculture & Environment, 2010, vol. 8 (2), no2, pp. 760-763 4. Paula Ioana Moraru and Teodor Rusu,		

84.			PN II PARTENERIATE: Research on the promotion of a complex system for the assessment of mechanical and physical characteristics of soils in order to increase the safety and security of the agricultural production Coordinator USAMV : Ioan Drocas	2010. Soil tillage conservation and its effect on soil organic matter, water management and carbon sequestration, Journal of Food Agriculture & Environment, 2010 Vol. 8, Issue 3&4, pages 309-312 5. Doina Clapa, Teodor Rusu, Ioan Pacurar and Alexandru Fira, 2009. Soil formation processes in the gangue heaps resulted in surface mining in Cluj County (Romania), Journal of Food Agriculture & Environment, Vol. 7, Issue 1, pages 248-251.	Transilvania University of Brasov	
85.			PN II PARTENERIATE: INTERDISCIPLINARY RESEARCH ON THE EFFECT OF potentially harmful MAIN SOURCES OF TECHNOLOGICAL INPUTS (fertilizers, pesticides) in optimizing RELATIONS soil, plants, quality assurance purposes CONSUMER LIFE; Coordinator USAMV: Ioan Oroian	6. Rusu T., P. Gus, I. Bogdan, P. I. Moraru, I. A. Pop, D. Clapa, I. M. Doru, I. Oroian and L. I. Pop, 2009, Implications of Minimum Tillage Systems on Sustainability of Agricultural Production and Soil Conservation. Journal of Food, Agriculture & Environment, vol. 7(2/2009), Print ISSN: 1459-0255, WFL Publisher Science and Technology, Helsinki, Finlanda. Online Journal JFAE, vol. 7 (2/2009) www.world-food.net., Section Environment, Online ISSN: 1459-0263	1. Technical University from BUCURESTI 2. Research National Institute for Soil Science, Agrochemistry and Environmental Protection - ICPA Bucharest 3. University of Agricultural Sciences and Veterinary Medicine Ion Ionescu de la Brad, Iasi	
86.			PN II PARTENERIATE: Interdisciplinary research on soil-plant correlation, establishment of factors transfer for historical anthropogenic pollution areas; Coordinator USAMV: Gus Petru	7. Teodor Rusu and Ileana Bogdan (2012). Influence of Degree Infestation with Echinochloa crus-galli Species on Crop Production in Corn, Herbicides - Properties, Synthesis and Control of Weeds, Mohammed Naguib Abd El-Ghany Hasaneen (Ed.), ISBN: 978-953-307-803-8, InTech, Available from: http://www.intechopen.com/articles/show/title/influence-of-degree-infestation-with-echinochloa-crus-galli-species-on-crop-production-in-corn .	University of Baia-Mare	
87.			PS _MADR: Assessing the impact of the use of organo-mineral resources in the nutrition of the vegetal species for protection and improvement of the soil fertility and increase the safety and security of agricultural and food production; Coordinator: Rotar Ioan	8. Rusu Teodor, Weindorf David, Moraru Paula, Cacovean Horea, Turcu Vasile, 2009. Metode de cercetare ale solului si plantei. Editura Risoprint Cluj-Napoca, p. 157, ISBN 978-973-53-0133-0. 9. Rusu, T., P. Guş (Coordinatori), 2007,	Institute for research and Development Meadows Brasov	
88.			PN II PARTENERIATE: Monitoring the impact of agriculture on global climate change, soil management, water and carbon by conservative systems: minimum tillage and no-tillage, in the Transylvania Plain; Coordinator USAMV: Rusu Teodor		1. University of Agricultural Sciences and Veterinary Medicine Bucharest 2. Agricultural Research and Development Station Turda 3. Research and Development Station for	

				Compactarea solurilor – procese și consecințe. Editura Risoprint Cluj-Napoca, Colecția Agraria, ISBN 978-973-751-417-2, pp. 276 10. Rusu, T., Laura Paulette, H. Cacovean, V. Turcu, 2007, Fizica, hidrofizica, chimia și respirația solului – Metode de cercetare. Editura Risoprint Cluj-Napoca, Colecția Agraria, ISBN 978-973-751-512-4, pp.188	Fruit Cluj	
89.			PN II PD 2010-2011: Research on the influence of tillage on the moisture, temperature and soil respiration; Coordinator USAMV: Moraru Paula			
90.			PN II PD 2010-2011: Influence of mineral and organic fertilization on the soil biodiversity and biochemical processes in arable land; Coordinator USAMV: Sandor Mignon			
91.			CNCSIS tip A: Testing and diagnosis of the technical condition of machines for phytosanitary works in order to reduce environmental pollution; Responsible USAMV: Stanila Sorin			
92.			PNII PARTENERIATE: Assessing the impact of the use of organo-mineral resources in the nutrition of the vegetal species for protection and improvement of the soil fertility and increase the safety and security of agricultural and food production; Coordinator USAMV : Marilena Marghitas		1. Research and Development Institutul for meadows Brasov 2. Research and Development Statione for fruit Cluj	
93.			PN II PARTENERIATE 2007-2010: Alternative crops with potential for adaptation to different ecological conditions and their exploitation by biotechnology complex; Responsible USAMV: Rusu Teodor		USAMV Bucuresti	
94.	E 5.4.1. Inovating processes and	RESEARCH CENTER FOR FOOD	PN II TD 365/2007: Bioincapsulation of natural	1. Veronica Sanda Chedea, Cornelia Braicu and Carmen Socaci,		1. Patent request:

	technologies in producing high quality nutrients and fodders PN II 5.1.6 Functional food for mentaining health and preventing illness r	BIOCHEMISTRY AND BIOTECHNOLOGY Director RESEARCH CENTER FOR FOOD BIOCHEMISTRY AND BIOTECHNOLOGY; Director: Prof.dr. Carmen Socaciu	products; (2007-2008), Coordinator USAMV: Trif Monica	2011.Antioxidant/prooxidant activity of a polyphenolic grape seed extract, Food chemistry, Volume 121, Issue 1, 1 July 2010, Pages 132-139 2.Dragan, S; Ursoniu, S; Kaycsa, D, Samoila C., Rada M., C. Socaciu , 2008, The ANTIATERO-ALIM Study: Effects of functional foods with vegetal bioactive ingredients in the metabolic syndrome , Planta Medica, 74, 1181-1182 , ISI= 2.085 3. Loredana Florina Leopold, Nicolae Leopold, Horst A. Diehl and Carmen Socaciu, 2011.Prediction of Total Antioxidant Capacity of Fruit Juices Using FTIR Spectroscopy and PLS Regression, Food Analytical Methods, (on line first) 4.Leopold Loredana F. Leopold Nicolae; Diehl Horst-A.; Socaciu Carmen,		Balsamic Vinegar with fruit juices and herbs, author: Carmen Socaciu 2. Patent: CAMELAJ DIETARY PRODUCTS IN FUNCTIONAL isomalt with natural ingredients and process for obtaining- author: Carmen Socaciu and Emil Racolta
95.			PN II MD 507/2008: Achievement and evaluating the effectiveness of microencapsulation of sea buckthorn fruit extracts; USAMV Coordinator: Trif Monica	2011.Quantification of carbohydrates in fruit juices using FTIR spectroscopy and multivariate analysis, SPECTROSCOPY-BIOMEDICAL APPLICATIONS, Volume: 26 Issue: 2 Pages: 93-104 4. Dan Cristian VODNAR, Adriana PAUCEAN, Fancisc Vasile DULF, Carmen SOCACIU, 2010.HPLC Characterization of Lactic Acid Formation and FTIR Fingerprint of Probiotic Bacteria during Fermentation Processes,NOTULAE BOTANICAE HORTI AGROBOTANICI CLUJ-NAPOCA,Volume 38 (2) 2010, Special Issue, 109-113 5. D. C. Vodnar, J. Venus, R. Schneider, C. Socaciu, 2010.Lactic Acid Production by Lactobacillus paracasei 168 in Discontinuous Fermentation Using Lucerne Green Juice as Nutrient Substitute,CHEMICAL ENGINEERING & TECHNOLOGY, Volume 33 Issue 3 , Pages 468 - 474 6. Dan C. Vodnar, Carmen Socaciu, Ancuța M. Rotar, Andreea Stănilă, 2010. Morphology, FTIR fingerprint and survivability of encapsulated lactic bacteria (Streptococcus thermophilus and	Medical Universoty Timisoara	
96.			PN II INOVARE 1383/2007: Research on the production of micronized metallic competitive substances required by the cosmetics and food industry, by implementing high performance processing –MICRONMIN; Responsible USAMV: Prof.univ. Carmen Socaciu	PAUCEAN, Fancisc Vasile DULF, Carmen SOCACIU, 2010.HPLC Characterization of Lactic Acid Formation and FTIR Fingerprint of Probiotic Bacteria during Fermentation Processes,NOTULAE BOTANICAE HORTI AGROBOTANICI CLUJ-NAPOCA,Volume 38 (2) 2010, Special Issue, 109-113 5. D. C. Vodnar, J. Venus, R. Schneider, C. Socaciu, 2010.Lactic Acid Production by Lactobacillus paracasei 168 in Discontinuous Fermentation Using Lucerne Green Juice as Nutrient Substitute,CHEMICAL ENGINEERING & TECHNOLOGY, Volume 33 Issue 3 , Pages 468 - 474 6. Dan C. Vodnar, Carmen Socaciu, Ancuța M. Rotar, Andreea Stănilă, 2010. Morphology, FTIR fingerprint and survivability of encapsulated lactic bacteria (Streptococcus thermophilus and	S. C. MINESA Research and Design Institute of Mining SA Cluj Napoca	
97.			PN II PARTENERIATE 1892/2007 (2007-2010): Innovative technologies for the production of functional foods of plant origin with impact on the human health; Coordinator USAMV: Prof.univ. Carmen Socaciu	PAUCEAN, Fancisc Vasile DULF, Carmen SOCACIU, 2010.HPLC Characterization of Lactic Acid Formation and FTIR Fingerprint of Probiotic Bacteria during Fermentation Processes,NOTULAE BOTANICAE HORTI AGROBOTANICI CLUJ-NAPOCA,Volume 38 (2) 2010, Special Issue, 109-113 5. D. C. Vodnar, J. Venus, R. Schneider, C. Socaciu, 2010.Lactic Acid Production by Lactobacillus paracasei 168 in Discontinuous Fermentation Using Lucerne Green Juice as Nutrient Substitute,CHEMICAL ENGINEERING & TECHNOLOGY, Volume 33 Issue 3 , Pages 468 - 474 6. Dan C. Vodnar, Carmen Socaciu, Ancuța M. Rotar, Andreea Stănilă, 2010. Morphology, FTIR fingerprint and survivability of encapsulated lactic bacteria (Streptococcus thermophilus and	Bremen University, Germany	

				Lactobacillus delbrueckii subsp. bulgaricus) in simulated gastric juice and intestinal juice, International Journal of Food Science & Technology, Volume 45, Issue 11, pages 2345–2351, November 2010		
98.	E 5.4.1. Inovating processes and technolgy in produceing high quality nutrients and foddere PN II 5.1.2 Optimization the food production, the food security and the production of appropriate principles of sustainable development	RESEARCH CENTER FOR FOOD QUALITY AND SAFETY; Director: Prof.univ. Maria Tofana	PN II INOVARE No. 155/2008: Dietary salt and its derivatives obtained by applying effective processing solutions and specific food hygiene procedures; (2008-2010), Responsable: Maria Tofana	<p>1. Emil RACOLTA, Crina MURESAN, Vlad MURESAN, Livia TICREA, 2011.Sunflower Halva with Addition of Hemp Protein Powder I. Determination of Protein Content, Bulletin UASVM Agriculture, 68(2), 400-403</p> <p>2.Edward MUNTEAN, 2011.Mathematical Modeling of Batch Enzymatic Starch Hydrolysis, Bulletin UASVM Agriculture, 68(2), 344-351</p> <p>3. Anamaria BIROU (POP), Sevastița MUSTE, Simona MAN, Vlad MURESAN, Carmen CHIRCU1, Rodica KADAR2,2010.Optimizing the Wheat / Triticale Ratio to Improve the Quality Parameters of Bakery Products, Bulletin UASVM Agriculture, 67(2),186-191</p> <p>4. Elena MUDURA, Dorina BRATFALEAN, Maria TOFANA, Sonia SOCACI, Adriana PAUCEAN, Delia Mihaela TRUTA,2010. The Varietal Classification of Hops Products by Chemometrics Method, Bulletin UASVM Agriculture, 67(2), 314-321.</p> <p>5. Simona MAN, Sevastița MUSTE, Vlad MURESAN, Anamaria BIROU (POP), Carmen CHIRCU, Rodica KADAR2, 2010. Influence of Genotype and Agrofond on the Quality of Wheat Varieties from Transylvania, Bulletin UASVM Agriculture, 67(2), 273-277.</p>	S. C. MINESA Research and Design Institute of Mining SA Cluj Napoca	<p>1. Patent: Isomalt CAMELAJ DIETARY FUNCTIONAL PRODUCTS with natural ingredients and process for obtaining; Authors: Carmen Socaciu and Emil Racolta</p> <p>2. Patent: Composition of dietary halva, candy diet composition and process for obtaining dietary halvitei; Author: Emil Racolta</p> <p>3.Patent: Composition for jellies and process for obtaining, Author: Emil Racolta</p> <p>4. Patent: Composition of cereal grains and expanded process for; Author: Emil Racolta</p>

99.			PN II INOVARE No.1375/2007: Obtaining functional candies with natural ingredients using alternative and innovative technologies - DROPSAN, 2007-2009. Responsible: Emil Racolta		PROPLANTA SRL	
100.			PN II PARTENERIATE No.51-001/2007: Recovery of residual starch solutions to modernize food production; (2007-2010), Director: Muntean Edward		Coordinator USAMV : Muntean Edward Parteneri: 1. INCD-INOE 2000 Branch - Research Institute for Analytical Instrumentation Cluj-Napoca 2. Babes-Bolyai University, Cluj-Napoca 3.Public Health Institute Prof. Iuliu Moldovan, Cluj-Napoca 4. S.C. MADEXPORT LLC Sf Gheorghe	
101.		ADVANCED RESEARCH CENTER FOR THE QUALITY OF LIFE AND ENVIRONMENTAL PROTECTION; Director: Ioan Oroian	POSCE No 284/2010: Obtaining increased bioavailability of selenium with the natural substrate of <i>Allium sativum</i> L. (garlic) in order to improve life quality by increasing the safety and the food security; Director: Prof.univ. Ioan Oroian		Transvital Cosmetics	
102.	E 5.4.1/5.1.8 Food chain traceability	RESEARCH CENTER FOR FOOD QUALITY AND SAFETY; Director: Prof.univ. Maria Tofana	CNCSIS-TD No 408/2007: Research on the study of oxidative and lipolytic changes in milk powder storage; (2007-2008), Director: Cristina Semeniuc	1. MUDURA, E., TOFANA, M., MUSTE, S., PAUCEAN, A., SOCACI, S.,(2009), The evaluation of hop utilisation in brewing process, J. Agroalimentary Processes and Technologies, 15(2), 249-252. 2.PAUCEAN, A., ROTAR, A.M., JIMBOREAN,M., MUDURA, E., SOCACIU, C.,(2009), Microbiological interaction between lactic acid bacteria and <i>Saccharomyces cerevisiae</i> brewers yeast in mixed culture for effective production of a kefir type products, Journal of Agroalimentary Processes and Technologies,15(2), 283-286.		

				<p>3. PAUCEAN,A., SOCACIU,C., VODNAR, D. and MUDURA, E., 2010. A new functional dairy product containing an optimized mixture of Lactococcus bacteria, kefir and brewer's yeasts, ROMANIAN BIOTECHNOLOGICAL LETTERS, Vol. 15, No. 6, 2010, p. 5793-5800</p> <p>4.Cristina A. Semeniuc, Ancuța M. Rotar, Ramona Suharoschi, Camelia Guș, Constantin Bele, Cristian Matea (2010) - Impact of storage conditions on hydrolytic rancidity degree of the dry dairy powders, Journal of Agroalimentary Processes and Technologies, Vol. 16, Nr. 2, p. 177-179</p> <p>5.Sonia A. Socaci, Maria Tofana, Carmen Socaci,The Evaluation of Rosemary Essential Oil Variability Compared with that of RosemaryLeaves; Journal of Agroalimentary Processes and Technologies 2010, 16 (2), 117-122</p>		
103.			PN II-RU-TD No 160/2008: Optimizing GC-MS for determination of volatile oils footprint and medicinal herbs; (2008-2009), Director : Sonia Socaci			
104.			PN II CAPACITATI No 142/2007: Food safety control by food fermentation industry for developing an integrated modeling, simulation and advanced management bioproces; (2007-2009), Responsible: Elena Mudura		<p>1. UBB University from Cluj -Napoca</p> <p>2. University Lucian Blaga Sibiu</p>	
105.	E 5.4.4. Contributions to the concept of chain food (from fork to fork), and environmental impact of pollutants on the quality and food safety PNII 5.1.9 Reducing	RESEARCH CENTER FOR FOOD QUALITY AND SAFETY; Director: Prof.univ. Maria Tofana	PNII No.52-132/2008: Reducing mycotoxin contamination in cereal to obtain bakery, high in fiber, safe for consumption – Fibresig; (2008-2011), Responsible USAMV : Prof.univ. Maria Tofana	<p>1. Tofana Maria- Performante analitice si limitari legislative, Ed. Mega, 2011, Cluj-Napoca</p> <p>2.Belbe, Giorgiana Mihaela, Maria Tofană, 2010, „Effects of Ionizing Radiation on Microbiological Contaminants of Foods”, În: Bulletin of University of Agricultural Sciences and Veterinary Medicine, Cluj Napoca, 67(2)/2010:178- 185</p> <p>3. Ana Laura NEACSU, Maria</p>	Dunarea de Jos University from Galati	

	from the entire supply chain waste and contaminants			<p>TOFANA, Food Safety Procedures and Food Law Principles in European Union; Bulletin UASVM Agriculture, 67(2)/2010, Cluj-Napoca, p.346-351</p> <p>4. Ancuța M. Rotar, S. Apostu, Carmen Lazar, Cristina A. Semeniuc, 2010. A study regarding the relationship between somatic cell count and bacteriological exam at goat milk, Journal of Agroalimentary Processes and Technologies, 16 (2), 150-154</p> <p>5. Carmen LAZAR, Ancuta M. ROTAR, Sorin APOSTU, Georgiana BUZGĂU, 2010. Comparative Studies Concerning Microbial Quality of Ecological and Conventional Milk, Bulletin UASVM Agriculture, 67(2), 266-272</p>		
106.	E 5.4.5. Modern methods of evaluation for the quality and safety for nutrients and fodders, authentic	RESEARCH CENTER FOR FOOD BIOCHEMISTRY AND BIOTECHNOLOGY; Director: Prof.dr. Carmen Socaciu	CNCSIS TIP A 860/2007: Plant metabolomics and functional food authenticity: advanced investigation (GC-, LC-by IR spectroscopy / NIR / MS) and phytochemical characterization footprint; Coordinator USAMV: Prof.univ. Carmen Socaciu	<p>1. M Andjelkovic, J Van Camp, M Pedra, K Renders, C. Socaciu, and R Verhe, 2008, Correlations of the phenolic compounds and the phenolic content in some spanish and French olive oils, J Agric Food Chem, 56(13): 5181-7 ISI-2.532. ISSN: 0021-8561</p> <p>2. Rugina Dumitrita, Simona Vicas, Carmen Momeu, C. Socaciu, 2008, Antioxidant</p>	Gent University Medical University Cluj-Napoca Oncology Institute Cluj-Napoca	

107.			<p>PN II PARTENERIATE 1753/2007 Advanced methodologies (instrumental and chemometric) applied to evaluate specific quality and authenticity print of functional foods Coordinator USAMV : Prof.univ.Carmen Socaciu PNII PARTENERIATE 1312/2007 Sensors and equipment of food for quality control Responsabil USAMV: Prof.univ. Carmen Socaciu</p>	<p>Activity Of Flavanols From Different Romanian Grape Seed Extracts, Chem.Listy, 99, 1234-1235 ISI-0.683 ISSN 1213-7103, 0009-2770 3. Bunea A.,M.Andjelkovic, C.Socaciu, O. Bobis, M.Neacsu, R. Verhé, J. Van Camp, Total and individual carotenoids and phenolic acids content in fresh, refrigerated and processed spinach (spinacia oleracea l.), Food Chem., 2007,108(2), 649-656 ISI-2.4333 ISSN: 0308-8146 4. Braicu C., Puia C., Bodoki, Socaciu C., 2008, Screening And Quantification Of Aflatoxins And Ochratoxin A In Different Cereals Cultivated In Romania Using Thin- Layer Chromatography-Densitometry, J.Food Quality, 31, 108-120 ISSN: 0146- 9428 ISI-0.800. 5. VERONICA S. CHEDEA, CAMELIA ECHIM, CORNELIA BRAICU, MIRJANA ANDJELKOVIC, ROLAND VERHE, CARMEN SOCACIU, 2011.COMPOSITION IN POLYPHENOLS AND STABILITY OF THE AQUEOUS GRAPE SEED EXTRACT FROM THE ROMANIAN VARIETY “MERLOT RECAS”, Journal of food biochemistry, Volume 35, Issue 1, pages 92–108, February 2011</p>	<p>Babes-Bolyai University from Cluj-Napoca Medical University Cluj- Napoca Oncology Institute Cluj- Napoca</p>	<p>Patent application: SPECTROSCOPIC EVALUATION UV-VIS and FTIR (Fourier transform infrared spectroscopy) for vegetable oil authenticity; Author: Carmen Socaciu</p>
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108.	5.1.16 Protecting and developing gunting and trout resources	Integrated Management of Forest Ecosystems – manager Conf dr. Liviu Holonec		<p>1. Georgette MAZARE, Adelina DUMITRAS, Dumitru ZAHARIA, Liviu HOLONEC, 2010. The Care in the First Years of Life of Blue Spruce Obtained by Grafting. Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Horticulture. Vol. 67(1)/2010, p. 524.</p> <p>2. Liviu HOLONEC, Rodica HOLONEC, Ioan OROIAN, Horea VLASIN, 2009. Issues Regarding the Location and Effects of Supporting Works on the Maintenance and Development of Spruce Seedlings (<i>Picea abies</i>). Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Horticulture. Vol 66(1), pp. 584-589.</p> <p>3. Liviu HOLONEC, Horea VLASIN, I. COVRIG, George MAZARE, Vasile CEUCA, 2009. CONSIDERATION THROUGH REGENERATION OF FOREST FROM NORTH-WEST OF TRANSILVANIAN PLAIN. Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Horticulture. Vol 65, No 1 (2008), pp. 391-395.</p> <p>4. Holonec L., H. Vlasin, 2006. EVOLUTION OF DIAMETER AND VERTICAL GROWTH OF THE SAPLINGS USED IN THE ECOLOGIC RECONSTRUCTION OF CERTAIN BARREN GANGUE WASTE AREAS WITHINTURDA FORESTRY AREA. Buletin USAMV Cluj, Seria Agricultura/Horticultura. Vol. 63/2006, pp. 65-70</p>		
109.	E 6.1.3. Putting to good use the animal and vegetal biodiversity for obtaining richer products RO 6.1.3 Creating new technologies for producing food with a maximum	Horticultural Research Center of Transylvania – manager prof dr. Radu Sestras	Project: Countering the risk of genetic erosion due to hereditary dowry narrowing in apple and pear cultivars and avoiding their vulnerability to stress agents by increasing genetic diversity – director prof dr. Radu Sestras;	1.Sestras Adriana, R. Sestras, A. Barbos, Madalina Militaru (2008). The Differences among Pear Genotypes to Fire Blight (<i>Erwinia amylovora</i>) Attack, Based on Observations of Natural Infection. Notulae Botanicae Horti Agrobotanici Cluj-Napoca. Index ISI-SCIE, JCR; CABI; VINITI, CSA etc.”, 36(2)/2008, 98-103, Print ISSN 0255-965X; Electronic ISSN 1842-4309. (Revista este inclusa in ISI Master Journal List,		Latin -New PEAR variety created at SCDP Cluj-Napoca; authors Radu SESTRAS, Eugenia HĂRȘAN, Mircea STRĂULEA, Adriana SESTRAS, Adrian

	safety on human health			<p>Web of Science – SCIE, JCR si alte baze de date internationale)</p> <p>2.Sestras, R., D. Pamfil, M. Ardelean, C. Botez, A. Sestras, C. Dan, L. Mihalte (2008). Use of Phenotypic and MAS Selection Based on Bulk Segregant Analysis for Study of Genetic Variability Induced by Artificial Hybridization on Apple. <i>Notulae Botanicae Horti Agrobotanici Cluj-Napoca</i>, 37(1)/2009:273-277. (Index ISI – SCIE, Scopus, CAB Abstracts si alte baze de date internationale)</p> <p>3.Mitre, I., L. Lukács, M. Ardelean, V. Mitre, R. Sestras, R. Pop, M. Cordea (2008). Genotypic Variability of the Main Apple Cultivars Grown in Transylvania Evaluated by Means of RAPD Analysis. <i>Notulae Botanicae Horti Agrobotanici Cluj-Napoca</i>, 37(1)/2009:261-264. (Index ISI – SCIE, Scopus, CAB Abstracts si alte baze de date internationale)</p> <p>4.Jantschi, L. S. D. Bolboaca, R. Sestras (2008). Hard Problems in Gene Sequence Analysis: Classical Approaches and Suitability of Genetic Algorithms. <i>Biotechnology & Biotechnological Equipment</i>. 23(2)/2009:1275-1280. (Index ISI – SCIE, Scopus si alte baze de date internationale)</p> <p>5.Mitre, I., V. Mitre, M. Ardelean, R. Sestras, A. Sestras (2008). Evaluation of Old Apple Cultivars Grown in Central Transylvania. <i>Notulae Botanicae Horti Agrobotanici Cluj-Napoca</i>, 37(1)/2009:235-237. (Index ISI – SCIE, Scopus, CAB Abstracts and other international databases)</p>		<p>BĂRBOS Meda - New PEAR variety created at SCDP Cluj-Napoca; authors: Radu SESTRAS, Eugenia HĂRȘAN, Mircea STRĂULEA, Adriana SESTRAS, Adrian BĂRBOS</p> <p>International Inventural Salon 'Pro Invent', 24-27 martie 2009, Cluj-Napoca:</p> <ul style="list-style-type: none"> - Diploma and Silver Medal for the New variety PEAR LATINA, created at SCDP Cluj-Napoca; - Diploma of Excellence awarded by the Romanian Society of Inventors, for the New variety PEAR MEDA and LATINA, created at SCDP Cluj-Napoca.
110.		Research Center for Agricultural Biotechnology – manager prof. dr. Doru Pamfil.	Project: Ex situ conservation of original resources in Prunus, Juglans, Corylus and Castanea based on genetic and agrobiological evaluation – director prof dr. Doru Pamfil	1. Pop Iulia Francesca, Doru Pamfil, Paul Andrei Raica, Ioana Virginia Petricele, Adina Cristina Vicol, Monica Harta, Cristian Radu Sisea, 2010, Evaluation of the Genetic Diversity of several Corylus avellana Accessions from the Romanian	SCDP Valcea	

				<p>National Hazelnut Collection, Notulae Botanicae Horti Agrobotanici Cluj, 38 (2) 2010, Special Issue, 61-67.</p> <p>2. Pop Iulia Francesca, Doru Pamfil, Paul Raica, Ioana Virginia Petricele, Cristian Sisea, Eszter Vas, Beata Botos, Monica Bodea, Mihai Botu, 2010, Assessment of the genetic variability among some Juglans cultivars from the Romanian National Collection at S.C.D.P. Vâlcea using RAPD markers, Romanian Biotechnological Letters, Vol. 15, No.2, Supplement, 2010, 41-49.</p> <p>3. BODEA MONICA, IULIA POP, D. PAMFIL, I. BOTU, M. BOTU, ELENA TURCU, RODICA POP, IOANA PETRICELE, ROXANA MANDRUSCA, BEATA BOROS, 2007, Utilizarea tehnicii RAPD pentru caracterizarea moleculară a unor genotipuri valoroase de alun cultivate în România, Lucr. Simp. International “Conservarea germoplasmei horticoale-realizări și perspective”, 161-165, Ed. Todesco.</p>		
111.		E 3.3.3. Research Laboratory for Biodiversity manager conf dr. Corina Catana	<p>Project: PRESERVATION OF INDIGENOUS VARIETIES OF APPROVED ORNAMENTAL PLANTS WITH MAJOR IMPORTANCE IN THE FLORICULTURAL – FLORIGENBANC INDUSTRY – director Conf dr. Corina Catana;</p> <p>Project: USING MOLECULAR BIOTECHNOLOGY TO IMPROVE CROP PLANTS OF ECONOMIC INTEREST – SALTRANS – director conf dr. Corina Catana;</p>	<p>Corina CATANA, 2008. BIOSAFETY AND ITS SOCIO-TECHNICAL CONTROVERSIES. Bulletin of University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca. Horticulture. Vol 65, No 1 (2008), pp. 59-62</p>		

112.	E 6.2.4. Putting to good use the biomass and agroalimentary waste for high value products a (biofuels – generation 2 and 3)	E 5.2.1 and RO 5.1.11. Research Center for Agricultural Biotechnology – manager prof. dr. Doru Pamfil.	Project PNII - Biodiversity and biological resources in the horizon 2020 – director prof dr. Doru Pamfil Project: Collection, evaluation, improvement and conservation of early maize germplasm in Transylvania. Identification of corn genotypes for bioethanol production – director prof dr. Doru Pamfil	TOKATLIDIS I.S., VOICHITA HAS, V. MELIDIS, I. HAS, I. MYLONAS, G. EVGENIDIS, A. COMPANDEAN, E. NINO, V. FASOULA. 2011. Maize hybrids less dependent on high plant densities improve resource use efficiency in rainfed and irrigated conditions. Field Crops Research, ISSN: 0378-4290, vol. 120, Issue:3, pag.345-351 RACZ, CAMELIA, I. HAS, VOICHITA HAS, TEODORA SCHIOP, I. COSTE, 2011. The cytoplasm origin influence, the tester influence and the nucleus-cytoplasm interactions influence on plant traits for isonuclear lines. Research Journal of Agricultural Science, 43 (2). SCHIOP, TEODORA, I. HAS, VOICHITA HAS, I. COSTE, CAMELIA RACZ, 2011. Gene actions, cytoplasmic actions and cytoplasmic-nuclear interactions involved in the determination of fiber content in a series of isonuclear maize lines. Research Journal of Agricultural Science, 43(2). Pop Rodica, D. Pamfil, Monica Harta, I. Haş, Iulia Pop, 2010, Use Rapd Tehnique for characterization of Genotypical Variability ff Maize Germplasm from Scda Turda Bul USAMV CLUJ-NAPOCA, SERIA Agricultură, vol. 67, ISSN 1843-5246, pg. 226-231. Rodica POP, Ioan HAŞ, Iulia Francesca POP, Monica HARTA, Doru PAMFIL, Genetic Diversity Analysis of Maize Inbred Lines from SCDA Turda -Romania Revealed by RAPD Molecular MarkersBulletin UASVM Agriculture, 68(1)/2011, p. 277-283, Print ISSN 1843-5246; Electronic ISSN 1843-5386.	SCDA Turda INCDA Fundulea	
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113.	E 6.4.2. Bioinformation applied in biotechnology	Bioinformatics laboratory – manager conf dr. Ioana Pop		<p>1. Ioana Pop, Liana Stanca, Marcela Sârbu and Ioana Tănăsescu, 2009. Automating the sensible heat computation. Journal of Food Agriculture & Environme. Vol. 7, Issue 3&4, pages 912-914.</p> <p>2. Pop Ioana, Matei Florica, Stanca Liana, Budiu Viorel and Deak Jutka, 2010. Automating field data collection related to the soil moisture status. Journal of Food Agriculture & Environment. 2010, Vol. 8, Issue 3&4, pages 635-638.</p>		
114.	6. BIOTECHNOLOGY 6.1. New sources of biomass and bioproducts (vegetal and animal biotechnology) E 6.1.1. Genetic and metabolic engineering applied to obtain new bioproducts 6.1.1 Creating and developing new drugs with maximum efficiency and minimal side effects	Research Centre: Bee and sericicole products - Mărghitaș Liviu	6.1./ E 6.1.1./6.1.1. High scientific competence core in bee biotechnologies in Romania-Robeetech; POS CCE operațiunea 212, ctr. 206, 2010-2013. Moritz Robin – Manager, USAMV Cluj.Napoca; Responsible implementation: Dezmirean Daniel	<p>Bobîș O. et al., 2010. Quality parameters and nutritional value of different commercial bee products Bull. USAMV CN, 67(1-2), 91-96.</p> <p>Mărghitaș L.A. et al., 2010. Evaluation of fresh royal jelly in different larvae stage. Bull. USAMV CN, 67(1-2), 29-35.</p> <p>Dezmirean D. et al., 2010. Physical-chemical attributes and mineral content of Heather honey (<i>Calluna vulgaris</i>). Bull. USAMV CN 67(1-2), 163-168.</p> <p>Dezmirean D. et al., 2011. RoBeeTech – A project for the future of the apicultural biotechnologies. Bull. USAMV-CN Animal Sciences and Biotechnologies, 68 (1-2).</p> <p>Mihai Cristina Manuela et al., 2012. Interactions among flavonoids of propolis affect antibacterial activity against the honeybee pathogen <i>Paenibacillus larvae</i>. Journal of Invertebrate Pathology, Available online 22 February 2012, doi: 10.1016/j.jip.2012.02.009</p>	USAMV Cluj.Napoca Responsible Implementation: USAMV Cluj-Napoca	
115.	E 6.1.3. Putting to good use the animal and vegetal biodiversity for obtaining richer products 6.1.2 Creating some diagnostic and treatment protocols with an	License Laboratory: Cell cultures	6.1./E 6.1.3./6.1.2. Assessing the impact of anaesthesia technique on the outcome of surgical interventions in patients with colon cancer - Zăhan Marius, Responsible partner USAMV Cluj-Napoca	-	Project proposal: Responsible partner: USAMV Cluj-Napoca Coordinating: UMF Cluj-Napoca	

	impact on health and a longer life.					
116.	6.1.4.1. The obtain and the characterization of new target drugs with bioactive substance 6.1.2.2. Unconventional therapies applied in animal pathology.	Research Laboratory: Pharmacovigilance – Director: Sef lucr. dr. Mihai Cernea	- Synthesis and characterization of new target drugs with the naphthoquinone active substance; PNCDI II. Grant nr. 61- 002/2007 (2007-2010)		USAMV CN	

Appendix – Institutional development projects**INSTITUTIONAL DEVELOPMENT PROJECTS FINANCED BY STRUCTURAL FUNDS**

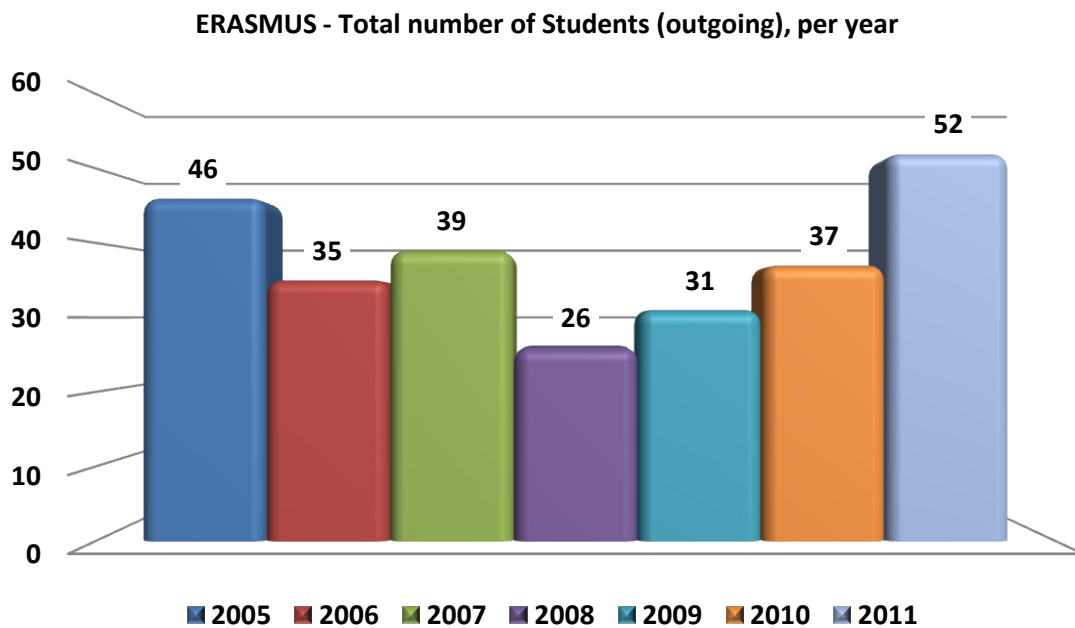
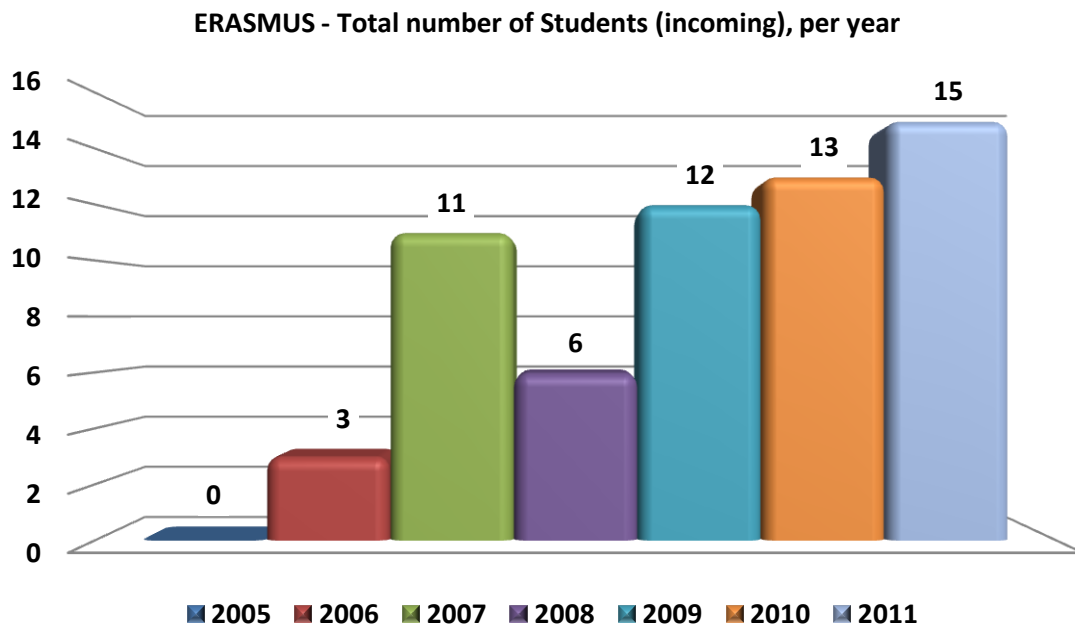
Crt. No.	Project title	Project manager	Structural funds financing Program	Implementation beginning year
1	Labor market development by promoting non-agricultural occupations in the rural area	Merce Emilian	ESF - POS DRU ²⁸	2008
2	Doctoral scholarships for 50 PhD students, for the period October, 2008 – October, 2011	Catoi Cornel	ESF - POS DRU	2009
3	Increasing the administrative capacity of USAMV – Cj for improving the research activity and efficiency	Oroian Ioan Gheorghe	FEDR - POS CCE ²⁹	2009
4	Informational tool to increase the quality, visibility and interdisciplinarity of doctoral study programs	Catoi Cornel	ESF - POS DRU	2009
5	Supporting the participation of the PhD students at the doctoral programs, in the period 2009-2012	Catoi Cornel	ESF - POS DRU	2009
6	Cellular and molecular biotechnologies with applications in medicine	Socaciu Carmen	ESF - POS DRU	2010
7	Higher education at European level in the domain of veterinary medicine	Groza Ioan Stefan	ESF - POS DRU	2010
8	Improving the study master programs in Agrifood profile, by promoting the innovation and quality assurance, in accordance with the qualification requirements from Romania and the European Union (CALIMAS)	Socaciu Carmen	ESF - POS DRU	2010
9	Integrated intervention to strengthen the social entrepreneurship of the vulnerable women	Sestras Radu	ESF - POS DRU	2010
10	Inter-university partnership for increasing the medical doctoral research quality and interdisciplinary, by granting doctoral scholarships - DocMed.net	Catoi Cornel	ESF - POS DRU	2010
11	Nucleus of high scientific competence for apiculture biotechnologies in Romania	Dezmirean Daniel Severus	FEDR - POS CCE	2010
12	Obtaining selenium with increased bioavailability, on natural substrate of <i>Allium sativum</i> L. (garlic), for improving the life quality by enhancing the food safety and security	Oroian Ioan Gheorghe	FEDR - POS CCE	2010

