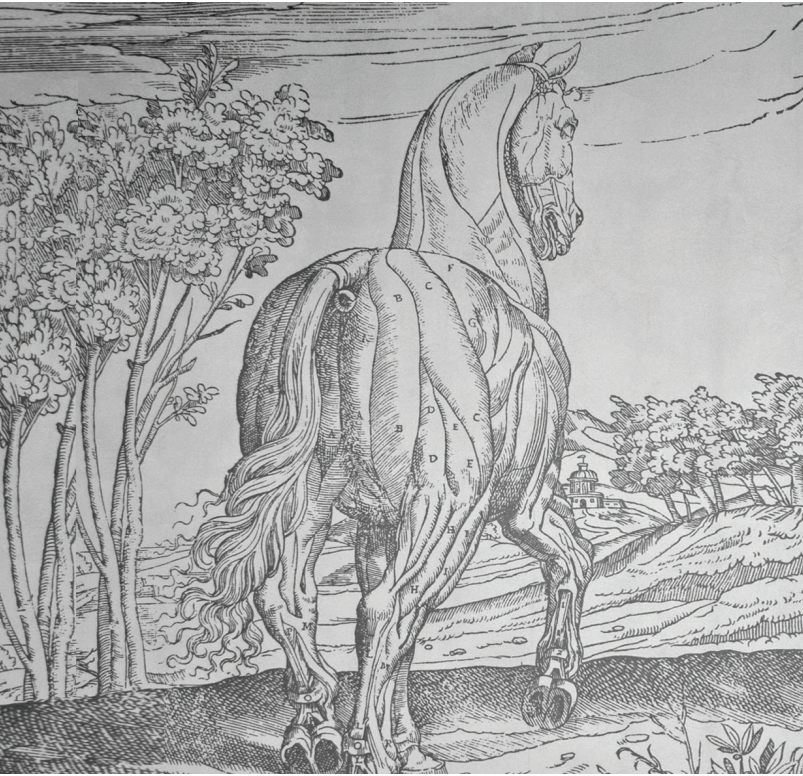




ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA

DIPARTIMENTO DI SCIENZE MEDICHE VETERINARIE



## SELF EVALUATION REPORT 2

EAEVE VISIT 5-9<sup>TH</sup> MAY 2014

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# ABBREVIATIONS

<b>ADPQR</b>	Annual Degree Programme Quality Report
<b>AIC</b>	Artificial Insemination Centre (Istituto Nazionale di Fecondazione Artificiale-INFA)
<b>AMQAG</b>	Alma Mater QA Group
<b>ANV</b>	Normal Veterinary Anatomy Service
<b>ANVUR</b>	National Agency of Assessment for University and Research (Agenzia Nazionale di Valutazione del Sistema Universitario e della Ricerca)
<b>AP</b>	Associate Professor
<b>APS</b>	Pathological Anatomy Service
<b>ARR</b>	Annual Review Report (Riesame)
<b>AUB</b>	University Farm (Azienda Agraria Università di Bologna)
<b>AVA</b>	Periodic Evaluation and Accreditation
<b>AY</b>	Academic Year
<b>BIOCHIM</b>	Biochemistry Service
<b>BioClinVet</b>	Veterinary Clinical Biochemistry Service
<b>CABA-Lab</b>	Laboratory of Analytical Bio-Agroalimentary Chemistry (Service)
<b>CE</b>	Continuing Education
<b>CFU</b>	University Learning Credit (Credito Formativo Universitario)
<b>CIVR</b>	National Research Committee
<b>CNVSU</b>	National Committee for the Evaluation of Higher Education
<b>CoCoCo</b>	Term Contract (Collaborazione Coordinata e Continuativa)
<b>CUN</b>	National University Council (Consiglio Universitario Nazionale)
<b>CVS</b>	Central Veterinary Service (Servizio Veterinario Centralizzato-SVC)
<b>DB</b>	Department Board (Consiglio di Dipartimento)
<b>DEC</b>	Department Executive Committee (Giunta di Dipartimento)
<b>DIMEVET</b>	Department of Veterinary Medical Sciences (Dipartimento di Scienze Mediche Veterinarie)
<b>DP</b>	Degree Programme (Corso di Studio)
<b>DPAB</b>	Degree Programme in Animal Biotechnology
<b>DPAFPH</b>	Degree Programme in Aquaculture and Fish Production Hygiene formerly Aquaculture and Ichthyopathology
<b>DPB</b>	Degree Programme Board (Consiglio di Corso di Studio).
<b>DPC</b>	Degree Programme Coordinator (Coordinatore di Corso di Studio)
<b>DPQAG</b>	Degree Programme QA Group
<b>DPR</b>	Presidential Decree (Decreto del Presidente della Repubblica)
<b>DPSQAP</b>	Degree Programme in Safety and Quality of Animal Production
<b>DPVM</b>	Degree Programme in Veterinary Medicine
<b>DRC</b>	Department Research Committee
<b>DSC</b>	Department Safety Committee
<b>DTC</b>	Department Teaching Committee
<b>ECTS</b>	European Credit Transfer System
<b>FIS</b>	Physiology Service
<b>FNOVI</b>	Federation of the National Veterinary Chapters (Federazione Nazionale Ordini Veterinari Italiani)
<b>FP</b>	Full Professor
<b>FT</b>	Pharmacology and Toxicology Service
<b>FTE</b>	Full-Time Equivalent
<b>FVMBol</b>	Faculty of Veterinary Medicine of Bologna
<b>HCD</b>	Health-Care Director (Direttore Sanitario)
<b>HE</b>	Higher Education
<b>IA</b>	Hygiene and Food Technology Service

<b>IC</b>	Integrated Course
<b>IEU</b>	Internal Evaluation Unit (Nucleo di valutazione)
<b>IQAS</b>	Internal Quality Assurance System
<b>ITLS</b>	Information Technology and Laboratory Service
<b>LD</b>	Legislative Decree (Decreto Legislativo)
<b>LOU</b>	Local Organisational Unit (Unità Organizzativa di Sede)
<b>MD</b>	Ministerial Decree (Decreto Ministeriale)
<b>MIPAV</b>	Infectious, Parasitic and Avian Diseases Service
<b>MIUR</b>	Ministry of Education, Universities and Research (Ministero dell'Istruzione, dell'Università e della Ricerca)
<b>MNY</b>	Minimum Number of Years
<b>MP</b>	Management Procedure (Procedura Gestionale-PG)
<b>NHS</b>	National Health Service (Sistema Sanitario Nazionale)
<b>NVS</b>	Non Veterinary Surgeon teaching staff
<b>OFA</b>	Additional learning requirements (Obbligo Formativo Aggiuntivo)
<b>PPT</b>	Professional Practical Training (Tirocinio)
<b>QA</b>	Quality Assurance
<b>QAS</b>	National Quality Assurance System
<b>RD</b>	Rectorial Decree (Decreto Rettorale)
<b>RDRL</b>	Research and Education Manager (Responsabile dell'Attività Didattica e di Ricerca)
<b>RO</b>	Research Observatory (Osservatorio della Ricerca)
<b>SARGA</b>	Large Animals Hospital and Emergency Service
<b>SARPA</b>	Emergency and Critical Care of companion animals Service
<b>SAVM</b>	School of Agriculture and Veterinary Medicine
<b>SAVM-B</b>	School of Agriculture and Veterinary Medicine-Board
<b>SAVM-VC</b>	School of Agriculture and Veterinary Medicine-Vice Chairmanship
<b>SBA</b>	University Library System (Sistema Bibliotecario di Ateneo)
<b>SCAR</b>	Surgery and Anaesthesiology Service
<b>SDIMM</b>	Diagnostic Imaging Service
<b>SEPAC VET</b>	Veterinary Clinical Pathology Service
<b>SFC</b>	Centralized Drug Service
<b>SMI</b>	Internal Medicine Service
<b>SPP</b>	University Service of Prevention and Protection (Servizio di Prevenzione e Protezione)
<b>SRA</b>	Animal Reproduction Service
<b>SSD</b>	Scientific-Disciplinary Sectors (Settori Scientifico-Disciplinari)
<b>S-SJC</b>	Student-Staff Joint Committee (Commissione paritetica docenti-studenti)
<b>STP</b>	Strategic Three-year Plan (Piano strategico triennale)
<b>SUA</b>	All-inclusive Annual Profile (Scheda Unica Annuale)
<b>UDF</b>	University Dairy Farm
<b>UDFU</b>	University Dairy Farm Unit
<b>UNIBO</b>	University of Bologna - Alma Mater
<b>URP</b>	Public Relations Office (Ufficio per le Relazioni con il Pubblico)
<b>UTS</b>	Unit of Teaching Service (Unità di Supporto alla Didattica)
<b>VC</b>	Veterinary Campus
<b>VQR</b>	Evaluation of the Quality of Research (Valutazione della Qualità della Ricerca)
<b>VS</b>	Veterinary Surgeon teaching staff
<b>VTH</b>	Veterinary Teaching Hospital
<b>VTP</b>	Veterinary Teaching Portal (Portale Didattico Veterinario)
<b>ZNA</b>	Animal Husbandry, Nutrition and Feedstuffs Service



# INTRODUCTION

The University of Bologna was probably the first University in the western world. Its history makes it an indispensable point of reference in the panorama of European higher education.

Among the many challenges which it has met with success, Bologna has committed itself to the European dimension, which has now led to the adoption of the new university system.

The institution began at the end of the 11<sup>th</sup> century; in the 19<sup>th</sup> century a committee of historians, led by Giosuè Carducci (who in 1906 won the Nobel Prize for Literature), attributed the founding of the University to the year 1088.

In 1888 the University celebrated its eighth centennial, and all the universities of the world convened in Bologna to honour the mother of universities, representing their common roots and ideals of progress and tolerance.

1988: on 18 September in Piazza Maggiore, Bologna, the rectors of 430 universities from all continents signed the *Magna Charta Universitatum Europaeum* during the nine hundredth anniversary of the University of Bologna, formally recognised as the mother of all universities (*Alma Mater Studiorum* – Università di Bologna; hereinafter “Alma Mater”). Subsequently signed by another 400 rectors, the Magna Charta affirms the autonomy of universities and the solid ties between teaching and research, rejecting any limits posed by “all geographical and political boundaries” <http://www.magna-charta.org/>.

1999: on 19 June in the *Aula Magna* of the *Alma Mater Studiorum* - University of Bologna, 29 European Ministers of Higher Education signed the Bologna Declaration, establishing the European Higher Education Area. This was the start of reforms known as the Bologna Process, committing the signatory countries to restructuring their university systems with a view to convergence, ending in 2010.

2012: the entry into force of the new Statute (11 January) concluded the process of university reform which began in 2010, and the implementation of the new university organisation began.

Among the most important changes introduced by Law no. 240/2010:

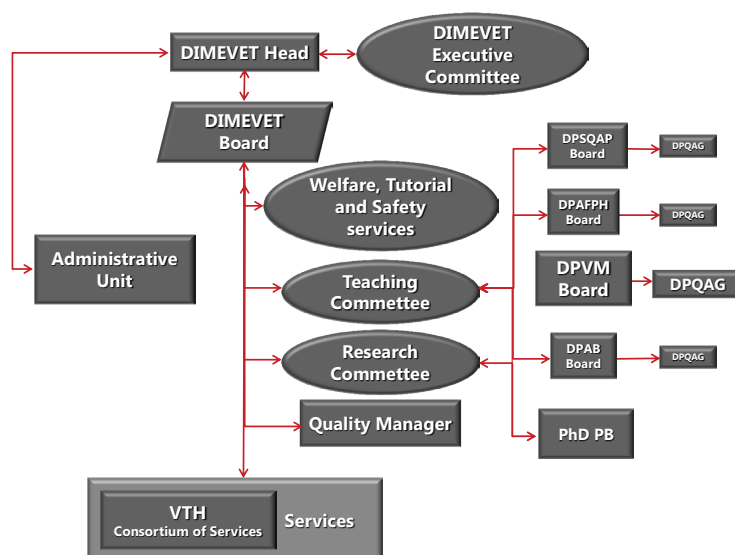
- The suppression of the Faculties;
- The new role of the Departments in:
  - Deciding the strategic plans concerning research and education;
  - Deciding on the activation/suppression of (Degree Programmes) DPs.;
  - Deciding on the recruitment and positioning of teaching staff;
  - Managing the teaching and support staff financial budget.
- The institution of the Schools with roles in:
  - Organising support to the different DPs.

As part of the general reorganisation, Alma Mater established the School of Agriculture and Veterinary Medicine (hereinafter: “SAVM”). The Department of Veterinary Medical Sciences (hereinafter: “DIMEVET”) was established with RD rep. 1032/prot. 45909 of 28-10-2011 and activated with the Rectoral Decree (RD) rep. 1258/prot. 46115 of 16-10-2012 as the result of the merger of the structures that constituted the former Faculty of Veterinary medicine of Bologna University (FVMBol) (Veterinary Public Health and Animal Pathology, Morphophysiology, Veterinary and Animal Production, Veterinary Clinical and a Section of the Veterinary Biochemistry Department), in order to obtain better and more integrated performances and increase the efficiency of the organisation of veterinary higher education and research.

The process of merging into DIMEVET was led by a specific Committee (the “Campus Committee”) established as a task force by the Dean of the FVMBol. The Campus Committee, comprising junior professors from different scientific areas, aimed to ensure the smooth merger of the different competencies of the FVMBol into a single establishment.