²⁸ POS DRU – Sectoral Operational Programme for Human Resources Development, financed under The European Social Fund (ESF);

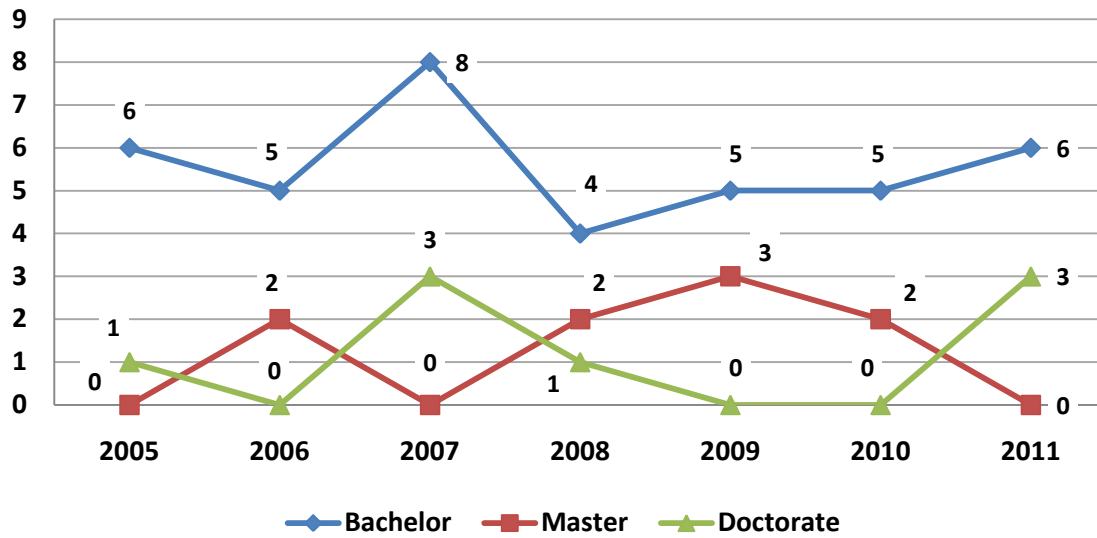
²⁹ POS CCE - Sectoral Operational Programme for Increasing of the Economic Competitiveness, financed under The European Regional Development Fund (ERDF);

13	Online network university collaboration for developing the capacity to provide skills and competitiveness on the labor market	Marghitas Liviu Alexandru	ESF - POS DRU	2010
14	Postdoctoral School in agriculture and veterinary medicine domain	Catoi Cornel	ESF - POS DRU	2010
15	The advanced horticultural research institute of Transylvania	Pamfil Doru	FEDR - POS CCE	2010
16	The organization of the Postdoctoral school of national interest "Applied biotechnologies", with impact on the Romanian Bio-economy - SPD-BIOTECH	Pamfil Doru	ESF - POS DRU	2010
17	Agro Career	Oroian Ioan Gheorghe	ESF - POS DRU	2011

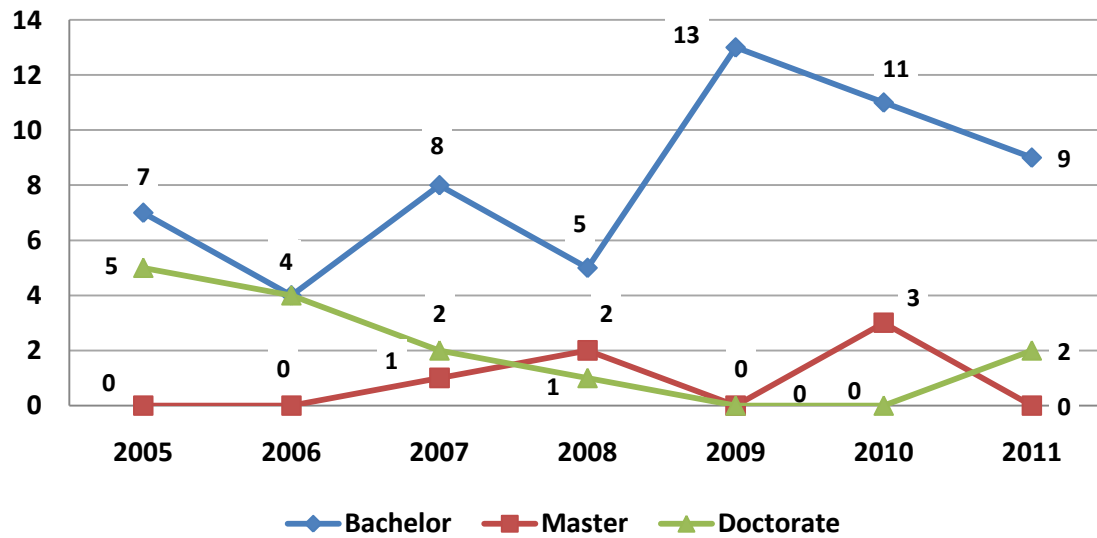
Appendix – Mobility under ERASMUS Programme



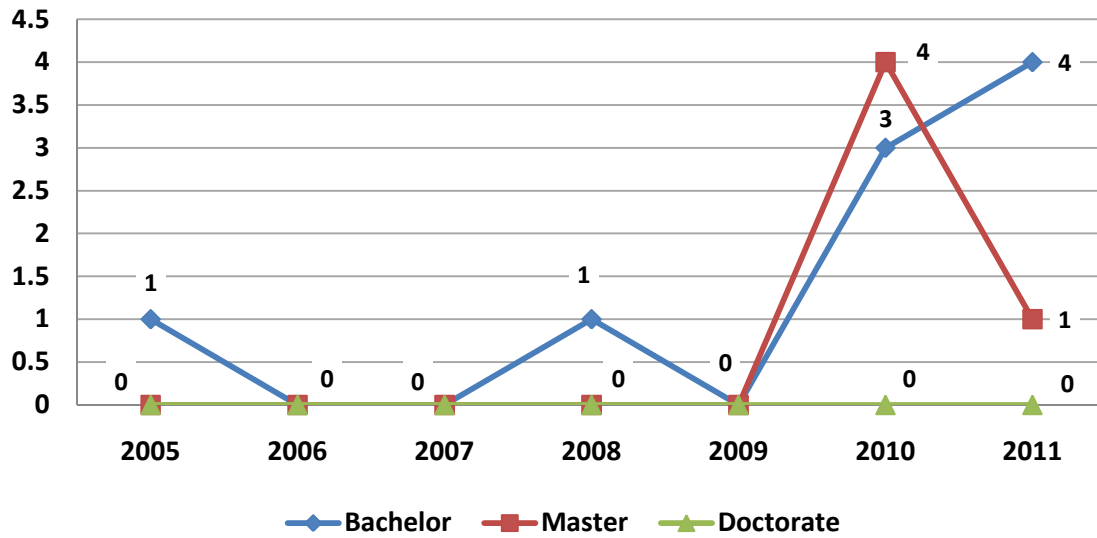
Faculty of Agriculture - ERASMUS Students outgoing number, per year and study level



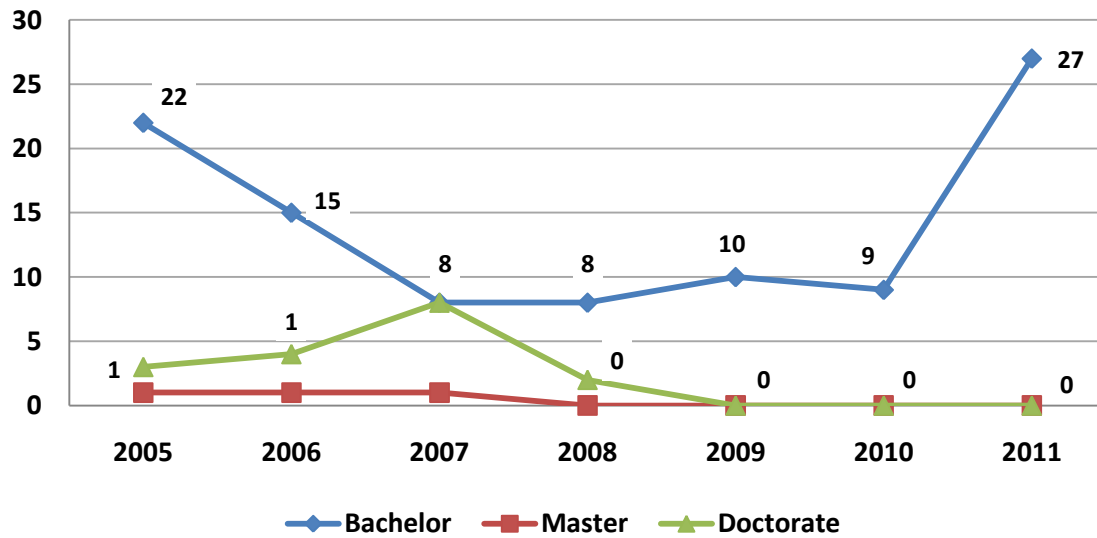
Faculty of Horticulture - ERASMUS Students outgoing number, per year and study level

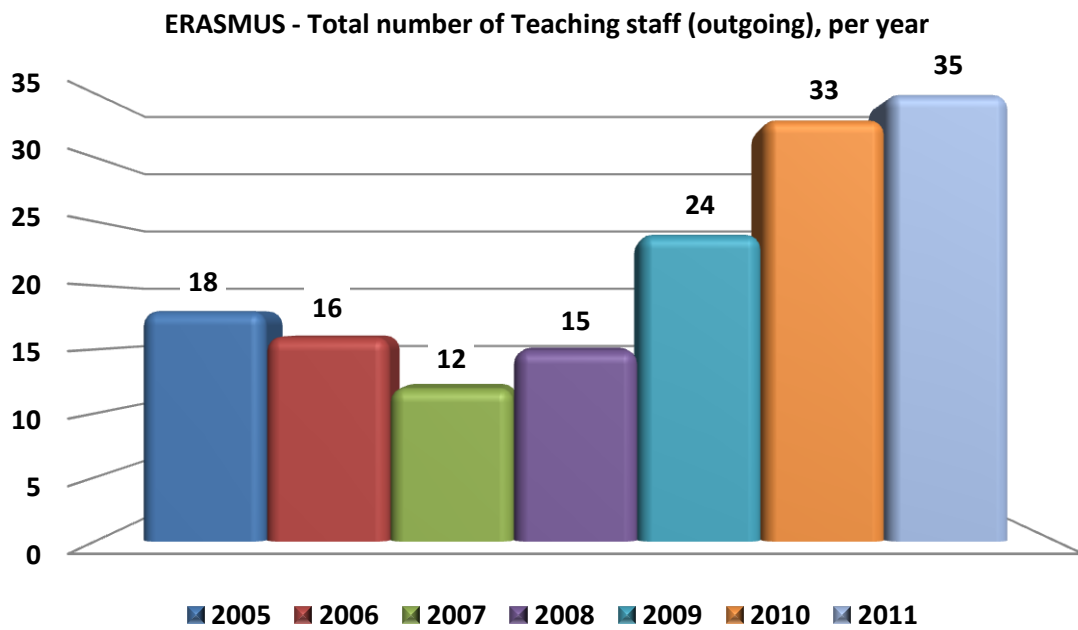
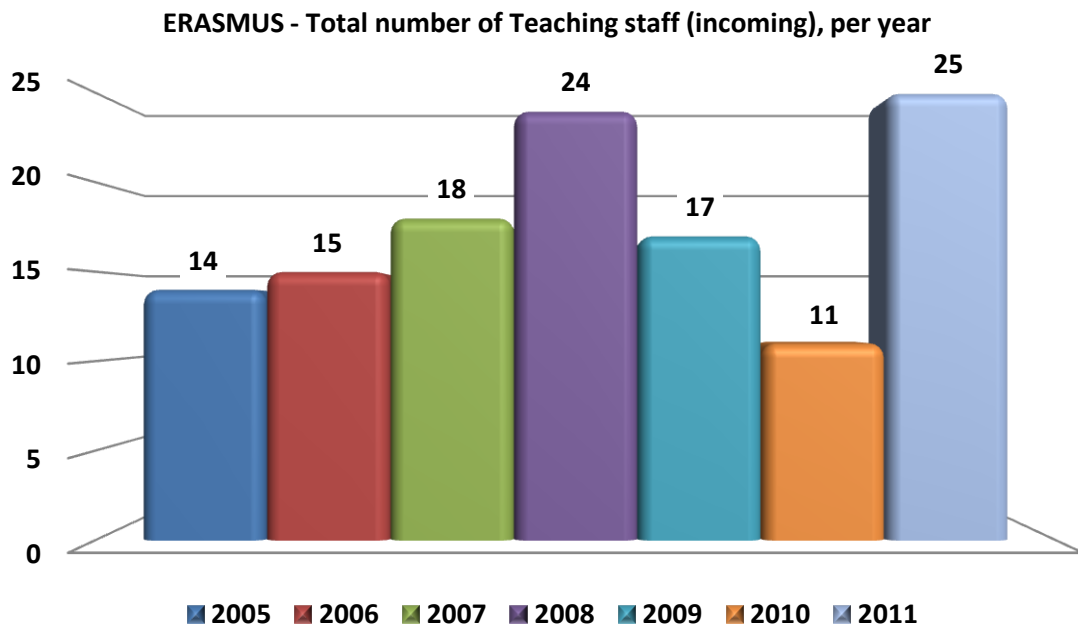


Faculty of Animal Science and Biotechnology - ERASMUS Students outgoing number, per year and study level



Faculty of Veterinary Medicine - ERASMUS Students outgoing number, per year and study level





Total amount granted by ERASMUS Program

Year	2011
Total amount (RON)	289,919.79

ERASMUS Bilateral agreements

Crt. No	Country	Partner University	Agreement validity period	Domain code	Number of scholarships
1	UK	Harper-Adams University College UK NEWP BE 01	2010-2011	TA ³⁰ Food/ Business	2
				SM ³¹ Food/ Business	2
2	Austria	Universität für Bodenkultur Wien (BOKU), A WIEN 03	2007-2013	TA Food Tech./ Horticulture	2
				SM Food/ Agriculture/ Horticulture	10 (12 months)
3		Veterinärmedizinische Universität At Wien, A WIEN 04	2011-2012	TA 640 VM	2
				SM 640 VM	2 (13 months)
4	Belgium	Universitaet GENT, B GENT 01	2007-2013	TA Food/ Agriculture	2
				SM Food/ Agriculture	4 (24 months)
5		Faculté Universitaire des Sciences Gembloux Fusag, B GEMBLOU 01	2007-2013	TA IPM/ Agriculture	3
				SM IPM/ Agriculture	2 (12 months)
6		Université de Liège, B LIEGE 01	2010-2014	TA 64 VM	1
				SM 64 VM	4 (20 months)
7		Katholieke Hogeschool Saint- Lieven, B GENT 16	2011-2013	TA Agriculture	2
				SM Agriculture	2 (24 months)
8		Katholieke Hogeschool Kempen, B GEEL 07	2009-2013	TA Agriculture	1
				SM Agriculture	1 (9 months)
9	Czech Republic	University of Veterinary and Pharmaceutical Sciences Brno, CZ BRNO 06	2008-2013	TA	3
				SM	2 (12 months)
10		Mendel University, Faculty of Agronomy CZ BRNO 02	2012-2013	TA Agriculture	2
				SM Agriculture	2
11	France	Ecole Nationale Veterinaire de Toulouse F TOULOUS 22	2008-2013	TA 12.4 VM	3
				SM 12.4 VM	2 (12 months)
12		Ecole Nationale d'Ingenieurs des Travaux Agricoles de Clermont Ferrand (ENITAC) F LEMPEDES 03	2008-2013	TA Agriculture	2
				SM Agriculture	3 (18 months)
13		Ecole Superieure	2008-2013	TA Agriculture	2

³⁰ TA – Teaching assignments³¹ SM – Student mobility

		D'agriculture D'angers F ANGER 08		SM Agriculture	1 (6 months)
14		Ecole Nationale Veterinaire de Lyon F LYON 22	2008-2013	TA 12.4 VM	1
				SM 12.4 VM	1 (9 months)
15		Esitpa- Ecole d'Ingénieurs en Agriculture F ROUEN 22	2009-2013	TA Agriculture	3
				SM Agriculture	6 (54 months)
16		VetAgro Sup F LYON 104	2010-2013	TA 64 VM	2
				SM VM/Agriculture	4 (2/2) (10 months/ 10 months)
				Training Mobility	1 (1 week)
17		FESIA F ANGERS 08	2011-2012	TA Agriculture/ Food	2
				SM Agriculture/ Food	1 (6 months)
				TA Agriculture/ Food	2
				SM Agriculture	1 (6 months)
18	Greece	Democrticus University of Thrace G KOMOTIN 01	2010-2013	TA	1
				SM	2 (10 months)
19		Agricultural University of Athens (A.U.A.) Departament of Animail Science G ATHINE 03	2007-2013	TA 12.4 VM	2
				SM 12.4 VM	2 (12months)
20		Mediterranean Agronomic Institute of Chaina G CHAINA 01	2011-2013	TA Food	2
21	Germany	Universität Bremen D BREMEN 01	2010-2012	TA Food	1
				SM Food	1 (6 months)
22		Maritn-Luther- Universität Halle- Wittenberg D HALLE 01	2010-2013	TA Biology	1
				SM Biology	2 (20 months)
23		Universität Kassel D KASSEL 01	2009-2013	TA Biology	1
24		Albert-Ludwigs- Universität Freiburg im Breisgau D FREIBUR 01	2010-2011	TA Forestry	2
				SM Forestry	2 (8 months)
25		Hochschule Magdeburg- Stendal (FH) D MAGDEBU 04	2010-2014	TA IPM	6
				SM IPM	6 (12 months)
26		University of Hohenheim, Stuttgart D STUTTGA 02	2010-2013	TA VM (640)/ Agriculture	2 (1/1)
				SM VM (640)/ Agriculture	4 (3/1) (18 months/ 6 months)
27	Italy	University of Turin I TORINO 01	2008-2013	TA VM (12.4)	1
				SM VM (12.4)	3 (12)

					months)
28	Alma Mater Studiorum- Università di Bologna I BOLOGNA 01	2011-2013	TA 12.4 VM	2	
			SM 12.4 VM	2 (6 months)	
29	Universita Degli Studi Della Tuscia I VITERBO 01	2007-2013	TA	1	
			SM Agriculture/ Environment	3 (9 months)/ 3 (9 months)	
			STT ³²	2	
		2008-2013	TA	4	
			SM	15 (45 months)	
30	Universita Degli Study Di Napoli Federico II I NAPOLI 01	2009-2013	TA Agriculture	2	
			SM Agriculture	2 (6 months)	
31	Università Politecnica delle Marche I ANCONA 01	2008-2013	TA Agriculture	1	
			SM Agriculture	2 (16 months)	
32	Universita Degli Studi di Teramo I TERAMO 01	2009-2013	TM 12.4 VM	1	
			SM 12.4 VM	2 (18 months)	
		2008/2013	TA Food/ Biotechnology	4 (2/2)	
		2007-2013	SM Food/ Biotechnology	6 (3/3) (27 months/27 months)	
			TA	-	
		SM	2 (8 months)		
33	Universita Di Bologna I BOLOGNA 01	2008-2013	TA VM	2	
			SM VM/Food	2/3 (6 months/18 months)	
34	Universita Degli Studi di Bari I BARI 01	2009-2001	TA VM/ Agriculture	4	
			SM VM/Agriculture	8 (36 months)	
35	Universita Degli Studi di Milano I MILANO 01	2009-2013	TA 12.4 VM	2	
			SM 12.4 VM	-	
36	Università Degli Studi di Palermo I PALERMO 01	2008-2013	TA Agriculture	2	
			SM Agriculture	2 (12 months)	
37	Universita Degli Studi di Foggia I FOGGIA 03	2012-2013	TA	-	
			SM	4 (40 months)	
38	University of Molise I CAMPOBA 01	2009-2013	TA Food	2	
			SM Food	2 (9 months)	
39	Universita Degli Studi Di Padova	2012-2013	TA 640 VM	2	
			SM 640 VM	2 (18 months)	

³² STT – Staff Training

		I PADOVA 01			months)
40	Hollande	Wageningen University NL WAGENIN 01	2009-2013	TA Agriculture	4
				SM Agriculture	2 (6 months)
41		Stoas NI Wageningen NL WAGENIN 06	2009-2013	TA Agriculture	4
				SM Agriculture	2 (12 months)
42		Christelijke Agrarische Hogeschool (CAH)Dronten NL DRONTEN 01	2007-2013	TA Agriculture	1
				SM Agriculture	4 (44 months)
43	Poland	Agricultural University of Poznań PL POZNAN 04	2007-2009	TA Agriculture	2
				SM Agriculture	2 (10 months)
44		Szkoła Główna Gospodarstwa Wiejskiego PL WARSZAW 05	2008-2013	TA 12.4 VM	1
				SM 12.4 VM	3 (13 months)
			2010-2013	TA Organic agriculture	1
				SM Organic agriculture	4 (48 months)
45	Portugal	Universidade do Porto P PORTO 02	2010-2013	TA 12.4 VM	2
				SM 12.4 VM	2 (18 months)
				STT	2
46		Universidade de Tras-os- montes e Alto Douro P VILA– RE 01	2010-2013	TA 12.4 VM	3
				SM 12.4 VM	3 (9 months)
47		Universidade Tehnica Lisboa- TuLisbon P LISBOA 04	2011-2012	TA 640 VM	3
				SM 640 VM	9
48	Spain	University of Burgos E BURGOS 01	2010-2013	TA	1
				SM Food	3 (18 months)
49		Universidad de Córdoba E CORDOBA 01	2011-2013	TA 12.4 VM	3
				SM 12.4 VM	3 (18 months)
50		Universidad de Murcia E MURCIA 01	2010-2013	TA	2 (1/1)
				SM VM/Food	2 (1/1) (9 months/6 months)
51		Universidad de Leon E LEON 01	2008-2013	TA Agriculture	2
				SM Agriculture	3 (27 months)
52		Universidad Politécnica de Valencia E VALENCI 02	2009-2010	TA	3
			2012-2013	SM Agriculture/ Food/ Horticulture	4 (10 months) /3 (10 months)
			2008-2009	SM Horticulture/ Forestry/ Biotechnology	4/4/4 (12 stud. 30 months)
			2012-2013	STT	3

			2007-2013	TA	1
				SM Food	2 (18 months)
				TA	1
				SM Forestry/ Environment	2 (20 months) /2 (20 months)
53		Universidad Politécnica de Madrid E MADRID 05	2009-2013	TA Marketing	2
				SM Agriculture	2 (12 months)
54		Universidad Cardenal Herrera E VALENCIA 08	2008-2013	TA 12.4 VM	1
				SM 12.4 VM	2 (6 months)
55		Universidad de Alicante E ALICANT 01	2008-2013	TA	-
				SM	2 (12 months)
56		Universidad de Extremadura E BADAJOZ 01	2008-2013	TA 12.4 VM	1
				SM 12.4 VM/Agriculture	5 (2/3) (18 months/10 months)
57		Universidad de la Laguna E TENERIF 01	2009-2013	TA Biology	3
				SM Biology	4 (36 months)
58	Sweden	Departament of Plant Physiology, Umeå University S UMEA 01	2010-2013	TA Agriculture/ Biology	1
				SM Agriculture/ Biology	4 (16 months)
59	Turkey	Selcuk Universitesi TR KONYA 01	2009-2013	TA	
				SM	
60		Celal Bayar University, Manisa TR MANISA 01	2010-2011 2012-2013	TA	4
			2011-2012 2012-2013	SM	3 (15 months)
				STT Mobility	3
				TA Agriculture	2
				SM Agriculture	6 (18 months)
61		KAFKAS Universitesi (Kafkas University) TR KARS 01	2011-2013	TA 12.4 VM	2
				SM 12.4 VM	3 (12 months)
62		Afyon Kocatepe Universitesi TR AFTYON 01	2012-2013	TA Agriculture	2
				SM Agriculture	1 (12 months)
63		Atatürk Universitesi Erzurum-Turkey TR ERZURUM 01	2009-2013	TA Horticulture	2
				SM Horticulture	4 (24 months)
64		Mustafa Kemal Universitesi TR HATAY 01	2008-2013	TA	2
				SM 12.4 VM	3 (18 months)
65		Akdeniz University TR AKDENIZ 01, TR ANTALYA 01	2008-2013	TA Horticulture	1
				SM Horticulture	12 (15 months)
66		Suleyman Demirel	2007-2013	TA Food	2

		University, Isparta TR ISPART 01		SM Food	5 (50 months)
				STT Training	2
67	Hungary	Szent Istvan Egyetem Hungary HU GODOLLO 01	2008-2013	TA VM/ Agriculture	1/1
				SM VM/ Agriculture	3/2 (13/6 months)
68		Debreceni Egyetem- University of Debrecen HU DEBRECE 01	2009-2013	TA Agriculture 01.0/ Ecological Agriculture 01.2	2
				SM Agriculture 01.0/ Ecological Agriculture 01.2	4 (2/2) (10/10 months)

Appendix – International relations**INTER-UNIVERSITY AGREEMENTS CONCLUDED BY USAMV CLUJ-NAPOCA**

Crt. No.	Partner institution	Country	Signing date	Validity period	Remarks
1	Ecole Nationale Veterinaire d'Alfort	France	10.02.1997	From 1997	Without specified validity time limit
2	Babes-Bolyai University of Cluj, University of Bremen and Bremerhaven University	Germany	23.04.2001	2000 – to present	Automatically extends each year
3	Federation d'Ecoles Superieures d'Ingenieurs en Agriculture (FESIA)	France	03.12.2001	2001 - to present	Without specified validity time limit
4	Strossmayer University of Osijek	Croatia	22.02.2002	2002-2013	Extended on 22.10.2008, for 5 years
5	Paris XII Val de Marne University and Agence Universitaire de la Francophonie; Cotutelles; bourses de mobilite	France	17.01.2002/ 24.01.2003/ 04.04.2003	2002 – to present	Without specified validity time limit
6	State Agrarian University of Moldova, Faculty of Cadastre and Environmental Engineering	Moldova	21.03.2003	2003-2008	With the Parties tacit extension
7	Tuscia University; bi-national two years Master - UUC	Italy	2004 07.10.2009 – extension	2004-2014	Extended on 07.10.2009, for 5 years
8	University of Georgia, College of Veterinary Medicine	USA	06.10.2004	2004 - to present	Without specified validity time limit
9	Faculte Universitaire des Sciences Agronomiques Gembloux, AUF	Belgium / France	10.01.2005	2005- to present	Without specified validity time limit
10	University of Parma	Italy	23.06.2005	2005- to present	Annual automatically extended
11	University of Bari	Italy	23.03.2005	2005 – to present	Annual automatically extended
12	University of Cordoba	Spain	15.07.2005	2005-2010	Automatically extended

Crt. No.	Partner institution	Country	Signing date	Validity period	Remarks
13	University of Jilin, Department of Agriculture	China	07.04.2006	2006-2011 2009- 2014	Extended on 26.10.2009
14	Research Center and Geisenheim Faculty within Wiesbaden University of Applied Sciences	Germany	August 2006	2006 - to present	With the Parties tacit extension
15	Ecole Normale Supérieure de Lyon	France	26.09.2006	From 2006	Without specified validity time limit
16	CIHEAM Montpellier	France	26.10.2006	2006-2011	Extended for 5 years
17	Humboldt University of Berlin, Agriculture and Horticulture Faculty	Germany	06.02.2007	2007-2012	Can be extended
18	Academy of Sciences of Moldova	Moldova	14.03.2007	2007-2011	Automatically extended every two years
19	State Agrarian University of Moldova	Moldova	22.05.2007	2007-2012	Can be extended
20	ESITPA	France	27.02.2007	2007-2012	
21	University of Saad Dahlab, Faculty of Agro-Veterinary and Biological Sciences, Blida	Algeria	10.07.2007	2007-2012	
22	Louisiana State University AgCenter – Baton Rouge	USA	01.10.2007	2007-2012	
23	Lanzhou Veterinary Research Institute	China	20.02.2008	2008-2013	Five years validity, renewable
24	The Agricultural University of Plovdiv	Bulgaria	18.04.2008	2008-2013	Can be extended
25	The University of Debrecen, Faculty of Agriculture	Hungary	14.08.2008	2008-2013	Can be extended
26	Università degli Studi del Molise, Cambopasso	Italy	2009	2009-2012	
27	University of Zagreb	Croatia	16.02.2009	2009-2014	
28	EMUNI University, EMUNI Foundation	Slovenia	12.05.2009	From 2009	Without specified validity time limit
29	Agroforestral Department from Polytechnic University of Valencia	Spain	29.07.2009	2009-2012	Automatically extended every three years

Crt. No.	Partner institution	Country	Signing date	Validity period	Remarks
30	University of Tuscia, Viterbo; Agreement of PhD Thesis under joint supervision	Italy	11.01.2010	From 2010	Without specified validity time limit
31	Hassan II Agronomic and Veterinary Institute (IAV Hassan II)	Morocco	15.04.2010	2010-2014	
32	University of Liège, Gembloux Agro-Biotech	Belgium	22.06.2010	2010-2015	
33	University of Sulaimani, Kurdistan	Iraq	07.10.2010	2010-2015	
34	Kazakh National Agrarian University	Kazakhstan	01.08.2011	2011-2016	Five years validity, renewable
35.	University of Marche	Italy	11.11.2011	2011-2016	Automatically extended
36.	University of Sassari	Italy	11.11.2011	2011-2016	Automatically extended
37.	Saint-Petersburg State Academy of Veterinary Medicine	Russia	28.11.2011	2011-2016	Automatically extended
38.	University of Nairobi	Kenya	29.12.2011	2011-2016	Extended every five years

Appendix – ECTS system in USAMV Cluj-Napoca

ECTS system for national and international students

1. The National context

To create the prerequisites for developing a student-centered higher education system and to promote the students mobility, in the spirit of the Bologna process of creating the European Higher Education Area, with the reorganization of university studies in three successive cycles (bachelor, master, doctorate), the [Order No. 3617/2005](#) of the Minister of Education and Research established the widespread application of the European Credit Transfer System (ECTS) in all higher education institutions in Romania.

Accordingly, starting with the 2005-2006 academic year, the European Credit Transfer System is used in all the Romanian universities, both for the professional results of their students and for the transfer of the professional results obtained by students as a result of attendance and exams promotion for subjects included in the curricula of other Romanian and foreign universities.

The credits allocation is made in accordance with the international academic practice, following the European Credit Transfer System methodology, according to which 60 credits are the equivalent number for the normal amount of work of the average student during an academic year, and 30 credits correspond usually to one semester of higher education.

Credit allocation covers all disciplines (mandatory, optional and facultative) offered by the curriculum, including the design and practical training, and the support for the development and successful completion of the graduation papers (diploma papers, dissertations, diploma projects).

In allocating the number of credits for each subject/activity is taken into account exclusively the workload required to the average student for the respective subject/activity, relative to the total amount of work needed to promote a full year of study. The amount of work refers to the number of hours of the student's physical presence at the educational activities (courses, seminars, practical works, workshops, etc.) and also hours to the number of hours of individual study, preparation of work, research, etc., required to achieve the formative targets of the subject matter as part of the future professional profile. Generally it is considered that to a credit point corresponds 25-30 hours of an average student's work.

The credits are granted only after the successful completion of the work required and the appropriate assessment of the results understood as sets of skills acquired, respective what the student knows, understands and is able to do after attending the respective subject matter.

2. ECTS implementation in USAMV Cluj-Napoca

The Order No. 3617/2005 of the Minister of Education and Research provisions regarding the European Credit Transfer System methodology were implemented by the University starting with the 2005-2006 academic year.

The Order No. 3617/2005 provisions are part of the legal base of the University internal [Regulation RC 39](#) regarding the initiation, approval, implementation and evaluation of the study programs.

Also, starting with 2012 within the organizational structure of the University it was established the "Recognition and equivalence of diplomas Center" – CRID under the International relations prorectorate.

Appendix – Doctoral School**Number of PhD domains, per academic year**

PhD Domains	Academic year						
	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012
Number	5	5	5	5	5	5	5

Number of accredited PhD specializations, per academic year

PhD Specializations	Academic year						
	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012
Number	36	35	36	40	42	42	41

Number of PhD supervisor positions, per academic year

PhD Supervisor position	Academic year						
	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012
Full time professors	37	36	43	55	62	56	47
Part time professors	24	24	24	24	28	3	15

PhD supervisors, per domains and specializations

Nr. crt.	PhD Supervisor	Domain	Specialization
1	Morar Gavril	Agronomy	Plant Technology
2	Rotar Ioan		Fodder Production and Preservation
3	Haş Ioan		Genetics and Plant Amelioration
4	Marghitaş Marilena		Agro-chemistry
5	Criveanu Horea Radu		Bio-physics
6	Dîrja Marcel		Land Amelioration
7	Muste Sevastiţa		Vegetal Raw Materials
8	Oltean Ion		Plant Protection
9	Păcurar Ioan		Pedology
10	Puia Carmen		Plant protection
11	Mihai Gheorghe		Fodder Production and Preservation
12	Luca Emil		Utilization of Land amelioration and Crop irrigation systems
13	Funar Sabina		Management and Marketing in Agriculture
14	Ciotlăuş Ana		Utilization of Land amelioration and Crop irrigation systems
15	Duda Matei Marcel		Plant Technology
16	Oroian Ioan Gheorghe		Plant protection
17	Rusu Teodor		Agrotechnics

18	Vidican Mirela Roxana		Microbiology
19	Ardelean Marin	Horticulture	Genetics and Plant Amelioration
20	Zaharia Dumitru		Flowers and Ornamental trees culture
21	Pamfil Doru		Genetics and Plant Amelioration
22	Apahidean Al. Silviu		Vegetables Culture
23	Apahidean Maria		Vegetables Culture
24	Sestraş Radu		Genetics and Plant Amelioration
25	Pop Nastasia		Viticulture
26	Cantor Maria		Flowers and Ornamental trees culture
27	Mănuşiu Dănuţ Nicolae		Vegetables Culture
28	Mitre Viorel		Trees Culture
29	Socaciu Carmen	Biotechnology	Agrifood Biochemistry and Biotechnology
30	Diehl Horst		Agrifood Biophysics and Biotechnology
31	Oprean Letiţia		Plant Biotechnologies
32	Tofană Maria		Plant Biotechnologies
33	Mărghitaş Liviu	Animal Science	Animal Products Technology
34	Bud Ioan		Furry animals, pets and Fish farming
35	Mureşan Gheorghe		Bovine and Equine Exploitation Technologies
36	Vlaic Augustin		Genetics and Plant Amelioration
37	Miclea Vasile		Reproduction Biology
38	Miresan Vioara		Animal Physiology
39	Şara Aurel		Animal Nutrition
40	Oroian Teofil Eugen		Genetics and Animal Enhancement
41	Pop Martin	Veterinary Medicine	Infectious Diseases
42	Muntean Mircea		Veterinary Obstetrics and Andrology
43	Man Cornel		Animal Hygiene
44	Drăghici Constantin		Animal Hygiene
45	Răpunţean Gheorghe		Microbiology – immunology
46	Vasiu Constantin		Infectious Diseases
47	Mateş Nicolae		Surgical Pathology
48	Laslo Cornel		Sanitary and Veterinary Technology and Expertise
49	Morar Roman		General and Special Animal Science
50	Cozma Vasile		Parasitic Diseases
51	Groza Ioan		Veterinary Obstetrics and Andrology
52	Pop Alexandru		Normal and Pathologic Physiology
53	Spînu Marina		Infectious Diseases
54	Muste Aurel		Surgical Pathology
55	Mihaiu Marian		Sanitary and Veterinary Technology and Expertise
56	Papuc Ionel		Semiology and Medical Pathology
57	Catoi Cornel		Normal and Pathologic Morphology
58	Damian Aurel		Normal and Pathologic Morphology
59	Ognean Laurent		Normal and Pathologic Physiology
60	Marcus Ioan		Normal and Pathologic Physiology
61	Brudasca Gheorghe Florinel		Infectious Diseases
62	Oana Liviu Ioan		Anesthetics, Propaedeutics and Surgical Techniques

Total number of enrolled PhD students, per academic year

Total number of enrolled PhD students	Academic year						
	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012
Full time PhD students	182	178	169	136	146	166	207
Part time PhD students	425	463	429	384	328	242	143

Number of PhD students enrolled in the first year of the PhD study programs

Academic year	PhD students			
	Budgetary scholarships		Self funding places	
	Full-time study programs	Part-time study programs	Full-time study programs	Part-time study programs
2005-2006	63	0	2	95
2006-2007	31	0	0	71
2007-2008	38	0	0	90
2008-2009	50	0	3	108
2009-2010	55	0	1	83
2010-2011	51	0	0	46
2011-2012	82	0	6	0

Number of awarded PhD diploma

	2006	2007	2008	2009	2010	2011
TOTAL NUMBER	34	39	50	95	92	136

Appendix – Research infrastructure**RESEARCH INFRASTRUCTURE AND ORGANIZATION – RESEARCH LABORATORIES,
CENTERS AND INSTITUTES****Total number of Research centers and laboratories, per faculties**

Crt. No.	Faculty	Number of Research centers	Number of Research laboratories	Date of the Faculty Council approval
1.	Faculty of Agriculture	5	4	June 15, 2011
2.	Faculty of Horticulture	2	10	June 16, 2011
3.	Faculty of Animal Science and Biotechnology	1	5	June 14, 2011
4.	Faculty of Veterinary Medicine	3	5	June 21, 2011
	TOTAL	11	24	

The Research centers and laboratories lists proposed by the faculties was approved by the University Senate on the 16th of June, 2011

FACULTY OF AGRICULTURE

Crt. No.	Research Centre / Laboratory	Coordinator
1.	Plant Culture Research Center	Ioan ROTAR, PhD, Professor
2.	Research Center in Biochemistry and Food Biotechnology	Carmen SOCACIU, PhD, Professor
3.	Center for Research in Minimum System and Agriculture Sustainable Technologies	Teodor RUSU, PhD, Professor
4.	Advanced Research Centre for quality assurance of life and environmental protection	Ioan OROIAN, PhD, Professor
5.	Center for Research on Quality and Food Safety	Maria TOFANA, PhD, Professor
6.	Research Laboratory for Soil Fertility Control and Monitoring of agro-ecosystems	Marilena MĂRGHITAȘ, PhD, Professor
7.	Research Laboratory for Optimization and Development of sustainable Technologies in crops	Ioan DROCAS, PhD, Professor
8.	Research Laboratory for Applied Biological Sciences	Roxana VIDICAN, PhD, Professor
9.	Laboratory for Environment Quality Control and Plant Protection	Antonia ODAGIU, PhD, Senior lecturer

FACULTY OF HORTICULTURE

Nr crt.	Research center	Coordinator
1.	Center for horticultural research of Transylvania	Radu SESTRĂȘ, PhD, Professor
2.	Research center for agricultural biotechnologies	Doru PAMFIL, PhD, Professor

Nr crt.	Research laboratory	Coordinator
1.	Laboratory for genetics and amelioration of horticultural and forestry plants	Radu SESTRĂȘ, PhD, Professor
2.	National reference laboratory for the evaluation and certification of vegetable products containing genetically modified organisms	Doru PAMFIL, PhD, Professor
3.	Laboratory for research in vegetable growing	Al. Silviu APAHIDEAN, PhD, Professor
4.	Research Laboratory for Biodiversity	Corina CĂTANĂ, PhD, Associate Professor
5.	Design and landscape arrangement using sustainable concepts	Adelina DUMITRAȘ, PhD, Associate Professor
6.	Integrated Management of Forest Ecosystems	Liviu HOLONEC, PhD, Associate Professor
7.	Business Administration and Rural Development	Felix ARION, PhD, Associate Professor
8.	Laboratory for land improvement, land measurements and exact science	Marcel DÎRJA, PhD, Professor
9.	Bioinformatics laboratory	Ioana POP, PhD, Associate Professor
10.	Laboratory for mathematical modeling and implementation of life science phenomena in computational systems	Florica MATEI, PhD, Associate Professor

FACULTY OF ANIMAL SCIENCE AND BIOTECHNOLOGY

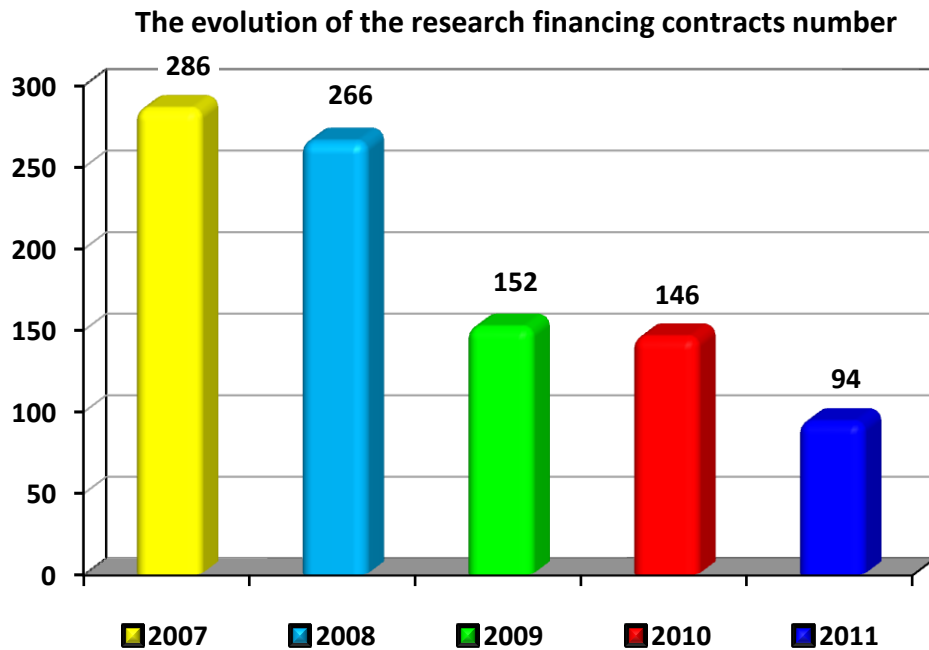
Crt. No.	Research Centre / Laboratory	Coordinator
1.	Laboratory for farm animals genotyping	Augustin VLAIC, PhD, Professor
2.	Laboratory for research and quality control of animal feed	Aurel SARA, PhD, Professor
3.	Laboratory for the certification and cryopreservation of animal germplasm	Marius ZĂHAN, PhD, Lecturer
4.	Laboratory for the evaluation of the xenobiotics propagation in agricultural environments	Bogdan GEORGESCU, PhD, Lecturer
5.	Research laboratory in pisciculture	Daniela LADOSI, PhD,

		Lecturer
6.	Research Center for apiculture and sericulture productions	Liviu MĂRGHITAȘ, PhD, Professor

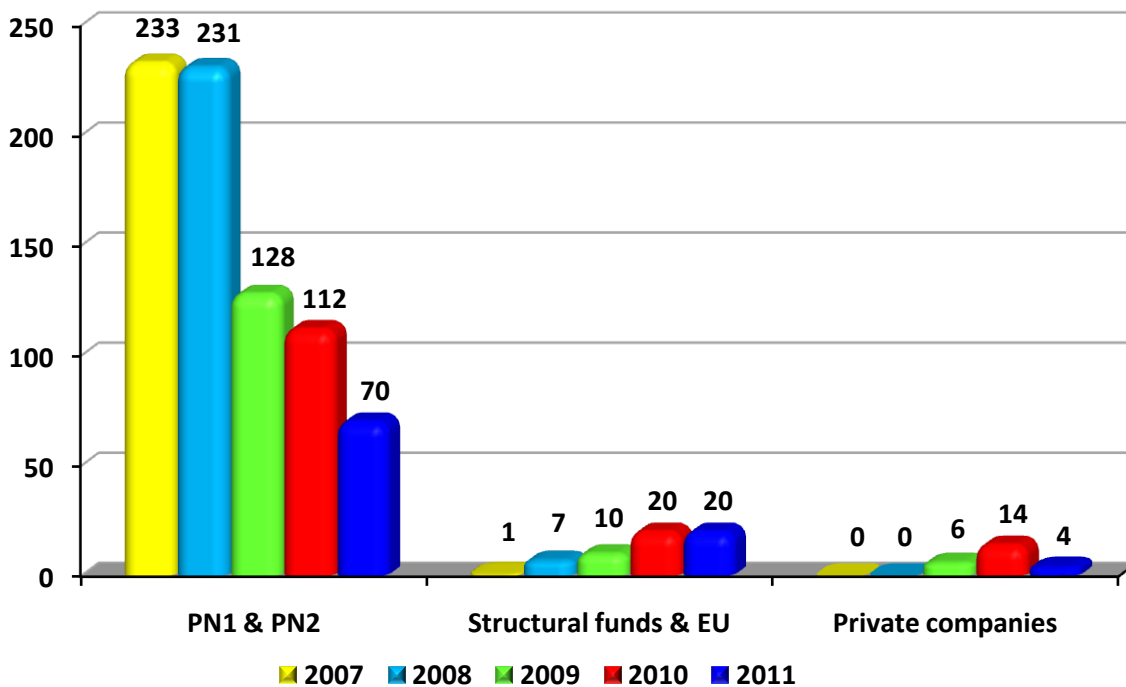
FACULTY OF VETERINARY MEDICINE

Crt. No.	Research Centre / Laboratory	Coordinator
1.	Research laboratory: animal production and animal safety	Marian MIHAIU, PhD, Professor
2.	Research laboratory - Physicochemical techniques applied for the analysis of animal products	Sanda ANDREI, PhD, Associate Professor
3.	Research laboratory - Pharmacovigilance	Mihai CERNEA, PhD, Lecturer
4.	Research laboratory - Diagnostic imaging in the pathology and clinic of the surgical, medical and reproductive animal diseases	Aurel MUSTE, PhD, Professor
5.	Research laboratory - Veterinary Medical Laboratory Diagnostic	Marina SPÎNU, PhD, Professor
6.	Research Center - Monitoring, diagnosis and control of zoonoses	Vasile COZMA, PhD, Professor
7.	Research Center - Comparative and Experimental Pathology	Cornel CĂTOI, PhD, Professor
8.	Research Center - Veterinary Medical Biotechnologies	Ioan GROZA, PhD, Professor

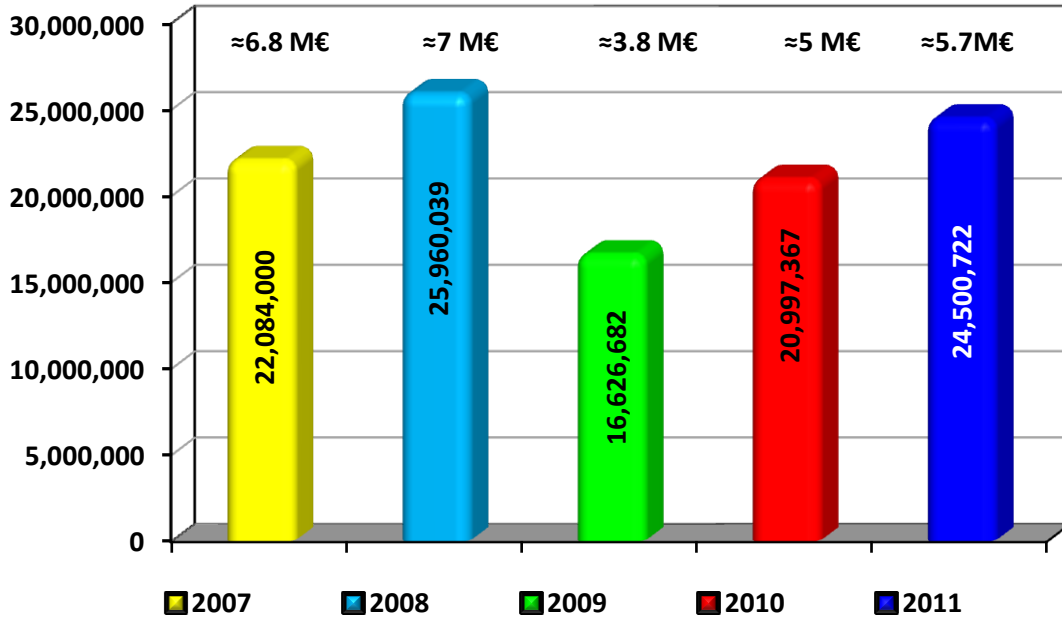
Appendix – Research performance



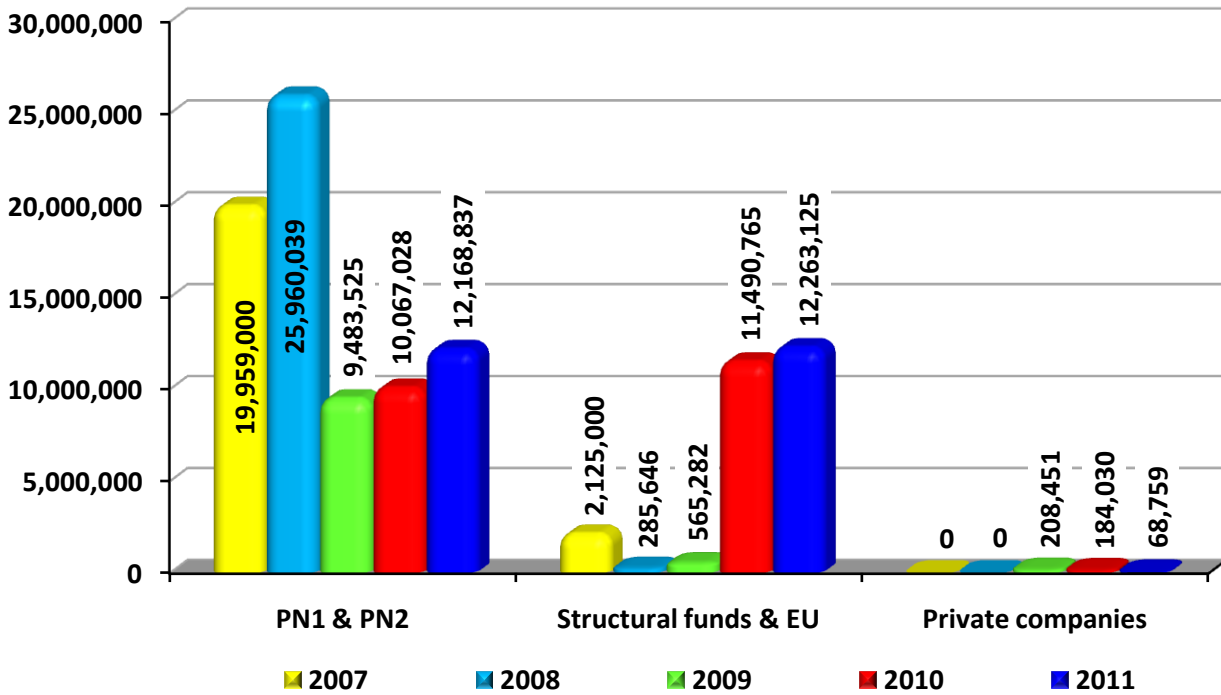
Number of research contracts, by financing source



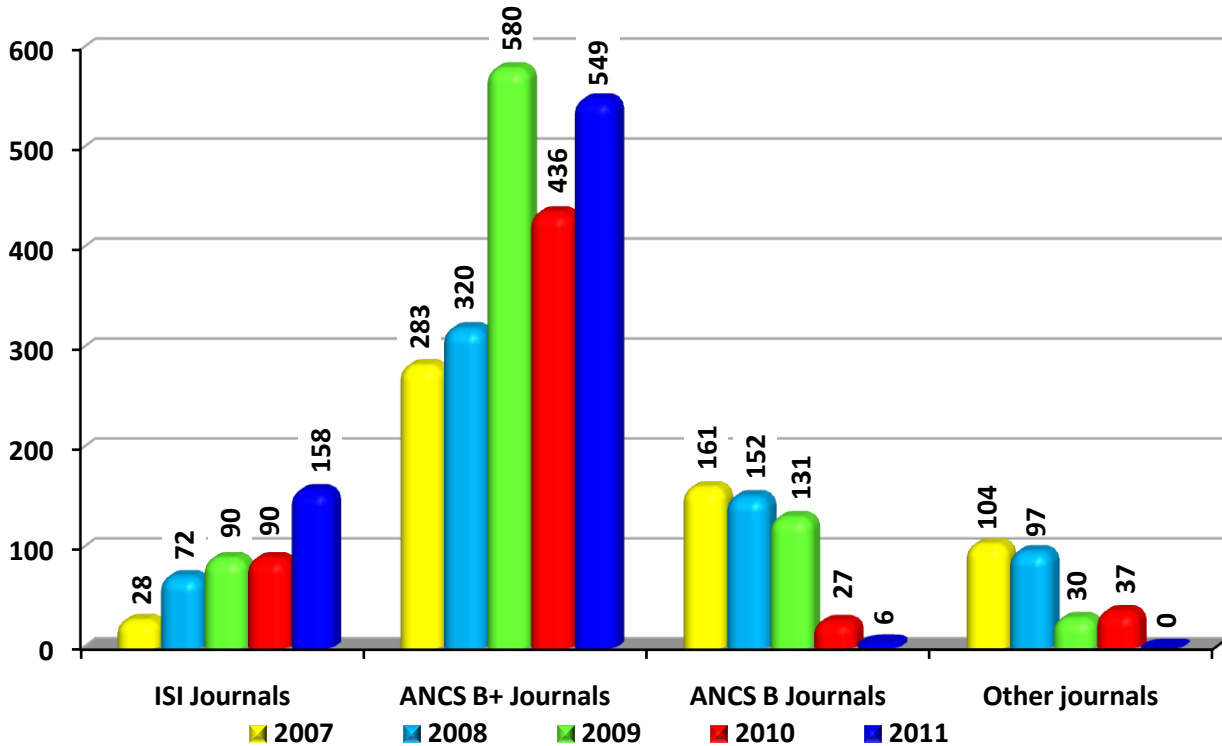
The evolution of the research contracts financing amount (ROL)



Structure of the research contracts financing (ROL)



Structure and evolution of the number of published articles



JOURNALS PUBLISHED UNDER UNIVERSITY'S AEGIS

1. *Notulae Botanicae Horti Agrobotanici Cluj-Napoca* (A)
2. *Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Agriculture* (B+)
3. *Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Horticulture* (B+)
4. *Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Animal Breeding and Biotechnology* (B+)
5. *Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Veterinary Medicine* (B+)
6. *Agricultura – revistă de știință și practică agricolă* (B+)
7. *Notulae Scientia Biologicae*
8. *Revista Scientia Parasitologica*
9. *ProEnvironment/ProMediu*
10. *Clujul Medical Veterinar*
11. *Protecția plantelor*
12. *Hameiul și plantele medicinale*
13. *The Romanian Society for Grassland Journal* (2 issues/year)
14. *Hortus Agrobotanicus Napocensis - Index Seminum* (1 issue/year)

The journal "NOTULAE BOTANICAE HORTI AGROBOTANICI CLUJ-NAPOCA" indexing by Thomson Reuters

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Mr. Radu E. Sestras
Univ Agr Sci & Veterinary Med Cluj-Napoca
3-5 Manastur St
Cluj-Napoca, 400372 ROMANIA

Dear Mr. Radu E. Sestras,

I am pleased to inform you that *Notulae Botanicae Horti Agrobotanici Cluj-Napoca* has been selected for coverage in Thomson Reuters products and custom information services. Beginning with V. 36 (1) 2008, this publication will be indexed and abstracted in the following:

- ◆ Science Citation Index Expanded (also known as SciSearch®)
- ◆ Journal Citation Reports/Science Edition

If possible, please mention in the first few pages of the journal that it is covered in these Thomson Reuters services. I would greatly appreciate completion and return of the enclosed *Journal Information Sheet* at your earliest convenience.

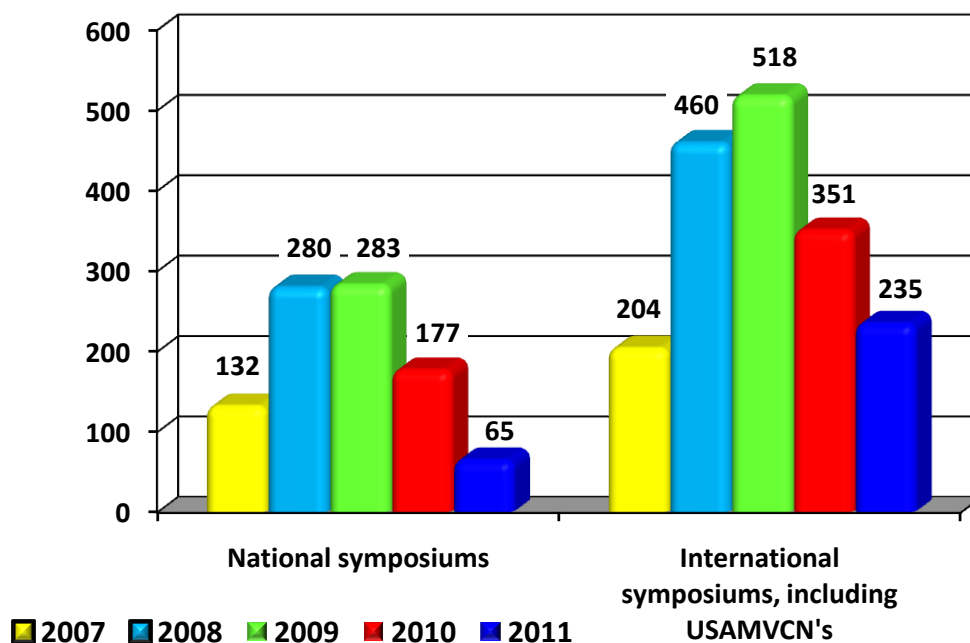
In the future *Notulae Botanicae Horti Agrobotanici Cluj-Napoca* may be evaluated and included in additional Thomson Reuters products and information services to meet the needs of the scientific and scholarly research community.

Thank you very much.
Sincerely,

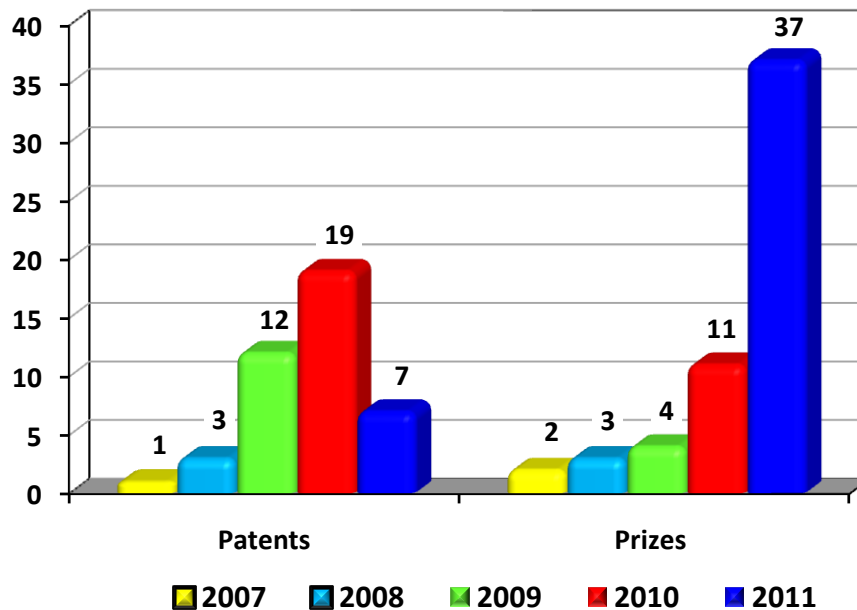


Marian Hollingsworth
Director, Publisher Relations

Scientific events attendance



Patents and scientific prizes awarded (Romanian Academy, exhibitions, etc.)



UNIVERSITY'S ACADEMIC PERSONALITIES ELECTED AS ACADEMY MEMBERS

- Doru PAMFIL, PhD, Professor Romanian Academy Corresponding Member
- Alexandru SALONTAI, PhD, Professor Honorary Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Eronim ȘUTEU, PhD, Professor Honorary Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Leon Sorin MUNTEAN, PhD, Professor Full Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Alexandru Ioan BABA, PhD, Professor Full Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Mihai RUSU, PhD, Professor Full Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Liviu Al. MĂRGHITAȘ, PhD, Professor Full Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Vasile COZMA, PhD, Professor Full Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Viorel BUDIU, PhD, Professor Corresponding Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"

- Ioan HAȘ, PhD, Professor Corresponding Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Ioan GROZA, PhD, Professor Corresponding Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Petru GUȘ, PhD, Professor Associate Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Doru PAMFIL, PhD, Professor Associate Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Silviu Al. APAHIDEAN, PhD, Professor Associate Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Radu SESTRĂȘ, PhD, Professor Associate Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Ioan BUD, PhD, Professor Associate Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Gheorghe RĂPUNTEAN, PhD, Professor Associate Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Marina SPÎNU, PhD, Professor Associate Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Carmen SOCACIU, PhD, Professor Associate Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Alexandru NAGHIU, PhD, Professor Associate Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"
- Emilian MERCE, PhD, Professor Associate Member of the Romanian Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu – Sisești"

Appendix – The Institute of Life Science

INSTITUTE OF LIFE SCIENCE – RESEARCH EXCELLENCE

Excellence in Life Science Research at USAMV Cluj-Napoca



The recently created Institute of Life Sciences (since 2010) is situated in the main campus of the USAMV Cluj-Napoca and represents the best demonstration of the Infrastructure dedicated to „Advanced Research & Specialized Human Resource Development” in our University. It includes the best research resources obtained by our university, during the last 5 years, by our own efforts and performance in Research, Consulting, Service providers and future Technology Transfer.

It is functioning under an integrated approach for advanced (fundamental and applied) research in Life Sciences: Plant and Animal Science, Environmental Protection, Knowledge-based Biotechnology Platform (Including Plant, Animal and Food Biotechnology). It concentrates the most performant and modern equipments which were provided from individual projects of each research group . More than 10 research groups (belonging to Research Centers or Service laboratories) are located in more than 40 different laboratories, at different levels of the Institute.

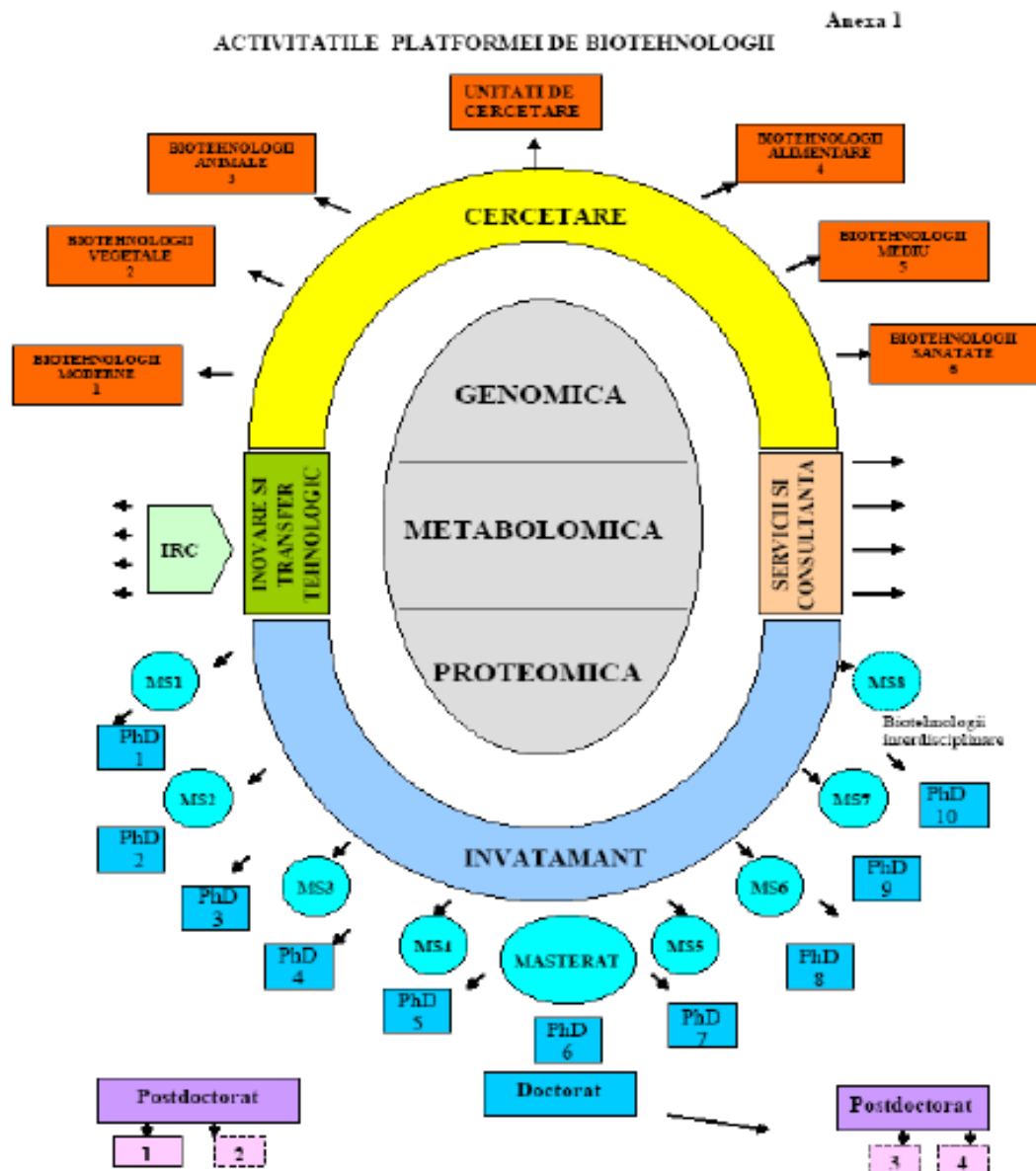
The total surface of the Institute is of more than 4200 sq meters, and includes at the **Ground Floor** the Doctoral School Office, the Postdoctoral School Office, The IT department, The Longdistance learning department, 2 amphitheatres with updated facilities for International Conferences, as well for for PhD presentations.

Floor No.	Research field /Centers/Platforms	Accredited /service laboratories	Coordinators
I	AGRICULTURE-PLANT SCIENCE AND ENVIRONMENTAL PROTECTION	Laboratory for tests concerning water and noise level - LIAZ	Tania MIHĂESCU, PhD, Lecturer
		Laboratory for air quality analysis - LACA	Ioan Oroian, PhD, Professor
		Zone Laboratory for certifying the feed quality - LZCF	Antonia ODAGIU, PhD, Lecturer
II	ANIMAL SCIENCE AND VETERINARY MEDICINE Research Center for supervision, diagnosis and zoonose control	Laboratory for the quality control of apiculture products - APIS	Liviu MĂRGHITAȘ, PhD, Professor
		Regional laboratory for apiculture control and diagnosis – LR-CDA	Liviu MĂRGHITAȘ, PhD, Professor
		Laboratory for the certification and cryopreservation of animal germoplasma - LCCG	Vasile MICLEA, PhD, Professor
		Regional Laboratory for genotyping farm animals - LZGA	Augustin VLAIC, PhD, Professor
			Vasile COZMA, PhD, Professor
III	BIOTECHNOLOGY KNOWLEDGE-BASED BIOTECHNOLOGY PLATFORM Research center for Molecular markers Research center for Chemistry and Biochemistry of Plant Pigments	Laboratory for Agrifood quality and authenticity - AGRIAL	Carmen SOCACIU, PhD, Professor
		National, reference laboratory for the evaluation and conformity certification for vegetal origin products that contain GMOs - CERTOMG	Doru PAMFIL, PhD, Professor
			Doru PAMFIL, PhD, Professor
			Doru PAMFIL, PhD, Professor
			Carmen SOCACIU, PhD, Professor

The Human Resources in ILS are represented by more than 25 postdoctoral fellows and more than 50 PhD students who are working for their own research projects as well for different research projects developed in the above-mentioned centers and laboratories.

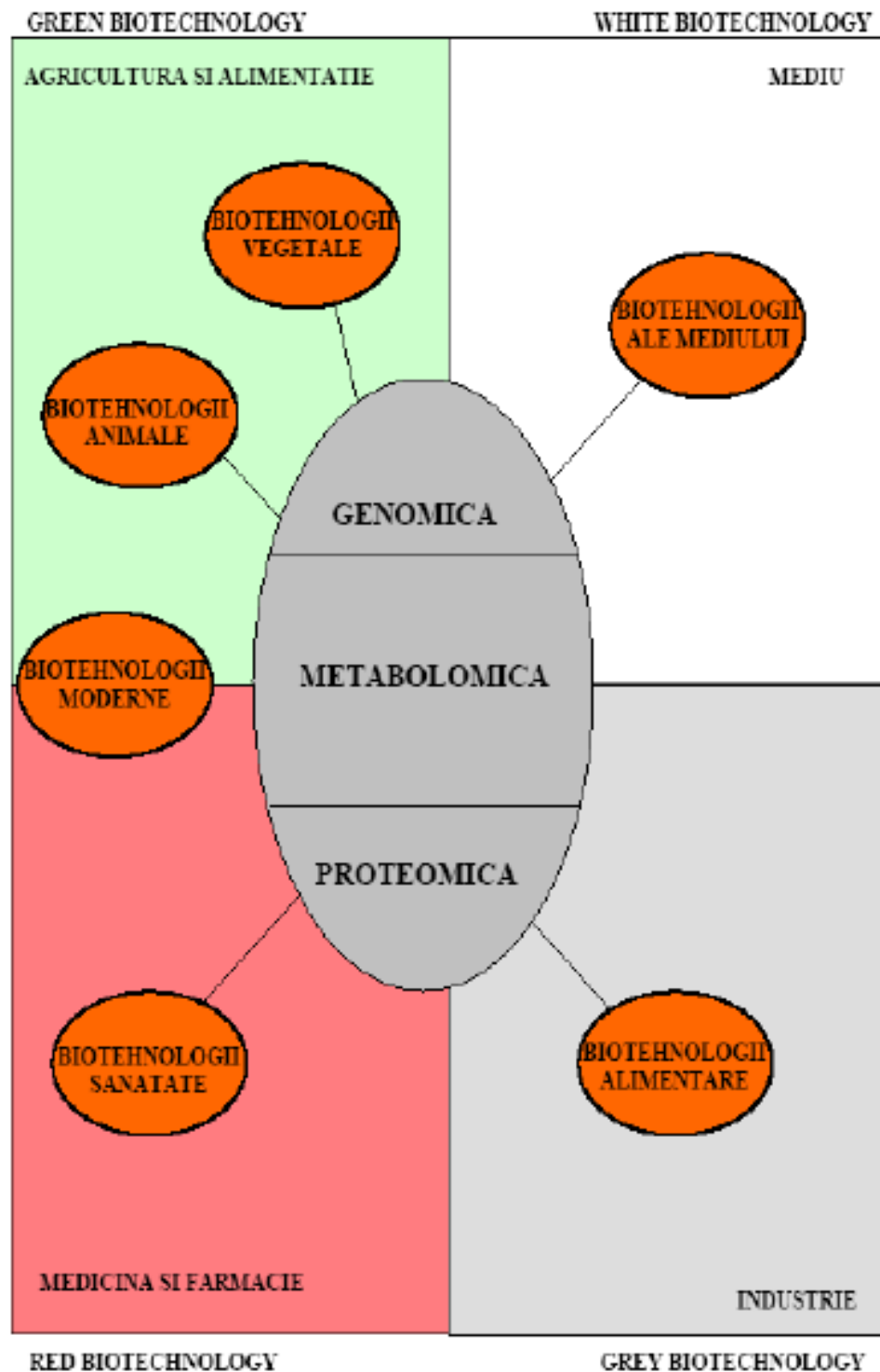
KNOWLEDGE-BASED PLATFORM OF BIOTECHNOLOGY

The activities related to this unique platform in our university are complex and include: research – teaching - innovation and technology transfer, services and consultancy. A special role is attributed to PhD and postdoctoral schools which are developing their programs in this infrastructure, following research topics related to all biotechnology areas (1 to 6), as presented in Annex 1, below.