The DIMEVET (**Fig. 1**) consists of functional units called "Services" that includes both teaching and support staff.

(<http://www.scienzemedicheveterinarie.unibo.it/it/dipartimento/servizi/Servizi-e-Laboratori>).



**Fig. 1** - DIMEVET Organisational Chart (as of 31 December 2013).

## QUALITY ASSURANCE IN ITALY: REGULATORY FRAMEWORK AND MAJOR INITIATIVES

In Italy, Ministerial Decree 509/1999 ([http://www.miur.it/0006Menu\\_C/0012Docume/0089Normat/2088Regola.htm](http://www.miur.it/0006Menu_C/0012Docume/0089Normat/2088Regola.htm)) empowered each university to establish its own institutional teaching regulations for verifying or evaluating the quality of education. Then Annex 1 to Ministerial Decree 115/2001 (<http://attiministeriali.miur.it/anno-2001/maggio/dm-08052001-n-115.aspx>) required that each degree programme have "a system for on-going evaluation of the quality of the educational organisations and its outcomes which meets national and international criteria". It also requires that the Degree Programme concern itself with "prospective employment and coordination with the outside world".

Accreditation procedures and criteria were outlined in MIUR-CNVSU (Italian Ministry of Education and Research-National Committee for the Evaluation of Higher Education) Document 12/01 of July 2001 on the "Implementation of a degree programme accreditation system in Italian universities: initial recommendations and proposals", which illustrated the structure of the Quality Management Information Model (**Annex 0.1**) whereby degree programmes could state their aims, processes and intended outcomes. Subsequently, Ministerial Note No. 995 of July 3, 2003 provided further details concerning minimum requirements and the institutional structures which reflect the goals of the 1999 Bologna Declaration developed at the national and/or Community level, and a "matrix of structural and process parameters which represent the conditions, as well as the minimum requirements, whereby quality can be guaranteed and students can be provided with a basis of comparison for making informed choices" was adopted.

Until 2007, the Italian Quality Assurance (QA) system comprised two separate sections, one concerned with Higher Education (HE) teaching and research at HE Institutions, the other specific for research, under the responsibility of CNVSU (National Committee for the Evaluation of Higher Edu-

cation) and CIVR (National Research Committee) respectively. Art. 36 of DL 262/2006 established a single national evaluation structure, the ANVUR (National Agency of Assessment for University and Research - <http://www.anvur.org/index.php?lang=it>), which replaced both CNVSU and CIVR. ANVUR, which has legal status, enjoys operational, managerial and budgetary autonomy; its functions must be developed according to principles of impartiality, professional competence, and transparency; its criteria and operations must be made public.

The new QA Agency, affiliated to the ENQA, is responsible for:

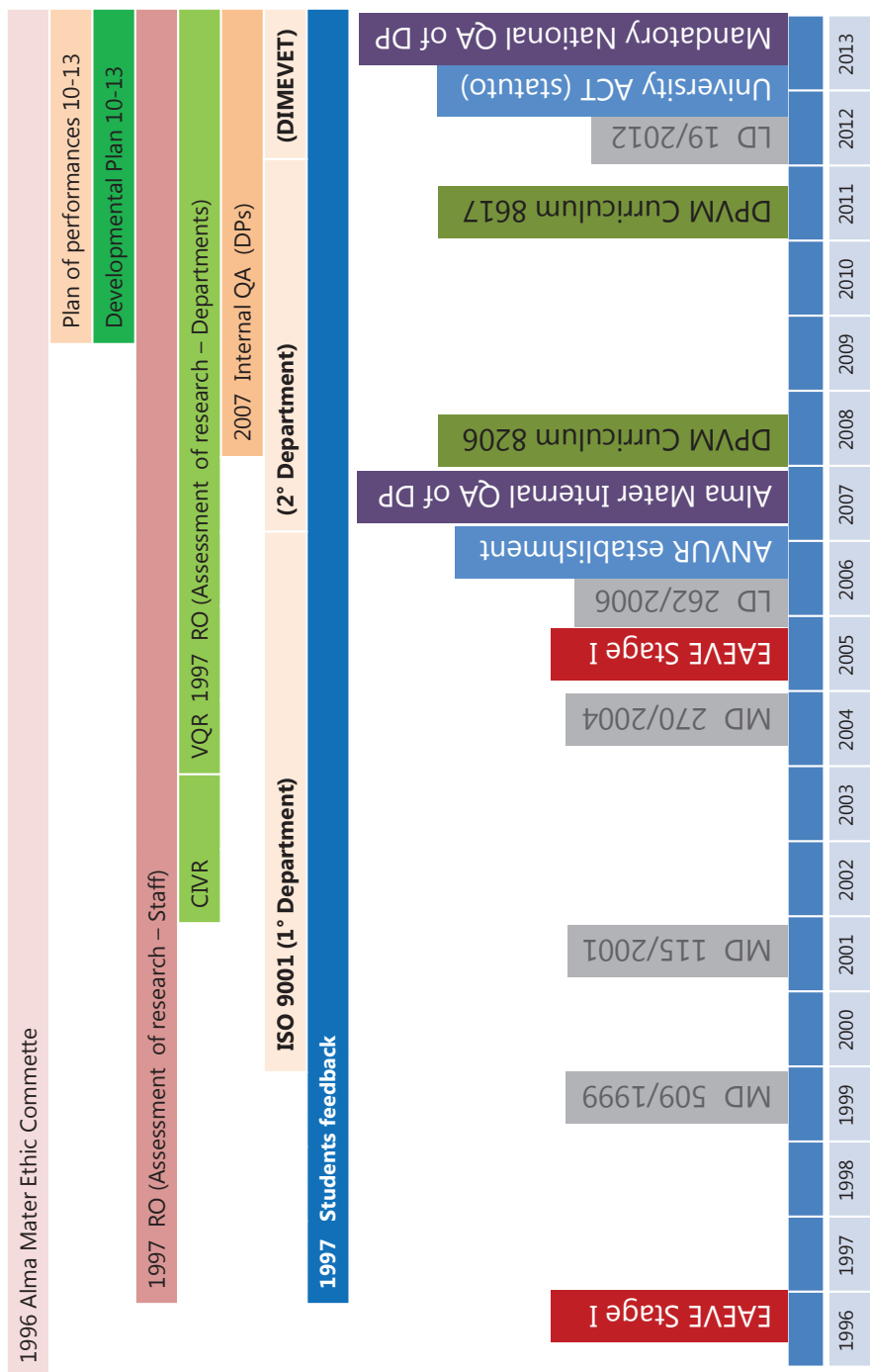
- The external evaluation of the quality of operations at all HE Institutions and public and private research bodies which receive State funding, on the basis of an annual plan;
- The coordination and supervision of the internal evaluation processes carried out by individual evaluation units within HE Institutions and research bodies;
- The assessment of the efficiency and effectiveness of State plans aimed at funding and incentivising research and innovation.

The outcomes of the ANVUR evaluation will provide reference criteria for the allocation of State funds to HE Institutions and research bodies.

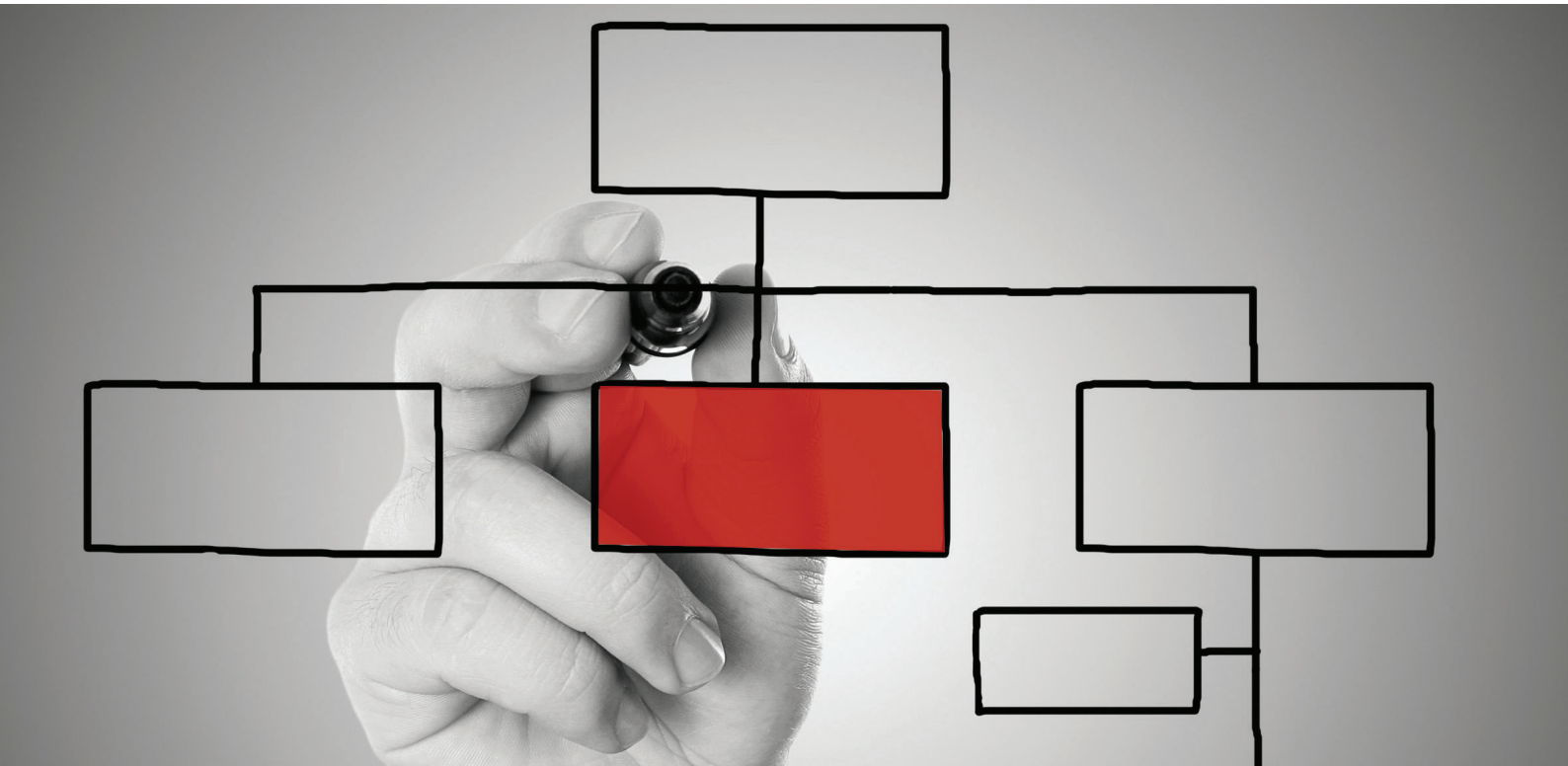
A mandatory system of QA for HE programmes was finally established under Legislative Decree (LD) no. 19 of 27 January 2012, and DM 47 of January 2013 "Self-assessment, initial and periodic accreditation and periodic evaluation of HE and degree programmes". ANVUR is the Ministry Agency appointed to manage the process (<http://attiministeriali.miur.it/anno-2013/gennaio/dm-30012013.aspx>).

The QA System of the Alma Mater started in 2007, implementing the suggestions of MD 270/2004, and has been progressively and proactively developed, indeed anticipating legal requirements; at the DPVM (Degree Programme in Veterinary Medicine) at the Alma Mater, the national law and University requirements were applied and implemented also to accomplish the EAEVE requirements following the last visit in 2005 (**Fig. 2**).





**Fig. 2** - Timeline of quality assurance measures since the EAEVE evaluation in 1996.



# CHAPTER 1

## POLICY STATEMENT

# 1 POLICY STATEMENT (AP 1)

The Corporate Social Responsibility Report clearly communicates Mission, Vision, Identity and values that regulate everyday activities at the Alma Mater, as well as performance and results achieved, to allow stakeholders to make informed choices (**Annex 1.1**).

The Alma Mater adopted QA as a means to carry out its normal activities: it thus guarantees itself, as well as external stakeholders, that its goals for development and improvement are properly pursued.

The Alma Mater and DIMEVET are aware that QA measures rely on two major catalysts for change:

- Open access – the fact that documentation is freely available encourages a spirit of transparency. As a result, the organisation can communicate more effectively;
- Clear-cut rules – people are inclined to give more careful thought to expectations that are clearly and appropriately expressed. This leads them to emulate the improvements they see around them, a process that openly accessible information helps to spread.

The two strategic areas defined in the Alma Mater Vision are Education and Research.

Overall strategic objectives for education include:

- Guaranteeing the students' personal, cultural and professional growth, according to the needs of society;
- Improving the quality of learning;
- Reinforcing the international nature of education;
- Developing policies aimed to reward deserving students;
- Improving policies aimed at fulfilling the right to education.

Overall strategic objectives for research include:

- Supporting fundamental research and improving applied research aiming to develop both individuals and society;
- Promoting and supporting training for scientific research throughout all phases;
- Reinforcing the ability to attract foreign researchers to our research facilities.

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## 1.1 NEW PRESIDIUM OF QUALITY

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Pursuant to the Ministerial Decree no. 47/2013, the Academic Senate (19.03.2013) and the Board of Directors (26.03.2013) appointed the new Presidium of Quality.