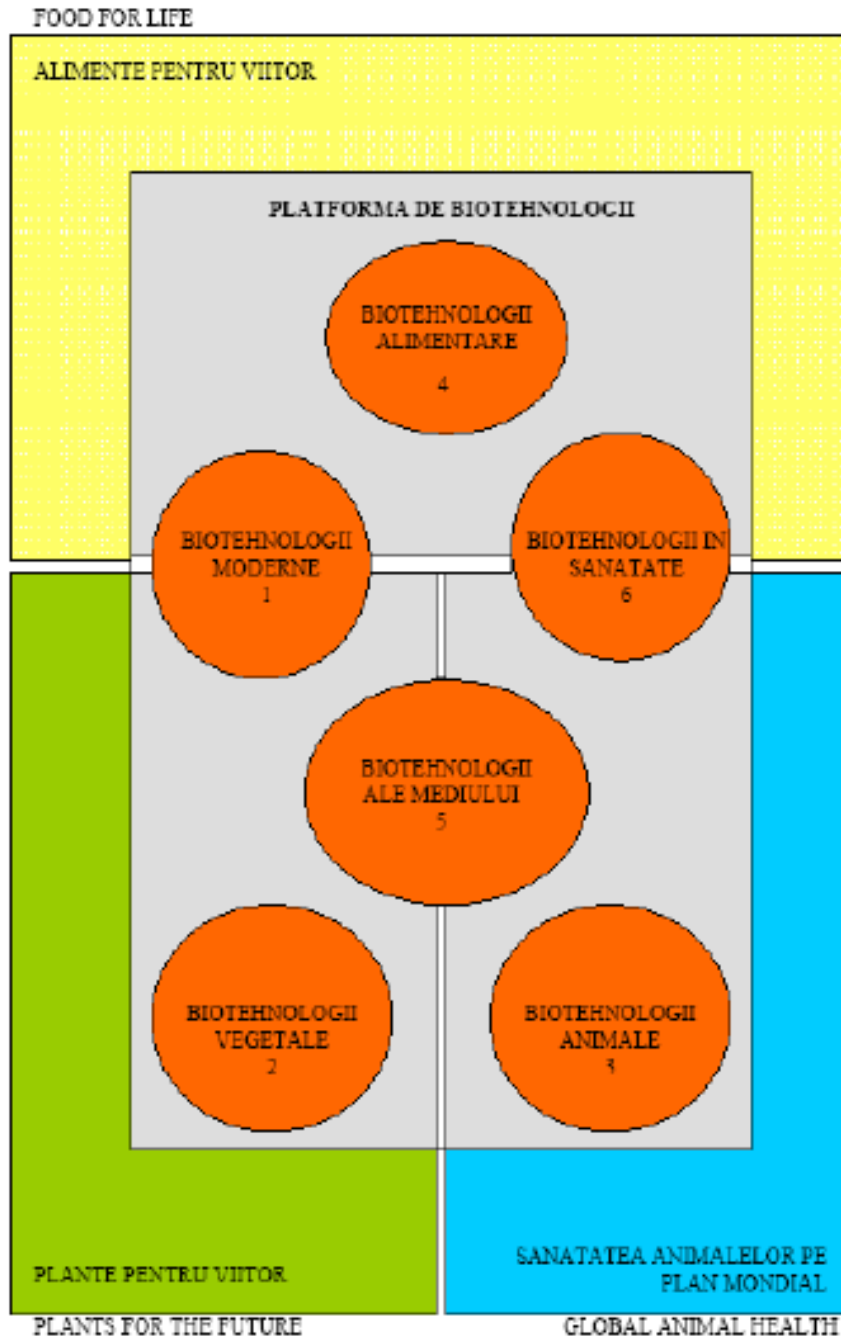
The research topics are related to genomics, metabolomics and proteomics, with involvement in the green /white/red and gray biotechnology, with impact in agrifood areas, as well environment, industry, nmedicine and pharmacy (see Annex 2, below).

INTEGRAREA PLATFORMEI DE BIOTEHNOLOGII IN BIOTEHNOLOGIA EUROPEANA



The Biotechnology Platform is connected and integrated also to European Technological Platforms, as presented below (Annex 3)

INTECRAREA PLATFORMEI DE BIOTEHNOLOGII ÎN ACTIVITATEA PLATFORMELOR
TEHNOLOGICE EUROPEAN



Appendix – Consultancy and technical services**CONSULTANCY AND TECHNICAL SERVICES PROVIDED BY DIFFERENT DEPARTMENTS AND LABORATORIES OF
USAMV CLUJ-NAPOCA**

Domain	Consultancy	Technical Services / Laboratory Analysis
Agrochemistry	Soil Fertilization and agro-chemical optimization	Soil-plant- fertilizers analysis
Agro-techniques	Weed recognition and control strategies for conventional or organic cultures	Phyto-toxicity of herbicides
Technologies Agriculture	Testing different machinery for agriculture Use of GPS in tractors for agriculture works Minimal soil tillage	Diagnosis and testing installations for phyto-sanitary treatments
Plant Science and Technology Plant Physiology and pathology	Diagnosis of pests in agriculture eco-systems Strategies for pest control Unbalances of plant physiology Soil bioremediation Cultivation of medicinal plants, seed production, hops production and potatoe cultivation for seed	Diagnosis of toxigenic fungi in seeds Diagnosis of diseases and control in horticulture plants
Environmental Engineering and Protection	Air and water Quality	Air and water quality, by analysis of different parameters (CO, Nox, SO ₂ , O ₃)
Food Science	Metabolic pathways in plants – as raw food resources - metabolomics Biorefinery & Enzymatic bioconversions Pro-and prebiotics Food microbiology	Biochemical parameters for plant and food authenticity (matabolomics) using HPLC, GC-separation methods and FTIR/MS spectroscopy
Food quality and safety	Food safety and security markers in food Food Additives and Ingredients Nutrition and health	Quality analysis of food (plant or animal origin) Pesticide and toxins analysis in food
Food Technology	Applied Biotechnology for Beverage production Dairy product technology Meat technology Confectionery and oil technology	New products obtained in specific pilot plants of the department (beer, meat products, dairy products , confectionery)
Horticultural technologies	Vegetable growing technology Viniculture and oenology Horticulture product processing Floriculture and landscape architecture (green areas) in ecologic systems Vergetable growing	Reconstruction of degraded fields, suspended gardens on roofs and vertical walls) Testing fungicides and insecticides on different vegetables
Forestry	Ecologic reconstruction by forests and fields remediation Protection and control of forestry pests	

Domain	Consultancy	Technical Services / Laboratory Analysis
Plant biotechnology	Micropropagation and tissue engineering Genomics Gene expression in plants	Evaluation and certification of GMOs (plants and food/feed) by molecular analysis (marker-assisted) based on PCR and EF separations of DNA
Biodiversity	Botanical and microbiological mapping Restoration of native vegetation Germoplasm storage	Cytologic and taxonomic analysis
Business administration	Business plans for rural affairs Managing European projects in rural areas Marketing in rural areas Impact studies regarding the economic-financial plans Trainin for tourism and services in rural areas	
Land management, ground measurements	Monitoring the Hydrologic areas (Somes), by GIS for dried lands, forest reconstruction, Geodezic improvements and topographic design and consultancy	
Animal technology	Investments in animal technology (cattle) feasibility studies, technical specifications) Design of sheep growing technology Improvement of reproduction and production of rabbits and fur animals Poultry growing technology	Milk and meat quality
Animal parasitology	Epidemiologic investigations in diagnosis of zoonotic (parasite) diseases	Chemoresistence tests –for antiparasitary drugs, plant extracts Clinic and molecular analysis (ELISA, PCR) applied in parasitology
Infectious diseases in animals	Diagnosis of infectious diseases Epidemiologic monitoring Monitoring the vaccination of animals	Microscopic examinations – incl resistance to antibiotics Molecular typing of bacteria (PCR) Immuno-cellular effectors in cells Molecular techniques applied for the diagnosis of infectious diseases
Beekeeping Sericulture	Management of apiculture and sericulture exploitations. Control of bee diseases	Quality control and expertise of apiculture and silk worm products
Genetics of farm animals	Genotyping of animals by molecular methods	Fingerprint of DNA using PCR, RAPD, AFLP, SSR and molecular techniques
Aquaculture	Aquatic explotation, selection and imbreeding in fisheries New technologies for intensive growth of fishes	
Animal Nutrition	Animal nutrition and feed composition	Feed analysis for quality (proteins, lipids), pesticide and micotoxins eval.
Animal microbiology	Pathogenity of bacteria- Biochemical markers for mico-bacteriology diagnosis Epidemiology and immunology	Screening of bacterial contamination of animals and animal-based food products

Domain	Consultancy	Technical Services / Laboratory Analysis
Animal Reproduction	Reproduction of farm animals Biotechnologies of animal reproduction - certification and criopreservation of germoplasm	Oocyte and embryo preservation
Veterinary Anatomy	Morphologic recognition of animals , incl. from archeological areas	
Biochemistry	Exploratory biochemical investigations for animal science	Biochemical analysis of milk , meat, and other biological samples, identification of residues by GC- and HPLC analysis
Cell Biology, and Embryology	Specific animal cell biology and embryology	Histological techniques
Biophysics	-	Organic and inorganic structural analysis by IR and Raman and magnetic properties by ESR (Electronic Paramagnetic Resonance)
Veterinary Physiology	Experimental models for studying the nervous and humoral influences on physiological regulatory mechanisms Blood compatibility and hemotransfusions	Hematology and metabolic profile
Animal Pathology	Animal pathology necropsy examinations	Hystopathologic diagnosis Contrastphase, confocal microscopy Immunofluorescence and immuno/histo/chemical investigations

Appendix – The Library

LIBRARY: FACILITIES FOR EDUCATION AND RESEARCH

The University's Library is a public library, of an encyclopedic nature. Its history is closely linked of that of the University. The first mention is the library dates back in 1872, when the Yearbook of the Agronomic Institute recorded the existence of 881 volumes within the Library.



The University's Library has now 4,892 registered users, out of which 4374 are students.

For the academic year 2011-2012 the Library counts:

- 70,170 book titles;
- 134,854 tomes;
- 41,190 journals;
- 3,620 audio/video materials with educational content.

The Library works with more than 126 partners libraries from the country and from abroad, within the interlibrary exchange service.

Within the Library, the Processing Items for Library Circulation is a centralized system using the integrated library automation system "Liberty3" that uses a database of over 60,000 records. By the OPAC module, the system permits the information retrieval to all of the workstations from the library. Also, by the Library web site the registered readers can access the Library Online Catalog.

The University's Library is a member of the ANELIS Project, coordinated by the Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI) and financed by Structural Funds. Due to that project, from the computers within the Library or by accessing the [Library site](#), the readers have access to a number of most important scientific literature databases platforms:

- **ScienceDirect**, offering full text access to over 25% of information published globally in exact sciences and humanities, technology and medicine. It is undoubtedly the most important academic information resource, to today. The readers have access to over 1800 journals in full text, from their current issue and the archives of the last four years. To note that most of the journals are ISI quoted.
- **SpringerLink**, that includes specialized journals and specialized books published by Springer-Verlag, Kluwer Academic Publishers, Urban and Vogel, Steinkopff and Birkhäuser. The readers have access to over 1800 full text journals, from their current issue and the archives until 1997.
- **Wiley-Blackwell**, that includes journals and books published by Wiley-Blackwell publishing group (grouped Publisher: John Wiley and Sons, Blackwell Publishing) is available on Wiley InterScience platform. The readers have access to over 1,400 full text journals from their current issue and the archives until 1997.

- **ProQuest Academic Research Library**, that offers access to full text and abstracts from scientific research journals in online format. On a single online platform the readers have access to information from over 160 scientific fields: economics, literature, geography, psychology, science, law, magazines and newspapers of general interest, education, religion, health, humanities, computers, etc., from academic publishers worldwide. The readers have access to over 4070 journals from all scientific fields, including over 2,800 in full text.
- **Cambridge University Press**, which currently publishes over 220 peer-reviewed academic journals. Cambridge publishes their own journals and magazines besides in collaboration with over 100 academic and professional societies.
- **Web of Science**, that is a well known bibliographic database, including scientific journals, delivered via the Internet. Available online Web of Knowledge platform provides access to abstracts of more than 11,220 scientific journals and 120,000 conferences from 256 scientific disciplines.
- **Journal Citation Reports**, accessible from the online Web of Knowledge platform, offering quantifiable statistical data that allow the assessment of the journals impact within the scientific community.
- **Derwent Innovations Index**, which includes data on more than 14.3 million registered patents and inventions from 40 countries, including Romania. It provides an international overview about an, including its novelty, the legal owner and the protection degree.
- **ProQuest CSA**, available on the online platform CSA Illumina, is providing to the researchers effective tools in project financing and publishing activity. CSA Research Pack contains 3 sections:
 - PapersInvited - information about the availability of the publication of scientific papers at conferences and in various issues of prestigious journals.
 - COS Funding Opportunities - information about available research grants worldwide.
 - Community of Scholars - direct access to the scientific community worldwide.
- **EBSCOhost**, that offers databases and technologies, online information resources, by: EBSCO Discovery Service, eBooks, Wilson, DynaMed, Business Book Summaries and EBSCO Digital Archives.

Appendix – Technology transfer**TECHNOLOGY TRANSFER AND RELATIONS WITH ECONOMIC PARTNERS****AGRICULTURE and FOOD TECHNOLOGY**

Crt. No.	Product/patent/ technology	Authors	Domain	Beneficiary	Description
1.	Composition of expanded cereals seeds and obtaining process Patent No. 123012/30.07.2010, OSIM Bucuresti	Racolța Emil	Food industry	SC Feleacul SA Cluj-Napoca	New composition of expanded cereals seeds and the process of production. The composition includes cereals like durum wheat, corn, rye, millet, rice, buckwheat, sorghum, triticale or mixture of these.
2.	Composition for jellies and obtaining process. Patent No. 122574/30.09.2009, OSIM Bucuresti	Racolța Emil, Hodrea Marta	Food industry	SC Feleacul SA	New composition for jelly and production based on pectin, sugar, glucose syrup and sea buckthorn extract.
3.	Composition of dietetically halva, composition of dietetically halvita and obtaining process. Patent granting in process; Application No. A/00929/2011 on 21.09.2011, OSIM Bucuresti	Racolța Emil, Marta Hodrea	Food industry	SC Feleacul SA	The problem which is solved by the invention is the assurance of some ratios between the elements of the composition and the evidence of parameters of the process where sugar is substitute by isomalt and sugar syrup by maltitol, the same taste characteristics being maintained.

4.	Dietetic hard candies with isomalt and natural functional ingredients, including preparation process” Patent granting in process; Application No. A/00752/22.09.2009, published in RO_BOPI on November 2010, pag.13, OSIM Bucuresti.	Carmen Socaciu, Racolța Emil	Confectionary, prophylaxis of diabetes and obesity	PROPLANTA SRL Cluj-Napoca	Two original confectionary products, containing isomalt (maltitol) and functional, natural ingredients: hard candies (I) and filled candies (II). Isomalt is a new texture and sugar replacer, having a low glycemic index, combined with medicinal plant extracts, propolis, yeast, cinnamon, sea buckthorn berry paste and citric pectin.
5.	“Balsamic vinegars with fruit juices and aromatic plants”. Patent granting in process; Application No. A 00893/24.09.2010, OSIM Bucuresti.	C. Socaciu Anca Baci (SC PROPLANTA SRL Cluj-Napoca)	Confectionary, prophylaxis of diabetes and obesity	PROPLANTA SRL Cluj-Napoca	Preparation of four balsamic vinegars containing apple vinegar mixed with fruit juices (sea buckthorn, black currant, Aronia) or grapes seed extract Vitis, as well aromatic plants from Romanian flora, mustard and pepper seeds. The composition is characterized by sensorial and physico-chemical characteristics which bring functionality and nutritional benefits. This patent valorize the results of a Research grant, PN II – PHYTOMED 61008/2007
6.	Procedures for Spectroscopic evaluation (UV-Vis and FTIR) of Plant oil authenticity. Patent granting in process; Application No. A 00894/22/09.2009, OSIM Bucuresti.	Carmen Socaciu & col.	Quality control, authenticity of vegetable oils		Utilization of molecular spectroscopy UV-Vis and Infrared (FTIR) to evidetiate the authenticity markers of plant oils. The patent valorize the results of a national grant PN II – AMPRENTAL 51049/2007

7.	Variety of <i>Festuca arundinacea</i> Schreber TRANSILVANIA 6. Patent granting in process; Application No. 1963/01.03.2012, OSIM Bucuresti.	OLAR M. & col.	Landscape architecture Agriculture		A semi-late synthetic variety, middle waist, with a very good foliage richness, suitable for lawn fields and founding of grasslands or pasture sown fields, dark green color of the leaves.
8.	Variety of <i>Festuca arundinacea</i> Schreber NAPOCA 2. Patent granting in process; Application No. 1962/01.03.2012, OSIM Bucuresti.	OLAR M. & col.	Agriculture Hydroamelioration		A very early synthetic variety, middle waist, with high richness of foliage, suitable for founding of grasslands sown fields used as meadow or pasture , or grassing for ramping ,high resistance to crushing ,long serenity (7-8 years)
9.	Variety of <i>Festuca arundinacea</i> Schreber JUCU 5. Patent granting in process; Application No. 1960/01.03.2012, OSIM Bucuresti.	OLAR M. & col.	Landscape architecture, Agriculture		The variety of <i>Festuca arundinacea</i> Schreber, JUCU 5, created at U.S.A.M.V. Cluj Napoca, is the first Romanian variety of tall lawn fescue. It is fit for grassing sport fields or other type of landscape greensward. In agriculture it can be used for sown grassland founding in pure culture or in mixture with perennial legume grassland. Synthetic variety Jucu 5 has a very good foliage richness, small width of leaves and medium green color of leaves

10.	Variety of Festuca arundinacea Schreber) VIO JUCU. Patent granting in process; Application No. 1961/ 01.03.2012, OSIM Bucuresti.	OLAR M. & col.	Agriculture, Hydroamelioration		The variety of tall fescue VIO JUCU, created at the U.S.A.M.V. Cluj-Napoca, is suitable for the establishment of sown pastures, same as for becoming overgrown with grass for the channel slopes. The synthetic variety VIO JUCU is winter hardiness, drought and trampling resistant, with an very good rich foliage and a high potential for production: 12-14 t S.U./ha and 800-1300 kg seed/ha.
11.	The Ardeal hop cultivar (<i>Humulus lupulus</i> L.) Patent No. 00160/30.12.2008, OSIM Bucuresti.	L.S. Muntean, & col.	Beer industry Pharmaceutical industry	S.C Moraagroind SRL	This hop cultivar is semilate, with an average vegetation period of 138 days. The cones are oval (rich in lupuline); the average yields: 2, 5-2, 8 t/ha dry cones. It is one of the bitter (superalfa) cultivars, medium-flavored, with a high content of alfa acids (13, 8-14, 5%); with production 340-360 kg/ha alfa-acids (is much higher than that of other hop cultivars cultivated in our country). It is resistant to manna, mildew-powder and tolerant to aphides.

12.	The Napoca echinacea cultivar (<i>Echinacea pallida</i> Nutt.) Patent No. 00161/30.12.2008, OSIM Bucuresti.	L.S. Muntean, & col.	Medicinal Applications (antivirals, imunostimulants)		This cultivar it is semilate, with a vegetation period of 134-145 days in the second and third years. Root is pivotant, with 1-3 vertical straight roots brown (vegetal material – harvested in the second or third year. Fresh root production is of 4, 5-5, 2 t/ha (1, 3-1, 5 t/ha in dry phase). The content in active principles is high, among which polizaharides immune stimulant (6,1-6,4 g %), derivates phenyl propane (0,5-0,6 g %), volatile oil (0,9-1,2 ml/ 100 g) etc.
13.	The Cluj echinacea cultivar (<i>Echinacea purpurea</i> L. (Moench.)) Patent No. 00253/30.05.2011, OSIM Bucuresti.	L.S. Muntean, & col.	Medicinal Applications (antivirals, imunostimulants)		It is an average late cultivar, with a period of 155-160 days (in the second year of vegetation and also in the following years). The aerial part (herba) is the vegetal material, a year harvest (about 10 years) at flowering phase, beginning with the second year of vegetation. Fresh herba production is of 10-22 t/ha. At the culture demolishing it can be obtained 3, 2-3, 8 t/ha fresh roots. The content in active principles: fenil-propanici derivates (2,3-2,5 g%), imunostimulent polizaharide (1-1,5%) etc.

HORTICULTURE

Crt. No.	Product/patent/technology	Authors	Domain	Beneficiary	Description
1	Six pear cultivars, certified by ISTIS Romania: - Arvena , certified by ISTIS in 2007; - Meda and Latina , certified by ISTIS in 2009; - Adria , Primadona and Transilvania , certified by ISTIS in 2010; Three apple cultivars: Silvan , Stefano and Somesan , certified by ISTIS 2010. All the above varieties are included in the Official Catalog published by ISTIS (The State Institute for Variety Testing and Registration), Ed.2012.	SESTRAȘ RADU & colab. SCDP Cluj	Pomiculture, Horticulture	Economic agents, commercial companies (private or state owned), individual farmers	Cultivation in many favorable regions and counties from Romania, enrichment in tree germoplasm
2	Foliar fertilizer composition based on nitrogen, phosphorus, potassium and process for producing. Patent No. 123140/30.12.2010, OSIM Bucuresti.	MITRE VIOREL, & colab.	Horticulture Plant Science Agrochemistry	Economic agents, commercial companies (private or state owned), individual farmers	Composition of leaf fertilizer based on nitrogen, phosphorus and potassium (NPK) for agricultural crops, mainly in horticulture; potato, sugar-beets and cereal culture.
3	Calcium Based Foliar Fertilizer Composition and Process for Producing. Patent No. 123139/30.12.2010, OSIM Bucuresti.	MITRE VIOREL, & colab.	Horticulture Plant Science Agrochemistry	Economic agents, commercial companies (private or state owned), individual farmers	Composition of leaf fertilizer based on calcium, useful for all pomiculture, grape- and vegetable growing.

4	Method of synthesis and purification of aspartic acid racemic used in biomedical and technical purposes Patent application published in the Official Bul. For Industrial property BOPI No. 10/2011, page. 23, OSIM Bucuresti.	MITRE VIOREL, & colab.	Biomedical	Chemical Eng. biomedicine	New preparation of aspartic acid racemic using maleic anhydride and ammonia as a reagent in the presence of NH ₄ Cl to yield 80-85%.
5	New cultivar of Gerbera, certified by ISTIS: 2 cultivars Rosamia, certified by ISTIS, Certificate No. 8297/23.11.2007.	Cantor Maria-& col.	Horticulture	Economic agents, commercial societies individual farmers	Recommended for all the cultivate area from our country in the greenhouses. Ideal for cut flower or floral arrangements.
6	New cultivar of Gerbera, certified by ISTIS: Dora certificat by ISTIS, Certificate No. 8296/23.11.2007.	Chiş Lenuţa Mirela, Cantor Maria -& col.	Horticulture	Economic agents, commercial societies individual farmers	Recommended for all the cultivate area from our country in the greenhouses. Ideal for cut flower or floral arrangements
7	Two new cultivar of Gladiolus hybridus: Excelsa, Patent No. 00251/2011 and Candida Ali, Patent No. 00252/2011, OSIM Bucuresti.	Cantor Maria-USAMV Cj, Chiş Lenuţa Mirela-SCDP CIUJ	Horticulture	Economic agents, commercial societies individual farmers	Recommended for all the cultivate area from our country in the greenhouses. Ideal for cut flower or floral arrangements
8	Nine new cultivar of Gladiolus hybridus, certified by ISTIS: Medina, Coral Passion – ISTIS Certificate issued in 2009; Melna, Mellisa, Orange Butterfly – ISTIS Certificate issued in 2011; Candida Ali, Excelsa – ISTIS Certificate issued in 2009; Fistic and Apus de Soare – ISTIS Certificate issued in 2011.	Cantor Maria-& col.		Economic agents, commercial societies individual farmers	Recommended for all the cultivate area from our country in the greenhouses. Ideal for cut flower or floral arrangements

ANIMAL SCIENCE AND TECHNOLOGY

Crt. No.	Product/patent/ technology	Authors	Domain	Beneficiary	Description
1	Tehnological Transfer - Optimization and harmonization of cattle breeding, according to EU requirements	G.Onaciu	Cattle technology	S.C. Modern Farm S.R.L	Technology for 200 Milk bovine
2	Tehnologic Transfer - Optimization of sheep and goat breeding	S.Daraban	Sheep and goat technology	S.C. Horațiu S.R.L	Technology for sheep and goats
3	Maintaining <i>Bombyx Mori</i> genetic fund of species. Patent No. Ro-125576-2010, OSIM Bucuresti	A.Matei, L.A. Mărghitas, D.S.Dezmirean, I.Pasca, Laura Laslo, M.Bentea	Animal Science, Sericulture-	S.C. Sericarom S.A.; Branch ANARZ România;	Conservation technique for native strains and hybrids
4	Tehnological Transfer - Ecologic Apicol Module for family.	L.A. Mărghitas, D.S. Dezmirean, Bobis Otilia	Animal Science, Apiculture	Stupina Sazs, Corund	Implementation of the technology for ecologic breeding of bees
5	Tehnological Transfer - Artificial insemination of bees ecotype <i>Apis mellifera carpatica</i> from Transylvania	L.A. Mărghitas, D.S. Dezmirean	Applied Biotechnology	Stupina Sazs, Corund	Implementation of the technology for Artificial insemination to preserve the biodiversity of local biotypes

VETERINARY MEDICINE

Crt. No.	Product/patent/ technology	Authors	Domain	Beneficiary	Description
1	ERISOL - Antidiarrhea and rehydration oral medicine. Patent No. 149003/2010, OSIM Bucuresti.	Roman Morar, Nicolae Miu, Emilia Morar, Corina Roman, Dana Pusta	Medicină Veterinară	SC Plantarom	Antidiarrhea and rehydration oral medicine
2	Administration protocol (technique) of a naftalendionic derivative used to control tumor growth. Patent granting in process; Application No. A/01250/30.11.2010.	Radu Tamaian Ioan Marcus Bogdan Sevastre Iulia Prodan	Veterinary oncology	ICSI Rm. Valcea	The invention relates to a new 2.3-derived naftalendionic disubstituit, chlorinated, with the formula C ₁₆ H ₉ ClN ₂ O ₃ : N-(3-chloro-1,4-dioxo-1,4-dihidronaftalen-2-yl)pyridine-3-carboxymide, at an injectable product, and also to its use in controlling tumor growth.
3	Naftalendionic derivative used to control tumor growth. Patent granting in process; Application No. A/01251/30.11.2010	Niculescu Violeta Carolina Radu Tamaian Ioan Marcus Bogdan Sevastre Iulia Prodan	Veterinary oncology	ICSI Rm. Valcea	The invention refers to a new derived naphthaendionic 2.3 - disubstituit, thiols, with the formula C ₁₆ H ₁₀ N ₂ O ₃ S: N-(1,4-dioxo-3-sulphanilic-1,4-dihidronaftalen-2-yl)pyridine-3-carboxamide, at two types of immunoconjugates (antigenic determinants chosen as specific targets for monoclonal antibodies or for antigen binding fragments derived from the monoclonal antibodies, are DNA topoisomerase II α chain and Tenascina C) polispecifics (with specific reactivity to <i>Mus musculus</i> and / or <i>Rattus norvegicus</i> and <i>Homo sapiens</i>), that have as load cytotoxic N-(1,4-dioxo-3-sulphanilic-1,4-dihidronaftalen-2-yl)pyridine-3-carboxamide, and to the combined use of these immuno-conjugates as targeted antipro-

					liferative.
4	Methods of maintaining of the breeds from the genetic pool of the Bombyx mori L species.	Matei Alexandra, L.Mărghita ș, D.Dezmirean, Pașca Ioan, Laslo Laura, M. Bențea	Animals amelioration	-	Methods of maintaining of the breeds from the genetic pool of the Bombyx mori L species.

Appendix – Students practice**Romania**

3474 - 2009
3672 - 2010
3766 - 2011

**Germany**

87 - 2009
131 - 2010
123 - 2011

**UK**

165 - 2009
172 - 2010
142 - 2011

Students practice in the country (2009 – 2011)

Faculty	Study year	No. of students		
		2009	2010	2011
Faculty of Agriculture	I	274	243	204
Faculty of Agriculture	II	244	233	288
Faculty of Agriculture	III	187	243	275
Faculty of Agriculture	IV	199	175	226
TOTAL FACULTY OF AGRICULTURE		1115	894	993
Faculty of Horticulture	I	441	459	410
Faculty of Horticulture	II	377	397	381
Faculty of Horticulture	III	294	315	296
Faculty of Horticulture	IV	201	252	243
TOTAL FACULTY OF HORTICULTURE		1204	1423	1330
Faculty of Animal Science and Biotechnology	I	72	108	95
Faculty of Animal Science and Biotechnology	II	62	88	93
Faculty of Animal Science and Biotechnology	III	60	63	80

Faculty of Animal Science and Biotechnology	IV	76	58	64
TOTAL FACULTY OF ANIMAL SCIENCE AND BIOTECHNOLOGY		270	317	332
Faculty of Veterinary Medicine	I	266	295	264
Faculty of Veterinary Medicine	II	137	234	236
Faculty of Veterinary Medicine	III	157	135	225
Faculty of Veterinary Medicine	IV	117	162	140
Faculty of Veterinary Medicine	V	102	114	140
Faculty of Veterinary Medicine	VI	106	98	106
TOTAL FACULTY OF VETERINARY MEDICINE		885	1038	1111
TOTAL USAMV CJ	85 %	3474	3672	3766

Students practice abroad (2009 – 2011)

Faculty	2009		2010		2011	
	No. of students	Foreign Country	No. of students	Foreign Country	No. of students	Foreign Country
Faculty of Agriculture	27	Germany	27	Germany	32	Germany
	43	United Kingdom	44	United Kingdom	37	United Kingdom
	14	Cyprus	-	-	-	-
Faculty of Horticulture	100	United Kingdom	105	United Kingdom	87	United Kingdom
	4	Germany	18	Germany	17	Germany
Faculty of Animal Science and Biotechnology	22	United Kingdom	23	United Kingdom	18	United Kingdom
	45	Germany	73	Germany	66	Germany
Faculty of Veterinary Medicine	11	Germany	13	Germany	10	Germany
TOTAL USAMV CJ	266		303		267	

**LIST OF ROMANIAN COMPANIES WITH WHICH THE UNIVERSITY HAS CONCLUDED AGREEMENTS
FOR THE STUDENTS PRACTICAL TRAINING**

FACULTY OF AGRICULTURE

Crt. No.	Company/Institution	Activity Domain
1	SCDA TURDA	Agronomy
2	SC ADA PROD COM SRL VIISOARA, CLUJ	Agronomy
3	SC AGROMEC MIHAI VITEAZUL S.A., CLUJ	Agronomy
4	SC AGRONOVA SRL, CLUJ	Agronomy
5	SC ECOINSPECT SRL	Agronomy
6	OFICIUL JUDEȚEAN DE CONSULTANȚĂ AGRICOLĂ CLUJ	Agronomy
7	BÖKER JUNGPLANZEN, GERMANIA	Agronomy
8	CHRISTIAN PUTENSEN, GERMANIA	Agronomy
9	FRITZ RÜPKE, GERMANIA	Agronomy
10	GERHARD KAPISKE, GERMANIA	Agronomy
11	H.L. WIEDENROTH, GERMANIA	Agronomy
12	HELMUT BREUER, GERMANIA	Agronomy
13	KLINIK DR OTTO BUCH , GERMANIA	Agronomy
14	KOBERLE CLAUDIA, GERMANIA	Agronomy
15	SC COMPANIA DE APĂ SOMEȘ CLUJ NAPOCA	Engineering and Environmental protection
16	SC NAPOLACT SRL CLUJ NAPOCA	Food engineering
17	SC PANEMAR MORARIT SI PANIFICATIE CLUJ NAPOCA	Food engineering
18	SC COSM-FAN SRL CLUJ	Food engineering
19	ASOCIATIA PENTRU PROTECTIA CONSUMATORULUI TURDA	Food engineering
20	SC CIA ABOLIV SRL – MIHAI VITEAZU, CJ	Food engineering
21	McDONALDS MANASTUR CJ	Food engineering
22	PF GANSCA ANISOARA – MANASTIRENI, CJ	Food engineering
23	SC ALBA DONER PROD – CIUGUD JUD ALBA	Food engineering
24	SC ALBALACT – ALBA	Food engineering
25	SC ANASTYL - CLUJ	Food engineering
26	SC BENDEARCRIS – MICESTII DE CAMPIE	Food engineering
27	SC BUJOOBO PRODCOM – LUDUS, JUD MS	Food engineering
28	SC CORADYN - CLUJ	Food engineering
29	SC EVERST PROD SERV- CLUJ NAPOCA	Food engineering
30	SC GEC STAR ELECTRA IMPEX – CAMPENI,AB	Food engineering
31	SC GRILL SRL – SEINI – JUD MM	Food engineering
32	SC HIVKE IMPEX – DEJ CLUJ	Food engineering
33	SC HOCHLAND ROMANIA – SIGHISOARA JUD MS	Food engineering
34	SC HOLY BREAD – CLUJ NAPOCA	Food engineering
35	SC KAZAL SRL - DEJ	Food engineering
36	SC KORENA –SIMLEU SILVANIEI - SALAJ	Food engineering
37	SC MARELE ALB - TURDA, CJ	Food engineering
38	SC MAYER PANE – BACIU, CJ	Food engineering
39	SC MIA CARN – MIRASLAU	Food engineering
40	SC MIB PRODCOM SRL - CLUJ	Food engineering
41	SC MUSTUIUC PROD – NASAUD, JUD BN	Food engineering
42	SC NICOLA CARM IMPEX – CLUJ NAPOCA	Food engineering
43	SC OLIVER INVEST SRL – OIEJDEA, GALDA DE JOS, AB	Food engineering
44	SC PAN ALIN – GLOD - SALAJ	Food engineering

45	SC PAN GRUP DUNCA, VISEUL DE SUS, MM	Food engineering
46	SC PASZTOR HUS PROD – FOIENI, JUD SM	Food engineering
47	SC PROD ALIMENT – CAMPIA TURZII	Food engineering
48	SC QUANTAL – CAMPIA TURZII, CJ	Food engineering
49	SC REAL WEST -CLUJ	Food engineering
50	SC ROMFULDA PROD, BECLEAN, BN	Food engineering
51	SC RONA SRL – LITENI JUD CLUJ -	Food engineering
52	SC SICILIANA –SIMLEU SILVANIEI - SALAJ	Food engineering
53	SC STANCA&TUDOR – CAMPIA TURZII, CJ	Food engineering
54	SC TEHNOSERVICE - ALBA IULIA	Food engineering
55	SC TRANSILVANIA OVICARN – ZALAU, SJ	Food engineering
56	SC UNILACT TRANSILVANIA – UNIREA, AB	Food engineering
57	SC XAMUS IMPEX – BACIU, CLUJ	Food engineering

FACULTY OF HORTICULTURE

Crt. No.	County	Company/Institution	Activity Domain
1	Cluj	ITCSMS	Horticulture
2	Cluj	G&D consulting	Horticulture
3	Cluj	SCDP Cluj-Napoca	Horticulture
4	Cluj	Întrep.Sere Câmpia Turzii	Horticulture
5	Cluj	ANCPI Cluj-Napoca	Horticulture
6	Cluj	Ferma Legumicolă Peteanu	Horticulture
7	Cluj	Ferma legumicolă Someșeni	Horticulture
8	Cluj	S.C.Hivke Impex S.R.L Dej	Horticulture
9	Cluj	SC Agroindustrială Cluj	Horticulture
10	Cluj	Ferma didactică Cojocna	Horticulture
11	Cluj	Ocolul Silvic Beliș	Forestry
12	Cluj	Ocolul Silvic Fântânele	Forestry
13	Cluj	Ocolul Silvic Gilău	Forestry
14	Cluj	Pepiniera Silvică Mihai Viteazu	Forestry
15	Cluj	ICAS Cluj-Napoca	Forestry
16	Cluj	Ocolul Silvic Privat Valea Ierii	Forestry
17	Cluj	City Green S.R.L. Cluj	Landscape
18	Cluj	AAZ S.R.L. Cluj	Landscape
19	Cluj	Grădina cu Flori SRL Cluj	Landscape
20	Cluj	Mini Garden SRL Cluj	Landscape
21	Cluj	SC Administrarea Domeniului Public SA Gherla	Landscape
22	Cluj	SC. Anilore Prod.Com Cluj (Contabile)	IEA/IMAPA
23	Cluj	Pensiunea Raluca Bologa	IEA/IMAPA
24	Cluj	SC. Adriserv SRL. (rest. Valahia) Cluj	IEA/IMAPA
25	Cluj	Hotel Onix Cluj	IEA/IMAPA
26	Cluj	S.C. Many solutions S.R.L Cluj	IEA/IMAPA
27	Cluj	S.C. DIGIX S.R.L Cluj	IEA/IMAPA
28	Cluj	Restaurant New Croco	IEA/IMAPA
29	Cluj	Brutăria Ioasim Cluj	IEA/IMAPA
30	Cluj	Restaurant Agronomia	IMAPA
31	Cluj	Fabrica de bere Ursus	IEA/IMAPA
32	Cluj	Brutăria Velpitar Cluj	IEA/IMAPA

33	Cluj	Grădina Botanică Jibou	Landscape
34	Cluj	Grădina Botanică Cluj	Landscape
35	Cluj	SC. Europlant Bonțida SA	Landscape
36	Cluj	SC. Meseriași SRL Cluj-Napoca	Landscape
37	Cluj	SC Nea Garden SRL Cluj	Landscape
38	Cluj	Univ. Babeș-Bolyai, parc sportiv Iuliu Hașeganu	Landscape
39	Cluj	RADP Cluj	Horticulture
40	Alba	SCVV Blaj	Horticulture
41	Alba	SC Agroindustrială Jidvei	Horticulture
42	Alba	SCVV BLAJ	Horticulture
43	Alba	Mirea Iulian Ilie – Birou individual de arhitectură	Landscape
44	Alba	SC. Bell Flover SRL.	Landscape
45	Alba	Hotel Fan Alba Iulia	IEA/IMAPA
46	Alba	Ocolul Silvic Sebeș	Forestry
47	Alba	Ocolul Silvic Dealu Negru	Forestry
48	Bistrița	SCDP Bistrița-Năsăud	horticol
49	Bistrița	SC. Pombis SA. Bistrița	horticol
50	Bistrița	SC Comgaby Moln SRL Bistrița Năsăud	Landscape
51	Bistrița	SC. Fresh SRL Bistrița	Landscape
52	Bistrița	Pensiunea Ștefan Bistrița	IEA/IMAPA
53	Bistrița	Ocolul silvic Tihuța-Colibița	Forestry
54	Bistrița	Ocolul Silvic Privat Mărgău	Forestry
55	Bistrița	Ocolul Silvic Joseni Bârgaului	Forestry
56	Bistrița	Ocolul Silvic Beclean	Forestry
57	Bistrița	Ocolul Silvic Maieru Bistrița Năsăud	Forestry
58	Bistrița	Ocolul Silvic Someș Țibleș Bistrița Năsăud	Forestry
59	Mureș	S.C. Agroindustrială Reghin	Horticulture
60	Mureș	Sucmerom SRL. Reghin	Horticulture
61	Mureș	Ocolul Silvic Slăvești	Forestry
62	Mureș	Topodumi SRL Shighișoara	Cadastre
63	Sălaj	Pepinierele Hida	Horticulture
64	Sălaj	SC Sălaj Plant SA.	Landscape
65	Sălaj	Pensiunea Vlasin	Economic engineering in agriculture / Engineering and management in catering and agro-tourism
66	Sălaj	Vila Vlad Zalău	Economic engineering in agriculture / Engineering and management in catering and agro-tourism
67	Sălaj	Ocolul silvic Magura Șimleul Silvaniei	Forestry
68	Maramureș	RADP Baia Mare	Horticulture
69	Maramureș	A.F. Pop Ioan Claudiu Buciumi	Horticulture
70	Maramureș	SC. Gherbera SRL Baia Mare	Landscape
71	Sibiu	SC. Julia Bio-Expo SRL Sibiu	Landscape
72	Satu-Mare	SC: Iuniperus SRL Satu-Mare	Landscape
73	Satu-Mare	SC. Florisal SRL Satu Mare	Landscape
74	Satu-Mare	SC. Garden Design SRL Satu Mare	Landscape
75	Bihor	Pensiunea Tudor Oradea	Economic engineering in agriculture / Engineering and management in

			catering and agro-tourism
76	Harghita	Vileco SRL. Gheorgheni	Horticulture
77	Harghita	Ocolul Silvic Privat TG. Secuiesc	Forestry
78	Suceava	Ocolul Silvic Crucea Suceava	Forestry

FACULTY OF ANIMAL SCIENCE AND BIOTECHNOLOGY

Crt. No.	Company/Institution	Activity Domain
1	S.C. ONCOS S.R.L.	Zootechnics
2	S.C. BIOTERRA S.R.L.	Zootechnics
3	S.C. AGROLACT S.R.L.	Zootechnics
4	P.I.C ROMÂNIA	Zootechnics
5	S.D.E COJOCNA	Zootechnics
6	S.C. TRANSAVIA S.A.	Zootechnics
7	S.C. AVEIMPEX S.R.L.	Zootechnics
8	S.C. SEMTEST BVNSA	Zootechnics
9	S.C. EUROBULL S.R.L. LECHINȚA	Zootechnics
10	O.A.R.Z. CLUJ	Zootechnics
11	SC MODERNFARM SRL	Zootechnics
12	S.C. ALBALACT S.A.	Biotechnology
13	S.C. SPUMANTE SILVANIA S.A.	Biotechnology
14	S.C. TRANSAVIA S.A.	Biotechnology
15	O.A.R.Z. CLUJ- Laborator de semiologie	Biotechnology
16	S.C. BIOTERRA S.R.L.	Biotechnology
17	SC AMARETO IMPEX SRL	Biotechnology
18	S.C. CEHUL SILVANIEI, JUD SALAJ	Pisciculture
19	S.C. CHIOCHIS, JUD. BISTRIȚA NASAUD	Pisciculture
20	STATIUNEA DE CERCETARE NUCET, DÂMBOVIȚA	Pisciculture
21	S. C. ARINIȘ	Pisciculture
22	PĂSTRĂVĂRIA REMEȚI	Pisciculture
23	ICAS GILĂU, JUD CLUJ	Pisciculture
24	S.C. PIRANYA JUD. BOTOȘANI	Pisciculture
25	PĂSTRĂVĂRIA PREJMER JUD. BRASOV	Pisciculture
26	REZERVAȚIA LACUL STIUCII, SĂCĂLAIA	Pisciculture
27	S.C. LOSTRIȚA, JUD. MARAMUREȘ	Pisciculture
28	S.C. FIRIZA, JUD. MARAMUREȘ	Pisciculture
29	PĂSTRĂVĂRIA TISMANA, TG. JIU	Pisciculture
30	PĂSTRĂVĂRIA CÂMPUL CETĂȚII JUD. MUREȘ	Pisciculture
31	PASTRĂVĂRIA GILĂU, CLUJ	Pisciculture

FACULTY OF VETERINARY MEDICINE

Crt. No.	Company/Institution	County
1	DSVSA Alba	Alba
2	Cab vet Meseșenii de Jos	Alba
3	CSV Teiuș	Alba
4	SC CANIS VET SRL Alba Iulia	Alba
5	CSV Arieșeni	Alba

6	Cab vet dr. Ursu Vasile - Stremț	Alba
7	CSV Alba Iulia	Alba
8	CSV Baia de Arieș	Alba
9	CSV Crișeni	Alba
10	CSV Petrești	Alba
11	CSV Cîmpeni	Alba
11	Cab vet dr.Mateescu Mihai- Bascov	Argeș
12	CSV Bacău	Bacău
13	CSV Comănești	Bacău
14	DSVSA Bihor	Bihor
15	Cab vet Dr.Benyovski Sandor Oradea	Bihor
16	CSV Bulz	Bihor
17	Cab vet Dr.Jankay Ferdinand - Oradea	Bihor
18	SC ROGERUS Oradea	Bihor
19	SC ANIFARM PREST SRL Aleșd	Bihor
20	CSV Tileagd	Bihor
21	Cab vet dr. Cipou Mircea - Aușeu	Bihor
22	CSV Salonta	Bihor
23	CSV Mădăraș	Bihor
24	SC Agricola SRL Șieu Măgheruș	Bistrița Năsăud
25	Cab vet Dr.Naghiu Vasile - Teaca	Bistrița Năsăud
26	Cab vet Dr. Bojthe Barna - Coșbuc	Bistrița Năsăud
27	SC ROMFULDA PROD.SRL Beclean	Bistrița Năsăud
28	SC TONVET Bistrița	Bistrița Năsăud
29	Cab vet dr. Sarkany Francisc - Bistrița	Bistrița Năsăud
30	CSV Mușeni	Bistrița Năsăud
31	DSVSA Bistrița	Bistrița Năsăud
32	SC VETERIN-M SRL - Milas	Bistrița Năsăud
33	SC VET MEDICA SRL Sângeorz Băi	Bistrița Năsăud
34	DSVSA Botoșani	Botoșani
35	Cab vet dr.Aroșoai Lucian Dărăbani	Botoșani
36	Cab vet Dr. Sipos Zoltan Bran	Brașov
37	Cab vet Dr.Șerban Simion Brașov	Brașov
38	Cab vet Dr. Pâtea Gheorghe - Bunești	Brașov
39	CSV Zărnești	Brașov
40	DSVSA Brașov	Brașov
41	SC SOPHI VET SRL Brașov	Brașov
42	SC L&D LUCA IND SRL Zărnesti	Brașov
43	SC TERRA BLACHORUM IMPEX SRL Șercaia	Brașov
44	Cab vet dr. Drăghici Sorin - Voila	Brașov
45	DSVSA Cluj	Cluj
46	SC MEDIVET BOGDAN SRL	Cluj
47	SC SANIVET SRL	Cluj
48	CSV Cuzdrioara	Cluj
49	CSV Călățele	Cluj

50	SC TRIVET SRL Cluj	Cluj
51	ZOOMEDICA SRL Cluj	Cluj
52	Asoc.de protecție a animalelor Cluj	Cluj
53	Cab vet dr. Mugea Mircea Cluj	Cluj
54	SC BIOVET SRL Cluj	Cluj
55	CSV Sîncrani	Cluj
56	CSV Cluj 1	Cluj
57	CSV Mihai Viteazu	Cluj
58	SC VETOMED sev SRL Cluj Napoca	Cluj
59	SC ALVET SRL Cluj	Cluj
60	CSV Săvădisla	Cluj
61	SC PROMOVET SRL Cluj Napoca	Cluj
62	SC AGRO ZOO BOO SRL Cluj	Cluj
63	SC AGROFAN PROD.SRL Cluj	Cluj
64	SC VET & VET SRL Cluj	Cluj
65	SC SENCO SRL Cluj	Cluj
66	SC CRISVET SRL Cluj	Cluj
67	Cab vet dr.Borbil Septimiu Cluj Napoca	Cluj
68	SC PETZONE SRL Cluj Napoca	Cluj
69	SC VIPET BG SERVICE SRL Cluj Napoca	Cluj
70	CSV Cătina	Cluj
71	SC MELIVET SRL Cluj	Cluj
72	SC SLIM VET SRL Cluj Napoca	Cluj
73	SC BACONE IMPEX SRL Cluj-Napoca	Cluj
74	Spitalul de urgență FMV Cluj Napoca	Cluj
75	CSV Florești	Cluj
76	SC BIOVET SRL	Cluj
77	SC ANIMAFLOREVET SRL	Cluj
78	SC SCURTOMAX SRL	Cluj
79	SC PROFESIONAL VET SRL	Cluj
80	CSV Baci	Cluj
81	CSV Căpuș	Cluj
82	SC ADA SRL	Cluj
83	SC AGRONOVA SRL	Cluj
84	CSV SOMEȘENI	Cluj
85	SC Reszagh Doki SRL Covasna	Covasna
86	SC SZIKAVET SRL Sf.Gheorghe	Covasna
87	SC PHOX-VET SRL Sf.Gheorghe	Covasna
88	SC SILVIA SRL cab vet - Covasna	Covasna
89	DSVSA Covasna	Covasna
90	SC FAUNUS-VET SRL Aita Mare	Covasna
91	SC BOCI-CSEPERDE SRL Telechia	Covasna
92	ILVET FARM SRL Craiova	Dolj
93	DSVSA Gorj	Gorj
94	SC FARMAVET SRL Tg Jiu	Gorj

95	Cab vet Sărmaş	Harghita
96	Cab vet Dr. Palffy Zoltan - Harghita	Harghita
97	Cab vet dr. David Iosif - Lăzarea	Harghita
98	CSV Tuşnad	Harghita
99	Cab vet dr.Szekely Arpad - Gheorgheni	Harghita
100	DSVSA Harghita	Harghita
101	Cab vet dr.Salamon Tiberiu Miercurea Ciuc	Harghita
102	SC HELPVET SRL -Miercurea Ciuc	Harghita
103	Cab vet dr. Iszlay Tibor - Păuleni Ciuc	Harghita
104	SC EGRES SRL Lunca de Jos	Harghita
105	Cab vet dr. Antal Vidor - Cârţa	Harghita
106	Cab vet.dr. Kollo Felix - Ditrău	Harghita
107	CSV Orăştie	Hunedoara
108	Cab vet TURCAS Deva	Hunedoara
109	Cab vet Dr. Gorneanu Răzvan - Deva	Hunedoara
110	CSV Vulcan	Hunedoara
111	SC PROVET-SAN SRL Deva	Hunedoara
112	CSV Simeria	Hunedoara
113	Cab vet dr. Friedrich Ştefan - Călan	Hunedoara
114	SC PARVIN VET SRL Hunedoara	Hunedoara
115	SC FARM BECARS VET Deva	Hunedoara
116	CSV Oarţa de Jos	Maramureş
117	Cab vet Dr. Ciula Sorin - Vadu Izei	Maramureş
118	Cab vet Dr. Ficai Robert - Seini	Maramureş
119	CSV Budeşti	Maramureş
120	SC KARIN SRL - Seini	Maramureş
121	Cab vet.Dr.Bogdan Gheorghe- Baia Mare	Maramureş
122	SC MEDPOL SERV SRL Baia Mare	Maramureş
123	SC ANCAFARMVET SRL Baia Mare	Maramureş
124	SC CLINVET -SERV SRL Baia Mare	Maramureş
125	Cab vet dr.Leta Vasile - Ulmeni	Maramureş
126	CSV LAPUŞ	Maramureş
127	Cab vet.Dr.Mulea Mihai- Baia Mare	Maramureş
128	Spital veterinar Gini House- Baia Mare	Maramureş
129	P.F. Dr.Kiss Barna Tg.Mureş	Mureş
130	SC R&R SRL Tg.Mureş	Mureş
131	SC TONVET Tg.Mureş	Mureş
132	SC ULTRAVET SRL Tg.Mureş	Mureş
133	Cab vet Dr. Păcurar Marius Tg.Mureş	Mureş
134	CSV Lunca	Mureş
135	SC SANAGRA SA Sântana de Mureş	Mureş
136	DSVSA Mureş	Mureş
137	CSV Reghin 2	Mureş
138	S.C.D.C.B. Tg.Mureş	Mureş
139	Cab vet dr. Antal Zsolt – Tg Mureş	Mureş

140	Cab vet dr. Todoran Viorel – Tg Mureș	Mureș
141	VET CLINIC SRL Ploiești	Prahova
142	SC DANIVET ARGO SRL Bărcănești	Prahova
143	SABADAS VET SRL Satu Mare	Satu Mare
144	Spital vet. Satu Mare	Satu Mare
145	CSV Tășnad	Satu Mare
146	Cab vet.dr. Bartiș Sabin – Satu Mare	Satu Mare
147	Sc FANDANADI SRL- TĂȘNAD	Satu Mare
148	DSVSA SATU MARE	Satu Mare
149	SC CRINUMED SRL - TĂȘNAD	Satu Mare
150	SC AVE IMPEX SRL	Satu Mare
151	SC PETREȘTI-CAREI	Satu Mare
152	SC NIMROD SRL	Satu Mare
153	Cab vet Văsăliuț - Jibou	Sălaj
154	SC CRIS-VET SRL Zalău	Sălaj
155	SC ANGISAND SRL Gârbău	Sălaj
156	CSV Bocșa	Sălaj
157	SC ANIMAVET SRL Șimleu Silvaniei	Sălaj
158	Cab vet dr.Lungu Marieta Zalău	Sălaj
159	CSV Nușfalău	Sălaj
160	DSVSA Sălaj	Sălaj
161	SC VIMAMED SRL Plesca	Sălaj
162	CSV Poplaca	Sibiu
163	Cab vet - Bazna	Sibiu
164	Cab vet dr. Toma Neculai - Horodnic	Suceava
165	SC FLAMINGO COM SERVICE SRL Măldăieni	Teleorman
166	DSVSA Tulcea	Tulcea
167	CSV Drăgășani	Vâlcea
168	Cab vet dr. Purice Adriana- Vâlcea	Vâlcea
169	Cab vet dr.Anicescu Viorel -Ocnele Mari	Vâlcea
170	SC TIMVET SRL Vâlcea	Vâlcea
171	DSV Vâlcea	Vâlcea
172	Cab vet dr. Bociog Ion - Costești	Vâlcea
173	Cab vet dr. Popescu Ioana - Rm Vâlcea	Vâlcea
174	Cab vet - Gyula	Ungaria
175	Cabinete veterinare	Grecia

Appendix – The teaching and experimental research station

The basis of the present University's Teaching and experimental research station was created in 1869 under the farm named "Ferma Mănăştur" that belonged to the Agricultural Institute, and continued with the Governmental Decision No. 123/1993 concerning the reorganization and function of the teaching and experiment stations belonging to the higher education institutes of agriculture.

The main objectives of the University's Teaching and experimental research station activity are:

- Supporting the practical education of students by experimental fields and zoo-technical farms equipped with modern technical equipment;
- Supporting the research activities of the University's teachers and PhD students;
- Supporting the technological transfer of the University's research activities results;
- Production of seeds and planting material;
- Pilot project for farmers training in the vegetal and animal field;
- Organizing of workshops and practical demonstrations with agricultural equipments and machinery, for students, farmers and teachers;

The land of the University's Teaching and experimental research station is located around the Cluj Napoca City, in four different places: Cojocna, Jucu, Hoia and Şapca Verde, summing up to a total agricultural area of 2028.13 ha, plus a total of 201.75 ha of non-agricultural area (forests, rivers, roads, constructions, unproductive land). Out of this four, the Cojocna and Jucu locations include next to the agricultural area, animals farms as well.

The land structure for each of the four University's Teaching and experimental research station locations is presented in the Table below:

Land structure	Cojocna	Hoia	Sapca Verde	Jucu	TOTAL
Arable (ha)	400	57.27	11.58	660.32	1129.17
Pastures (ha)	176	27.29	0.39	312.15	515.83
Hay (ha)	32.87	13.7	0.8	329.13	376.5
Orchard (ha)	0	0	6.63	0	6.63
Total Agricultural Area (ha)	608.87	98.26	19.4	1301.6	2028.13
Total Non-Agricultural Area* (ha)	58.23	50	4.79	88.73	201.75
* forest, rivers, roads, constructions, unproductive					

The main agricultural crops cultivated within the University's Teaching and experimental research station are presented in the Table below:

Crop	Land under crops (ha)
Wheat	70
Mash (wheat & triticale)	20

Rye	5
Maize	100
Corn Silage	70

The structure of the livestock raise within the University's Teaching and experimental research station is presented in the Table below:

Animal species bred	Breeding stock (heads)
Cattle	297
Merinos Sheep	413
Tigaie Sheep	644
Pigs	125
Hens	4671

In the Hoia location there are two domestic sheep breeds: the Merinos de Cluj – created by the University's researchers, and Tigaie. In the Cojocna location there is a modern animal breeding complex comprising tree farms: cattle, pigs and poultry.

In accordance to the provisions of the Law No. 45/2009 and the Law No. 72/2011, in the near future the orchard of the Station for research and development of orchard from Cluj Napoca will be integrated within the University's Teaching and experimental research station, as part of the teaching and experimental research activities of the University.

Appendix – Long life learning programs

LONG LIFE LEARNING PROGRAMS FOR THE COMMUNITY

Modernization of Agricultural Knowledge and Information (MAKIS)

The project Proiectul „ Modernization of Agricultural Knowledge and Information System” (MAKIS) was implemented by the Romanian Ministry of Agriculture, Forests and Rural development (MADR) and the The National Veterinary and Food Safety Agency (ANVSA) by the Project Management Unit (UMP). The loan agreement between Romania and the International Bank for Reconstruction and Development concerning the financing of the project was signed on the 28th of January, 2005 being ratified by the Law No. 170/2005. The Work Bank Council approved on the 24th of June 2005, the enforcement of the project.

Contractual data:

Project Title:	Training and consulting specialists in agricultural extension, food safety inspectors and agricultural researchers from North-West and Centre regions from Romania
Contract Number	<i>World Bank MAKIS loan 4758 RO, Contract No. 2444 / 30.09.2008</i>
Date of start	<i>10th October 2008</i>
Period of the contract	<i>10th October 2008 – 30th September 2010</i>
Contracting Authority	<i>UMP – MAKIS</i>
Contractor	<i>USAMV Cluj in association with ADT Projekt GmbH - Germania</i>
Contract value	4,824,207 ROL

The main project objectives:

Within the program entitled: "Modernization of Agricultural Knowledge and Information (MAKIS) ", the education and training component aims: to improve the capacity of researchers, the agricultural consultants, and the specialists in food safety, to better serve the needs and improve competitiveness of the farmers/producers and processors in the context of EU accession, to increase the access of the farmers and the processors to knowledge on technologies related to production, quality control, food safety, processing and marketing in order to meet the EU requirements.

The general objectives:

- a. Improving the capacity of the agricultural researchers, the agricultural specialists in extensions and consultancy and the inspectors in the domain of the food safety, to meet better the needs of the farmers and the agro-processors from the food industry, in the context of the accession to the EU
- b. broadening the activity field of the specialized training centers for the specialists in extension and consultancy, for the inspectors in the domain of the food safety and for the agricultural researchers, by establishing of the Training and Information Center (**CPI**) for the North-West Region and the Central Region of Romania – the counties: Alba, Bistrita, Cluj, Harghita, Maramures, Mures, Satu Mare and Salaj

The main activities performed during the project implementation:

- Assessment of the Training needs
- Elaboration of training plans, Curricula and course materials
- Organizing of the training courses
- Evaluation of training results and impact
- Developing the strategy for setting-up a sustainable Training and Information Centre (TIC) in North-West and Central Region of Romania within the University of Agricultural and Veterinary Medicine Cluj-Napoca - to serve as a professional training provider for the institutions subordinated to the Romanian Ministry of agriculture, forests and rural development (MAPDR)

The participants attending the courses organized during the implementation of the project by the Training and Information Centre within the University of Agricultural and Veterinary Medicine Cluj-Napoca:

- 420 specialists in extension and agricultural consultancy, over 21 courses for a term of 21 days
- 120 food safety inspectors, over 6 courses for a term of 10 days
- 40 agricultural researchers, over 2 courses for a term of 5 days

The professional training courses provided by Training and Information Centre of Cluj-Napoca were focused on presenting modern production technologies, the economic aspects of management and marketing, and presenting the regulations and requirements established both at the EU and national level. There are also included the regional specific priorities for the North West Region and the Centrum Region. The training courses aimed the specialists in extension and agricultural consultancy, the food safety inspectors, and the agricultural researchers, from the North West Region and the Centrum Region of Romania.

Appendix – Facilities for students

STUDENTS' HOSTELS

	2007	2008	2009	2010	2011
Number of existing places	1047	1047	1047	1047	1047
Number of accommodated students	1047	1047	1047	1047	1047
Number of requests filed	1750	1751	1894	2114	2088

SPORTS HALL AND GROUND

- **Number of Sports grounds:** 2 of about 2388 square meters
- **Number of Sports halls:** 1 of about 597 square meters

NUMBER OF SCHOLARSHIPS AWARDED

Crt. No.	Academic year	Semester	Scholarship Types				
			Performance	Merit	Study	Social	TOTAL
1.	2007-2008	SEM. I	24	73	582	127	806
		SEM. II	24	66	602	115	807
2.	2008-2009	SEM. I	24	62	532	175	793
		SEM. II	24	68	585	88	765
3.	2009-2010	SEM. I	22	57	569	277	925
		SEM. II	22	81	561	204	868
4.	2010-2011	SEM. I	25	62	619	313	1019
		SEM. II	25	88	573	209	895
5.	2011-2012	SEM. I	24	72	507	226	829

In addition to the above scholarships the University provides financial assistance for the students having special family events as baby born, parents death, etc.

CAMPS

Every year our students have the opportunity to join for free one of the students camps from the Black Sea Coast or the Romanian mountains. The financial support is provided by the National Authority for Youth and Sports.

Crt. No.	Academic year	Season	No of University's beneficiary students
1.	2007-2008	-	82
2.	2008-2009	Winter	24
		Summer	100
3.	2009-2010	Winter	32
		Summer	86
4.	2010-2011	Winter	-
		Summer	110
5.	2011-2012	Winter	-

BEST STUDENTS' TRIP

Crt. No.	Academic year	No of participating students	Trip location
1.	2007-2008	110	Croatia
2.	2008-2009	55	Danube Delta
3.	2009-2010	35	Germany
4.	2010-2011	-	-
5.	2011-2012	-	-

MEDICAL CARE

The medical care is free of charge, within a Medical center being located near the campus. For about 3,000 students got free consultations each year.

STUDENTS RESTAURANT "AGRONOMIA"

The students have the opportunity to have their breakfast/lunch for a very convenient price at the Students Restaurant "Agronomia" that is situated within the Campus.

Crt. No.	Academic year	Average no of students having lunch at the Students Restaurant "Agronomia"
1.	2007-2008	150 students/day
2.	2008-2009	250 students/day
3.	2009-2010	350 students/day
4.	2010-2011	450 students/day
5.	2011-2012	300 students/day

Within the University's Campus the students can join the Cafeteria for coffee, tea and sandwiches.

SOCIAL AND CULTURAL EVENTS

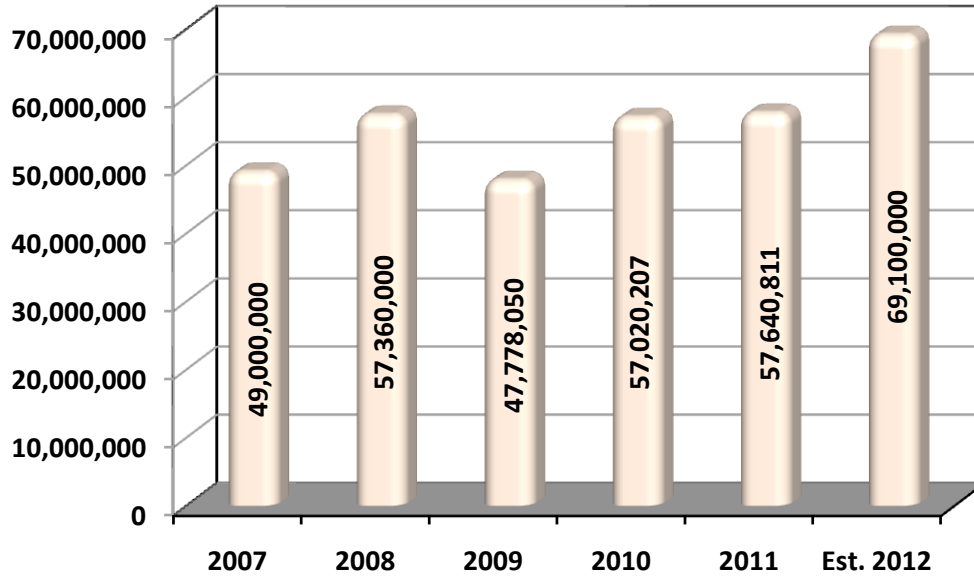
In the period 2007-2012 in the Students Club "Agronomy" worked various student cultural groups:

- The Popular dances Band "Tradiții" of the University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca;
- The Theater Band of the Faculty of Veterinary Medicine;
- The Modern dance Cluj "Salsa";
- The Cluj-Napoca Students Pastoral Center;
- The "Erasmus" Club.

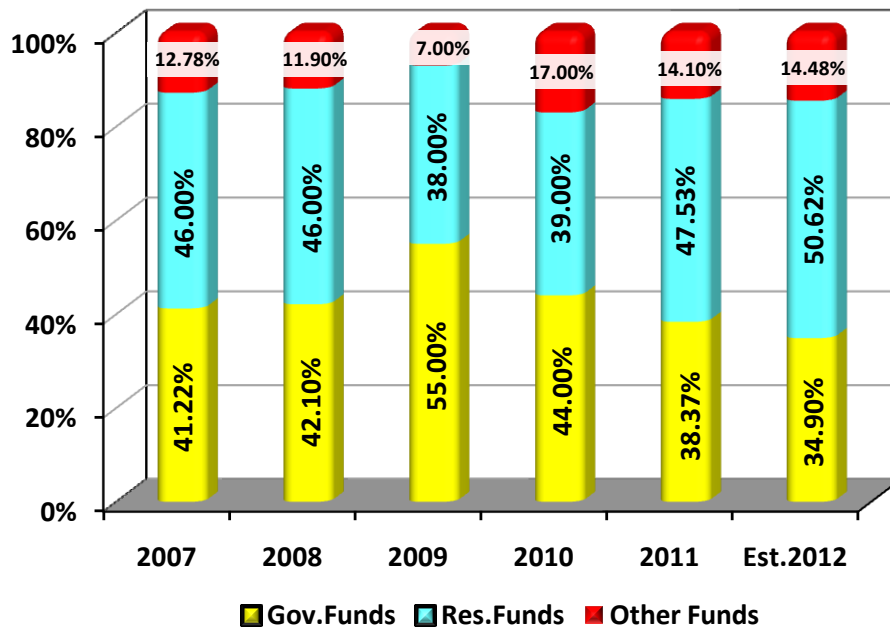
The University is offering the needed facilities and support for the students to organize meetings, parties, social gathering, team building meetings, sports competitions.

Appendix – Funding

Total annually budget (ROL)



Annual budget, by funding sources (%)



Appendix – QMS documents

LIST OF THE INTERNAL QMS PROCEDURES AND REGULATIONS

A. INTERNAL DOCUMENTS

Crt. No.	Document	Elaborated by	Identification code	Ed./ rev.
I. THE UNIVERSITY'S MANAGEMENT				
1	Regulation concerning the organization and the functioning of the University.		RC 1	
2	Organizational chart		RC 2	
3	Internal working rules.		RC 3	
4	Regulation concerning the organizing and holding of the elections for the management structures and positions.		RC 5	
5	Regulation of the Council for university's strategies.		RC 10	
6	Regulation of the University's ethics Commission.		RC 26	
7	Regulations required by The National Education Law No. 1/2011.		RC 46	
8	University's ethics Code.		RC 47	
II. THE QUALITY MANAGEMENT SYSTEM (QMS)				
9	Certification file SR EN ISO 9001:2008	QMS Responsible	MSMC-02	2
10	Documents control.	QMS Responsible	PS-01	2/1
11	Registering control.	QMS Responsible	PS-02	2/1
12	Internal audit.	QMS Responsible	PS-03	2/1
13	Not corresponding product/service control.	QMS Responsible	PS-04	2/1
14	Corrective actions.	QMS Responsible	PS-05	2/1
15	Preventive actions.	QMS Responsible	PS-06	2/1
16	Analyze performed by the management.	QMS Responsible	PO-01	2/1
17	Customer satisfaction evaluation and complains treating.	QMS Responsible	PO-08	2/1
18	The Manual of the Integrate system for quality management (ISQM).	ISQM Responsible	MSMIC-01	1
19	Teaching and research activities evaluation.	QAD Responsible	PO-18	1/0
20	The Information and Communication Center (ICC) activity carrying.	ICC Responsible	PO-19	1/0
21	The Communication and public relations office' (CPRO) activity carrying.	CPRO Responsible	PO-20	1/0
22	Regulation of the Quality assurance department (QAD).	Quality Assurance and Human Resources Prorector	RC 14	
23	Regulation of the Quality assurance and Human resources policies Council.	Quality Assurance and Human Resources Prorector	RC	
24	Regulation of the Communication and public relations office (CPRO)	Head of CPRO	RC 20	
25	Regulation of the Information and Communication Center (ICC).	ICC Responsible	RC 30	

26	Regulation of the Human resources policies office (HRPO).	HRPO Manager	RC	
III. FUNDAMENTAL PROCESSES				
<i>Didactic process –4 years/6 years of study</i>				
27	Student's professional activity.	Didactic Prorector	PO-44	1/0
28	Methodology concerning the organizing and holding of the matriculation for the bachelor studies cycle.	Didactic Prorector	PO-45	1/0
29	Methodology concerning the organizing and holding of the matriculation for the master studies cycle.	Didactic Prorector	PO-46	1/0
30	Methodology concerning the organizing and holding of the matriculation for the doctoral postgraduate studies cycle.	Didactic Prorector	PO-47	1/0
31	Organizing and holding of the competition for the didactic positions.	Didactic Prorector	PO-48	1/0
32	Bachelor studies graduation.	Didactic Prorector	PO-30	1/0
33	Master studies graduation.	Didactic Prorector	PO-31	1/0
34	Didactic Council Regulation.	Didactic Prorector	RC 7	
35	Regulation of the Commission for relations with the University graduates.	Didactic Prorector	RC 28	
36	Regulation concerning students' professional activity.	Didactic Prorector	RC 40	
37	Regulation and methodology concerning the university's studies graduation.	Didactic Prorector	RC 41	
38	Regulation concerning the initiation, approval, implementation and regular evaluation of the study programs.	Didactic Prorector	RC 42	
39	Regulation concerning taxes and services.		RC 44	
40	Regulation and methodology concerning the matriculation.	Didactic Prorector	RC 45	
41	Regulation of the Social and students issues Council.	Social and students issues Prorector	RC 9	
42	Regulation concerning scholarships awarding.	Social and students issues Prorector	RC 43	
43	Regulation of the Consultancy Center.	Social and students issues Prorector	RC 29	
44	Regulation concerning the organization and the functioning of the Agronomy Club.	Social and students issues Prorector	RC 33	
45	Regulation concerning the organization and the functioning of the Students' Hostels	Social and students issues Prorector	RC 34	
46	Regulation concerning the organization and the functioning of the Students' Restaurant.	Social and students issues Prorector	RC 35	
<i>Didactic process –Erasmus/foreign mobility</i>				
47	Description of the functioning activity – Community Programs Office.	International Relations Prorector	PO-33	1/0
48	Academic staff travels abroad.	International Relations Prorector	PO-34	1/0

49	Doctorate students travel abroad.	International Relations Prorector	PO-35	1/0
50	Foreign students matriculation file takeover.	International Relations Prorector	PO-36	1/0
51	Regulation of the International relations Council.		RC 8	
52	Regulation of the International relations Office (IRO).	IRO Coordinator	RC 21	
Didactic process – Distance /Part time learning				
53	Functioning activity of the Distance /Part time learning Department (DPTLD).	DPTLD Manager	PO-32	1/0
54	Regulation of the long life learning, distance learning and part time learning Center.	DPTLD Manager	RC 16	
Research and Publications				
55	Regulation of the Research, innovation and technological transfer Department (RITTD)	RITTD Manager	RC 15	
56	Regulation of the Projects management office (PMO).	PMO Responsible	RC 22	
57	Regulation of the Publications and journals Office (PJO).	PJO Responsible	RC 23	
58	Regulation concerning the organization and the functioning of the Academicpres publishing house.	Research Prorector	RC 32	
Doctoral and Postdoctoral School				
59	Doctoral School Regulation	Council of doctoral studies Director	RC 24	
60	Postdoctoral School Regulation	Council of doctoral studies Director	RC 25	
IV. SUPPORT PROCESSES				
Human Resources				
61	Regulation concerning the didactic positions undertaking.	Manager of the Human Resources Department	RC 37	
62	Competence, awareness, training.	Manager of the Human Resources Department	PO-02	2/1
63	Human Resources management.	Manager of the Human Resources Department	PO-03	2/1
64	Signing and registration of the labor contracts for positions in research activity.	Manager of the Human Resources Department	PO-09	1/0
65	Didactic and auxiliary non didactic staff recruitment.	Manager of the Human Resources Department	PO-10	1/0
66	Employing of the Didactic and auxiliary non didactic staff.	Manager of the Human Resources Department	PO-11	1/0
67	Employing of the Didactic staff.	Manager of the Human Resources Department	PO-12	1/0
68	Stating the didactic staff salary rights.	Manager of the Human Resources Department	PO-13	1/0

69	Stating the non didactic and auxiliary staff salary rights.	Manager of the Human Resources Department	PO-14	1/0
70	Payroll preparing.	Manager of the Human Resources Department	PO-15	1/0
71	Labor contract ceasing.	Manager of the Human Resources Department	PO-16	1/0
72	Didactic and auxiliary non didactic staff sanctioning.	Manager of the Human Resources Department	PO-17	1/0
Students				
73	Regulation of the Didactic Staff Training Department (DSTD)	DSTD Manager	RC 18	
74	Activity description (DSTD)	DSTD Manager	PO-49	1/0
75	Regulation of the Education for Career Center (ECC)	DSTD Manager	RC 19	
76	Regulation of the Practice Organizing Center (POC)	POC Manager	RC17	
77	Activity description of the Experimental Teaching Station (ETS) management analysis	ETS Manager	PO-38	1/0
78	Regulation of the Experimental Teaching Station (ETS)	ETS Manager	RC 36	
Infrastructure				
79	Equipments maintenance	Head of the Procurement Office	PO-04	2/1
80	Procurement	Head of the Procurement Office	PO-05	2/1
81	Measurement and monitoring equipments control.	Head of the Procurement Office	PO-06	2/1
Library				
82	Regulation concerning the organization and the functioning of the University's Library.	Library Manager	RC 31	
83	Publications acquisition activity description.	Library Manager	PO-21	1/0
84	Books registering and cataloguing activity description.	Library Manager	PO-22	1/0
85	Journals registering and cataloguing activity description.	Library Manager	PO-23	1/0
86	Inter librarian exchange activity description.	Library Manager	PO-24	1/0
87	Library access card releasing activity description.	Library Manager	PO-25	1/0
88	Books lending and reading hall access activity description.	Library Manager	PO-26	1/0
89	Management of the library subsidiaries.	Library Manager	PO-27	1/0
90	Inter librarian lending activity description.	Library Manager	PO-28	1/0
91	Preparing and updating of the Risks Register activity description.	Library Manager	PO-29	1/0
Secretariat				
92	Regulation of the University's secretariats.		RC 13	
93	Internal communication.	Chief Secretary	PO-07	2/1
94	Scholarships awarding.	Chief Secretary	PO-39	1/0
95	Romanian students expelling at the faculties proposal.	Chief Secretary	PO-40	1/0
96	Study courses interrupting.	Chief Secretary	PO-41	1/0

97	Re matriculation of Romanian students.	Chief Secretary	PO-42	1/0
98	Study courses retaking.	Chief Secretary	PO-43	1/0
Senate				
99	Regulation of the University Senate.	Senate President	RC 4	
100	Regulation concerning Doctor Honoris Causa title awarding.	Senate President	RC 38	
101	Regulation concerning Honoris Senator title awarding.	Senate President	RC 39	
102	Description of the conditions and procedure for Doctor Honoris Causa/ <i>Professor Honoris Causa</i> title awarding.	Senate President	PO-37	1/0
General Administrative Division				
103	Regulation of the Administration Council	Administrative General Manager	RC 6	
104	Regulation of the General Administrative Division	Administrative General Manager	RC 11	
105	Regulation of the Economic Division	Economic Manager	RC 12	
106	Regulation of the Patrimony and Material base management Commission	Administrative General Manager	RC 27	

B. EXTERNAL DOCUMENTS

Crt. No.	Document	Elaborated by	Identification code	Ed.
1	National Education Law No. 1/2011.	MECTS		
2	Law No. 87/2006 for the approval of the O.U.G. No. 75/2005 concerning education quality assurance. External quality evaluation methodology (ARACIS).	MECTS		

Appendix – Action plan**ACTION PLAN**

designed to undertake corrections according to the SWOT Analysis outcomes (Weaknesses)

IDENTIFIED WEAKNESS	CORRECTIVE ACTION	RESPONSIBLE	SPECIFIC ACTIVITIES	EXPECTED RESULTS	TIMING
1. Some of the study programs are not represented in the third cycle of studies (PhD)	Nomination of new PhD supervisors, including some from EU foreign universities Support measures for new PhD supervisors	Director of Doctoral Schools (IOSUD)	Abilitation of new PhD supervisors Advertising to international collaborators the opportunity of becoming PhD supervisors	Increase of PhDs students number Increase of the PhDs study programs quality	Permanent
2. Some of the first and second study programs curricula are disproportionate and deficient; lack of harmonization with the European standards	Revision of BSc and MSc study programs curricula	Vicerector for Academic Vicedeans for education Specific faculties councils Senate Commission	Revision of each BSc and MSc study programs curricula, from all departments Discussions within the faculty councils Approvements of new curricula Internal audit and national accreditation	Improvement of curricula and harmonization with other similar EU programs	Permanent, beginning with the academic year 2013/2014