Under the regulatory guidelines, the functions of the Presidium are divided into:

- Functions related to teaching activities;
- Functions related to the research activities.

For the functions related to teaching activities, the Alma Mater has appointed the Presidium of Quality to monitor the QA of the Teaching and Student Services and the Alma Mater QA Group (AMQAG), coordinated by the Vice-Rector for Education and Quality Assurance (Prof. Fiorentini) which acts as internal auditor and is composed of eight teachers and one student appointed by the Student Council.

For the functions related to research activities, the University refers to the Research Observatory (RO), which is currently made up of 15 teachers (one chairman and one representative from each subject area (CUN). The Vice-Rector for Research (Prof. Braga) is permanently invited.

To ensure a link between the activities of the two bodies, a group of 8 members has been appointed, including four from the Research Observatory and 4 from AMQAG, one for each of the following areas: humanities , social, scientific-technical, biomedical areas.

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## 1.2 QUALITY ASSURANCE FOR TEACHING

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The internal QA system for teaching was established at the Alma Mater in AY 2007-2008. From AY 2012-2013, the Italian Ministry of Education introduced an External Quality Assurance system and appointed a board of evaluators (ANVUR).

This new system requires functional coordination in the planning of learning activities provided in the DP, services and available resources, ensuring constant connection and communication between the different agencies involved in the process with their own governing bodies: DP Board (DPB), Departments, Schools and related joint committees, Presidium of QA, the Evaluation Team and the academic bodies (Senate and Board of Governors).

Pursuant to Ministerial Decree 47/2013, the DP QA Group (DPQAG), comprising the Degree Programme Coordinator (DPC), a group of staff selected from the members of the DPB and a group of students (currently not mandatory), drafts the Annual Review Report (ARR), which, after discussion by the DPB, is sent to the Department and presented to the Student-Staff Joint Committee (S-SJC) of the School, which in turn express their views on it (LD 19, Art. 13) and transmit the final documents to Presidium of QA together with any proposals for the establishment of new course units and the modification of existing ones. The Presidium of QA then forwards the findings to the Academic Senate, the Board of Governors and the Evaluation Team.

The final version of the ARR is sent to external National Agency for QA (ANVUR), which randomly selects and analyses 10% of the ARR received each year. Any DP with major amendments to their study plan undergo a mandatory evaluation (**see AP 7**).

Two main results are expected for the DPs:

- To progress in terms of results achieved, in the direction indicated by the University policies;
- To independently administer their quality management, developing appropriate internal evaluation systems.

If the ANVUR evaluation of DPs is not satisfactory, the HE institution running them may lose its accreditation status and be subject to an in-depth general evaluation.

For these reasons, process organisation, systems of responsibility and funding and programming strategic plan activities are integrated in QA, which is configured as a structural element of the teaching processes: in short, doing things and improving them constantly.

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## 1.3 QUALITY ASSURANCE FOR RESEARCH

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Since 1997 all Teaching Staff of the Alma Mater are ranked, on the basis of the quality of their own scientific products, using public bibliometric criteria defined by the internal Research Observatory (RO). The RO comprises a Chairman and 14 members, representing all the subject areas identified by the National University Council (CUN).

The Departments of Italian Universities are also evaluated externally on a national basis by ANVUR in order to assess the quality of scientific products using unbiased performance indicators. The VQR process (Evaluation of the Quality of Research) 2004-2010 ranked DIMEVET top in its scientific area for the quality of research products (for details see AP 10).

## 1.4 QUALITY ASSURANCE WITHIN ALMA MATER – UNIVERSITY OF BOLOGNA AND DIMEVET

The Alma Mater general policy for quality is set out in the Three-years Strategic Plan (STP) available at <http://www.unibo.it/it/ateneo/chi-siamo/piano-strategico-2010-2013> (**Annex 1.2**). Along with the STP and every year, the University approves the Budget Plan, the Personnel Employment Programme, the Building Plan, the Safety Plan and the Performances Plan (**Annex 1.3**).

<http://www.unibo.it/Portale/Ateneo/Amministrazione+generale/Aree+amministrative/726/766/default.htm>

To complete the cycle, the achievement of the University's general objectives was assessed, according to Italian law, by the "Internal Evaluation Unit" (IEU). The IEU is in charge of the overall internal evaluation of the University management, research and education, as well of any other University functions established by law.

The main tasks of the IEU are:

- To express opinions and judgements to University Academic Bodies about established objectives and their achievement;
- To draft an annual analysis report on the overall University activities and management;
- To draft a summary of the survey on the opinions of students about teaching activities;
- To express opinions concerning the establishment and activation of DPs. The IEU gives its opinion on available resources and their congruency with the objectives of the programme.
- The Alma Mater "IEU" comprises 5 members, 4 of whom are external.

The Alma Mater has adopted a monitoring system and management control system to evaluate the management of internal resources and the results of teaching and research activities. The management control system support the decision-making processes with documents, data analysis and indicators, also concerning the organisation of teaching programmes. Resources are partially distributed to peripheral structures depending on the results achieved in these evaluations.

The 2012 IEU Report (**Annex 1.4**) is the last available before the reform of the Statute and the reorganisation of the University. Since 2010, the Alma Mater has initiated the process of self-renovation, anticipating the approval of Law 240/2010. The new Statute, approved by RD no. 1203 of 13 December 2011 which came into force on 11 January 2012, is based on a more suitable system to administer and qualify expenditure, and has involved a radical revision of the research and teaching structures as well as the administrative services.

The 2012 IEU Report offers a concise but complete description of all the activities of the Alma Mater, teaching, PhD programmes, research, financial management, personnel policy, student services. A range of 40 indicators provides a summary of the events and results.

Moreover, for the past ten years the Alma Mater has been taking part in the Good Practice Project, a National Inter-University project benchmarking the administrative departments of the university.

The project, now in its 8th edition 2013 (GP2012), aims to measure the performance of administrative services of a group of universities that voluntarily decided to participate and provide the data required for comparison.

21 public universities participated in the GP2012 edition, and, together with the working group, defined the framework for comparison.

The 2012 IEU Report (<http://www.unibo.it/nucleodivalutazione/default.aspx>) also contains the raw information and assessments on the new structure of the University after the application of Law 240/2010. The aggregation of Departments (from 70 to 33), the suppression of the 23 Faculties in favour of the 11 Schools, as well as a broader coordination of teaching, all changed the governance of the University, reducing the size and changing the competences of the governing bodies, while expanding the role of the student representatives who will be also present in the new IEU body.

During AY 2013, the Alma Mater produced a detailed business plan for the new organisational structure, as well as the definition of a new model of teaching, functional to fostering processes of joint planning and programming and ensuring efficient forms of management, efficiency and quality of training and student support services. In this context, all the Departments continued to operate until the end of the AY 2012/13, and then began to operate as the new Departments.

In this rapidly evolving context, DIMVET anticipated the transformations by deciding to merge the three Departments previously involved in Veterinary teaching into a single one in AY 2011/12. The basis for this reorganisation was an official document stating the recognised cultural identity of Veterinary Sciences within the Alma Mater and representing the first description of the Mission and Vision of the newly established department. The document was prepared by the Dean of the FMVBol, the Heads of the former Departments and an ad hoc Campus Committee established to manage the reorganisation process and approved by the respective boards, all including student representatives (**Annex 1.5**).

Currently (Autumn 2013), the Alma Mater is finalising the format for the new integrated STP model for Schools and Departments. The new STP 2014-2016 will be prepared by DIMEVET and SAVM as soon as the University template is available. Meanwhile, DIMEVET acts in line with the overall objectives detailed in **Annex 1.5**.

DIMEVET was able to face the challenge of reform, turning it into an opportunity for development because of its knowledge and understanding of the QA approach following its ISO 9001 certification for research and development activities, acquired and maintained since 30 November 2000 (by means of the previous departmental system) (**Annex 1.6**), as well as the constant control of indicators required to comply with EAEVE rules; the mission, overall objectives and developing strategies are in fact integrated in the DIMEVET Quality Manual (**Annex 1.7**).

The DIMEVET strategy for quality of teaching and research is defined in the context of the Alma Mater QA Strategy (**Fig.1.1**); it is reported in the foundation document and revised and implemented each year in the accompanying report to the annual budget plans. The strategy is designed to achieve the following objectives:

- To assure the quality and standards of the degrees run by the Department;
- To assure the quality and standards of the research and clinical services performed at the Department;
- To deliver high quality study programmes based on research activities;
- To meet the expectations of stakeholders, including students;
- To satisfy the requirements of the ANVUR;
- To satisfy, as far as the DPVM is concerned, the European Union Directives and EAEVE requirements;
- To periodically review the effectiveness of the Department's QA procedures.

These objectives are gathered in the ARR of each DP, including the DPVM, and follow the thorough critical analysis of qualitative and quantitative data mainly contained in the Annual DP Quality Report (ADPQR), published on the web at <http://corsi.unibo.it/SingleCycle/VeterinaryMedicine/Pages/Presentation.aspx>.

The ARR establishes the consequent Action Plan to achieve the specific goals, and includes deadlines and responsibilities (see **AP 7**).

Responsibility for quality and standards lies with DPQAG and DPC of each DP for teaching activities and with the Department Executive Committee (DEC) for research and clinical service activities.

Student input to QA is through their membership of various different Academic Boards. Although not mandatory by law, the DPVM decided to include a large number of students in its DPQAG in charge of preparing the ARR. For the preparation of the 2012 ARR, the group comprised the Degree Programme Coordinator (DPC), 5 teachers and 6 students. Students also provide regular feedback

through structured twice-yearly surveys on the quality of single subjects, organisation, resources and teaching staff.

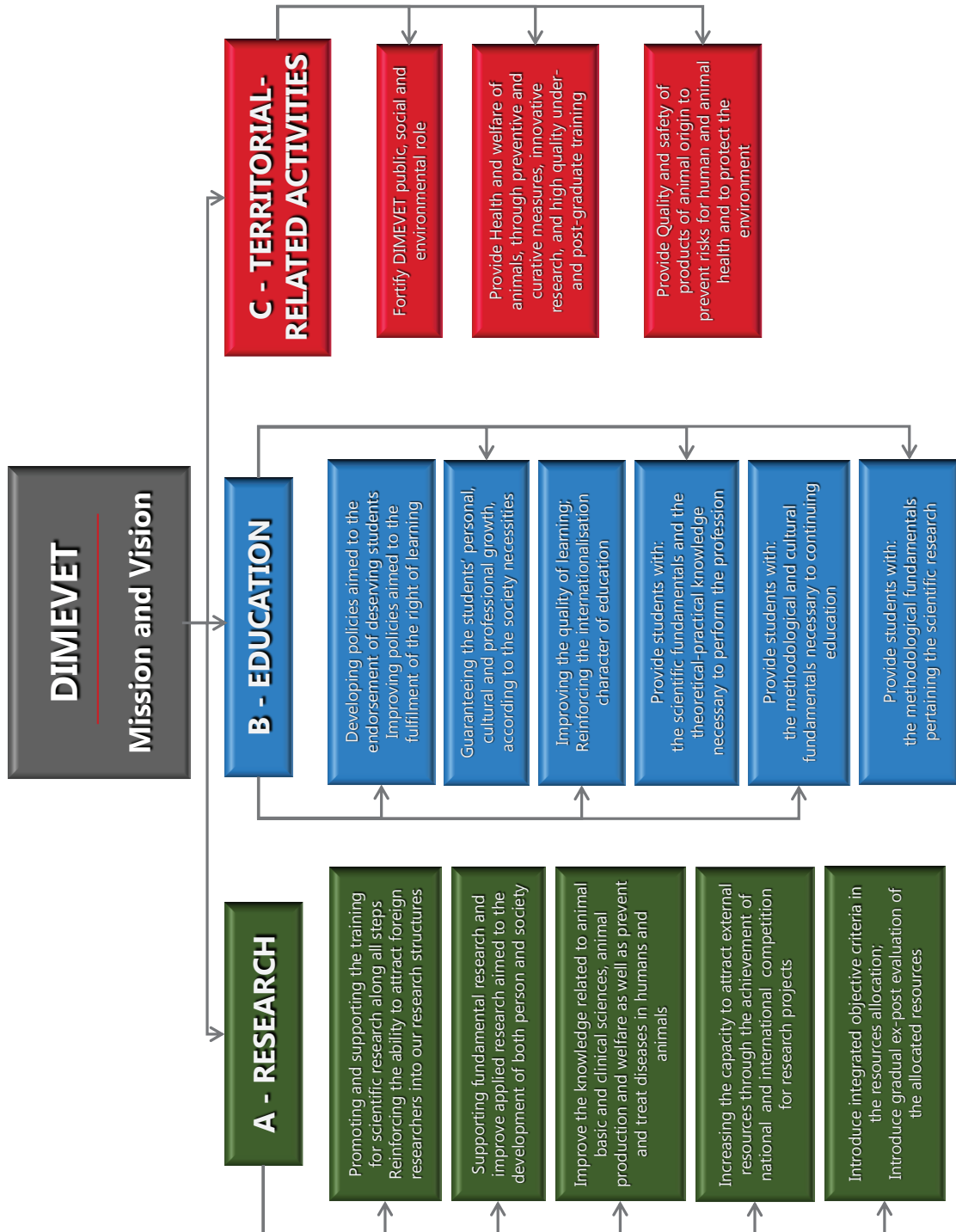


Fig. 1.1 - DIMEVET Performances Tree.



## CHAPTER 2

# ASSESSMENT OF STUDENTS, POSTGRADUATE EDUCATION AND STUDENT WELFARE



## 2 ASSESSMENT OF STUDENTS, POST GRADUATE EDUCATION AND STUDENT WELFARE

### 2.1 ASSESSMENT OF STUDENTS (AP 2)

#### Admission of students

Due to the large number of students applying to study Veterinary Medicine, the MIUR enforces a *numerus clausus* system which restricts access to a set number of students for each Italian DPVM on the basis of the resources available in the different institutions.

The admission rules applied to the DPVM are fully defined each year in the ministerial regulations for all EU and non-EU students.

The admission test is conducted in the same way and on the same day for all the DPVM across the country.

Each DPVM merely organises the test and checks compliance with the ministerial regulations on the day of the test.

The timetable of the procedures, the number of places available for enrolment to the first year, the minimum admission requirements for EU (Italian and non-Italian citizens following exactly the same procedures) and non-EU students, the procedures, subject areas of the questions in the admission tests, test marking, the results of assessment and the drawing up the ranking lists, the criteria applied to the assessment of student performance, are defined by law and available at:

[http://www.accessoprogrammato.miur.it/2012/VE\\_HP.html](http://www.accessoprogrammato.miur.it/2012/VE_HP.html)

<http://www.studiare-in-italia.it/studentistranieri/>

Each year, a specific description of the admission requirements is given in the Call for Applications published on the DP web site <http://corsi.unibo.it/MagistraleCU/MedicinaVeterinaria/Pagine/ammisione-al-corso-di-laurea-in-medicina-veterinaria-aa-20122013.aspx> (**Annex 2.1**).

All the information is in Italian, as enrolling students are expected to have basic knowledge of the language, enabling them to achieve good results in the course assessments. For non-EU students, knowledge of Italian is assessed by a specific committee before the day of admission test.

Students must pre-register using an on-line system at <http://www.university.it/index.php> where they can also find useful information to compare their chosen DP with the national ones, including feedback of students and graduates.

Since Academic Year 2001-2002, the Alma Mater has established an agreement with the Military Academy of Modena for the preparation of Veterinary officers, and every year it reserves a number of places (usually two) for cadets.

In the last few years, the total number of new students accepted has been progressively reduced. In contrast to other Italian Faculties, the FVMBol spontaneously decided to reduce the number of students in order to provide better training and comply with the request of the statutory bodies to reduce the number of veterinary surgeons in Italy (**Tab.2.1**). Specifically, in Bologna since AY 2005/2006, the 150 places for Italian or EU citizens and foreign students with equivalent qualifications have been reduced to 90. The number of places available to non-EU students has not been modified.

Currently, 90 EU students (including those from the Military Academy) and a maximum of 15 non-EU students (including 5 students from the People's Republic of China - Marco Polo project) are admitted. Each DPB proposes the number of EU and non-EU students to be enrolled in the first year (on the basis of the number of teaching staff, availability of facilities and future opportunities for professional employment) in the SUA (All-inclusive Annual Profile). The proposed number is then notified to the Ministry of Education, Universities and Research (MIUR), which decides whether or not to accept it, also considering the EAEVE approval. Finally, the MIUR determines, by decree, the total number of

students that can enrol nationally and assigns a specific number to each University. Major reductions in the number of students can be seen in those Faculties that are not EAEVE-approved.

Admission is based on a multiple choice test to assess the candidate's knowledge in different areas. A ranking list is drawn up on the basis of the score obtained in the test, and only the highest-ranking students can enrol.

In evaluating the test, the following criteria are taken into account:

- Test score (maximum 90 points):
  - 1.5 points for each correct answer;
  - Minus 0.4 points for every wrong answer;
  - 0 points for each question not answered.
- Assessment of the high school curriculum (max 10 points)

In any case, to be admitted, students (EU and non-EU) must obtain a minimum score of at least 20 points.

As defined by law, the admissions procedure is based on a relative, rather than absolute, indicator of performance. Applicants get ranked and the highest have the opportunity to enrol formally for the coming AY within a set period of time.

If they do not enrol, their place will be given to the next applicant in line. Since 2011/2012, a single ranking list has been drawn up for the Universities of Bologna, Parma, Milan and Padua; from 2013/2014 the ranking list is drafted at national level.

On the basis of the results achieved, students are assigned to the different DPVMs all over the country. The University chosen to sit the admission test is considered the first choice of students, therefore the higher the number of applicants the better the quality of enrolled students.

Additional learning requirements (OFA) are assigned to enrolled students who have not fully met the entrance requirements. The assessment methods of students' initial preparation and the fulfilment of the OFA are described in the Degree Programme Regulations, may change each year and are clearly stated in the call for applications. Students not completing the additional learning requirements have to re-enrol to year 1 as repeating students. Students enrolling to the DPVM also have to meet the B1 English requirement; if they do not reach this level before enrolment, they are given a specific OFA to be completed within the first year (<http://www.cilta.unibo.it/CILTA/Idoneitalinguistica/ProveIdoneita.htm>).

Traditionally, the admission procedure takes place in the month of September, immediately preceding enrolment and the beginning of lessons (October). From AY 2014-2015, the admission procedure will be brought forward to April, giving more time to students (a large percentage of whom come from other Italian Regions) to organise their move to Bologna.

The formal enrolment for AY 2014-15 can only take place once formal requirements have been completed, particularly once students have acquired the secondary school certification.

Application and admission data is analysed each year in the ADPQR (section D1.1) and ARR (see **AP 7**).

## Comments

The enrolment procedure needs improvement because:

- Students' knowledge of scientific subjects varies greatly due to the heterogeneity of their previous studies, and the DPVM has no possibility to plan appropriate actions to reduce the variability of the background knowledge given the rules of the national selection system;
- The selection process does not provide the possibility to assess the students' motivations and their real ability to practice;
- It usually takes over two months to obtain the final list of students admitted to DPVM (bringing

forward the admission procedure to April next AY may solve this point).

In 2013 the MIUR established an ad hoc Commission to study new criteria for admission to different DPs regulated by numerus clausus, such as Veterinary Medicine. The representative for all Italian DPVMs is a member of the DIMEVET teaching staff. The Commission discussed specific issues of the current admission procedures and produced a list of suggestions, currently under evaluation by the MIUR to improve the selection of new students.

**Tab. 2.1** - Assessment admission of student.

		2013 entry	2012 entry
N° of EU students applying		806	689
N° of EU students admitted		88	100
N° of non EU students applying		12	7
N° of non EU students admitted		1	1
N° of student by other entry mode (Military Academy)		3	2
Assessment of selection criteria	Good		
	Acceptable		
	Need improvement	✓	✓

### Assessment procedures of the performance of enrolled undergraduates

The guidelines for the examination were developed within the context of the FMVBol Teaching Committee in 2009. The guidelines were then approved by the DIMEVET Board (**Annex 2.2**).

According to the DPVM policy of exam guidelines:

- The exam is public and is considered part of the education process;
- The exam can be done in written, practical or oral form. Teachers are free to choose the way to perform their exam, even if the policy encourages examining students in the most objective perspective, e.g. using a written examination. Written examination may be composed of multiple-choice questions, open questions, brief or extended reports.
- The exam methods must be clearly stated, communicated to the students at the beginning of the course and are specifically detailed on the website (course structure diagram) (e.g. Special Veterinary Pathology I: <http://www.eng.unibo.it/PortaleEn/Academic+programmes/Teachings/dettaglio.htm?AnnoAccademico=2013&IdComponenteAF=341725&CodDocente=016839&CodMateria=10230#conoscenze>);

The DPVM strongly encourages the adoption of written examination. The process is quite slow since it's very difficult to change the habits of some (especially senior) teaching staff also due to the lack of proper continuing education and/or specific indications provided by the Alma Mater. This means that the next steps include the review of written exam methods and settings. Specific teacher training should be of great benefit. Nevertheless, in the last three years, there is evidence of the increasing use of written (practical or computer-assisted) examinations compared to oral exams. As the reduced number of exams in the last curriculum has led to an increasing amount of information required to pass, the DPVM has actively encouraged the use of progress tests, and in this context, written exams are particularly effective.

The exam sessions are determined according to the teaching period (2 semesters) and are published on line at the beginning of the year:

<http://corsi.unibo.it/MagistraleCU/MedicinaVeterinaria/Pagine/calendario-didattico.aspx>

Roughly the exams take place as follows:

- January – February;
- June – September.

Students are informed of specific exam sessions on the web (<http://corsi.unibo.it/SingleCycle/VeterinaryMedicine/Pages/Exams.aspx>) and they use an intranet electronic database to sign up for a specific exam; here they can also see their exam results and full portfolio (Alma Esami) (**Annex 2.3**). The Year Coordinator (YC) is responsible for the various exam timetables in order to provide students with the best possible opportunity to sit exams according to schedule for all the course units included in the year.

External Examiners may be included at the proposal of the teacher leading the examination board, and with the approval of the Department Board. This is not however common in Italy in the DPs.

Italian law sets no limits for resitting exams for any students who fail (apart from a period of 8 consecutive years without passing an exam). Students are encouraged to sit each exam as soon as possible, sometimes offering different assessment methods for subsequent examination. Nevertheless, there are many circumstances, such as working students, which add difficulties for the system. Students are required to pass some preparatory subjects before sitting certain exams. The list of the preparatory exams is published on the DPVM website. The list of preparatory course units is given on the webpage: <http://corsi.unibo.it/MagistraleCU/MedicinaVeterinaria/Documents/2013/Propedeuticit%C3%A0%20CdS%208617.pdf>.

Scores are given either on a pass/fail basis or with a score out of 30. To make the conversion system more transparent and understandable, the Alma Mater has adopted the ECTS grading tables which, for each positive grade on the Italian scale, indicate not only the corresponding ECTS grade but also the actual percentage of students who obtained that grade. From AY 2012-2013, for all students enrolled to a programme, the statistical distribution is updated annually.

<http://www.eng.unibo.it/PortaleEn/TheECTSGradingScale.htm>

The pass/fail (“idoneità”) grading may be used for a maximum of one-sixth of the course units.

The assessment requirements are an integral part of the Course Structure Diagram, published on-line before the beginning of the year and containing the full Flow Chart:

- Learning outcomes;
- Course contents;
- Readings/Bibliography;
- Teaching methods;
- Assessment methods;
- Teaching tools;
- Language of instruction;
- Office hours.

For an example see:

<http://www.eng.unibo.it/PortaleEn/Academic+programmes/Teachings/dettaglio.htm?AnnoAccademico=2013&IdComponenteAF=341784&CodDocente=030922&CodMateria=35480>

Moreover, the DPVM strongly encourages teachers to discuss the syllabus, including the learning outcomes and assessment methods, during the first lesson of each subject. The examination board, for each subject, must include at least two members of the teaching staff (see the previously mentioned examination guidelines – **Annex 2.2**).

The details of the exam passed and average scores reported are part of the ADPQR (Table D.2.3 – see **AP 7**); the results are examined and addressed by the DPQAG during the preparation of the ARR. In

particular, the average number of ECTS obtained by first year students is assessed, traditionally used to determine the students' subsequent rate of progression and performance.

### Complaints about exams

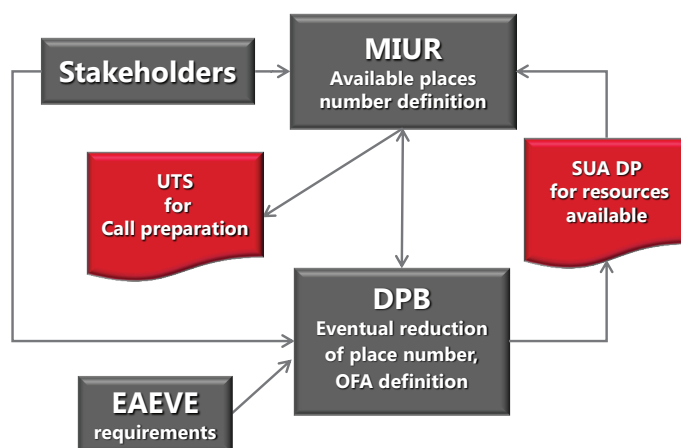
Due to the fact that the exam format is not regulated (neither by Italian law nor by Alma Mater rules), there is no specific procedure for complaints. From a general point of view, any problems arising in the assessment system, as well as in other parts of the student's life, can be reported by the student representatives in DPQAG, DPB or S-SJC to ensure anonymity. For other cases, in which anonymity is not essential, the students may refer to the YCs (<http://corsi.unibo.it/MagistraleCU/MedicinaVeterinaria/Pagine/coordinatori-danno.aspx>), who are available to assess complaints and provide support in identifying solutions. SAVM coordinators for different areas of Student Affairs are also responsible for evaluating specific complaints (see **AP 4**).

At the Alma Mater there is also a Student's Ombudsman. Its function is regulated by RD no. 1491/2012 of 7 December 2012).

The Guarantor is appointed by the Academic Senate, after consultation with the Student Council, from among persons outside the University and with proven specific legal knowledge of university organisation. The Guarantor ensures that the Alma Mater's teaching and research activities and services affecting the rights and interests of the students, are in compliance with the values and rules laid down in the Code of Ethics of the University as well as with the principles and rights set out in the Alma Mater Statute.