IDENTIFIED WEAKNESS	CORRECTIVE ACTION	RESPONSIBLE	SPECIFIC ACTIVITIES	EXPECTED RESULTS	TIMING
3. The quality control of the educational activity needs to be improved	Evaluation and improvement of educational process quality	Vicerector for Academic Vicerector for Quality and Human resources Vicedeans for education Department Directors	Assistance to lectures in developing practical courses Analysis of the courses content and of the teachers' attitude Control of courses timing Evaluation of teachers by the students	Improvement of educational process quality	Permanent
4. The graduation work and master dissertations, have often a theoretical content, not focusing on research and practical case studies	More focusing of the BSc and MSc diplomas on updated research topics related to European and national priorities	Vicerector for Academic Vicerector for Research Vicedeans for education and research Department Directors	BSc and MSc coordinators are asked for topics, 2 years in advance Stimulation of specific students' interests by their inclusion in the departments' research groups	Increase of research quality and students competences and practical abilities	Permanent, beginning with the academic year 2013/2014

IDENTIFIED WEAKNESS	CORRECTIVE ACTION	RESPONSIBLE	SPECIFIC ACTIVITIES	EXPECTED RESULTS	TIMING
<p>5. Research activity weaknesses:</p> <ul style="list-style-type: none"> - lack of full-time research staff; - small number of European projects; - low ratios between the number of teachers and number of ISI publications; - small number of inventions and patents; - small number of Master and PhD students involved in research projects and contracts. 	<p>Specific requests addressed to the Research Ministry for Research positions recognition</p> <p>Launching specific grants competitions financed by University's own funds, to stimulate ISI publications</p> <p>Students involvement in research topics and grants within National and local research projects</p>	<p>Vicerector for Research</p> <p>Vicedeans for research</p> <p>Directors of Research Centres and laboratories</p> <p>PhD supervisors</p>	<p>Habilitation of „Researcher” positions</p> <p>Selection of research grants that aim ISI publications</p> <p>Establishing of a functional Office for Intellectual property (inventions/patents) that may share the costs for patents filing</p> <p>Enforcing a percentage of min 15% for students involvement (PhD and MSc) within the University's research grants</p>	<p>Intensifying the University's research potential and the research results dissemination/valorization</p> <p>Intensifying the involvement of PhD and MSc students in research (from the departments level to the University and international projects level)</p>	<p>Permanent</p>
<p>6. Low efficiency for the technology transfer of the research activity results into the real economic environment, resulting in low financial incomes;</p> <ul style="list-style-type: none"> - Need of an organizational structure at the University level to handle technology transfer, consulting, outsourcing; 	<p>Increase of technology transfer offers, consulting, and services offered by the University to the economic environment</p> <p>Increase of the financial efficiency of the Research activity results</p>	<p>Vicerector for Research</p> <p>Vicerector for Institutional Development</p> <p>Commission for relations with the economic environment</p> <p>Senate Council for Institutional Strategy</p> <p>Directors of Research Centres and laboratories</p> <p>PhD supervisors</p>	<p>Establishing of the USAMVCN Office for Intellectual property, services and Technology Transfer</p> <p>Financial stimulation for the research groups that have marketable offers for technological transfer or services/consultancy</p>	<p>Increase of the financial income from technology transfer and service offers</p>	<p>Permanent</p>

IDENTIFIED WEAKNESS	CORRECTIVE ACTION	RESPONSIBLE	SPECIFIC ACTIVITIES	EXPECTED RESULTS	TIMING
7. Insufficient visibility of the research activity; - Small number of interdisciplinary and trans-disciplinary research topics approached with the other universities in Cluj-Napoca, the other USAMV in the country and other EU universities	Increasing the connections number with other research groups inside and outside Romania, and strengthening the existing ones Increase of joint ISI publications number	Rector Vice-rector for Research Vice-rector for International relations Department Directors	Specific financial stimulation for research programs with interdisciplinary and transdisciplinary activities, with collaborators from inside or outside Romania	Increase of collaborations in research and technology projects, inside and outside Romania Increased number of publications in relevant ISI journals Increase of joint study and PhD programs number, taught in English	Permanent
8. Decreasing of the exchange/mobility number via Erasmus Program (teachers and students, from and to Romania)	Finding new solutions to stimulate the Erasmus exchanges	Vice-rector for International relations Vice-deans for research and International relations	Stimulating (via promotion, quality assessment and financial support) of new Erasmus bilateral agreements for teachers and students exchanges (in and out of Romania)	Increasing the internationalization visibility and promoting the University's image across the EU countries	Permanent

IDENTIFIED WEAKNESS	CORRECTIVE ACTION	RESPONSIBLE	SPECIFIC ACTIVITIES	EXPECTED RESULTS	TIMING
<p>9. Limited information concerning the labor market needs and the graduates' career track;</p> <p>- weak involvement of the ALUMNI Association.</p>	<p>Enhancement, at the faculties level, of the contact with the former graduates</p> <p>Stimulating the ALUMNI activity</p> <p>Enhancement, at the institutional level, of the activity of evaluation and register of actual labour market needs</p>	<p>Vice rector for Social and students' activities</p> <p>Deans</p> <p>The Alumni Association</p>	<p>Completion and Finalization of the existing database about ALUMNI</p> <p>Intensifying the activity of the graduates' career track</p>	<p>Complete Database concerning the former graduates, their career track, and the companies within our former students are employed</p> <p>Using of the Database outcomes as input data for the quality improvement of study programs</p> <p>Disseminating by Promotional flyers of the success careers of the former University's students</p>	<p>Permanent</p>

IDENTIFIED WEAKNESS	CORRECTIVE ACTION	RESPONSIBLE	SPECIFIC ACTIVITIES	EXPECTED RESULTS	TIMING
<p>10. Deficiencies in the management and attitude of administration services;</p> <p>- need for training, procedures' follow-up and activity quality assessments</p>	<p>Tailored courses for the administration staff</p> <p>Improved balance of the ratios between work loading and staff number</p> <p>Implementation of management procedures and regular quality evaluation and correction</p>	<p>Vicerector for Quality Assurance and Human Resources</p>	<p>Measuring and analysis of the Customer satisfaction grade concerning the quality of the administration services provided and satisfaction grade of the students and teachers</p> <p>Supporting the administration staff participation in training programs for quality management in administration services</p>	<p>Increased quality of administration services provided to the academic community</p> <p>Updated procedures for administration processes</p>	<p>Permanent</p>



ROMÂNIA
MINISTERUL EDUCAȚIEI, CERCETĂRII, TINERETULUI ȘI SPORTULUI
UNIVERSITATEA DE ȘTIINȚE AGRICOLE ȘI MEDICINĂ VETERINARĂ
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RAPORT DE AUTO EVALUARE



Tradiție și modernitate

Cluj-Napoca, 2012



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1. INTRODUCERE

Procesul de evaluare instituțională internațională a Universității de Științe Agricole și Medicină Veterinară Cluj-Napoca, realizat de Asociația Universităților Europene (EUA), are loc în contextul reformelor majore din sistemul de învățământ superior românesc și, în mod special, în conformitate cu prevederile noii Legi a Educației care a intrat în vigoare în ianuarie 2011. Legea impune ca exercițiul național de clasificare a universităților să fie urmat de evaluarea instituțională a tuturor universităților, realizată de către o agenție internațională. Asociația Universităților Europene (EUA) a fost selectată de către autoritățile române pentru a îndeplini această sarcină.

Reprezentanții universității au participat la workshop-ul pentru universități organizat în București, în 10 ianuarie 2012, de către Unitatea Executivă pentru Finanțarea Învățământului Superior, a Cercetării, Dezvoltării și Inovării (UEFISCDI) și Asociația Universităților Europene (EUA). În data de 26 ianuarie 2012, Senatul Universității a fost informat cu privire la procesul internațional de evaluare instituțională și cu privire la cerințele prezentate în "Liniile directoare pentru instituții - Programul de evaluare instituțională: Performanță în cercetare, Performanță în predarea – Proiectul Calitate, Diversitate și Inovare în Universitățile românești - versiunea ianuarie 2012", emise de către Asociația Universităților Europene (EUA) prin Programul de Evaluare Instituțională (IEP), care este inclus în Registrul European al Agențiilor pentru Calitate (EQAR).

Pentru a asigura succesul procesului de auto-evaluare, în 7 februarie 2012, Consiliul de Administrație a Universității a numit Grupul de auto-evaluare a universității, desemnat să coordoneze procesul de auto-evaluare și pentru a realiza raportul de auto-evaluare a Universității în conformitate cu liniile directoare ale IEP. Membrii Grupului de auto-evaluare a universității (SEG) sunt următorii:

- D-na Profesor Carmen SOCACIU – Pro-rector Cercetare – Președinte SEG;
- Dl. Profesor Ioan ROTAR – Pro-rector Academic;
- Dl. Profesor Augustin VLAIC – Pro-rector pentru Dezvoltare instituțională;
- Dl. Conferențiar Adrian OROS – Pro-rector cu Probleme sociale și Studentești
- D-na Conferențiar Ioana POP – Pro-rector Asigurarea calității și Resursa umană;
- Dl. Conferențiar Andrei MIHALCA – Pro-rector Relații internaționale;
- D-na Profesor Roxana VIDICAN – Decan al Facultății de Agricultură;
- Dl. Profesor Radu SESTRĂȘ – Decan al Facultății de Horticultură;
- D-na Profesor Vioara MIREȘAN – Decan al Facultății de Zootehnie și Biotehnologii;
- Dl. Profesor Cornel CĂTOI – Decan al Facultății de Medicină veterinară;
- Dl. Dr.ing. Doru SABĂU – Director Departament Cercetare – Secretar SEG;

Vizându-se o vedere de ansamblu a Universității, membrii SEG reprezintă componente majore ale Universității și sunt într-o bună poziție pentru a judeca punctele tari ale Universității, punctele slabe, oportunitățile și amenințările.

Prezentul Raport de autoevaluare este rezultatul procesului dezvoltat în cadrul instituției în perioada februarie-martie 2012 de către Grupul de auto-evaluare (SEG), sub patronajul Rectorului. Colectarea datelor a fost realizată de SEG, în colaborare cu toate structurile instituționale, secretariate, administrația universității, facultăți, departamente suport și birouri. Datele au fost analizate de către SEG printr-un proces transparent de auto-evaluare, incluzând reuniuni de consultare (între februarie și martie 2012), pe diferite tematici și la diferite niveluri: structuri de management ale facultăților/departamentelor (pentru analiza managementul academic și procesele de asigurare a calității/evaluare a calității), studenți și reprezentanți ai personalului academic (având în vedere departamentele de învățământ și cercetare) și școala doctorală. Participanții au fost invitați să difuzeze informațiile către membrii grupului pe care îl reprezintă și să formuleze feedback-ul pentru punctele de discuții. Informațiile colectate au permis formularea finală a raportului de auto-evaluare. Managementului instituțional a sprijinit cu fermitate întregul proces de auto-evaluare, prin prezentarea către întreaga comunitate a universității, a scopului și

responsabilității SEG, în cadrul ședințelor Senatului și prin discuțiile purtate cu reprezentanții personalului administrativ. Ca urmare, activitatea grupului de auto-evaluare a fost susținută de către toate structurile instituționale.

2. CONTEXTUL INSTITUTIONAL

2.1. O scurtă prezentare istorică

Universitatea de Științe Agricole și Medicină Veterinară Cluj-Napoca este continuatorul prestigioasei instituții de învățământ superior agricol din Cluj, care a fost fondată cu 143 de ani în urmă, bazat pe o lungă tradiție care data din secolul XV, cu teme agricole care erau predate de către călugării iezuiți în *trivium* care exista pe locul actual al campusul universității. Istoria Universității de Științe Agricole și Medicină Veterinară Cluj Napoca a început în octombrie 1869 când, pe fostul domeniu Mănăștur, a fost fondată una dintre cele mai vechia școli europene de studii superioare pentru agricultură, numită "Institutul de Învățământ Agronomic Cluj-Mănăștur", fiind situată în sediul unei foste mănăstiri. În 1906, Institutul a dobândit statutul de academie, devenind "Academia de Agricultură Cluj". La aproape 50 de ani de la înființare și până la sfârșitul deceniului al doilea al secolului trecut, activitatea Academiei a fost bazată numai pe un departament, de agricultură, ale cărui studii aveau durata de trei ani și care acorda titlul de "Agronom diplomat". Academia de Agricultură Cluj și-a continuat activitatea până la începutul Primului Război Mondial.

Crearea Statului Național Unitar Român în 1918 a marcat începutul unei noi etape în evoluția "Academiei de Agricultura Cluj". Incepand cu 1921, studiile în învățământul superior agronomic din România au devenit de patru ani de studiu, dintre care trei erau pentru studii teoretice și anul al patrulea consta dintr-un stagiu în cadrul fermelor. Din anul 1922, absolvenții primeau titlul de "inginer agronom". În 1929, ca urmare a reorganizării și modernizării învățământului superior agronomic românesc, Academia a devenit "Academia de Înalte studii agronomice Cluj". Durata studiilor a crescut la cinci ani și fost organizată pe două cicluri: "învățământ general" (subiectele de bază), cu o durată de trei ani și jumătate și "învățământ de specialitate" care se dura un an și jumătate. Prin aceste studii, Academia a format atât ingineri agronomi, cât și cercetători în diferite ramuri ale științelor agricole.

În urma Dictatului de la Viena, din 1940 până în 1945 Academia (facultatea, studenții și o parte din patrimoniul său) s-a refugiat la Timișoara, unde și-a desfășurat activitatea ca "Facultatea de Agronomie Cluj - Timișoara". În 1945, Academia a revenit la Cluj și s-a reorganizat în 1948 ca "Institutul Agronomic Cluj".

Inițial, Institutul funcționa doar cu Facultatea de Agricultură. În 1935, în cadrul Facultății de Agricultură a fost înființat un departament de Zootehnie, care a fost transformat în 1968 în Facultatea de Zootehnie. În 1992, au fost dezvoltate noi studii de biotehnologie, astfel încât facultatea a devenit Facultatea de Zootehnie și Biotehnologii. Facultatea de Medicină Veterinară a fost în anul 1962, iar Facultatea de Horticultură în anul 1977.

Începând cu anul 1990, activitatea Institutului Agronomic a fost organizată în patru facultăți: Agricultură, Horticultură, Zootehnie și Biotehnologii și Medicină Veterinară, având un total de 1.750 studenți. În 28 iulie 1995, în conformitate cu Hotărârea Guvernului nr 586, instituția a primit numele actual de "Universitatea de Științe Agricole și Medicină Veterinară Cluj-Napoca".

O dovadă istorică importantă cu privire la rolul important al instituției noastre, atât în dezvoltarea învățământului agricol românesc, cât și în cea a societății noastre, este prezentat în volumul "*Tradiție și Inovație în Învățământul Agricol din Transilvania – Vol.I De la începuturi până în 1945*", publicat la sfârșitul anului 2011 și fiind primul volum al unei ample istorii a Universității de Științe agricole și Medicină veterinară Cluj-Napoca.

Din 1999, universitățile românești au început să se reformeze, în conformitate cu sistemul Bologna, cu scopul de a se integra în Spațiul European al Învățământului Superior. Fiind conștienți de necesitatea unei evaluări internaționale pentru a evalua îmbunătățirea universității și statusul sistemului său de asigurare a

calității, USAMV Cluj-Napoca a decis în 2003 să aplice pentru evaluarea instituțională EUA. Raportul de evaluare final, emis de către EUA în iulie 2003 (vezi: [Appendix – Institutional evaluation process](#)), sublinia prin concluzia că: "USAMV poate fi o sursă de mândrie pentru membrii săi, o mândrie despre care ei spun că a caracterizat personalul și studenții în trecut și pe care, de asemenea, ei o pot simți pe bună dreptate în viitor". Celelalte sfaturi sugerate de către evaluatori EUA au fost benefice pentru strategia viitoare a universității și au stat la baza noii misiuni a universității, asumată în 2005, aceea de "Universitate de Cercetare". Concentrându-se în special pe activitatea de cercetare și obținerea de fonduri pentru investiții în cercetare, universității a fost premiată de către Ministerul Educației, Cercetării și Tineretului, în anul 2007, prin [Ordinul Nr. 2784/13 decembrie 2007](#), ca fiind cea mai bună universitate de cercetare din România, derulând 321 de proiecte cu un personal de doar 268 de persoane și obținând mai mult de jumătate din bugetul său din activități de cercetare și inovare.

În 2009, USAMV Cluj-Napoca a decis să aplice pentru o evaluare externă, efectuată de către ARACIS (Membru român al Asociației Europene pentru Asigurarea Calității în Învățământul Superior - ENQA). După evaluare, ARACIS a publicat the "[Raportul privind evaluarea externă a calității academice](#)", care afirmă că Universitatea de Științe Agricole și Medicină Veterinară Cluj-Napoca este evaluată ca "[Universitate cu grad de încredere ridicat](#)" (cel mai înalt calificativ ce poate fi acordat unei universități românești). De asemenea, în 2009 USAMV Cluj-Napoca a decis să-și revizuiască sistemul său de management intern, în conformitate cu prevederile standardelor internaționale. Implementarea cerințelor standardului EN ISO 9001:2008 pentru procesele de predare, cercetare și administrare, a fost certificată de către TUV Austria CERT (vezi: [Appendix – Institutional evaluation process](#)).

În urmă cu doi ani, Universitatea lansat o nouă Cartă, cu o nouă misiune, aceea de "cercetare avansată și educație", anticipând noua dezvoltare din sistemul de învățământ românesc și făcând un pas înainte, înspre noua lege a învățământului și procesul de clasificare națională a universităților. După Evaluarea Națională 2011, coordonată de către Ministerul Educației, Cercetării, Tineretului și Sportului, USAMV Cluj-Napoca a fost clasificată în top 12 al celor mai bune universități din România, fiind nominalizată pe locul 5 în prima clasă, a universităților "de cercetare avansată și educație". Clasificarea națională a programelor de studiu a confirmat poziția de lider al universității noastre, majoritatea domeniilor de cercetare fiind clasate în clasa "A", USAMV Cluj-Napoca fiind cea mai bună universitate de profil agricol (Life Science) din România și singura care are dreptul să organizeze studii de doctorat (vezi: [Appendix – Report on the 2011 National classification exercise](#)).

Astăzi, universitatea are aproape 7.000 de studenți, de patru ori mai mult decât cu 20 de ani în urmă, are activități internaționale bine cunoscute primind peste 200 de studenți străini care studiază în limbile engleză și franceză, având de asemenea o extensie în Italia, singura extensie evaluată de către ARACIS. Noua evaluare EUA va fi esențială pentru viitorul parcurs al universității spre excelență și pentru viitoarea politică de asigurare a calității.

2.2. Statutul legal și autonomia

Universitatea de Științe Agricole și Medicină Veterinară Cluj-Napoca este o instituție publică de învățământ superior, membră a Sistemului Național Român de învățământ superior. Prin [Hotărârea Guvernului Nr. 916 din 11 august 2005](#), universitatea a fost organizată în patru facultăți: Facultatea de Agricultură, Facultatea de Horticultură, Facultatea de Zootehnie și Biotehnologii și Facultatea de Medicină Veterinară. Uzând de autonomia sa garantată, Senatul Universității a aprobat în data de 26 ianuarie 2012, înființarea noii Facultăți de Știința și Tehnologia Alimentelor. Pe baza oportunităților oferite de noua Lege a învățământului, universitatea noastră s-a reorganizat în 14 departamente, descentralizând bugetul pentru un mai bun management și asigurare a calității și dând o mai mare responsabilitate comunității academice pentru viitorul clasament național al domeniilor de studiu.

2.3. Poziția geografică și localizarea

Universitatea de Științe Agricole și Medicină Veterinară Cluj-Napoca este situată în Cluj-Napoca (în germană: *Klausenburg*, în maghiară: *Kolozsvár*, în latina medievală: *Castrum Clus*, *Claudiopolis*), un oraș cosmopolit situat pe râul Someșul Mic. Între anii 1790-1848 și 1861-1867, Cluj a fost capitala oficială a Marelui Principat al Transilvaniei. Din punct de vedere geografic, acesta este aproximativ echidistant față de București (439 km), Budapesta (451 km) și Belgrad (473 km).

În prezent, în limitele orașului trăiesc peste 310.000 de locuitori, în timp ce populația din zona peri-urbană depășește 400.000 de locuitori. Cu cele opt universități, Cluj-Napoca găzduiește anual o populație de peste 90.000 de studenți, făcându-l al doilea mare centru universitar din România.

Principalul campus la Universității de Științe Agricole și Medicină Veterinară Cluj-Napoca, de aproximativ 16 hectare, *este situat în partea de vest a orașului*, incluzând un parc și o grădină botanică, de 6 hectare. Al doilea campus al doilea, pentru food science, este foarte aproape de cel principal, astfel încât universitatea are unul dintre cele mai compacte campusuri din zona. Universitatea deține peste 1.000 de hectare de teren pentru predare, cercetare experimentală și practica studenților, organizate într-o Stațiune didactică și experimentală cu patru locații situate în vecinătatea Clujului, în care peste 1.000 de studenți efectuează practica 10 luni pe an.

Fiind situată în partea centrală a Transilvaniei (85.000 km²) și fiind singura universitate de profil agricol din această zonă, universitatea are cei mai mulți dintre studenții săi (78%) din această regiune agricolă importantă. Restul studenților provin din alte părți ale țării, fiind atrași de calitatea studiilor și de oportunitățile orașului.

2.4. Situația actuală a pieței forței de muncă regională și națională

Piața forței de muncă din România s-a schimbat în mod semnificativ din anii 90, fiind puternic afectată de tranziția la economia de piață, aderarea la UE, de reducerea activității în industria grea și de sistemul agricol centralizat existent. Cu toate aceste inconveniente, județul Cluj este în prezent una dintre cele mai dinamice regiuni din România, având o contribuție majoră la dezvoltarea economică, în principal ca urmare a resursei sale umane înalt calificată. Cluj-Napoca, un oraș universitar cu patru universități clasate în prima clasă, a universităților "de cercetare avansată și educație", are o rată scăzută a șomajului, de mai puțin de 2%, oferind pentru agricultura locală și pentru sectorul privat oportunități de noi locuri de muncă. Trebuie să avem în vedere faptul că agricultura, chiar și cu reducerea dramatică a populației agricole de la 42% în anii 90, la 31% în prezent și probabil 15% în 2025, va rămâne importantă pentru România. Trebuie de asemenea subliniat faptul că la o treime dintre studenții noștri familiile dețin terenuri agricole.

2.5. Structură, studenți și personal

USAMV Cluj-Napoca aplică de peste zece ani sistemul Bologna, cu o licență specială de patru ani (4 +2 +3). Ciclurile de studii 1 și 2 sunt organizate ca programe de studiu full-time sau la distanță/frecvență redusă (part-time), de cele patru facultăți. Al treilea ciclu de studii (doctorale), precum și studii post-doctorale, este organizat de o Școală Doctorală interdisciplinară, cu cinci specializări de studiu full-time. Fiind o universitate de cercetare, activitățile pentru masterat și doctorat sunt finalizate în cadrul a 23 de centre de cercetare și laboratoare, precum și în trei institute de cercetare (cel de Științele vieții și alte două aflate în construcție).

Structura universității este proiectată pentru a asigura activitatea pentru studii universitare de licență (BSc), studii universitare de masterat (MS) și studii postuniversitare (doctorat și post-doc). Infrastructura universității a fost complet reînnoită în ultimii 4 ani, oferind o mulțime de oportunități și facilități pentru studenți și personal și, în viitorul apropiat, va include o bibliotecă nouă, un cămin studentesc nou, un restaurant pentru studenți și alte dezvoltări care vor face universitatea mai atractivă și adecvată pentru o capacitate de aproximativ 7.000 de studenți.

USAMV Cluj-Napoca cuprinde 4 facultăți: Agricultură, Horticultură, Zootehnie și Biotehnologii și Medicină Veterinară. Studenții înmatriculați în universitate (ciclurile de studiu 1, 2 și 3), pe facultăți, sunt după cum

urmează: 2.166 la Horticultură, 1.882 la Agricultură, 1.427 la Medicină Veterinară și 745 la Zootehnie și biotehnologii. Numărul actual de studenții înmatriculați la USAMV Cluj-Napoca este de 6.220 de studenți, dintre care 4.869 sunt înscriși la studii de licență, 1.001 sunt studenți la master și 350 sunt doctoranzi. De asemenea, 30 de tineri cercetători sunt înscriși la studii postdoctorale (vezi: *Appendix – Students*). Numărul de studenți în ultimii ani a fost de aproximativ 6.400 și estimăm că, în urma noii clasificări în clasa "A", universitatea va menține acest număr în următorii cinci ani.

Ca urmare a unei bune strategii a universității și a adaptării la cerințele pieței, numărul de studenți a crescut în ultimii 20 de ani de la 1.720 în 1990, la 3.850 în 2000 și la 6.220 în 2011. Subliniem în special creșterea numărului de studenți masteranzi din ultimii cinci ani, de la 375 la peste 1.000 de astăzi, precum și faptul că în prezent USAMV Cluj este singura universitate de profil agricol care are dreptul să organizeze studii de doctorat.

Având în vedere scăderea demografică înregistrată în România în ultimii 20 de ani (de aproximativ 22%) și rata mare de emigrare (mai mult de 2 milioane, adică 10% din populație), suntem conștienți de impactul major pe care acestea le pot avea asupra viitoarei populații tinere. De aceea, strategia universității s-a concentrat în ultimul an pe extinderea în străinătate a studiilor în limba română, prin extensia noastră din Italia și pe atragerea de studenți străini care să studieze la universitatea noastră în limbile engleză și franceză.

Numărul total de personal al USAMV Cluj-Napoca este de 572, care include 366 de cadre didactice, 127 personal didactic auxiliar și 79 personal administrativ. De asemenea, 59 de persoane sunt angajate ca personal de cercetare: 9 cercetători și 50 de asistenți de cercetare. Fiecare facultate are departamentele sale, care sunt structurate pe domeniile specifice de competență domenii tehnice, specifice pentru fiecare program de studiu. Personalul academic este compus din 66 de profesori, 48 conferențieri universitari, 129 lectori, 115 asistenți și 9 preparatori (vezi: *Appendix – Academic staff*).

3. NORME ȘI VALORI, MISIUNE ȘI OBIECTIVE

3.1. Governanță și management

Viziunea USAMV Cluj-Napoca se concentrează pe Excelența în Cercetare și Educație, competitivitatea la nivel național și internațional și Integrarea societală ca și universitate antreprenorială conectată la mediul socio-economic al regiunii și la scară națională.

Ca și universitate de "primă clasă", "de cercetare avansată și educație", conform Clasificării Naționale 2011, universitatea își propune să consolideze rolul de lider în promovarea *Dezvoltării durabile a excelenței academice și a activităților conexe, integrate în Aria Europeană a Învățământului Superior și Cercetării*, în beneficiul comunității naționale și internaționale.

Misiunea USAMV Cluj-Napoca, ca și instituție "de cercetare avansată și educație", își propune să asigure o dezvoltare bazată pe cunoaștere a cercetării, inovării și transferului tehnologic în domeniile sale specifice de competență: Științele vieții (agricultură și horticultură, zootehnie, food science, medicină veterinară), precum și în domeniile conexe de inginerie/(bio)tehnologie și economie în agrifood.

USAMV Cluj-Napoca, folosind deplina sa autonomie universitară și în conformitate cu prevederile Legii Învățământului Nr 1/2011, a redactat o Cartă reînnoită și actualizată a Universității, care a fost aprobată de Senatul nou ales, în prima sa reuniune, pe data de 26 ianuarie 2012. Carta USAMV include misiunea și strategia privind dezvoltarea Universității pentru următorii 4 ani, obiectivele universității, cât și regulamentele privind managementul fiecărui compartiment al universității (49 de regulamente). Toate aceste documente sunt cunoscute de comunitatea universității și sunt prezentate pe [web site-ul universității](#).

Conform Cartei sale, USAMV Cluj-Napoca are ca misiune formarea profesională la nivel universitar și producerea de cunoaștere științifică prin cercetare și inovare. Misiunea asumată este realizată prin educație și cercetare științifică avansată. Universitatea își va îndeplini misiunea prin promovarea excelenței în educație, cercetare și inovare, prin programele sale de formare inițială și post-universitară, prin sistemul

său de long-life learning, precum și prin integrarea valorilor universale, în conformitate cu cerințele unei societăți bazată pe cunoaștere.

Planul strategic al USAMV Cluj-Napoca 2012-2016 (vezi: [Appendix – Strategic plan](#)), are ca obiectiv principal consolidarea poziției universității, ca instituția academică de profil agricol cu cele mai bune rezultate la nivel național, prin dezvoltarea și furnizarea de cunoștințe avansate în domeniile de competență, pe deplin integrate în Aria Europeană a Învățământului Superior și Cercetării și validate prin recunoașterea internațională. Planul strategic este diferit de cele anterioare, ca urmare a schimbărilor profunde luate în considerare cu privire la epoca prezentă a societății, marcată de efectele crizei economice mondiale și de scăderile bugetare substanțiale din societate.

Structurile organizatorice ale USAMV Cluj-Napoca. Organigrama universității a luat în considerare schimbările apărute în alegerea managementului universității: crearea unei delimitări între Senat, în calitate de principal coordonator legislativ al universității și conducerea executivă, reprezentată de rector, 6 prorectori, 4 decani, un director pentru studiile doctorale și directorul general administrativ (vezi: [Appendix – Management and organizational chart](#)). Fiecare facultate are propria sa structură de management, care cuprinde: 3 prodecani (academic, cercetare - relații internaționale și probleme sociale - studenți), șefii de departamente și reprezentanți ai fiecărui departament în Consiliul Facultății (vezi: [Appendix – Faculties chart](#)). Fiecare departament are personal responsabil pentru fiecare dintre activitățile sale, reflectând "linia de management sus-jos al universității". Conform organigramei, managementul academic și de cercetare, asigurarea calității, resurse umane, relații internaționale, dezvoltarea instituțională și probleme sociale - studenți, sunt cuprinse în structura de conducerea a universității, fiind în legătură cu departamentele și serviciile administrative și de suport (vezi: [Appendix – Central administration and support services chart](#)).

Coordonarea activităților executive se face de către Consiliul de Administrație, care include, sub conducerea rectorului, pro-rectorii și decanii facultăților, directorul general administrativ, precum și prefectul studenților. Senatul, coordonat de către președinte, asigură controlul legalității activităților și, prin puterea sa legislativă, ia decizii și poate modula puterea conducerii executive (Consiliul de Administrație).

Un proces de îmbunătățire continuă este avut în vedere în următorii 4 ani, prin descentralizarea responsabilităților managementului, pentru:

- a consolida managementul strategic care implementează legislația națională/UE și deciziile interne ale managementului USAMV Cluj-Napoca;
- a crește responsabilitatea elaborării deciziilor la nivel de facultate și departamente, prin extinderea abordării participative;
- implementarea de strategii inovative promovate de universitate, inclusiv dezvoltarea de entități antreprenoriale suport specifice.

Politicele de Resurse umane în USAMV Cluj-Napoca se concentrează în principal asupra următoarelor:

- creșterea permanentă a calității personalului academic prin: recrutarea de tineri specialiști cu înaltă calificare, utilizarea deplină a ariei extinse de expertiză a personalului academic, precum și prin promovarea personalului exclusiv bazată pe criteriile de performanță profesională;
- îmbunătățirea continuă a competențelor personalului academic, non-academic și administrativ, incluzând cursuri specifice oferite de USAMV Cluj-Napoca (didactice, IT, limbi străine, managementul calității, etc.), precum și sprijinirea mobilităților personalului și a schimburilor de experiență.

USAMV Cluj-Napoca își bazează strategia și politica de dezvoltare pe un cadru bine stabilit de sistemul de evaluare și asigurare internă a calității. Având implementat acest sistem de peste 10 ani, Cultura calității și **Politica de asigurare a calității (QAP)** sunt bine definite, în acord cu dezvoltarea actuală a USAMV Cluj-Napoca și cu standardele naționale și luând în considerare multiplele obiective (re)formulate în conformitate cu Legea Educației 1/2011. În conformitate cu contextul internațional și național, universitatea și-a stabilit propriul set de standarde interne de calitate și a dezvoltat strategia adecvată

printr-un proces coordonat de către Rector. Împreună cu pro-rectorul pentru Asigurarea Calitatii și Resursa Umană, Departamentul de Asigurare a Calității este responsabil pentru sustenabilitatea implementării sistemului de asigurare a calității (SAC). SAC este acum structurat la toate nivelurile, de la departamente, la facultăți și universitate, incluzând standardele de calitate specifice pentru cadrele didactice, cercetători și post-doctoranzi, personalul non-academic și administrativ, precum și pentru studenți (inclusiv doctoranzi).

Pe baza performanțelor reale de management, se are în vedere o îmbunătățire continuă a flexibilității în luarea deciziilor, transparență și comunicare, prin dezvoltarea unui sistem informațional extins.

3.2. Profil academic

USAMV Cluj-Napoca are autonomie deplină în definirea și implementarea strategiei sale educaționale și a obiectivelor, care vizează excelența în ariile sale de competență: agricultură-hrană-zootehnie, (bio)tehnologii înrudite, medicină veterinară, în scopul de a-și menține competitivitatea, atât la nivel național cât și internațional.

Ne propunem o continuă **îmbunătățire a conținutului predării programelor de studiu** prin armonizarea cu programele europene și în conformitate cu standardele naționale și internaționale. Aceasta reprezintă un obiectiv-cheie în îmbunătățirea calității educației, creșterea competitivității naționale/internaționale și a colaborării, a schimburilor prin mobilitate academică.

Bazat pe excelența și performanța noastră anterioară în cercetare, **dezvoltarea bazată pe cunoaștere a proiectelor de cercetare inovative** este de asemenea un obiectiv major al universității, puternic integrat cu programele educaționale, în special la nivel post-licență (nivel post-doc, doctorat și masterat).

Instruirea practică a studenților și serviciile oferite partenerilor economici, la nivel național și, în special în regiunea Transilvaniei, este al treilea obiectiv prioritar, care are nevoie de o atenție specială în perioada următoare.

În acest context, este vizată o abordare integrată, pentru a se ajunge la un bun echilibru între procesul de predare și instruirea practică, cercetare avansată și servicii pentru societate.

O bună premisă pentru aceste obiective strategice este performanța dobândită în ultimii 8 ani. USAMV Cluj-Napoca și-a consolidat poziția ca și universitate "de primă clasă", *de Cercetare avansată și Educație* și vizează un proces de învățământ de cea mai bună calitate, de la licență la masterat interdisciplinar și programe de doctorat. Implementarea procesului Bologna în sistemul nostru de învățământ, cu mai mult de 8 ani în urmă, a fost esențială în schimbarea și armonizarea programelor de studii la nivel național și internațional. Toate programele de studiu, licență, masterat și doctorat oferite de USAMV Cluj-Napoca, sunt în conformitate cu procesul Bologna, astfel cum este definit în legislația română. În consecință, există un plan de acțiune coerent în dezvoltarea de programe de studiu integrate, la nivelele Licență - Masterat - Doctorat (B-M-D), în ariile de competență ale fiecăreia dintre facultățile universității (vezi: [Appendix – Bachelor study programs](#) and [Appendix – Master study programs](#)), compatibile cu activitățile de Cercetare-și-Dezvoltare-Tehnologică (RTD) desfășurate în universitate (vezi: [Appendix – Research topics](#)).

Respectând Procesul Bologna, USAMV Cluj-Napoca își propune să implementeze pe scară largă o **abordare centrată pe student**. Varietatea de arii academice are ca rezultat o diversitate de abordări educaționale: îndrumarea de grupuri mici de studenți sau educație aplicativă și predarea bazată pe probleme/proiect, sporirea lucrărilor practice ale studenților și a practicii tehnologice, adaptate la cele "trei cicluri Bologna", după cum este specific pentru universitățile din România care aparțin domeniului "Științe ingineresti", 4 +2 +3 ani.

Obiectivele educaționale sunt legate de formarea de competențe specifice pentru studenți, în calificarea lor, printr-o continuă îmbunătățire a unei **abordări centrată pe student**. Această abordare este, de asemenea, o prioritate pentru următorii ani, luându-se în considerare personalitatea studenților și responsabilitatea crescută a acestora, printr-o activitate mai independentă și mai multe abilități practice. Un număr semnificativ dintre absolvenții noștri sunt implicați în procesele decizionale, atât în sectorul

public cât și în cel privat, la nivel regional/național, iar mulți dintre lucrează în străinătate, în companii, instituții de cercetare și dezvoltare tehnologică, sau universități.

O atenție specială va fi acordată dezvoltării de programe de masterat interdisciplinare (mastere profesionale și un program de studii de masterat specific pentru cercetare, care este util pentru studenții care doresc să urmeze studiile de doctorat). Îmbunătățirea calității programelor de masterat este esențială pentru noi în realizarea integrării cunoștințelor teoretice (educația) dobândite în timpul studiilor de licență, cu cercetarea, inovarea și transferul tehnologic. Astfel se asigură o bază bună pentru programele de doctorat și post-doctorale dedicate cercetătorilor tineri și talentați, care lucrează în laboratoarele de cercetare universitare, în centre și institute de cercetare.

Abilitatea cadrelor didactice și a studenților de a vorbi în limbi străine este de un interes special pentru bunele colaborări la nivel internațional, pentru mobilitatea lor prin programe specifice Erasmus, în interiorul sau în afara României, precum și pentru dezvoltarea competențelor lor antreprenoriale și reprezintă o condiție prealabilă pentru o cooperare eficientă a universității cu alte entități academice sau non-academic și pentru o bună inserție a studenților noștri și a absolvenților pe piața forței de muncă.

În același timp, am început un proces de modernizare privind dobândirea de cunoștințe prin tehnologii avansate IT, diseminarea cunoștințelor prin intermediul e-platforms, precum și utilizarea unor instrumente noi și moderne electronice pentru scopurile pedagogice ale cadrelor didactice (cursuri online, verificări online). Web site-ul universității este îmbunătățit în mod constant și oferă nu numai informații actualizate, ci și noi posibilități de interacțiune între studenți și cadre didactice, noi modalități de informare cu privire la publicații, teze de doctorat, simpozioane naționale și internaționale.