The Guarantor takes action on any claims made by phone (a freephone number is available during office hours), verbally at the office during opening hours or in writing. The Guarantor ensures the right to anonymity for both the students and witnesses.

The Guarantor sends an annual report of activities, including any recommendations and proposals for regulatory changes and/or administrative provisions, to the Rector, the Student Council and the Academic Senate. The report contains a statistical analysis of complaints and is published on the website: <http://www.unibo.it/it/ateneo/organizzazione/organi/garante-degli-studenti>.



**AP 2** - Assessment of students - Admission.

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## 2.2 POSTGRADUATE EDUCATION (AP 3)

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### Academic track

#### PhD Programme

The PhD programme in Veterinary Sciences is the primary postgraduate education at DIMEVET. The PhD in Veterinary Sciences started in 2010 (activity 2011-2013), when four previous PhDs were joined into a single Programme. The PhD in Veterinary Sciences has different curricula that can be chosen by the student:

- Basic Sciences;
- Animal Production and Food Safety;
- Public Health;
- Clinical Sciences.

To obtain the PhD degree, PhD students must:

- Perform independent research under the supervision of a faculty member;
- Attend a series of PhD seminars;
- Attend foreign research establishments for at least six months during the three year period of the PhD programme;
- Acquire skills in performing research, ultimately aimed at the production of scientific publications;
- Produce a PhD thesis based on the PhD project;
- Successfully present their results before an examination board.

The admission procedures, quite similar for both Italian and foreign candidates, as well as the score for the evaluation of CV, research project and any publications presented, etc., are specified on the website: <http://www.eng.unibo.it/PortaleEn/Academic+programmes/Research+doctorates/PhDprogrammestablessecondcall20132014.htm>.

Candidates who fail to obtain the Alma Mater scholarship may be admitted, up to the maximum number of places indicated in the call for applications, with no financial support or with an external financial backer, usually from the research grant of their tutor. When a candidate is admitted, in accordance with the candidate himself, the PhD Board identifies a supervisor with appropriate subject expertise to support the PhD student throughout his/her studies.

PhD students discuss and argue their thesis with an examination board comprising three examiners (one may be from DIMEVET, the other two must be external examiners from other Universities, either Italian or foreign). Additionally, the progress of PhD students in their research activity is formally assessed annually; if the student's progress is unsatisfactory, and remedial action does not lead to an improvement, the student may be asked to leave the programme.

The PhD Board may apply to the Alma Mater Research Committee to award a Doctor Europaeus to PhD candidates who satisfy the following conditions:

- The thesis is approved beforehand with a report drawn up by at least two professors belonging to universities of two other European Countries;
- At least one member of the Commission that assigns the title belongs to University other than that in which the doctorate is supported;
- The thesis is argued in a European language other than Italian;
- The research was carried out for at least six months in another European country.

The students' research activities should be aimed to produce publications in International journals, especially those of high level, present papers at both International and National meetings and document clinical cases.

To guarantee the achievement of this requirement, the PhD students are required to have published at least two papers in IF journals before being admitted to the final exam (the thesis discussion). In some circumstances, if results are not satisfactory, students may be encouraged to remain in the programme for an extra year, without financial support, in order to complete their scientific project.

An electronic repository of PhD Theses is available for consultation at

<http://amsdottorato.cib.unibo.it/>

The PhD Board comprises 19 teaching staff of DIMEVET, and the number of scholarships awarded annually to the PhD programme by the Alma Mater depends mainly on the scientific merit of the Staff involved (see **AP 10**).

In 2013, ANVUR produced guidelines for the QA of PhD programmes, to be introduced from next year (2014).

**Tab. 2.2** - Postgraduate Academic Education PhD Veterinary Science.

		Number of students of enrolled	Number of PhD graduated	Mean number paper per graduated student**
2011 (XXVI cycle)	PhD students at DIMEVET	22 (11)	22	NA
	PhD students holding a DVM degree	16	-	NA
2012 (XXVII cycle)	PhD students at DIMEVET	25 (12)	NA	1.15
	PhD students holding a DVM degree	22	-	-
2013(XXVIII cycle)	PhD students at DIMEVET	16 (8)	NA	1.1*
	PhD students holding a DVM degree	13	-	-

in brackets is reported the number of fellowship available from Alma Mater

\*only published paper are reported (in case of considering submitted papers, the mean value becomes 2.4)

\*\* data are available starting from the new PhD School and specifically refer to the production of graduate students enrolled in 2010 and graduated in 2013.

### Research fellowships

Research fellowships are agreements between the research fellow and DIMEVET for the development of a project, generally co-funded by the Department and the Alma Mater. These contracts usually have renewable terms. All fellow researchers receive a salary for their research work. All the specific research programmes co-funded by the Alma Mater are generally addressed to PhD graduates. At least 90% of these positions are occupied by Veterinary Medicine graduates.

**Tab. 2.3** - List of DIMEVET full time fellowships divided per year.

YEAR OF ACTIVATION	N° OF POSITIONS	DURATION (MONTHS)
2012	18	13 (12 m); 2 (18 m); 3 ( 24 m)
2013	17 (+6)	11 (12 m); 1 (15 m); 1 (20 m); 1 (23 m); 3 (24 m) (6 are presently next to start )

## Professional track

DIMEVET offers the following professional postgraduate programmes for veterinary surgeons:

- Professional Masters programmes;
- Three-year residency programmes (related to the European Colleges);
- One-year clinical training programmes (temporary contracts – Internship-equivalent).

### Professional Masters

Professional Master's programmes normally last one calendar year full-time (or two-years part time) for a total of 60 CFUs (1 CFU = 1 ECTS). The training consists of advanced instruction in the relevant scientific discipline, advanced instruction in generic research skills such as statistical analysis and the completion of a substantial original research project.

Clear entry criteria are established for each Master's degree by the Master's Teaching Committee. They are clearly defined and published on the call. Those wishing to apply for a place on a Master's programme apply direct to the Alma Mater.

DIMEVET currently runs the following two Professional Masters programmes:

Ultrasonography of companion animals:

[http://www.unibo.it/unibo/it/didattica/master/2011-2012/ultrasonologia\\_specialistica\\_in\\_medicina\\_veterinaria\\_dei\\_piccoli\\_animali](http://www.unibo.it/unibo/it/didattica/master/2011-2012/ultrasonologia_specialistica_in_medicina_veterinaria_dei_piccoli_animali)

Aquaculture and Ichthyopathology:

[http://www.unibo.it/it/didattica/master/2013-2014/acquacoltura\\_ittiopatologia](http://www.unibo.it/it/didattica/master/2013-2014/acquacoltura_ittiopatologia)

**Tab. 2.4** - Post graduate Professional Master.

TYPE OF MASTER	YEAR	NUMBER OF APPLICANTS	NUMBER OF STUDENTS ADMITTED	NUMBER OF STUDENTS THAT SUCCESSFULLY PASSED THE FINAL EXAMINATION
Ultrasonography of companion animals	2012-2013	95	20	20
Aquaculture and Ichthyopathology	2013-2014	13	12	NA

Students of the "Ultrasonography of companion animals" Professional Master Programme can perform parts of the guided specialisation training in private small animal clinics approved by the Director of the Masters Programme.



### Residency and Internship programmes

One of the recently approved DIMEVET strategies consists in increasing the number of Diplomates in the teaching staff. With this objective, DIMEVET positively views all efforts made to start a residency programme, either internally or by joining foreign institutions. The number of European Diplomates in the DIMEVET teaching staff has increased since 2005. In 2013, DIMEVET started to fund residency programmes.

Currently, there are four approved Residency training programmes at DIMEVET, including:

- European College of Veterinary Neurology (ECVN);
- European College of Veterinary Internal Medicine (ECVIM);
- European College of Animal Reproduction (ECAR);
- European College of Veterinary Pathology (ECVP).

All the residents involved in the training programmes run at DIMEVET receive a salary. The salary comes from different funds (*i.e.* PhD scholarships or teaching and tutorial contracts) partially or completely supporting the training period. To date, there is no specific funding for residency programmes.

Some DIMEVET residents are in training under the primary supervision of Diplomates from foreign establishments. To fulfil the requirements of the specific European Colleges, they spend a certain period of time abroad, to be trained under the direct supervision of the tutor.

Residents' Clinical training takes place through the management of cases, under the supervision of specialist Teaching Staff. The large and varied caseload of the Veterinary Teaching Hospital (VTH) ensures that residents and interns are exposed to a wide variety of clinical problem solving and patient management. Residency programmes train veterinary graduates to work at a specialist level in their chosen field. They are designed to prepare thoroughly for the examination leading to a specialist diploma.

All residents are expected to participate in DIMEVET research activities, including the development of a prospective clinical research project. Attendance and participation in a range of regular meetings, journal clubs, seminars and lectures are expected.

DIMEVET is currently planning internship programmes that are totally comparable to those of foreign institutions. A pilot project began in 2012 with two internal medicine internships.

The current role and work of the staff clinicians working in the Internal Medicine Service (SMI), Emergency and Critical Care Service (SARPA), Pathological Anatomy Service (APS), Surgery and Anaesthesiology Service (SCAR) is fully equivalent to that of an internship, since they are acting under the strict supervision of tutors. Specific policies and procedures to properly regulate this type of activity, making it equivalent to European internships, are currently being established and approved by DIMEVET. For the purpose of this SER, they are considered "Internship-equivalents".

Postgraduates students wishing to apply for one-year temporary contracts for staff clinician (internship-equivalents) must hold the recognised Veterinary Degree, the national qualification to practice and be registered with the local statutory body (Veterinary Chapters). The majority of these contracts are advertised on the DIMEVET website in early autumn, and start in January, although some programmes may start in other periods of the year.

Applicants must submit an application form. After the positive evaluation of the application by an appointed DIMEVET board, applicants are invited for interview. A DIMEVET board, including the future supervisor and at least one other senior academic from the subject area, conducts the interviews.

Parts of the Clinical Training temporary contracts are scholarships funded externally by the Emilia Romagna Region and private companies.

Historically, DIMEVET offers post-graduate students the opportunity to attend the Departmental clinical services for a maximum of one year in order to further study a specific veterinary area under the guidance of a university tutor. The persons involved are called "Laureato Frequentatore" (attending

graduate), they require insurance coverage and do not receive funding or payment. They are free to attend occasionally or continually.

**Tab. 2.5** - Diplomates, interns and residents.

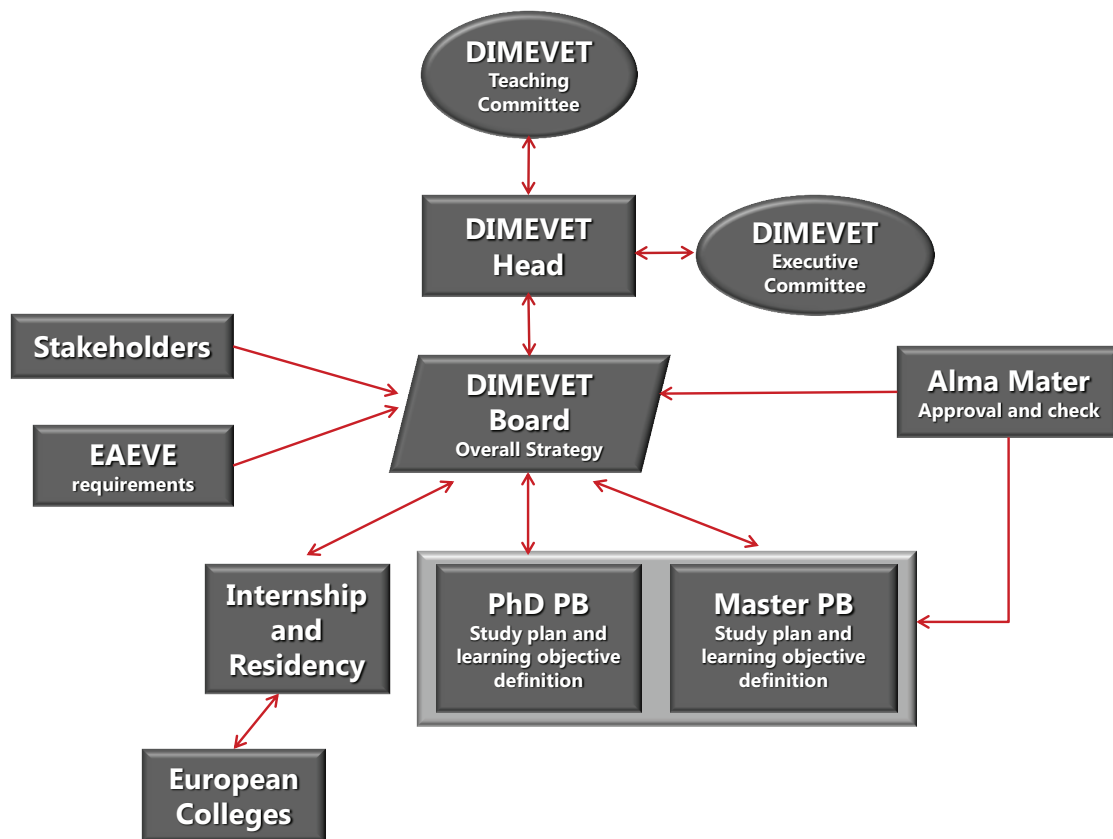
DIPLOMATES, INTERNS AND RESIDENTS									
COLLEGE	DIPLOMATE TITLE OFFERED	NUMBER OF DIPLOMATES IN THE STAFF		NUMBER OF INTERNS		NUMBER OF RESIDENTS		SUCCESS RATE	
		2012	2013	2012	2013	2012	2013	2012	2013
European College of Veterinary Neurology	Dipl. ECVN	1	1	1	1	2	2	1/2	-
European College of Animal Reproduction	Dipl. ECAR	4	3	1	1	0	0	-	-
European College of Veterinary Internal Medicine (Internal Medicine)	Dipl. ECVIM-CA (Internal Medicine)	1	1	2	1	1	1	1/1	-
European College of Veterinary Internal Medicine (cardiology)	Dipl. ECVIM-CA (Cardiology)	0	0	0	0	1*	1*	-	-
European College of Veterinary Pathology	Dipl. ECVP	3	3	3	3	4***	5***	-	-
European College of Bovine Health	Dipl. ECBHM	1	1	0	0	0	1**	-	-
European College of Veterinary Surgery (Large animals)	Dipl. ECVS (Large animals)	0	0	0	0	1*	0	0/1	0/1
European College of Veterinary Anaesthesia and Analgesia	Dipl. ECVA	0	0	0	0	1*	1*	-	-
European College of Veterinary Parasitology	Dipl. ECVP	1	1	0	0	0	0	-	-
European College of Veterinary Public Health	Dipl. ECVPH	1	1	0	0	0	0	-	-

### Post-graduate Specialisation Schools

In Italy, the Specialisation Schools (Scuole di specializzazione), run by Universities, are the only establishments entitled to issue official qualifications acknowledging specialisation in specific areas. Until last year, DIMEVET hosted three Schools of Veterinary Specialisations in:

- Food Inspection;
- Clinical Medicine of Domestic Animals;
- Animal Health, Livestock and the Science of Animal Breeding.