Biblioteca Universității își dezvoltă oferta, de la o bună colecție de cărți la accesul la baze de date științifice on-line. Dezvoltarea platformei de eLearning existentă este de asemenea un obiectiv, cu scopul de a fi folosite nu numai pentru programele de învățământ la distanță, ci și pentru o diseminare mai rapidă de cunoștințe către alte universități din România sau din străinătate. Unele proiecte finanțate de UE pentru îmbunătățirea educației, de exemplu, "Calitate în învățământul superior" (POS DRU), în care USAMV Cluj-Napoca este implicată, contribuie la îmbunătățirea calității învățământului la toate nivelurile (vezi: [Appendix – Institutional development projects](#)).

3.3. Activități legate de partea academică

Un obiectiv important pentru USAMV Cluj-Napoca, ca și instituția academică cea mai importantă în Transilvania pentru domeniile de competență legate de agricultură, este implicarea sa în dezvoltarea social-economică a regiunii, precum și la nivel național. Valorificarea resurselor universității și capabilitatea de transfer de cunoștințe, colaborările cu parteneri economici externi și autoritățile locale și regionale, reprezintă elemente-cheie pentru dezvoltarea activităților legate de partea academică. Implicarea entităților extra-academice reprezintă o componentă importantă în dezvoltarea programelor noastre de studii, prin linii de învățământ comune, învățământ și cercetare în colaborare cu întreprinderi mici și mijlocii. Aceste entități partenere contribuie de asemenea la dezvoltarea universității, în calitate de membri în Consiliul de dezvoltare instituțională și în alte structuri de guvernare ale universității. De asemenea, ele pot contribui la dezvoltarea infrastructurii universității, precum și prin diferite suporturi financiare, precum premii, burse de studiu acordate pentru studenți, precum și prin organizarea de evenimente comune.

În prezent universitatea furnizează educație lifelong care va fi substanțial dezvoltată, la fel și consultanța și serviciile tehnice.

Potrivit situației prezente, USAMV Cluj-Napoca vizează să atingă următoarele obiective:

- **Să implementeze colaborări coerente cu mediul economic, administrativ, social și cultural al regiunii** prin consolidarea cooperării universității cu zona extra-academică, prin programe de formare post-universitară pentru personalul din industrie, colaborarea cu autoritățile locale și județene pentru a

- atrage investitori pentru proiecte majore de dezvoltare, de interes comun (de exemplu, noul Parc-Gradina Botanica "Pârvan", înființat în colaborare cu Primăria Municipiului Cluj-Napoca).
- Să joace un rol cheie în proiectele majore locale/regionale, ca și un *"pol de excelență în agrifood, plante/nutriția animală și cercetarea veterinară"*, în special în regiunea Transilvaniei, dar și la nivel național.
 - Să participe activ la noile oportunități oferite de Programele operaționale pentru dezvoltare regională, finanțate din fonduri UE (POR), care reprezintă, de asemenea bune oportunități pentru universitatea noastră ca, în viitorul apropiat, să se integreze în Poliile de competitivitate, împreună cu alte universități, companii private și Agenția de Dezvoltare Regională (ADR Nord-Vest)
 - **Să extindă sistemul de învățare pe tot parcursul vieții și să ajusteze oferta de formare și instruire practică, la nevoile economice ale beneficiarilor**, prin: ofertă de formare și resurse adaptate, atragerea și stabilizarea resurselor umane la potențialii angajatori prin burse, stimulente și sprijin financiar, colaborarea cu angajatorii pentru implementarea unui sistem de selecție și orientare a absolvenților, organizarea de târguri de locuri de muncă, etc., prin accesarea Programului de învățare pe tot parcursul vieții (LLP), prin proiecte-pilot, precum și prin plasarea studenților pentru practică în ferme din UE, institute de cercetare și industrie.
 - **Să dezvolte parteneriate pentru proiecte de cercetare aplicată, cu IMM-uri sau întreprinderi mari, pentru a răspunde nevoilor din economie**, prin: teme de proiecte comune, care să implice studenți la nivel de master sau doctorat, dezvoltarea de programe de doctorat în parteneriat cu companii și corporații naționale/internaționale, furnizarea de cercetare și consultanță, precum și de servicii tehnice, pentru partenerii economici și sociali, pentru a realiza în mod eficient transferul de cunoștințe și tehnologic al rezultatelor cercetării către companii.
 - **Să sprijine dezvoltarea de noi IMM-uri, ca și spin-off-uri ale universității**, deoarece acestea pot forma un cadru important pentru transferul tehnologic de produse high-tech.
 - **Să asigure legături permanente cu autoritățile locale/regionale și naționale**, prin: membrii managementului universității și ai comunității academice să fie aleși ca membri ai consiliilor naționale și ale ministerului și comisii (CNFIS, UEFISCDI, ANCS, ARACIS, CNDI, CCCDI).

3.4. Finanțarea

USAMV Cluj-Napoca, ca și instituție publică de învățământ superior, este finanțată în principal din fonduri guvernamentale/publice, dar are și resurse proprii de auto-finanțare prin programe de învățământ, proiecte și servicii, consultanță și servicii tehnice, sponsorizări, etc. Bugetul total al universității a avut o tendință de creștere în ultimii 8 ani, în ciuda scăderii continue a finanțării publice. Atragerea de fonduri reprezintă o condiție prealabilă pentru atitudinea antreprenorială a dezvoltării USAMV Cluj-Napoca.

În ceea ce privește echilibrul dintre finanțarea publică și auto-finanțarea universității, rata medie în ultimii 4 ani a fost de aproximativ 1 la 1.

Proiectele de cercetare sunt cea mai bună sursă de finanțare și valoare adăugată de know-how. În ciuda "micii sale dimensiuni" în rândul celorlalte universități din România, în 2007 USAMV Cluj-Napoca s-a situat pe primul loc în țară în ceea ce privește rata de succes (nr. de proiecte/cadre didactice), pentru proiecte de cercetare la nivel național, în special pentru proiecte dedicate doctoranzilor și post-doctoranzilor finanțate prin programe naționale coordonate de către Autoritatea Națională pentru Cercetare Științifică (ANCS) și Consiliul Național al Cercetării Științifice din Învățământul Superior (CNCSIS) (vezi: [Ordinul Ministrului Nr. 2784/13 decembrie 2007](#)).

USAMV Cluj-Napoca s-a implicat cu succes într-un număr semnificativ de proiecte finanțate prin FP6, proiecte de cercetare FP7, precum și prin participarea la proiecte COST și Leonardo.

3.5. Poziția universității la nivel local, regional, național și internațional

USAMV Cluj-Napoca este conștientă de faptul că, fiind o instituție academică cheie în Transilvania, trebuie să difuzeze nu doar cunoștințe teoretice și know-how practic ci, dar, de asemenea, să fie un furnizor și beneficiar al input-urilor/output-urilor societății, prin servicii adecvate. Universitatea își propune să fie un pol de cunoaștere pentru bioeconomie la nivel național, prin inovație și performanță tehnologică.

Pentru aceasta, strategia pe termen scurt vizează să instruiască studenții din toate ciclurile ca și profesioniști, în scopul de a satisface nevoile locale/regionale, pentru a găsi locuri de muncă în companii specifice, agenții și sănătate, instituții de cultură și educație, precum și să ofere soluții la nevoile internaționale. Pe termen lung, USAMV Cluj-Napoca își propune strategic să devină o instituție academică de vârf, un pol competitiv de excelență în educație și cercetare pentru dezvoltarea sa durabilă (educație și RTD), la nivel local și regional, o universitate de top în Clasamentul Național Român, precum și prin recunoașterea europeană deplină.

3.6. Opțiuni strategice ale instituției

Prin misiunea, viziunea și opțiunile sale strategice, USAMV CLUJ-NAPOCA este parte a Ariei Europene a Învățământului Superior și Ariei Cercetării Europene, promovând valorile și liniile de acțiune ale proceselor de restructurare ale UE definite prin Declarațiile de la Bologna și Lisabona și ținând cont de legislația română, ca parte a cerințelor UE. Schimbările globale în învățământul superior, alături de nevoile locale/regionale/naționale, au fost analizate atent de către USAMV Cluj-Napoca, fiind incluse în strategia și obiectivele sale.

Ținând cont de valorile sale tradiționale, de infrastructura existentă și de resursele umane, de finanțare, de rezultatele și performanțele obținute, de nevoile actuale și de viitor ale societății, precum și în legătură cu tendințele internaționale, USAMV Cluj-Napoca și-a formulat viziunea sa specifică pentru Excelență, Competitivitate și Integrare societală. Bazat pe această viziune, strategia pentru următorii patru ani va fi urmată de către echipa de management a universității, corelat cu toți factorii interni și externi interesați, pentru dezvoltarea sustenabilă a universității.

4. GUVERNARE ȘI ACTIVITĂȚI

4.1. Guvernare și management

Organizarea efectivă a conducerii și activităților USAMV Cluj-Napoca a luat în considerare normele și valorile menționate mai sus, aflate în legătură cu strategia universității, viziunea și obiectivele și s-au bazat pe principalele decizii strategice luate în ultimii 10 ani (vezi: *Appendix – Strategic decisions in the last decade*):

- 2004 – implementarea pentru prima dată a Sistemului de Asigurare a Calității în universitate, bazată pe o analiză SWOT și pe un proces de evaluare academică
- Din 2004 – Restructurarea ofertei educaționale pentru programele de licență, adaptată la nevoile societății, precum și implementarea sistemului ECTS în concordanță cu sistemul Bologna
- Din 2005 – Dezvoltarea infrastructurii de cercetare și implementarea de proiecte de cercetare prin promovarea excelenței
- 2009 – Evaluarea Instituțională de către ARACIS și recunoașterea universității ca având “Grad de încredere ridicat” pentru calitatea sistemului de învățământ
- 2009 – Evaluarea managementului, implementarea și acreditarea sistemului ISO 9001:2008 de către TUV Austria
- 2011 – Clasificarea națională și recunoașterea universității ca având “cercetare avansată și educație” de primă clasă (locul 5/12)

Analiza practicilor manageriale. Conducerea și managementul USAMV Cluj-Napoca sunt formulate în concordanță cu scopurile strategice și obiectivele, respectând pe deplin viziunea și misiunea universității, specificitatea fiecărei facultăți, precum și a contextului general național și internațional.

Începând cu anul 2011, noua Lege a Învățământului a acordat puteri întregii comunități academice în alegerea structurii de management de vârf. Structurile actuale de management ale USAMV Cluj-Napoca, la diferitele niveluri, sunt prezentate în Anexele Raportului de auto-evaluare (vezi: [Appendix – Management and organizational chart](#) și [Appendix – Faculties chart](#)). Membrii din structurile manageriale ale universității au fost aleși printr-un proces de tip “de jos – în sus” (alegeri succesive la nivel de consiliu de departament/facultate, precum și Senatul universității, în acord cu Legea Educației nr 1/2011 și metodologia pentru procesul de alegeri al universității aprobată de Senatul universității). Consiliile facultăților au validat cel puțin doi candidați pentru postul de decan. Senatul și-a ales președintele, precum și coordonatorii comisiilor Senatului.

În conformitate cu această metodologie și cu Referendum-ul printre membrii personalului academic din universitate, rectorul a fost ales de către întregul personal academic al universității și apoi, utilizând un proces de tip de sus – în jos, rectorul a nominalizat prorectorii și a selectat, în urma unei competiții publice, decanul pentru fiecare facultate dintre candidații validați de către consiliile facultăților. Ulterior, decanii au nominalizat prodecanii.

Senatul universității, format din reprezentanți aleși în mod democratic din fiecare facultate și departament (personal academic 75% și studenți 25%), este organismul decizional al USAMV Cluj-Napoca. Acesta include, de asemenea, ca și membru invitat, reprezentantul sindicatului. Senatul universității însuși, sau prin structura sa operativă – Consiliul Senatului, decide asupra problemelor majore ce privesc activitățile academice și politicile USAMV Cluj-Napoca, chestiuni legate de finanțare, selecția și promovarea personalului academic și administrativ, admiterea studenților, dezvoltarea de servicii pentru societate.

Structura managementului operativ (Consiliul de Administrație) include rectorul, șase prorectori, directorul general administrativ al universității și reprezentantul studenților (prefect), fiecare membru fiind responsabil pentru activitățile sale manageriale specifice, în concordanță cu strategia universității și organigrama acesteia.

Pentru activități de predare, de exemplu dezvoltarea și revizuirea curriculei, selecția și promovarea personalului academic, admiterea studenților, este responsabilitatea prorectorului academic. Pentru activitățile legate de cercetare, politici, strategii și standarde de calitate, propunerile vin de la departamente, centre de cercetare și laboratoare, precum iar Consiliul Științific propune deciziile, care trebuie să fie validate de către Consiliul de Administrație.

Există de asemenea procese interne, care privesc întreaga instituție, cum ar fi selecția și promovarea personalului administrativ, precum și dezvoltarea de noi servicii pentru societate, pentru care Senatul trebuie să valideze propunerile, în conformitate cu reglementările legale naționale și instituționale, precum și cu planul strategic al universității.

Pentru a veni în sprijinul procesului decizional și implementării obiectivelor strategice, precum și pentru asigurarea calității activităților de management, la nivelul universității operează următoarele structuri:

Comisiile Senatului Universității: Comisia didactică și învățământ, Comisia Cercetare, Comisia Administrativă și de Patrimoniu, Comisia socială și cu probleme studențești, Comisia Relații internaționale și mediul de afaceri, Comisia de etică.

Departamente suport: Facultatea de Agricultură: Știința solului și mecanizare, Cultura plantelor, Protecția mediului și a plantelor, Inginerie alimentară; **Facultatea de Horticultură:** Horticultură și Peisagistică, Silvicultură, Economie, Măsurători terestre și Științe Exacte; **Facultatea de Zootehnie și Biotehnologii:** Discipline fundamentale – biotehnologie; Discipline tehnice – creșterea animalelor; **Facultatea de Medicină Veterinară:** Preclinic, Produse animaliere și siguranța alimentelor, Paraclinic, Clinici.

Servicii suport ale universității: Rectorat, Biblioteca universității, Tehnic și administrativ, Financiar și contabilitate, Servicii Sociale și pentru studenți, Relații publice. Comunicarea și Relațiile publice sunt de importanță deosebită pentru comunitatea academică și pentru implementarea strategiei universității. De

aceea, toate deciziile de interes general sunt făcute public, c[tre întreaga comunitate, fie utilizând rețeaua intranet a universității, fie sunt postate pe [website-ul](#) universității.

Reprezentarea studenților. În conformitate cu regulamentele USAMV Cluj-Napoca, studenții sunt considerați parteneri în procesul academic, fiind reprezentați în toate structurile de management (Consiliul facultății, Senatul Universității, Consiliul Academic și Consiliul Senatului). Mai mult, Comisia de Etică și Comisia pentru asigurarea și evaluarea calității – cu subdiviziunile sale de la nivelul facultăților și programelor de studii – includ de asemenea membri ai comunității studențești. Căminele studențești sunt administrate de către studenți și săptămânal sunt organizate întâlniri ale prodecanilor responsabili cu activitățile studenților la nivel de facultate, cu reprezentanții studenților, sub coordonarea prorectorului pentru probleme sociale și ale studenților. Studenții sunt implicați activ în promovarea universității, prin competiții educaționale și sportive, cum este de exemplu “Agronomiada”, la nivel național.

Chiar dacă s-au făcut pași importanți în ultimii zece ani cu scopul de a implica studenții în procesul decizional, pare a fi încă dificil pentru federația studenților în a comunica cu masa mare a studenților, rezultând astfel un interes o implicare limitată din partea studenților cu bune performanțe, în procesul decizional, precum și goluri în diseminarea acestor decizii în rândul studenților.

În ceea ce privește **părțile externe interesate** care reprezintă mediul economic, deși regulamentele actuale ale USAMV Cluj-Napoca nu prevăd implicarea acestora în guvernarea instituțională, există un dialog permanent cu comunitatea economică și socio-culturală, în principal pentru a asigura o ofertă educațională și de cercetare flexibilă și actualizată la nevoile pieței muncii.

Universitatea oferă distincții, adică Doctor Honoris Causa și Honorary professor, personalităților naționale și internaționale, de la alte universități, instituții de cercetare, din mediul economic și socio-cultural (local, național, internațional).

Cel mai bun membru al personalului academic și al celui administrativ sunt premiați de către rector la sfârșitul anului, în acord cu performanța lor, evaluată de către Departamentul de Asigurare a Calității.

Totuși, atunci când avem în vedere nivelul de angajabilitate al absolvenților și șansele acestora pe piața muncii în acord cu competențele lor, mai sunt acțiuni de întreprins. Studiile periodice cu privire la gradul de satisfacție al absolvenților și angajatorilor în ceea ce privește calitatea educației oferită de către USAMV Cluj-Napoca ar putea fi inputuri interesante și utile pentru procesul academic și îmbunătățirea calității. Deși un sistem pentru a colecta opiniile absolvenților cu privire la studiile lor a fost implementat cu câțiva ani în urmă, nu putem afirma că acesta este în întregime eficient. USAMV Cluj-Napoca îl clasifică ca și un punct slab și urmărește să identifice căile pentru a îmbunătăți această situație.

Resursele umane. Procesele și activitățile specifice ale USAMV Cluj-Napoca sunt realizate de către 572 angajați– 366 membri ai personalului academic și 206 membri ai personalului non-academic (personal didactic auxiliar și personal administrativ), într-un procent echilibrat din punct de vedere al genului și al vârstei (vezi: [Appendix – Academic staff](#)). Deși numărul de studenți a crescut constant în ultimii cinci ani (vezi: [Appendix – Students](#)), numărul de personal academic s-a păstrat în anumite limite, permițând un echilibru între asigurarea calității proceselor academice și eficiența financiară.

De aproximativ 15 ani universitatea a implementat o politică de deschidere către experiența academică europeană, sprijinind programele de schimb de experiență pentru personalul didactic în universități europene (vezi: [Appendix – Mobility under ERASMUS Programme](#)), cu beneficii semnificative asupra calității educației, armonizarea curriculumelor programelor de studii și a programelor analitice, la nivel European, implementarea metodelor moderne de predare și evaluare, etc. Ulterior, acest proces a fost extins și la nivelul personalului administrativ.

Recrutarea și promovarea personalului de predare este efectuată în cadrul noii legislații naționale și în concordanță cu Regulamentul intern și Procedura pentru numirea personalului de predare. USAMV Cluj-Napoca estimează în fiecare an nevoile curente și de viitor de resurse umane. Este în responsabilitatea prorectorului pentru Resurse umane de a estima, în acord cu managementul facultăților, nevoia de cadre

didactice, corelat cu criteriile de calitate impuse pentru a obține un post academic. Astfel, în ultimii ani accentul principal s-a pus pe atragerea absolvenților tineri și valoroși către o carieră academică, precum și pe definirea standardelor pentru promovarea personalului în ierarhia academică, bazată exclusiv pe criteriile de performanță profesională. Un punct sensibil îl reprezintă reglementările naționale privind angajarea/promovarea personalului care se aplică în ultimii ani tuturor instituțiilor publice și care prevăd o limitare drastică a angajărilor (o angajare la 7 plecări).

Personalul de cercetare este compus în prezent din membrii ai personalului academic implicați în proiecte CDT finanțate prin granturi și contracte internaționale/naționale, precum și 59 de cercetători din care: 9 cercetători și 50 de asistenți cercetători. Politica de resurse umane a USAMV Cluj-Napoca încurajează dezvoltarea de profesioniști de înaltă calificare, prin programe doctorale și postdoctorale, ca viitori cercetători full-time, sau cadre didactice. Dreptul de a organiza al treilea ciclu de studii - Școala Doctorală – în domenii noi în cadrul USAMV Cluj-Napoca, pe lângă cele tradiționale, sprijină acest obiectiv.

Obiectivele USAMV Cluj-Napoca privind consolidarea poziției sale la nivel național, de instituție de învățământ superior cu cercetare avansată, implică dezvoltarea celui de a 3-lea ciclu în *toate* domeniile de competență/excelență ale primelor două cicluri, acesta fiind un proces în desfășurare. Totuși, numărul de profesori cu drept de a coordona doctoratul, este în scădere, ca urmare a pensionărilor dar și datorită noilor criterii stipulate de noile reglementări naționale. "Excelență în Școlile Doctorale". Acest aspect a fost identificat ca și un punct slab încă de acum câțiva ani și, ca urmare, universitatea implementează o politică de stimulare a coordonatorilor de doctorat cu rezultate competitive, prin stimulente și recompense speciale. Acest aspect este de o importanță specială, deoarece un procentaj semnificativ al actualilor conducători de doctorat se vor pensiona în următorii cinci ani.

Cooperare inter-instituțională. În concordanță cu viziunea și strategia sa, USAMV este un partener important în comunitatea locală/regională/națională. USAMV Cluj-Napoca a jucat un rol activ în formularea strategiilor de dezvoltare sustenabilă locală și regională – și este implicată în efortul general pentru creșterea economică locală și regională (incluzând proiecte în parteneriat de CDT și educație, cu parteneri industriali internaționali importanți care au ales Cluj-Napoca pentru a deschide noi sucursale) și sprijinirea companiilor emergente (USAMV Cluj-Napoca este parte a "Polului pentru Tehnologie și Competitivitate", un proiect care este dezvoltat în colaborare cu Agenția de Dezvoltare Regională, IMM-uri și companii românești interesate în transferul tehnologic). USAMV Cluj-Napoca este de asemenea parte a vieții comunității, dezvoltând colaborări continue cu Camera de Comerț, Departamentul de Agricultură al regiunii, Inspectoratul Regional Școlar, precum și cu multe alte entități locale (companii Agrifood, bănci, etc.), ceea ce permite un răspuns rapid la nevoile comunității. De câțiva ani, în colaborare cu Centrul Cultural Francez, universitatea a fost co-organizator pentru Târgul de Produse Alimentare Tradiționale/Ecologice, Târgul Internațional AGRARIA, târguri de gastronomie și vin, a sprijinit conceptul Slow Food și târguri. USAMV Cluj-Napoca este un membru activ în cadrul a două consorții universitare, Consorțiul local al universităților din Cluj-Napoca, și Consorțiul tuturor universităților USAMV din țară.

Opțiunea USAMV Cluj-Napoca pentru *Dezvoltarea sustenabilă* a determinat ca aceasta să fie un actor puternic în promovarea strategiei regionale pentru bioenergie și, împreună cu *Agenția de Dezvoltare Regională*, USAMV Cluj-Napoca a formulat Planul de Acțiune pentru Implementarea Energiei Regenerabile: "Towards 2020".

La nivelul învățământului superior național, USAMV Cluj-Napoca vizează să își păstreze poziția în primele 12 cele mai bune universități, prin promovarea cercetării avansate și a excelenței în educație.

La nivel internațional, USAMV Cluj-Napoca a dezvoltat în mod continuu cooperări cu alte universități (în prezent USAMV Cluj-Napoca are acorduri de cooperare cu peste 30 de universități), structuri CDT și companii, în toată Europa, în US și Canada (vezi: [Appendix – International relations](#)), cooperări în învățământ prin proiecte trans-naționale în care USAMV Cluj-Napoca este lider național, promovând proiecte pilot integrate cu rezultate semnificative în dezvoltarea de instrumente moderne de predare/învățare și cooperare internațională prin intermediul proiectelor Leonardo da Vinci, Comenius și a Rețelelor Transnaționale pe tematici specifice privind dezvoltarea sustenabilă. Aceste proiecte au

reprezentat punctul de start pentru cooperarea internațională în CDT, universitatea fiind un partener active în unele proiecte FP6 și FP7.

Politica de management ca și reflectare a misiunii și obiectivelor. Politica managerială a USAMV Cluj-Napoca poate fi caracterizată prin *“valori pe termen lung, într-o abordare flexibilă”*; această abordare permițând acționarea rapidă pentru capitalizarea punctelor tari ale universității, găsirea soluțiilor pentru a corecta punctele slabe, diminuarea riscurilor, luarea în considerare a amenințărilor și abordarea oportunităților. Planul de acțiune al USAMV este corelat cu această politică de management și a fost elaborat printr-o analiză internă care are loc cel puțin o dată pe an, fiind sprijinită de prin sesiuni de benchmarking, diverse audit-uri și evaluări externe. Așa cum a fost menționat mai sus, deciziile majore luate în ultimii 10 ani au fost de mare importanță pentru dezvoltarea noilor strategii și elaborarea deciziilor pentru viitor. Rolul abordării *“de jos – în sus”* a structurilor de management și implicarea acestora, de la departamente la facultăți și la nivelul universității, este de foarte mare importanță pentru procesele decizionale coerente și transparente de elaborare a deciziilor și comunicare, prin aceasta sprijinind dezvoltarea sustenabilă a universității.

4.2. Profilul academic

Analiza abordărilor educaționale și a cercetării. Resursele de management integrat pentru asigurarea calității procesele de învățământ, formare și cercetare, reprezintă o abordare care le confirmă viabilitatea în timp. După cum deja a fost menționat, o abordare integrată în activitățile de educație și cercetare este baza pentru dezvoltarea sustenabilă a USAMV Cluj-Napoca, care vizează să sprijine asigurarea calității și îmbunătățirea continuă în domeniul educației. Reformele curriculare ce au urmat procesul Bologna, este necesar să fie implementate în cadrul fiecărei curricule, pentru a îmbunătăți calitatea învățământului și a accelera și stimula implementarea procedurilor de acreditare internă și externă, în concordanță cu legislația națională și cerințele ARACIS.

Fiecare program de studii dezvoltat de către cele patru facultăți ale USAMV Cluj-Napoca are o structură și un conținut bine definite. Cursurile la nivel de licență (licență de 3 sau 4 ani - primul ciclu) și curricula specifică definită, prin programă analitică detaliată, conținutul, rezultatele, metoda de evaluare, pentru fiecare curs, precum și ECTS atribuite (vezi: [Appendix – ECTS system in USAMV Cluj-Napoca](#)). Armonizarea conținutului curiculei reprezintă un proces continuu, în cadrul căruia cadrele didactice și studenții sunt invitați să contribuie la fiecare trei ani.

Un an academic constă din 2 semestre, a 14 săptămâni fiecare, urmate de o perioadă de examinare de patru săptămâni și o perioadă suplimentară de examinare, de două săptămâni, în luna septembrie. Numărul total de credite cerute pentru a absolvi programul licență, variază între 180 (programul de studii: Biologie) și 240 credite (toate programele de studii pentru Științele Injineresti– Resurse Vegetale și Animale), în timp ce pentru absolvirea unui program de master numărul total de credite este de 90 sau 120.

Conținutul curiculei, rezultatele și metodele de evaluare, sunt prezentate studenților la începutul fiecărui semestru. În mod normal, o examinare mid-term și una finală evaluează rezultatele unui curs. Pe lângă aceasta, sunt aplicate metode complementare de evaluare (proiecte, muncă individuală, etc.). Sunt oferite cursuri opționale, aceasta fiind una dintre caracteristicile învățării centrate pe student. USAMV Cluj-Napoca sprijină toate facultățile în a stimula învățământul centrat pe student și îmbunătățirea continuă a curiculei prin noi cunoștințe, instrumente didactice moderne (multi/media, grupuri de lucru, proiecte, învățare prin rezolvarea de probleme), prin înregistrarea feedback-ului prin chestionarea studenților și benchmarking cu alte instituții de învățământ superior.

Rezultatele evaluării de către studenți în ceea ce privește calitatea și conținutul cursurilor sunt foarte importante, fiind gestionate de către Departamentul pentru Asigurarea Calității. Din păcate, răspunsurile studenților sunt relativ slabe, fiind planificată o acțiune specifică pentru a îmbunătăți această situație.

O atenție specială este dedicată reducerii ratei relative mari a abandonului în rândul studenților care își întrerup sau abandonează studiile în universitate înainte de absolvire. Această problemă este în corelație

directă cu un alt punct sensibil: procedura de admitere în universitate. Deși formele și criteriile de admitere sunt considerate a fi parte a autonomiei universitare, decizia trebuie totodată să țină seama și de opțiunile și trendul celorlate universități din România, cu profil similar.

USAMV Cluj-Napoca vizează să atragă candidați valoroși și de aceea dorește să dispună de criterii de selecție bune, care să aibe în vedere performanța anterioară a candidaților prin notele obținute în liceu și rezultatele lor la o examen de admitere.

O prioritate de vârf pentru universitate este îmbunătățirea calității programelor masterale. Numărul de programe masterale este legat de numărul de studenți absolvenți, iar scopul general al universității a fost acela de a atrage cel puțin 50% dintre studenții absolvenți, la programele masterale. În ultimii opt ani, la nivel național și la nivelul universității, s-a observat o tendință de creștere și un efort permanent în diversificarea ofertei educaționale pentru a crește numărul de programe masterale. Astfel, sunt situații când au fost propuse și autorizate o prea mare diversitate de programe de studiu, cu suprapuneri de cursuri și informații redundante. Din păcate, succesul acestor programe a fost limitat, datorită calității lor scăzute. Intenționăm să restructurăm programele de master, pentru a avea mai puține dar mai puternice, programe de master cu relevanță pentru piața muncii și, în special, compatibile cu programe similare predate în universități europene. În special, masterale internaționale, predate în limba engleză, sunt încurajate și promovate, cu module care să permită mobilitatea profesorilor și a studenților între universitățile partenere.

Credem ca avem câteva puncte slabe în dezvoltarea strategic a programelor de master și în special în aplicarea unei curricule sustenabile pentru studenți cu adevărat interesați.

Un punct cheie în dezvoltarea programelor de studii eficiente și sustenabile este buna echilibrare dintre studenți și personalul academic (vezi: [Appendix – Students](#)). Propunerea pentru un nou program de studii este, în general, făcută de către un department, în concordanță cu criteriile standard naționale (definite de către ARACIS), transmise Consiliului facultății și, după aprobare, către Consiliul de Administrație al universității. Senatul aprobă, sau respinge, propunerea. Dacă Senatul universității aprobă programul, urmează evaluarea externă, realizată de către evaluatorii ARACIS. Programul de studii este autorizat temporar, dacă este obținut un grad de încredere după prima evaluare externă. După absolvirea de către trei generații de studenți, programul trebuie să obțină acreditarea de către ARACIS. Pentru menținerea acreditării, are loc o evaluare o periodică externă, la fiecare cinci ani. Relevanța unui nou program este validată, printre altele, prin numărul de candidați. În acest context putem menționa că programele de studiu nou dezvoltate, care au atras un număr semnificativ de candidați, sunt: Controlul și Expertiza Produselor Alimentare, Ingineria Produselor Alimentare, Medicină Veterinară.

În final, fiecare program de studiu este validat prin numărul de absolvenți capabili să-și găsească un loc de muncă în concordanță cu specialitatea sa. Referitor la aceasta, USAMV Cluj-Napoca are încă informații limitate cu privire la parcursul în carieră a absolvenților. Din păcate, riscurile și amenințările situației economice actuale din România au afectat de asemenea și oferta de locuri de muncă în domeniul agriculturii, zootehniei, tehnologia produselor alimentare și, aproape în aproape toate domeniile noastre de competență. Dacă nu este atractiv pentru studenții potențiali, un program de studii fără candidați, va fi suspendat.

Un activ important pentru universitate este foarte buna clasare, care sprijină capacitatea de a atrage studenți din toată țara și din străinătate. Studenții străini sunt înscriși în cadrul universității la programe complete, sau la perioade de studii specifice, prin proiecte internaționale. Creșterea numărului de programe de studiu predate într-o limbă străină, reprezintă o acțiune care începe să fie implementată în special la nivelul master. USAMV Cluj-Napoca este parte a programului Erasmus din anul 1998. Pachetele de informații ECTS sunt disponibile pentru studenții români și pentru studenții străini (see: [Appendix – ECTS system in USAMV Cluj-Napoca](#)). Mai mult, lucrările privind Suplimentul de diplomă au fost de asemenea finalizate, implicând reorganizarea creditelor ECTS și fiind astfel, în principiu, eliminate obstacolele pentru mobilitatea studenților. În ultimul an academic, 59 de studenți au beneficiat de acest program. În timp ce media anuală a numărului studenților care au beneficiat de mobilități outgoing este

37, numărul de studenți care au beneficiat de mobilități incoming este de aproximativ 22. Un număr aproximativ de 33 dintre membrii personalului participă în fiecare an la programul de mobilități de predare și formare în universități UE. Detalii privind evoluția acestui program sunt prezentate în [Appendix – Mobility under ERASMUS Programme](#). Numărul de studenți străini, în afara programului Erasmus, este relativ scăzut; cauzele sunt complexe (legislație, recunoaștere internațională și competiția), însă recunoașterea acestora conduce la un set de acțiuni pentru creșterea vizibilității internaționale a universității. Au existat/există multe proiecte dezvoltate și implementate sub Socrates, Leonardo da Vinci, Erasmus, iar începând cu anul 2007, în cadrul LLP, prin intermediul grupurilor de lucru de la mai multe facultăți, cu rezultate bune pentru întreaga comunitate academică (așa cum este platforma eLearning, metode și instrumente ICT pentru învățământ și instruire, laboratoare virtuale, etc).

Un punct tare în dezvoltarea USAMV Cluj-Napoca este reprezentat de către *personalul academic* cu competențe certificate și experiență internațională, care doresc să-și împărtășească cunoștințele prin metode moderne de predare, precum și metode de evaluare.

Regulamentul pentru **programele doctorale** este în prezent revizuit pentru a fi în concordanță cu noua Lege a învățământului, Nr. 1/2011. Această activitate este gestionată de către Școala Doctorală interdisciplinară a universității (vezi: [Appendix – Doctoral School](#)). Programele doctorale and postdoctorale au primit un sprijin financiar important prin Programul Operațional Sectorial – Dezvoltarea Resurselor Umane. Ca și rezultat, 100+45 studenți doctoranzi și cercetători postdoctoranzi au primit sprijin financiar UE pentru activitatea lor de cercetare. În anul 2011, USAMV Cluj-Napoca a implementat un număr mare de proiecte finanțate din fonduri structurale (17 proiecte) pentru dezvoltarea resurselor umane. Prin aceste proiecte s-au dezvoltat noi programe de studii și noi module pentru studenții doctoranzi, postdoc (4 proiecte), pentru practică (4 module de instruire) și platforma de învățare pe tot parcursul vieții care vizează o gamă largă de tematici (vezi: [Appendix – Institutional development projects](#)).

Rezultate extinse pot fi obținute prin creșterea numărului de conducători de doctorat. De asemenea, USAMV Cluj-Napoca recunoaște valoarea îmbogățirii posibilităților studenților, pentru a echilibra dimensiunile teoretică și practică ale instruirii lor prin activități curriculare și extra-curriculare.

Cercetare. Toate activitățile legate de cercetare și inovare, consultanță și servicii tehnice, transfer tehnologic, sunt realizate în USAMV Cluj-Napoca de către membrii personalului de cercetare (59 de persoane sunt angajate ca și personal de cercetare: 9 cercetători și 50 de asistenți în cercetare), precum și de către personalul academic, postdoctoranzi și studenți doctoranzi. Coordonarea acestor activități este asigurată de către Consiliul Științific, care este coordonat de către prorectorul pentru cercetare și conectat cu prodecanii pentru cercetare de la fiecare facultate. Managementul activităților CDT, incluzând monitorizarea și evaluarea, diseminarea și valorificarea rezultatelor cercetării, este de asemenea în responsabilitatea prorectorului pentru Cercetare, sub directă coordonare a Rectorului și reprezintă unul dintre punctele strategice majore în strategia universității. Studiile doctorale și postdoctorale care implică cercetare avansată, sunt coordonate de către o Școala Doctorală Interdisciplinară, care este strâns legată de activitățile de cercetare.

Din 2004, activitățile de CDT și performanța s-au dezvoltat semnificativ, datorită creșterii finanțării naționale și contextului internațional. O analiză inițială, care evaluează resursele, tematicile, rezultatele și performanțele în publicări și participări la conferințe, a scos în evidență o anumită polaritate și diversitate în termeni de tematici și excelență, de competitivitate și vizibilitate. În ciuda resurselor de finanțare bune obținute până în prezent, este evident nevoia de a crește excelența științifică, o coerență a tematicilor, o utilizare eficientă a infrastructurii și resurselor umane, informare și documentare la zi, precum și creșterea numărului de parteneriate internaționale.

Infrastructura actuală a universității pentru cercetare (laboratoare, centre de cercetare și institute) (vezi: [Appendix – Research infrastructure](#)), constituie un bun rezultat al investițiilor făcute universitate, realizate în procent de 40% cu resursele proprii ale universității (granturi obținute în competiții naționale).

Temele de cercetare (vezi: [Appendix – Research topics](#)), reflectă competențele cercetătorilor din universitate, ale personalului academic, doctoranzilor, studenții postdoc, precum și performanța cercetării. Succesul în obținerea de finanțare, arată în mod clar faptul că USAMV este una dintre cele mai bune instituții academice care promovează cercetarea avansată (vezi: [Appendix – Research performance](#)).

Pentru a descrie performanța în valorificarea infrastructurii și a resurselor umane în activitățile CDT, exemplul privind Institutul de Științele Vieții este relevant (vezi: [Appendix – The Institute of Life Science](#)). Institutul de Științele Vieții este situat în campusul principal și include laboratoare excelente (6 Centre de cercetare, o Platformă bazată pe cunoaștere pentru biotehnologii, laboratoare acreditate pentru servicii), care ating standardele europene. Concentrația celor mai bune resurse de cercetare în acest institut și crearea unei entități de cercetare de excelență, permite performanță în cercetarea interdisciplinară, sustenabilitatea unei infrastructuri de înalt nivel și organizarea de evenimente științifice internaționale (conferințe și workshop-uri), crescând competitivitatea universității în Aria Europeană a Cercetării. USAMV Cluj-Napoca este de asemenea implicată activ în consultanță și servicii tehnice oferite partenerilor economici (vezi: [Appendix – Consultancy and technical services](#)).

Planurile strategice ale universității se concentrează pe dezvoltarea transferului tehnologic înspre întreprinderi și ferme, înființarea de spin offs, incubatoare de afaceri, un birou pentru proprietate intelectuală și un Centru de afaceri. De asemenea, instruirea avansată a resursei umane pentru competențe antreprenoriale este încurajată și sprijinită prin proiectele strategice ale universității.

Pentru a crește vizibilitatea internațională, managementul universității stimulează publicările în reviste de prestigiu ISI, cu factor de impact, precum și participarea la întâlnirile științifice internaționale. Anual, sunt organizate de către USAMV Cluj-Napoca conferințe internaționale, cu participarea unor personalități din partea universităților partenere, cercetători, organisme profesionale internaționale și factori decizionali în CDT (de exemplu: [The 11th International Symposium “Prospects for the 3rd Millennium Agriculture”](#)).

Cooperarea internațională reprezintă un obiectiv strategic major al ploicii CDT în USAMV Cluj-Napoca, vizând integrarea în consorții și platforme europene și dezvoltarea de proiecte comune cu entități CDT (institute și companii), din Europa și din întreaga lume, bazate pe tematici de expertiză specifice.

În ultimii trei ani, criza economică a afectat puternic finanțarea CDT, ducând aproape la lipsa totală a competițiilor CDT la nivel național, confirmând nevoia de a dezvolta cooperarea internațională a universității în CDT, precum și aceea cu partenerii sociali și economici.

Infrastructura. Departamentul IT, resursele bibliotecii și infrastructura multimedia, sunt vitale pentru orice activitate didactică și de cercetare. Infrastructura actuală din USAMV satisface nevoile dar, luând în considerare dinamica în ariile specifice universității, USAMV Cluj-Napoca va continua să își actualizeze aceste resurse și să instruiască personalul tehnic în concordanță. Serviciile de înaltă calitate ale bibliotecii pentru informare-documentare, au ca și rezultat un acces rapid la informație, cataloage online, ghidare metodologică, baze de date de referință pentru informare/cercetare, împrumuturi online inter-bibliotecii, folosirea resurselor de informare naționale și internaționale prin intermediul Internetului, etc. Biblioteca are un număr mare de publicații, pentru toate programele de studii ale universității, care este în continuare îmbogățit și suplimentat prin abonarea la publicații științifice și educaționale. Biblioteca universității permite accesul la baza de date științifice, cum ar fi: ISI Web of Knowledge, Science Direct, Scopus, Thomson ISI, SpringerLink, Oxford Journals, EMBASE, EBSCO, MEDLINE și CABI Databases. Resursele pentru documentare științifică achiziționate prin granturi și proiecte (aflate în departamente), sunt de asemenea achiziționate de biblioteca universității, extinzând resursele disponibile pentru studenți (vezi: [Appendix – The Library](#)).

4.3. Activități corelate cu domeniul academic

Transferul tehnologic ca și consecință a rezultatelor cercetărilor (vezi: [Appendix – Technology transfer](#)), reprezintă o țintă-cheie pentru managementul universității. Partenerii economici ai universității nu sunt numai furnizorii sponsorizărilor, dar și gazde pentru studenții care fac practică (vezi: [Appendix – Students practice](#)), cu scopul de a obține noi competențe și calificări.

Viitoarea strategie a USAMV Cluj-Napoca include o politică mai coerentă în ce privește stimularea creativității cercetătorilor prin brevete, incluzând sprijinul financiar pentru depunerea și evaluarea acestora. Ca și componență a acestei politici este înființarea unui *Departament pentru Proprietate intelectuală* care va include consultanță specifică pentru membrii comunității de cercetători.

Stațiunea didactică și de cercetare experimentală din cadrul universității este situată fie în Cluj-Napoca (Stațiunea pentru cercetări horticoale), precum și în vecinătatea orașului Cluj Napoca, la 14 km (Jucu) și respectiv 20 km (Cojocna) (vezi: [Appendix – The teaching and experimental research station](#)).

Învățarea pe tot parcursul vieții (LLD) reprezintă un alt domeniu de activitate dezvoltat continuu în ultimii ani. Din anul 2005 acest proces este coordonat în mod coerent de către Departamentul Învățare pe tot parcursul vieții, care a adoptat strategia corectă de a promova și întări oferta USAMV Cluj-Napoca în domeniul învățării pe tot parcursul vieții. Amenințarea datorată scăderii democratice, și ca o consecință, diminuarea numărului de studenți, pot fi echilibrate cu ajutorul unei politici inteligente în domeniul învățării pe tot parcursul vieții, atragând studenți pentru a-și definitiva/ completa educația cu ajutorul diferitelor cursuri de specializare. În prezent, USAMV Cluj-Napoca oferă cursuri pentru aproximativ 150 de participanți, număr semnificativ mai mare decât în ultimii cinci ani. Proiectele comune cu autoritățile regionale au permis extinderea ofertei LLD cu privire la învățarea pe tot parcursul vieții în 8 județe din România (vezi: [Appendix – Long life learning programs](#)).

Oportunitățile pentru noi cooperări au fost materializate cu ajutorul unor acorduri și contracte cu companii naționale și internaționale. De altfel, USAMV Cluj-Napoca este conștientă de punctele sale slabe, analizate, privind relația dintre învățământul superior din România, corelat cu organizarea și coordonarea cursurilor de formare ale studenților. Astfel, cu ajutorul parteneriatelor cu companii la nivel regional /național și internațional, universitatea tindește realizarea instruirii studenților, integrată în totalitate în cadrul economic, social și cultural caracteristic calificării studenților.

Proiectele europene cum sunt plasamentele Erasmus sau proiectul European sub egida LLP “*Un model pentru calitatea transnațională a plasamentelor studențești în întreprinderile Q-Planet*”, sprijină aceste obiective și pot dezvolta modele de cooperare printre universități și companii. Urmând această abordare, diverse proiecte finanțate prin fonduri structurale sunt în prezent implementate în USAMV Cluj-Napoca care sprijină practica studenților în cadrul companiilor din România și Europa.

În 2006, a fost înființată asociația **ALUMNI - Alma Mater Cluj-Napocaensis Association**, având ca și scop inițierea activităților menite să sprijine și să coordoneze absolvenții precum și să dezvolte un cadru legal pentru a promova relațiile cu absolvenții universității. Astăzi universitatea are o platformă operațională *online* pentru ALUMNI și, ca și partener al proiectului național strategic, pentru a identifica cursuri, beneficiază de know-how și instrumente utile pentru a intensifica această activitate. USAMV Cluj-Napoca este conștientă de limitările ei în această direcție, și că mai sunt multe de făcut pentru a ajunge la relația pe care universitățile europene o au cu proprii lor ALUMNI. Pentru o comunicare eficientă cu absolvenții și o vizibilitate mărită a universității, ar trebui implicate resurse adiționale, pentru a avea beneficii pe termen lung.

4.4. Servicii de sprijinire a studenților

Universitatea are un număr semnificativ de servicii de sprijin pentru studenți și este într-o constantă dorință de a le îmbunătăți și de a adăuga altele noi, în concordanță cu obiectivele strategice. Asigurarea unei educații adecvate precum și un sprijin consistent oferit studenților este văzut ca și obiectiv strategic în sine.

Accesul *online* la platforma *eLearning*, dezvoltată ca și o bază de date cuprinzătoare, este valabilă pentru toți studenții. Studenții se pot loga și pot accesa instrumente de învățare, notele obținute, precum și variate articole din reviste științifice naționale și internaționale; universitatea oferă 307 săli cu conexiune Internet (fiecare cu câte 50 computere) oferite studenților prin acces liber, în campusul universității și în biblioteca universității. Îmbunătățirea platformei în activitatea de predare reprezintă o țintă care poate fi îndeplinită prin efort comun al personalului didactic (oferind material pentru învățare și implicând

facilitățile platformei în procesul de predare), a studenților, și a administrației (facând astfel platforma mai prietenoasă).

Investițiile în dezvoltarea laboratoarelor moderne și a sălilor de predare oferă studenților accesul la concepte moderne, la noi metode și instrumente, creând o rețea suport pentru studenți. Sursele de publicații și documentație sunt disponibile în *biblioteca universității*, la fel și resursele individuale ale facultăților, cu subscripții reînnoite la zi. De asemenea există informații utile în ceea ce privesc oportunitățile și serviciile oferite de universitate, publicate pe [web site-ul universității](#).

Ghidul studentului oferă informații complete despre facilitățile universității, și informații utile despre oraș.

Universitatea investește constant în creșterea confortului în căminele studențești. În prezent, căminele studențești *sunt situate* în apropierea campusului universitar iar în căminele Agronomia sunt oferite peste 1047 locuri de cazare, modernizate în ultimii patru ani, cu sisteme de supraveghere video și conexiune la Internet în fiecare cameră. Facilitățile sportive (Sala de sport și terenurile de sport) sunt într-o continuă dezvoltare, Clubul sportiv al universității, ansamblul de muzică "Traditii" fac parte integrantă de asemenea din USAMV Cluj-Napoca. *Clubul studenților și pub-ul sunt foarte active și vizibile în comunitatea academică* (vezi: [Appendix – Facilities for students](#)).

Asociațiile studențești sunt componente active ale serviciilor oferite studenților. Acestea sunt autofinanțate prin programele studențești, și oferă o multitudine de informații, sesiuni de comunicări științifice anuale, competiții, concursuri, activități culturale, cursuri de formare (strângeri de fonduri, vanzare), festivaluri și schimburi culturale. Acestea sunt organizații flexibile în care studenții pot să participe. Asociațiile studențești oferă informații asupra dezvoltării profesionale și a carierei, prin evenimente la care pot participa și companiile. Rețeaua asociațiilor studențești este unul dintre factorii majori care contribuie la conturarea profilului studentului prin intermediul serviciilor pe care aceasta le oferă. Se simte oricum nevoia ca universitatea să sprijine și mai mult aceste asociații, care pot avea un rol mai activ în implicarea lor în programele de predare.

Programele internaționale de schimb (Erasmus, Leonardo) reprezintă oportunități excelente pentru studenți pentru a beneficia de experiența educațională din străinătate, și sunt promovate activ, incluzându-le și pe cele manageriate de asociațiile de studenți.

Universitatea a dezvoltat un Centru de Orientare Informare și Consultanță, în anul 2006, oferind consultanță pentru carieră și consultanță specializată (e.g. Ghidul studentului în corelație cu oportunitățile de carieră), și organizează periodic târguri pentru locuri de muncă. În continuare, studenții cer mai mult sprijin pentru servicii de orientare în carieră.

Alte servicii de sprijin care au ca scop îmbunătățirea activității studenților sunt website-urile universității USAMV Cluj-Napoca și ale facultăților, sistemul de sprijin pentru studenții defavorizați financiar (burse sociale, reducerea taxelor), precum și pentru studenții performanți (care sunt, recompensați de Universitate printr-o excursie specială la universitățile partenere din UE și vizite în țări străine), subvenții pentru transportul public (rețeaua de autobuz local și pe calea ferată), precum și la Centrul Medical al Studenților.

4.5. Finanțarea

USAMV Cluj-Napoca este finanțată din fonduri publice, și din fonduri rezultate din taxele studenților, activități de cercetare-dezvoltare tehnologică (RTD), granturi & cursuri de formare și contracte, sponsorizări, etc.

Finanțarea publică este alocată în fiecare an pe baza numărului de studenți finanțati de la buget (1) și a criteriilor de calitate (2). Procentul de finanțare bazat pe criterii de calitate este în creștere, fiind de 30% în 2010. Prin urmare, ponderea publică a bugetului universității este atent proiectată, printr-o creștere constantă a numărului de studenți bugetari (cu accent pe master și doctoranzi), în timp ce creșterea continuă a calității proceselor academice este conformă cu standardele și indicatorii definiți de către organismele de evaluare (CNFIS și CNCSIS). Valoarea fondurilor atrase în această competiție națională între

universitățile de stat au crescut continuu în ultimii patru ani. Fondurile dedicate pentru investiții în infrastructură și modernizare sunt de asemenea parțial acoperite din fonduri guvernamentale. Fondurile universității sunt utilizate pentru acoperirea cheltuielilor curente (costuri de personal, investiții în dezvoltarea infrastructurii și modernizare, utilități, etc), precum și pentru finanțarea priorităților strategice.

În 2011, bugetul total al universității a fost de 57640811 lei, din care 38,37% din finanțare guvernamentală, 47,53%, din cercetare și dezvoltare tehnologică (proiecte de cercetare, granturi de educație și formare și a contractelor tehnologice, proiecte educaționale și de dezvoltare a carierei) și 14,10% din alte fonduri. Evoluția finanțării în 2007-2011 este detaliată în [Appendix – Funding](#), subliniind că, în timp ce bugetul total al universității a crescut în ultimii ani, procentul de fonduri guvernamentale este în continuă scădere. Fiind confrunțați cu această provocare, a fost nevoie de o bună gestiune financiară, care combină asigurarea calității și utilizarea eficientă a fondurilor, în conformitate cu opțiunile strategice universitare. Evaluarea financiară a programelor de predare / formare în facultăți (și începând cu anul 2010, în liniile de formare DMO), este o parte semnificativă a managementului.

Fondurile atrase prin proiecte de cercetare sunt cheltuite în conformitate cu bugetul aprobat pentru fiecare proiect. Nivelul de cheltuieli din subvenții și contracte este votat anual de către Senatul Universității, și este utilizat pentru a sprijini dezvoltarea proiectelor. Începând cu anul 2008, 15% din cheltuieli sunt returnate la departamentele de cercetare și dezvoltare tehnologică în cazul în care proiectele au fost dezvoltate, și poate fi utilizat pentru achiziționarea de echipamente și de întreținere, materiale, consumabile, mobilitate, taxe de conferințe.

Anual, o parte din buget este folosit de către conducerea universității pentru punerea în aplicare a noilor inițiative. Aceste inițiative sunt discutate și validate în Senatul Universității și se acoperă teme de interes pentru întreaga comunitate academică. Câteva exemple sunt: Biblioteca Universității renovată și complet modernizată în perioada 2007-2008; instalații multi-media în toate sălile de curs; internet cu acces gratuit pentru studenți, acces la Internet în căminele studenților. Începând cu anul 2012, universitatea finanțează granturi interne de cercetare pentru cadrele didactice tinere, în domenii prioritare diferite, stabilite de către departamentul de cercetare și dezvoltare tehnologică.

În fiecare an, în luna decembrie, rectorul prezintă "Raportul anual", ca "starea universității", inclusiv toate aspectele de activitate universitară, de la predare, la cercetare și la evoluțiile strategice, resurse umane, studenți, servicii pentru comunitate, rezultate financiare.

Raportul este validat de către Senat și reprezintă un punct de luat în considerare în procesul de luare a deciziilor pentru anul viitor. Independența față de finanțarea din fonduri publice este imposibilă pentru o universitate de stat, dar, în mare măsură fiind dependentă de finanțarea publică, reprezintă un risc continuu de sub-finanțare și, prin urmare s-au realizat progrese limitate. Prin urmare, deciziile conducerii urmăresc creșterea fondurilor atrase și distribuția lor. Deciziile sunt formulate de către Senatul universitar Consiliului, sunt validate de către Senat și sunt puse în aplicare la nivel de facultăți, departamente, centre sau laboratoare de cercetare.

Personalul care trebuie să răspundă acestor provocări și noua legislație (pentru învățământul superior, ocuparea forței de muncă, resurse umane, contabilitate, etc), este instruit adecvat.

5. PRACTICI DE EVALUARE A CALITĂȚII

USAMV Cluj-Napoca este recunoscută, la nivel național, ca și instituție reprezentativă în dezvoltarea și implementarea asigurării calității, fiind una dintre primele universități în România care a implementat și certificat un sistem al managementului calitatii (QMS) bazat pe un model ISO 9001, încă din anul 2004. Implementarea QMS a fost sistematic abordată în cadrul universității, și recunoscută de către autoritățile naționale. USAMV Cluj-Napoca a implementat instrumente de calitate interne iar evaluarea programelor de studii, pentru personalul academic, pentru cercetare, și pentru evaluarea performanțelor administrative.

Îmbunătățirea continuă a educației, calității și eficienței cercetării, implicarea studenților în asigurarea procesului de asigurare a calității interne, participarea lor activă la procesul decizional la nivel de universitate/facultate, și la evaluarea activității de predare, reprezintă unul dintre elementele cheie ale sustenabilității universității.

Abordarea universității referitor la calitate a căpătat o nouă relevanță și dimensiune din 2008, când QMS a fost armonizat cu noile cerințe iar eficacitatea sa a fost îmbunătățită. Departamentul pentru Asigurarea calității (DAC), Comisia pentru Evaluarea și Asigurarea Calității la nivelul universității (CEAC) sunt structuri funcționale dezvoltate și la nivelul reprezentanților facultăților. În același timp a fost realizată reprezentarea studenților în aceste comisii, ca și parteneri pentru evaluarea calității și asigurarea procesului.

Rolul Departamentului pentru Asigurarea Calității (DAC) a fost reevaluat, în prezent acesta este coordonat direct sub supravegherea prorectorului cu asigurarea calității. Activitatea structurilor de calitate este analizată în fiecare an iar raportul este publicat pe site-ul universității. În acest raport, trebuie menționat că implicarea membrilor CEAC este mai mic decât cel stabilit inițial, rezultând în limitarea participării în activitatea de evaluare, formare și comunicarea datelor de calitate precum și nivelul programului de studiu.

Procesele QMS au fost definite, acoperind toate activitățile universității: educație, cercetare, administrație, relații cu mediul extra academic, serviciile studenților și nu în ultimul rând, procesele de management (vezi: [Appendix – QMS documents](#)). Procesele, mecanismele, procedurile și instrumentele de planificare a calității, de management și asigurare a calității au fost dezvoltate și publicate pe [web site-ul universității](#).

Prioritatea a fost adresată către procesele de învățare și cercetare, drept pentru care este necesară completarea instrumentelor administrative și de management pentru asigurarea calității. Procedurile sunt dezvoltate de către DAC în colaborare cu CEAC, sunt aprobate de către Senatul universității, sunt publicate pe site-ul universității, și implementate complementar regulilor interne. În fiecare an există proceduri noi care sunt completate iar cele deja existente sunt actualizate sau îmbunătățite. Acest proces are loc continuu și e adaptat schimbărilor din legislație iar procedurile trebuiesc actualizate în permanență.

Un rol important în asigurarea calității îl are auditul intern de calitate, în mai multe moduri:

- Evaluarea instituțională internă este realizată anual de către CEAC, cu sprijinul de DAC, rezultând într-un raport prezentat la Senatul Universității și publicat pe web site. Concluziile sunt apoi utilizate de top management pentru a elabora o analiză SWOT, cu scopul de a corecta punctele slabe identificate, în cadrul planului de acțiune, pentru a îmbunătăți calitatea.
- Evaluarea internă a programelor de studiu se face anual, sub coordonarea coordonatorului de program de studiu și, cu sprijinul structurilor de calitate.
- Evaluarea externă a programelor de studiu se realizează de către ARACIS. Pe parcursul anului universitar 2009-2010, a fost făcută evaluarea instituțională, precum și o serie de 5 programe de studii au fost evaluate extern (4 programe de studii de licență și 1 program de master), toate au primit calificativ de încredere ridicată.
- Evaluarea activității de cercetare efectuată de către cadrele didactice se realizează anual, cu ajutorul software-ului online de evaluare, pe baza unor criterii de evaluare naționale și standarde interne.
- Un sistem *online* este, de asemenea, utilizat pentru evaluarea personalului academic de către studenți, după fiecare sesiune de examen, din păcate o slabă implicare a studenților în evaluarea cadrelor didactice/cursuri de performanță fiind înregistrată până acum. Alte evoluții pozitive sunt de așteptat pe bază de acțiuni de feedback la ideile studenților formulate în timpul procesului de evaluare.
- Evaluarea generală a personalului didactic se face anual în departamente, de către directorii de departamente prin analiza rapoartelor de auto-evaluare și evaluarea de către studenți. Rezultatele individuale de evaluare sunt utilizate la departament, facultate și la nivel de universitate, pentru a stabili măsuri corective și de luare a deciziilor cu privire la recompensa personalului didactic.

Un rezultat așteptat de atitudine pro-activă a Asociației Alunni este, de asemenea, acela de a îmbunătăți procesul de evaluare externă. În scopul de a spori funcționalitatea de Asociația Alunni, USAMV Cluj-

Napoca a dezvoltat o bază de date de informații de contact pentru absolvenții săi și va fi constituit un panou Alunni.

Colectarea datelor, prelucrarea și analiza acestora pentru evaluarea calității sunt dezvoltate în mod sistematic. Comisia CEAC și subcomisiile divizate pe programe de studii sunt responsabile cu colectarea și analiza datelor. Rezultatele evaluării sunt supuse discuțiilor în cadrul Consiliilor facultăților și a Senatului Universității, fiind formulate măsuri corective. Fiind dezvoltate în cadrul universității, aceste aplicații IT pot fi îmbunătățite și re-formulate, conform strategiei universității.

Universitatea și toate facultățile furnizează informații publicului cu privire la programele de studii, diploma de licență, organizarea proceselor, precum și procedurile, etc. Principalele căi de informare sunt site-ul universității, precum și broșurile, evenimentele, alte activități de promovare. Asigurarea accesului la informațiile de interes public este reglementat printr-o procedură internă, în conformitate cu Legea nr 544/2001.

Impactul pozitiv de punere în aplicare a Sistemului de Management al Calității. SMC a creat un cadru organizatoric și instrumentele necesare pentru punerea în aplicare a strategiilor adoptate de USAMV Cluj-Napoca. Rezultatele prezentate mai jos au urmat următoarele domenii principale de activitate:

Procesele educaționale. Au fost implementate proceduri pentru inițierea, proiectarea, monitorizarea și evaluarea periodică a programelor de studiu, precum și instrumente pentru: comunicarea cu organizațiile economice, sociale și culturale; de evaluare a eficienței financiare pentru procesele didactice, studenți / absolvenți / angajatori de feedback, etc. Rezultatele sunt înglobate în structuri noi (DMO linii de formare integrate cu activitățile de cercetare), sau de instrumente noi (platforma eLearning).

Procesele de cercetare. În domeniul cercetării, SMC din universitate include mecanisme de monitorizare și evaluare și instrumente pentru: identificarea priorităților în domeniul cercetării de excelență, la nivel universitar; identificarea strategiei și a obiectivelor de cercetare la nivel instituțional / CDT departamente / nivel individual, de asigurare a calității resurselor de cercetare, valorificarea rezultatelor de cercetare la nivel instituțional / de cercetare departamente / individuale, de evaluare a calității cercetării.

Resursele umane. Asigurarea și îmbunătățirea calității resurselor umane se realizează prin procese și instrumente pentru: planificarea structurii de personal în funcție de nevoile specifice de la universitate / facultăți / departamente de cercetare și dezvoltare tehnologică / studenților pe nivele de servicii; competențe de dezvoltare și de promovare a personalului academic și a altor categorii de personal; evaluarea performanței; asigurarea securității și sănătății în muncă.

Infrastructura. Din perspectiva de management a calității, în ultimii cinci ani, accentul a fost pus pe instrumentele de dezvoltare pentru: planificarea resurselor necesare, luarea în considerare a celor existente; efectuarea achizițiilor publice, în conformitate cu reglementările în vigoare, evaluarea calității. Pentru a asigura utilizarea eficientă a infrastructurii, au fost dezvoltate instrumente de management: proceduri și aplicații software pentru achiziție și control, utilizarea de aplicații software pentru dotarea din săli de curs / seminar și laboratoare, monitorizarea încărcării fiecărui spațiu și locație la nivel de facultate și universitate.

Cooperarea cu comunitatea extra-academică. Dezvoltarea de mecanisme și instrumente care să sprijine dezvoltarea unei interfețe între universitate și mediul economic, social și cultural a fost una dintre prioritățile SMC în ultimii ani.

Managementul proceselor. Managementului universitar este conștient de climatul și cultura creată pentru asigurarea calității în universitate, care implică toate nivelurile, personalul academic și ne-academic, studenți implicați în toate procesele legate de asigurarea calității și îmbunătățirea calității. Procesele interne de evaluare a calității permit o analiză extinsă și rezultatul reprezintă punctele forte și punctele slabe, ca instrumente pentru deciziile de management.

Schimbările sociale și economice și de concurență în învățământul superior și în cercetare impun noi provocări. Comparând provocările cu rezultatele anterioare, evaluarea internă a calității a determinat (re) formularea planurilor de acțiune și a strategiei.

6. MANAGEMENT STRATEGIC ȘI CAPACITATEA DE SCHIMBARE

Strategia USAMV Cluj-Napoca, pentru perioada 2012-2016 se bazează pe o analiză realistă SWOT. Această abordare, având în vedere resursele existente și punctele slabe, oportunitățile și amenințările inevitabile, se actualizează anual și sprijină formularea planurilor de acțiune, cu accent pe minimizarea riscurilor în punerea în aplicare a Planului strategic. Un plan de acțiune specific pentru a corecta punctele slabe este prezentat în Planul de acțiune destinat să întreprindă corecțiile în funcție de rezultatul analizei SWOT (vezi: [Appendix – Action plan](#)).

Analiza SWOT se referă la aspectele importante ale universității, ca și:

1. Resurse de predare / formare la nivel de licență, masterat, doctorat
2. Resursele de cercetare și performanța cercetării
3. Facilități sociale, culturale și sportive pentru studenți
4. Managementul resurselor pentru asigurarea calității proceselor de educație, de formare și cercetare

PUNCTE TARI

1. USAMV Cluj-Napoca a fost acreditată de către EUA, ARACIS, este certificată ISO-TUV, iar Facultatea de Medicină Veterinară a fost acreditată de către EAEVE;
2. Multe programe de studiu sunt clasate în Categoria A, de către MECS
3. Extensia programelor educaționale în system “ învățământ la distanță” pentru Agricultură, Horticultură, Zootehnie și Biotehnologie, in Viterbo, Italia
4. Universitatea este un leader regional în domeniul studiilor, cu programele sale de studii și a contractelor de cercetare;
5. Universitatea oferă o varietate de programe de studii incluse în următoarele ramuri ale științei: Ingineria Resurselor vegetale și animale, Științe Inginerești, Medicină Veterinară, prin domenii variate: Agronomie, Horticultură, Silvicultură, Biotehnologii, Inginerie Alimentară, Zootehnie, Știința Mediului, Inginerie și management, Medicină Veterinară;
6. Universitatea oferă toate ciclurile de educație (licență-master-doctorat) pentru învățământul la zi și cel la distanță;
7. Pentru nivelul licență și cel masteral, universitatea oferă linii de predare în limba engleză și franceză;
8. Stimularea managementului competitiv și performanța la nivel de department, ca și rezultat al descentralizării și a distribuției bugetului în concordanță cu ierarhia programelor de studiu;
9. Cercetarea în universitate are recunoaștere națională, transparentă în clasificarea universității printre universitățile de cercetare de top, bazată pe un număr mare de contracte de cercetare, publicații cotate ISI, investiții în infrastructură și implicarea tinerilor cercetători, doctoranzi, post-doctoranzi, proiecte comune extinse.
10. Existența unor reviste, elaborate în universitate, și cotate la nivel național și internațional (ISI)
11. Inițierea competițiilor interne pentru granturile de cercetare, dedicate tinerilor cercetători, finanțate de către universitate;
12. USAMVCJ dezvoltă un system de asigurare al calității pentru educație și activități de cercetare și pentru stimularea resurselor umane. Principiile generale în ceea ce privește calitatea în învățământul superior ia în considerare transparența, compatibilitatea și convertibilitatea. În planul strategic al Universității de Științe Agricole și Medicină Veterinară Cluj-Napoca calitatea este esențială și permanent în continuă îmbunătățire;
13. Personalul academic este dedicat activității educative și cercetării, sunt competenți, oferă studenților sprijin prin cursuri la standarde internaționale, compatibile cu programele europene, dezvoltate prin programe Erasmus;

14. Baza materială, caracterizată prin existența unui echipament modern de educație și cercetare, oferă condiții optime pentru predare, la fel ca și munca practică în unități pilot și stațiuni experimentale;
15. Toși studenții au acces la serviciile bibliotecii, baza de date, Internet, cazare în cămine, programe sociale, facilități sportive, precum și un restaurant și un pub.

PUNCTE SLABE

1. Unele programe de studii nu sunt reprezentate la nivelul doctoral al universității. Din cele zece domenii pentru studii de licență, doar cinci se regăsesc la nivel doctorat.
2. Unele curricule sunt disproporționate și deficiente, lipsa de armonizare cu standardele europene
3. Controlul calității activității educaționale este deficient (prezența la cursuri, control);
4. Lucrarile de licență și de dizertație deseori au un conținut teoretic doar, fără a se concentra pe cercetare studiile de caz nu sunt întotdeauna rezultatele unor lucrări practice efectuate de către studenți.
5. Nivelul cercetării: lipsa personalului calificat; număr mic de proiecte europene, corelație slabă între numărul de profesori și publicații ISI, număr mic de invenții; număr mic de studenți masteranzi și doctoranzi implicați în proiecte de cercetare și contracte.
6. Eficiență scăzută a transferului de tehnologie în cazul rezultatelor de cercetare (cu finanțare slabă), în mediul economic actual, fără structură organizațională la nivelul universității ca să se poată face transfer tehnologic, consultarea, căutare de fonduri;
7. Insuficientă vizibilitate: cercetare la un nivel scăzut din punct de vedere al intradisciplinarității, cu alte universități în Cluj-Napoca, alte USAMV din țară, și universități EU
8. Număr mic de mobilități prin programul Erasmus (profesori și studenți, din și către România)
9. Informare limitată în ceea ce privește piața muncii și nevoile absolvenților, o implicare anevoiasă a asociațiilor ALUMNI.
10. Deficiențe în managementul și atitudinea serviciilor administrative: nevoia de formare, procedura follow-up, și asigurarea calității

OPORTUNITATI

1. Clasificarea universității la nivel național, în prima categorie, este un bun preambul pentru finanțarea adițională a activității didactice și de cercetare
2. Dezvoltarea rețelelor de colaborare și a parteneriatelor cu universități străine;
3. Accesarea de granturi specifice pentru practica studenților
4. Colaborarea cu mediul economic pentru posibile transferuri tehnologice, oferte de servicii, consultanță;
5. Interesul manifestat de tineri din diverse țări din spațiul și din afara spațiului european pentru a urma programe de studii de licență și master.
6. Valorificarea strategiei ORIZONT 2020 pentru a încuraja și susține programele de cercetare ale universității
7. Alocarea unui suport financiar important prin noua Politică Agricolă Comună, în vederea finanțării inovării din domeniul agricol și de transfer la nivel de ferme;
8. Dezvoltarea de noi programe europene de tip "Long live learning" și e-Platforme
9. Dezvoltare de noi programe prioritare naționale, de exemplu cele dedicate îmbunătățirii resursei umane, parcuri tehnologice regionale, poli de competitivitate, etc.
10. Dezvoltarea parteneriatelor existente cu instituții publice și mediul privat, generând noi surse de finanțare

AMENINȚĂRI

1. **Finanțarea guvernamentală pentru învățământul superior și a cercetării, în scădere în ultimul an**

poate duce la fonduri insuficiente pentru procesul academic. Răspunsul de la universitate constă într-o luptă permanentă pentru a crește eficiența acestor procese, în timp ce menținerea sau creșterea calității, precum și prin dezvoltarea de activități specifice de atragere a fondurilor, valorificarea resurselor (programe de învățare continuă, proiecte de RTD finanțate la nivel național sau al UE, proiecte de RTD și de servicii de cercetare pentru companii).

2. **Concurența internă și internațională:** competiții deschise pentru atragerea de studenți, resursele de calitate și fonduri. Răspunsul universității se traduce prin efortul permanent pentru creșterea calității ofertei educaționale și de formare, în lansarea de noi programe de studiu cerute de piața forței de muncă, în dezvoltarea de programe de cercetare, și atractive, programe de nivel înalt pentru formarea resurselor umane. Politica agresivă a universităților importante în atragerea de studenți la licență și post doctoranzi; Concurența de la alte universități, bazată pe condiții și facilități materiale superioare, de cazare, facilități sportive, sponsorizare;
3. **Legislația națională** care nu este (încă), extrem de stimulativă pentru atragerea de studenți străini (din afara UE). Legislația națională ridică, de asemenea, amenințări legate de măsurile de criză care limitează puternic noi locuri de muncă în cadrul instituțiilor bugetare. Măsurile pe termen scurt a contrabalansa această amenințare este posibilă prin creșterea utilizării eficiente a resurselor existente.
4. **Tendința de scădere demografică**, cu un impact negativ asupra dinamicii de numărul de studenți și creșterea treptată a costurilor de trai, duce la o scădere a nivelului de trai și lipsa de interes a absolvenților de liceu pentru universitate;
5. **Contextul economic actual**, cu câteva agenții de dimensiuni medii și mari economice, care pot executa și susține introducerea studenților în stagii, care afectează de formare a viitorilor absolvenți, care nu va avea un minim de experiență în profesia dobândită;
6. Reducerea semnificativă a fondurilor naționale de cercetare în ultimii 3 ani, concomitent cu creșterea standardelor pentru criteriile minime de eligibilitate, pentru atragerea de granturi de cercetare la nivel național, pentru directorii de proiect;
7. Lipsa unei piețe de cercetare activă în România (care determină scăderea numărului de programe de studii doctorale și post-doctorale);
8. Devine aproape imposibilă promovarea cadrelor didactice pe baza criteriilor de performanță exigente impuse de lege, în special pentru cadre didactice tinere
9. Plata angajaților de stat nu permite stimulente financiare pentru activitatea de cercetare;
10. Tendința de scădere a veniturilor de la studenți (taxe de studii), rata de abandon mare de studenți în primii ani de studiu.

7. CONCLUZII

În peste 143 de ani de istorie, USAMV Cluj-Napoca s-a dezvoltat ca o instituție academică de elită, la nivel regional și național. După 1990, și, mai ales după acceptarea României ca membru UE, au fost adoptate schimbări majore în învățământul superior și, prin urmare, USAMV Cluj-Napoca, și-a adaptat strategia sa de dezvoltare.

Procesele Bologna și Lisabona sprijină restructurarea didactică universitară și de cercetare, creșterea calității și eficienței tuturor proceselor academice este acum înțeleasă ca o acțiune continuă, condiție necesară pentru recunoașterea internațională și a competitivității.

Strategia universității este formulată pe patru ani, și obiectivele stabilite pentru următorii ani au în vedere de excelență, competitivitatea și integrarea, sa în societate, plasând USAMV Cluj-Napoca, ca o universitate de cercetare avansată și educație, conform Legii învățământului nr 1/2011 . Cerințele prevăzute de această lege deschide oportunități pentru restructurarea universității, consolidarea punctelor forte deja existente: în educație, cercetare, comunitatea academică și de management. Considerarea universității la cel mai înalt rang de calitate la nivel național este susținută de un set de rezultate care individualizează universitatea în România, și sunt în bună concordanță cu evoluțiile din universitățile din UE de referință.

Educația integrată (la toate nivelurile) și cercetarea avansată are eficiență în utilizarea resurselor prezente și în dezvoltare (resurse umane, infrastructură, documentare, etc), iar evoluțiile viitoare țin cont de faptul

că liniile de predare pot aduce schimbări semnificative în structura universității, a facultăților și a departamentelor.

Abordarea integrată leagă dezvoltarea de produse high-tech (Energie Durabilă), de aspecte privind mediul (conservarea și utilizarea resurselor naturale), calitatea vieții și Educație și Dezvoltare Economică, oferă posibilitatea unor abordări complexe în proiecte mari, care implică activ departamentele de cercetare și dezvoltare tehnologică. Sunt luate în considerare formarea unor structuri specifice de consolidare a rolului universității în promovarea cercetării și a transferului tehnologic de excelență .

Facilitățile oferite studenților pentru învățare și condiții de cazare oferă noi oportunități în următorii ani, inclusiv o oferta de formare pentru competențe orizontale (antreprenoriat, educație pedagogică).

Numărul mare de proiecte pentru dezvoltarea resurselor umane, care sunt acum derulate în universitate, susțin în continuare această tendință și dezvoltă cunoașterea și competențele absolvenților noștri. Implicarea puternică în comunitate și în zona economică a regiunii, care rezultă prin parteneriate în universitate- industrie – au în vedere în viitor, dezvoltarea acestora, în conformitate cu noua lege a parteneriatelor public-private.

Extinderea cooperării cu instituțiile de învățământ superior UE și institute de cercetare pentru o competitivitate mai puternică la nivel internațional.

Un management proactiv la toate nivelurile (învățământ-cercetare-administrație), și în toate departamentele și facultățile, ca o dezvoltare coerentă, care sprijină o decizie de management sinergic și acțiuni strategice. Asigurarea a calității este un element cheie în îmbunătățirea managementului universitar printr-un continuu ciclu de planificare-efectuare-verificare, prin estimarea riscurilor, și reformulări ale planurilor de acțiune.

Conducerea USAMV Cluj-Napoca aplică periodic sondaje de top management pentru superviza punctele slabe și a lua măsuri, în special cu privire la programele doctorale, adaptare programelor de studiu la aspecte mai pragmatice și recente ale științei și tehnologiei, a educației centrate pe student, bazate pe mai multe abilități practice și competențe îmbunătățite , luarea în considerare a opiniilor studenților în îmbunătățirea programelor, câștigarea încrederii reciproce pentru a îmbunătăți calitatea și responsabilitatea în relația profesor-elev.

Riscurile legate de schimbarea legislației, schimbările de pe piața forței de muncă și performanțele economiei locale, în contextual actualei crize economice europene, pot fi minimizezate printr-un management flexibil și o strategie coerentă.

Având în vedere punctele forte și punctele slabe ale performanței actuale a universității, precum și oportunitățile și riscurile prezente, considerăm că acest proces de auto-evaluare, urmat de evaluarea externă de către EUA, este un pas necesar pentru îmbunătățiri ulterioare care vizează competitivitatea internațională în aria europeană a educației universitare și a cercetării, în calitatea noastră de instituție de învățământ superior competitivă, "de cercetare avansată și educație".

Cluj-Napoca, 28 martie 2012

R E C T O R,

Prof. Dr. Ing. Doru PAMFIL