For political and financial reasons, from the current AY (2013-2014) the Alma Mater decided not run the Veterinary post-graduate school.



AP 3 - Postgraduate education.

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## 2.3 STUDENT WELFARE (AP 4)

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All students of the Alma Mater are covered by the global health insurance policy, and there are no special requirements for veterinary students.

All the activities, including teaching, are run under the very strict Italian law on safety in the work place (LD 626/1994 and subsequent): students are assimilated to the workers and the Rector to their employer. The teacher in charge is responsible for student safety during the learning activities. (Research and education manager – RDRL).

A central Prevention and Protection Service (SPP) (<http://www.unibo.it/Portale/Ateneo/Strutture/Strutture+di+servizio/501/503/default.htm>) is in charge of periodically evaluating the students involved in research activities at the Alma Mater (*i.e.* for the preparation of dissertations). A Safety Record containing all the information on the risks connected with the activity the students will perform, must be filled in by the RDRL and sent to the SPP before the activity begins (**Annex 2.4**).

DIMEVET established a Safety Committee (<http://www.scienzemedicheveterinarie.unibo.it/it/sistema-sicurezza>) to provide technical support, information and training, consultation, and to supervise periodic audits on health and safety practices and regulatory compliance.

The Safety Committee comprises teachers and technicians working in a coordinated manner to address health and safety issues in different areas of expertise: general safety, chemical safety, radiation safety and biosafety. The Safety Committee works on guidelines defined by the Alma Mater SPP and is also responsible for ensuring that the staff and students are medically fit to work in specific areas. For admission to the curricular supervised practical training, all students have to attend a two-hour seminar on the regulatory and general aspects regarding safety in the work place (**Annex 2.5**) focusing on:

- Rights and responsibilities of students;
- Safety signs;
- Personal protective equipment;
- Emergency plans;
- Behaviour in an emergency.

At the end of the seminar, the students are evaluated through a multiple-choice test (**Annex 2.6**).

Before the practical teaching activities, when necessary, the teacher gives specific instructions on the task.

Before each Professional Practical Training rotation, students can download the specific SOPs on safety procedures from the website: (<http://corsi.unibo.it/MagistraleCU/MedicinaVeterinaria/Pagine/tirocini.aspx>) and they have to give evidence of learning through a written test, completed before starting the activities.

In the case of experimental activities for the preparation of the dissertation, students receive additional training on specific safety procedures in advance.

The SAVM appointed the following Coordinators involved with students welfare:

- Guidance for prospective students Coordinator;
- Professional Practical Training Coordinator;
- Tutorial Service Coordinator;
- International Relationship Coordinator;
- Disabled and Dyslexic Students Coordinator.

DIMEVET appointed a Coordinator for Tutorial Services and for Disabled and dyslexic students who, working together with the Student Affairs department of the SAVM is in charge of addressing all students with special needs to the specific Alma Mater services.

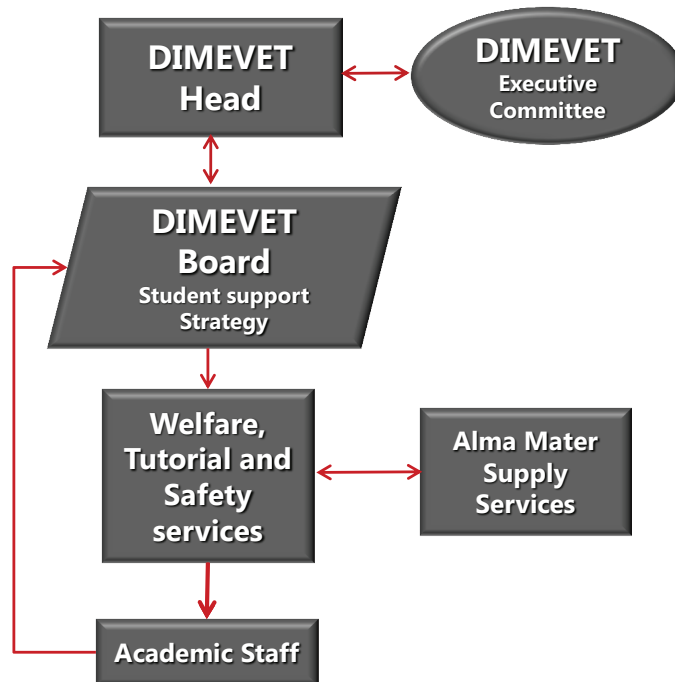
<http://www.agrariaveterinaria.unibo.it/it/studenti-iscritti>

A support service responds to the needs of students with disabilities or learning disorders enrolled at the Alma Mater (<http://www.unibo.it/DisabledStudents/>).

The Service also works with different universities, regional agencies, and local institutions in the belief that, through strong networks of sharing and working together, we can take meaningful steps towards a more accessible university for all.

University students and young people suffering from emotional and relational problems, affective and behavioural disorders, troubles in their academic or working life, can apply to the Psychological Support Service. The Service is free for all students of the Alma Mater, regardless of their age, and for young people aged between 20 and 28 years resident in Bologna. It is run by the staff of the Psychology Department (<http://www.unibo.it/it/servizi-e-opportunita/salute-e-assistenza/servizio-di-aiuto-psicologico-a-giovani-adulti-sap>).

Aiming to balance studies, career and family, DIMEVET established a crèche for the children of the university staff and students.



**AP 4** - Student welfare.



## CHAPTER 3

# ASSESSMENT OF TEACHING STAFF

## 3 ASSESSMENT OF TEACHING STAFF (AP 5)

### 3.1 STAFF RECRUITMENT

The DIMEVET teaching staff is composed of:

- Permanent Researchers (a position destined to die out after the recent University reform);
- Fixed-term Researchers;
- Associate Professors;
- Full Professors.

Each member of the teaching staff is engaged in research and scientific training and is required to dedicate a significant part of their annual time to teaching tasks and student services including guidance and mentoring (Law 240/2010).

<http://www.camera.it/parlam/leggi/102401.htm>

According to Italian Law 240/2010 each University must establish the procedures for certification and evaluation of teaching and student services; the Alma Mater also differentiates teaching tasks in relation to different scientific areas and the type of teaching, as well as in relation to other specific managerial tasks or research activities.

Fixed-term Researchers, recently introduced by law to replace the previous permanent Researchers, are chosen through open public selection procedures based on the assessment of the curriculum and scientific production of the candidates. Good knowledge of a foreign language (normally English) is also required.

Contracts may be for:

- Junior Researcher: three-year project-based contract, renewable for a further two years;
- Senior Researcher: three-year contract. After this, the national qualification (see below) is required to become Associate Professor.

The contract specifies the extent of teaching activities the new staff have to be involved in. Each researcher signs an agreement for a certain amount of research products during the contract period, based on other established duties and the scientific area of pertinence.

Associate and Full Professors are recruited based on their achievement of scientific results. The first mandatory requirement is the certification of the candidate's scientific qualifications (<http://abilitazione.miur.it/public/index.php>). The certification procedure is done annually on national basis. A board of 5 members (Presidential Decree No. 222 of 14 September 2011) is established for each scientific area; four members are selected randomly from a list of full professors of the area who applied to be included and who cover the median of scientific merit (only bibliometric parameters) of that specific area. The fifth member is selected randomly from a list, drawn up by ANVUR, (National Agency of Assessment for University and Research) consisting of at least 4 Professors in service at the University of an OECD (Organisation for Economic Cooperation and Development) country other than Italy.

The assessment of the teaching qualifications of associate or full professor is based on the evaluation of the curriculum and overall scientific activity and in particular:

- Scientific products;
- Individual contribution to research and development activities;
- The bibliometric impact of the products (number of publications in ISI or Scopus, median total citations and contemporary h index).

At local level, the appraisal of candidates from the national qualification list is governed by the Alma Mater according to the following steps:

- Public call for application on the website of the Ministry and the European Union, specifying the scientific area and giving a description of the profile sought;
- Evaluation of the scientific publications, curriculum and teaching experience of the applicants;
- Drafting of the proposed specific ad personam call from the Department with the vote of Full Professors (for Full Professors) or Full and Associate Professors (for Associate Professors), with the final approval of the call by resolution of the Board of Governors.

Contracts for temporary teaching activities can be signed in order to secure the cooperation of highly qualified experts, with a significant scientific or professional curriculum to meet specific educational needs. Moreover, in order to promote internationalisation, teaching contracts can be signed with foreign teachers, scholars or professionals (<http://www.camera.it/parlam/leggi/102401.htm>).

PhD students in Veterinary care can perform activities into veterinary services in the forms and in the manner governed by agreements approved by the Academic Senate and signed between the Alma Mater and the facilities where such activities are carried out. A limited teaching activity, not exceeding 60 hours/years, of ancillary or practical training is compatible with the PhD programme (524 del 26/06/2013 – <http://www.normateneo.unibo.it/NormAteneo/dottoratoRicerca.htm>)

Research fellows may carry out activities in relation to the needs of their own training plan, within the limits set by their contract with the University (RD no. 416 of 19 April 2011 – [http://www.normateneo.unibo.it/NormAteneo/assegni\\_ricerca.htm](http://www.normateneo.unibo.it/NormAteneo/assegni_ricerca.htm))

The amount of direct teaching activity of professors has to be by law at least 120 hours per year. Researchers have no teaching obligation by law but, Alma Mater considers at least 60hr/year up to 120hr/year. The teaching activities performed by researchers results in an extra salary; extra income for professors is expected only for any hours exceeding 120.

The calculation of the overall duties for education activity of each single professor/researcher not only considers the aforementioned direct teaching activities (theoretical and practical training in groups), but also includes all educational activities, *i.e.* participation in exam sessions and tutorial activities for the preparation of dissertations.

DIMEVET monitors the distribution of teaching activities to avoid an excess of hours that negatively affect the quality of performance. The DIMEVET Board annually approves the Teaching Plan for all Teaching Staff, taking into account the specific scientific area, the personal involvement in terms of research within the subjects as well as the total amount of teaching activities of each teacher.

Before the University reform, besides a letter of appreciation from the Dean to those teachers judged very positively by the students, no official reward policy for teaching excellence was available.

The current University Reform Law (no. 240/2010) considers the development of a system to reward excellence. The system however has still not been supported by a set of rules. In the near future, the Alma Mater will distribute part of the financial resources to the Departments on the basis of staff results.

The Department Board will be in charge of deciding how to allocate these additional resources among the staff members.

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## **3.2 OPPORTUNITIES FOR TRAINING AND SPECIALISATION**

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Continuous education for university teachers, including pedagogical training, is not mandatory in Italy.

Despite the evidence that most of teachers require proper education to improve their teaching skills, the Alma Mater has not yet planned consequent actions. Therefore, like other Degree Programmes, no specific staff development initiatives are currently available for the staff involved in the DPVM.



Recognition of teaching weaknesses and planning of adequate countermeasures was one of the main tasks of the Teaching Committee of the former FMVBol.

From 2009 to 2012, with the appreciation of the Alma Mater, the FMVBol began a pilot project of seminars for teachers, aimed at improving the awareness of modern educational concepts and techniques.

Within this project, two series of seminars were organised, focused respectively on "Efficient communication for education purposes" and "Learning to evaluate - communication during oral exams".

To pursue this activity, seminars and events were organised by DIMEVET and/or SAVM. The last one was the seminar "Veterinary Education: how to make the programme efficient and promote active learning in students", held in May 2013 by Prof. Peter Van Beukelen, reporting on the experience of the Faculty of Veterinary Medicine of Utrecht – The Netherlands.

Moreover, DIMEVET encourages teachers to develop their teaching skills supporting the achievement of the Diplomate status in the different European Colleges.

DIMEVET and SAVM support the development of internationalisation projects, such as ERASMUS, permitting the exchange of teachers and facilitating the acquisition of teaching skills by sharing the experience of other teaching programmes developed abroad. In AY 2013 the DPVM had 29 active Erasmus exchange agreements, which also permit the exchange of teachers. Moreover, the Marco Polo project is devoted to experiences abroad for PhD students and junior teaching staff.

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### 3.3 EVALUATION BY STUDENTS

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Evaluation of the students' opinion on teachers and teaching activities is a pillar of the Alma Mater QA system. In spring 1997, the Alma Mater introduced a pilot scheme for student evaluation of teaching. Subsequently, Italian Law no. 370 of October 1999 introduced "periodic, anonymous evaluation of students' opinions on teaching activities".

Based on the results obtained with different feedback and surveying approaches among European Universities, the Alma Mater decided to achieve this goal through the direct administration of hard copies of a questionnaire to the students (**Annex 3.1**), at the end of lessons and before the exams. For the DPVM that proactively worked to reach the goal, this means covering more than 99% of course units each year.

The questionnaire is made of:

- General and specific questions with four grading points;
- A series of possible suggestions;
- Free space for comments.

The forms are collected and evaluated anonymously by a centralised automated facility. The results of the questionnaires are visible to each teacher, in a restricted area of the Intranet.

The overall results of the questionnaires of the DP are available on-line on the dedicated Alma Mater website (<https://www.osservatoriodatistico.unibo.it/>) and are also included in the ADPQR (Chapter D.3.2.1) published on the Degree Programme website. Around 80% of students in the DPVM responded positively to question 19: "Are you generally satisfied with this course unit?". Last year, the percentage of DPVM teachers obtaining for this question an evaluation above the Alma Mater average was 83.6%.

Specific evaluation forms are administered monthly to the students involved in the Professional Practical Training (PPT) rotations and are collected and evaluated at the end of each training period (**Annex 3.2**; e.g. Surgery).

The forms are processed by the person in charge of each rotation and sent to the PPT Coordinator at DIMEVET, who coordinates the corrective actions to solve any criticalities. On a yearly basis, the PPT coordinator reports to DPQAG and then to the DIMEVET Board.

For QA purposes and for a deep understanding of any problems arising, the Head of the Department and the DPC receive the analytical and synthetic results of the students' questionnaires twice a year. Based on these, the DPC has the possibility to call teachers with low scores and discuss the reasons in order to find a solution. Since 2012, Alma Mater has established that the results of the feedback must be discussed in the DPB (including the student representatives). The results of the discussion must be included in the ARR and sent to the S-SJC of the SAVM for critical evaluation.

Furthermore, the Alma Mater guidelines establish that, in the event of unsatisfactory ratings, the DPC has to send an official letter to the teacher requiring a written explanation of the problems encountered and results obtained in order to sort out any strategy to improve the specific situation. The problem is subsequently discussed by the DPQAG and, if necessary, collegially by the DPB. The summary of the results of these processes are included in the ARR.

Considering all the Alma Mater teaching staff, teachers with overall highest score receive formal written recognition from the Rector. The ADPQR also contains table (D.5.2.3.2.) reporting exams passed and average scores obtained. This allows DPC and DPQAG to evaluate teachers also on this significant parameter, to prevent some specific subjects from causing potential bottlenecks in the programme.

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### 3.4 EVALUATION BY SCIENTIFIC MERIT

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On the assumption that scientific activity is an indirect indicator of the success of research-based teaching, teachers are required to present a three-year report on all the activities undertaken, underlining:

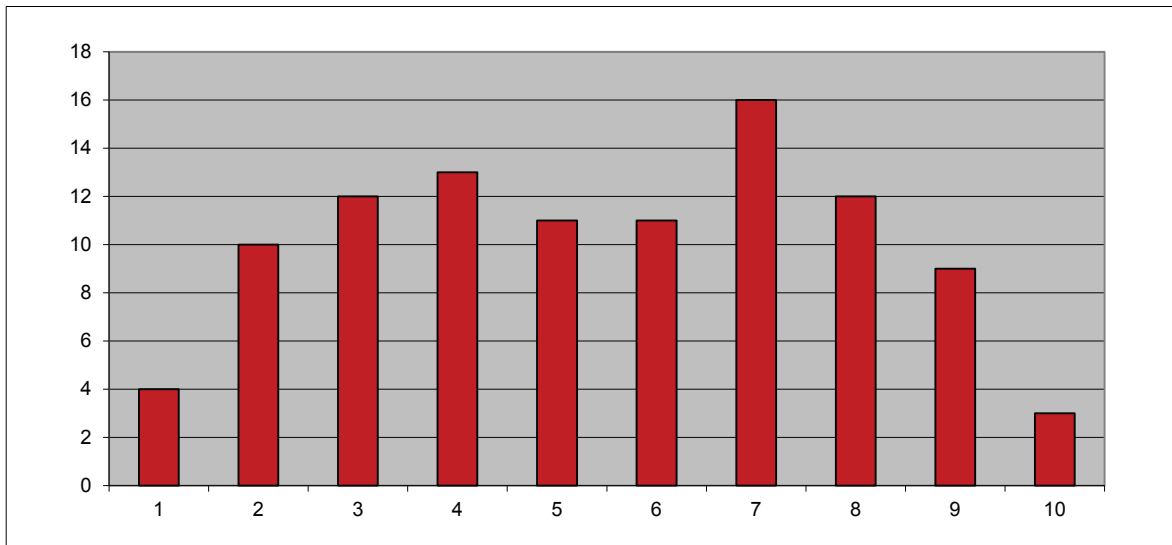
- Teaching-related responsibilities;
- Research activities (publications and contributions to scientific literature);
- Managerial activities;
- Extramural activities (participation in scientific committees of journals or scientific societies, etc.).

The three-year report is presented, discussed and approved by the DB.

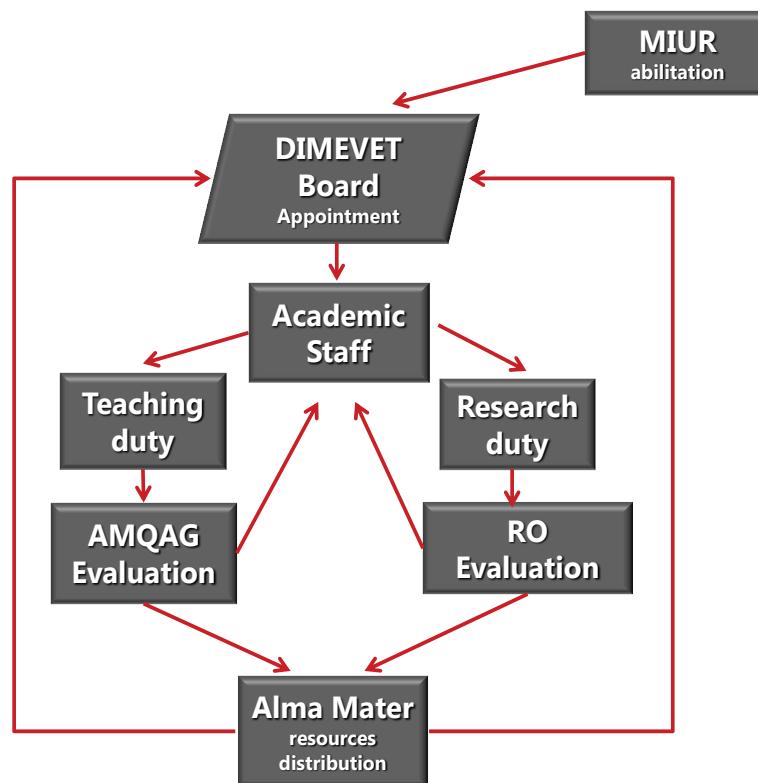
Scientific activities of the academic staff have been monitored since 1997 by RO, which is in charge of updating the research products database and identifying the criteria for evaluating research. Each year RO carries out an evaluation of all the academic staff of the Alma Mater. These reports include a grading of staff in ten classes of merit (1 is the best) based on key indicators of performance (**Fig. 3.1**) :

- Publications;
- Patents.

Until 2013, Italian law did not consider the financial reward of merit, either related to teaching or research. Therefore, the greatest power for improving staff quality is through their voluntary and active involvement in the DPVM education project.



**Fig. 3.1** - Fig 3.1 Frequency distribution of Teaching staff of DIMEVET in the 10 classes of merit at the last evaluation exercise (2012).



**AP 5** - Assessment of teaching staff.



# CHAPTER 4

## ASSESSMENT OF LEARNING OPPORTUNITIES

## 4 ASSESSMENT OF LEARNING OPPORTUNITIES (AP 6)

The provision of and advice on learning materials are an integral part of the Course Structure Diagram published on-line before the beginning of the year (Readings/Bibliography) For an example see: <http://www.eng.unibo.it/PortaleEn/Academic+programmes/Teachings/dettaglio.htm?AnnoAccademico=2013&IdComponenteAF=341784&CodDocente=030922&CodMateria=35480>

Students are strongly encouraged to use veterinary textbooks, both in Italian and in English. Students are also encouraged to search for scientific papers published in international journals by using specific bibliographic databases, such as Pub Med.

In addition to the large availability of textbooks (library, website, purchase), students actively ask for course notes. The matter was debated several times in the DPB, since this practice was not considered in line with the concept of Evidence Based Medicine. At the beginning of the academic year, great effort is made by most teachers in explaining to students that course notes are just a way to integrate the textbooks and not to replace them.

Students appreciate having hand-outs, PowerPoint or keynote presentations used in the lessons. The Alma Mater has implemented a specific web site, Alma DL - AMS campus, where teachers upload teaching materials and students can download them (<http://campus.cib.unibo.it/>).

Most of the teaching material concerning the DPVM is available in advance on Alma DL - AMS campus and can be downloaded and printed by the students before attending the lessons.

Besides what officially offered to the students by the DP, DIMEVET offers many additional opportunities for learning. The campus facilitates a purposeful and stimulating environment for the students to take full advantage from all the learning opportunities. Students are always in contact with their teachers, very often outside of the official timetable devoted to the lectures.

The results of the DP are annually reviewed by the DPQAG, approved after proper amendments by the DB and critically evaluated by the S-SJC, which sends out its final report for approval by the SAVM Board and IEU. In addition, the programme as a whole may be randomly evaluated by an external Board appointed by the Italian QA system (ANVUR).

The quality assurance of learning opportunities is primarily the responsibility of DPVM, which reports to the S-SJC.

Learning opportunities for students and staff are provided by:

- The Library, supporting students with multiple hard copies of each adopted textbook and a wide on-line and printed collection of scientific journals;
- The IT facilities, including all the IT tools and specific teaching labs used for teaching purposes. The IT group, comprising 3 people, provides support and technology for adequate functioning of the IT infrastructures);

The SAVM and DIMEVET are responsible for the Library and IT facilities.

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## THE LIBRARY

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**Opening time.** From Monday to Friday, from 8.30 am to 6.45 pm, twelve months/year. During the summer holidays, opening times may change. Changes are planned way in advance and promptly published on the library website (<http://www.biblioteche.unibo.it/veterinaria/>). On average, there are no more than eight days of additional closure besides national and local holidays.

**Structure.** Eighty-six reading places and 6 computer workplaces for on-line search. The access to the library is controlled by a personal badge, which is used to enter all the Alma Mater libraries.

**Board.** The Scientific Board of the Library includes one student and manages the library from a scientific point of view.

**Services.** The library offers courses for students and staff, focused on the use of electronic resources and bibliographic databases of veterinary interest. All the activities and services offered by the library are subject to revision and statistical control.

ACCESS TO LIBRARY	2012	2013
Professors and researchers	218	210
PhD/research fellows/graduate visitors	453	525
Students	10970	9601
Technical staff	68	66
External users	112	104
Other	249	196
<b>TOTAL</b>	<b>12070</b>	<b>10702</b>

LOANS	2012	2013
Local loans (15 days)	7008	6453
Local loan renewal for a further 7 days	512	670
Consultations of books for daily loan	415	362
Interlibrary loans		
From other libraries	18	8
To other libraries	33	41

PAPER INTERLIBRARY EXCHANGE VIA NILDE	2012	2013
From other libraries	860 (arrived 725)	418
To other libraries	798	568

**New book purchases.** Students and staff can suggest new books to be purchased using an on-line form accessible from the Home page of the Library website (<http://www.biblioteche.unibo.it/veterinaria/servizi/proposte-di-acquisto/proposte-dacquisto-di-monografie/>). The Head Librarian checks the relevance for the subject areas of pertinence to the Library or any need for additional copies and the Scientific Board takes the final decision.

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## THE IT FACILITIES

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### Almawifi

The whole campus area is covered by a wireless network, called ALMAWIFI, free for the students and staff. The same network operates in all buildings and structures of the Alma Mater.

### Alma DL

Alma Mater Digital Library (Alma DL) is the Institutional warehouse of the teaching course materials in digital format for students, developed and administered by the Alma Mater. Students have free access to download teaching material (lecture slides, hand-outs and multimedia resources) prepared and uploaded by the teaching staff (<http://almadl.unibo.it/>). AlmaDL also stores PhD theses, Alma Mater Journals, research products related to Seventh Framework Programme (FP7).

### Proxy

All the resources are available by a Proxy service, free for students and teaching staff after logging in with their username and password.

### Multimedia labs entirely dedicated to students

- Room 1 equipped with 14 personal computers, a laser printer and a scanner;
- Room 2 equipped with 21 personal computers.

The multimedia rooms observe the following opening hours:

Monday - Thursday	9.00 a.m. - 6.00 p.m.
Friday	9.00 a.m. - 3.00 p.m.

### Veterinary Teaching Portal (VTP)

The VTP (<http://portaledidatticovet.unibo.it/>) is a web platform hosting multidisciplinary and multimedia education material originating from the daily professional (*e.g.* clinical) and research activities of the teaching staff. VTP was implemented with specific Alma Mater funding for the improvement of education. The VTP project was planned and approved by the Teaching Committee of the former FVMBol.

Students and DIMEVET staff search for multimedia material (*i.e.* videos, pictures, slices) in order to facilitate self-directed learning and which is useful in the preparation of both theoretical and practical exams.

The VTP is continuously updated and improved and, in order to facilitate the search of topics by students, it is organised into chapters, considering both the years of the programme (first to fifth) and the different areas (*e.g.* anatomy, pathology, surgery, animal productions and internal medicine).

The uploading of clinical cases and “transversal” multimedia material aims to facilitate self- evaluation and self-directed learning.

The VTP is an Open Access resource.

E-learning has not been substantially developed because the DPVM has mandatory attendance of lectures, so initially it has preferred to focus on the establishment of the VTP, which is considered the basis for further development of self-directed learning, including e-learning.

## Fenice®

The electronic patient clinical record (Fenice® - see **AP 8**) is an essential tool for the quality of care and service provided by the hospital, as well as for teaching activities.

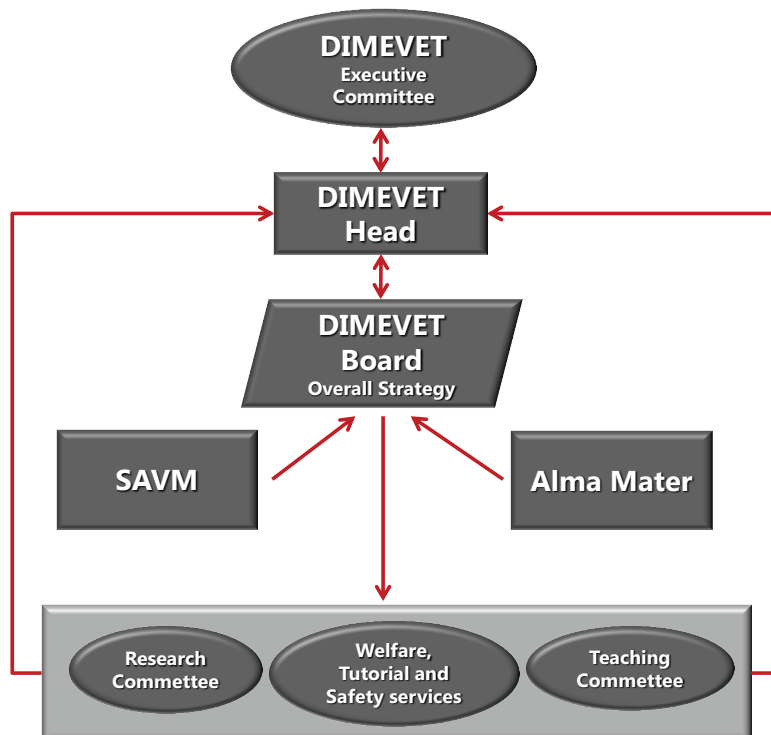
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## OTHER LEARNING OPPORTUNITIES PROVIDED TO STUDENTS

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The Department runs other programmes: Aquaculture and Ichthyopathology (first cycle degree), Animal Biotechnology and Safety and quality in animal production (second cycle degrees). Students of Veterinary Medicine can attend specific classes, according to their elective courses, thus widening their learning opportunities.

Each student can choose a teacher as the supervising professor of their dissertation. Students start the so-called "intern" programme which allows them to follow the teachers' everyday activities of research, teaching and practice, creating further unpredictable opportunities to learn. During this period, students defines their own project for the dissertation. Students may choose the subject of the dissertation from among those in their personal study plan, otherwise they must be authorised by the DP Board. The DPC chooses a teacher, expert in the subject, for the external evaluation of the dissertation, and his written judgement is discussed after the discussion of the dissertation before a board comprising at least 5 members of the teaching staff.



**AP 6** - Assessment of learning opportunities.





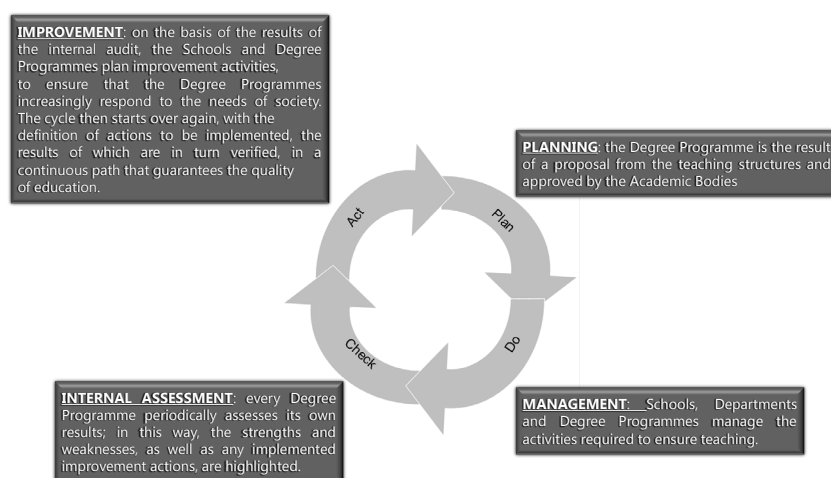
## CHAPTER 5

# ASSESSMENT OF TRAINING PROGRAMMES AND THE AWARDING OF THE TITLE OF VETERINARY SURGEON

## 5 ASSESSMENT OF TRAINING PROGRAMME AND THE AWARD OF THE TITLE OF VETERINARY SURGEON (AP 7)

### 5.1 BACKGROUND

The Italian DPVM is regulated by Italian laws MD 509/1999 as amended by MD 270/2004 and MD 16/3/2007. The DPVM is a single cycle degree, a combined Bachelor and Master (300 ECTS) belonging to class LM-42. Laws and regulations establish a general framework which outlines the basic and common fundamentals of the DPVM in Italy, *i.e.* the minimum amount of ECTS for each subject area the learning activity belongs to. Within these fundamentals, each DPB autonomously develops, monitor and implements its own DP (**Fig. 5.1**).



**Fig. 5.1** - The circle of QA in the DP.

In addition to representing a profound modification of the government's academic policy, the University Reform Law 240/2010 and LD 19/2012 introduce and define the criteria for transparency, self-evaluation and Internal QA of learning and research activities, and External QA evaluation and accreditation of HE Institutions.

The ANVUR (<http://www.anvur.org/index.php?lang=it>) reviews and evaluates the results according to criteria of quality, transparency and promotion of merit, on the basis of the best international experiences, to ensure a distribution of public resources consistent with the objectives, guidelines and activities carried out by each University, in accordance with the principle of National cohesion, and with the evaluation of the results.

The Alma Mater, which has been applying the QA principle to teaching activities since 2007, has played a proactive role in the definition of the national QA policies (see also **AP 1**).

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## 5.2 DEVELOPMENT AND PUBLICATION OF EXPLICIT INTENDED LEARNING OUTCOMES

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All elements and information on the DP were thoroughly and systematically reported in the All-inclusive Annual Profile of the Degree Programme (SUA-DP **Annex 5.1**). The SUA-DP is a fundamental document comprising many parts. Some parts of the SUA-DP have restricted access, while other parts have open access (<http://www.universitaly.it/index.php/public/schedaCorso/anno/2013/corso/1501612>).

Typical expectations of achievements and abilities are reported according to the Dublin Descriptors, both as detailed expected learning outcomes of each subject in the respective Syllabus and as "day-one skills" by the link with the specific learning outcomes of each subject published in the on-line teaching guide (e.g. <http://www.eng.unibo.it/PortaleEn/Academic+programmes/Teachings/dettaglio.htm?AnnoAccademico=2013&IdComponenteAF=341974&CodDocente=015895&CodMateria=35595>).

A concise brochure which reports the learning outcomes is freely available also on the DPVM website and is used to promote the DP to high school students (<http://corsi.unibo.it/SingleCycle/Veterinary-Medicine/Pages/Presentation.aspx>).

The DPVM improves the detail of learning outcomes by publishing specific Syllabi on the website which detail the time devoted to each topic within the subject (<http://corsi.unibo.it/MagistraleCU/MedicinaVeterinaria/Pagine/sillabi.aspx>).

Designing the DP project, the demand for professional skills from the labour market as well as the demand for education from the students and their families are both considered and balanced. In particular, the DP is designed following a thorough consultation of stakeholders (local Boards of Veterinary Practitioners, Italian Federation of Veterinary Practitioners, Public Health Institutions and Laboratories, National Welfare and Assistance Office for Veterinarians, the Emilia-Romagna Region, Scientific Societies, etc.) which are the main contributors for defining and updating the learning outcomes and professional profiles including the method and frequency of consulting the stakeholders as well as the report with the conclusions (Module A1 of the SUA-DP). Consultations are also requested before substantial modifications to the DP.

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## 5.3 PROCEDURES FOR FORMAL CURRICULUM AND TEACHING PROGRAMME APPROVAL AND REGULAR REVIEWS

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With the University reform (L240/2010) approval and recurrent reviews of the teaching activities are undertaken as part of the Self-Evaluation, Periodic Evaluation and Accreditation (AVA) procedures defined by the ANVUR. Basically, the AVA regulation, as outlined by the law, takes inspiration and conforms to the ESG ENQA 2005/2009 (<http://portaledidatticovet.org/eaeve/QA.pdf>).

AMQAG coordinates all the activities aimed at improving the quality of Alma Mater DPs (<http://www.unibo.it/QualityAssurance/Pagine/default.aspx>).

The draft DP presented in the SUA-DP is approved by DIMEVET and the SAVM and ultimately evaluated and approved by the Alma Mater and an advisory bureau of the Ministry (CUN). After formal approval, the management of the teaching activities is shared by both DIMEVET and SAVM Boards.

DIMEVET and the SAVM are engaged in the management of financial resources, the running and supervision of lectures, the availability of teaching rooms, laboratories, library and study rooms; moreover, the SAVM has further exclusive accountability in defining the Academic calendar, and in organising the lectures and general exam timetable.

The curriculum undergoes regular reviews: the DPQAG monitors the fulfilment of the actions of the ARR and, on an annual basis, reviews the SUA-DP accordingly. The suggested changes are approved firstly by the DPVM Board, then by the DIMEVET Board, and finally by the SAVM Board.

### Procedures monitoring delivery of the curriculum and teaching programme

Under the AVA system, as implemented at the Alma Mater, the QA system is managed at central level by the Quality Board (AMQAG) that produces and publishes an annual ADPQR on the DP web site; the report summarises all the data concerning the indicators of efficiency and efficacy for the DP Quality Assessment (<http://www.unibo.it/QualityAssuranceEn/Reports2013/Report-8617-2013.pdf> – **Annex 5.2**).

The ADPQR has five sections and a glossary:

1. Presentation and prospects (key information on the DP, including the expected learning outcomes, career opportunities and further studies);
2. Teaching and Learning (the updated DP structure diagram with the full titles and listings of the course units and the latest published lecture timetable);
3. Resources and services (the list of teaching staff and their relative curricula, the offices, services and infrastructures available to students);
4. The Degree Programme in Figures (key data showing how many students are enrolled, how many have been assigned OFA, how many drop out after the first year, how many graduate in line with the programme schedule, the opinions of attending students and graduates on the DP and information concerning graduate employment.);
5. Find out more: the quality of your Degree Programme.

Creating this document for each DP implies the integration of different data and information (**Fig 5.2**). The main sources are:

- Alma Mater Data Warehouse;
- "Osservatorio Statistico" (Teaching Activities Observatory);
- Analysis from Almalaurea (University Consortium);
- University databases and information systems on teaching activities;
- Alma Mater website: information on the organisation of teaching activities, (lesson timetables, tabs teaching, time of receipt, support services to teaching).

Documents are produced directly by the Alma Mater QA Group (AMQAG), rather than by each DP, in order to grant transparency, uniformity and accuracy of information.

Based on the ADPQR, and any other input documents, the DPQAG draws up the ARR annually (**Annex 5.3**). The ARR is, together with the SUA-DP, the essential pillar of the QA and includes the evaluation of the effects of the previous Action Plan and the further corrective actions (new Action plan) required to implement the Degree Programme based on the evidence gathered through the monitored indicators.

The ARR is discussed in the DPB and, after approval, sent to the DIMEVET Board for further approval. The next step of the ARR is the critical evaluation by the Staff-Student Joint Committee (S-SJC) and the final approval by the School of Agriculture and Veterinary Medicine (SAVM) Board. The final document is then sent to the Alma Mater Internal Evaluation Unit (which provides feedback to the DPVM and S-SJC) and, at a national level, to ANVUR.

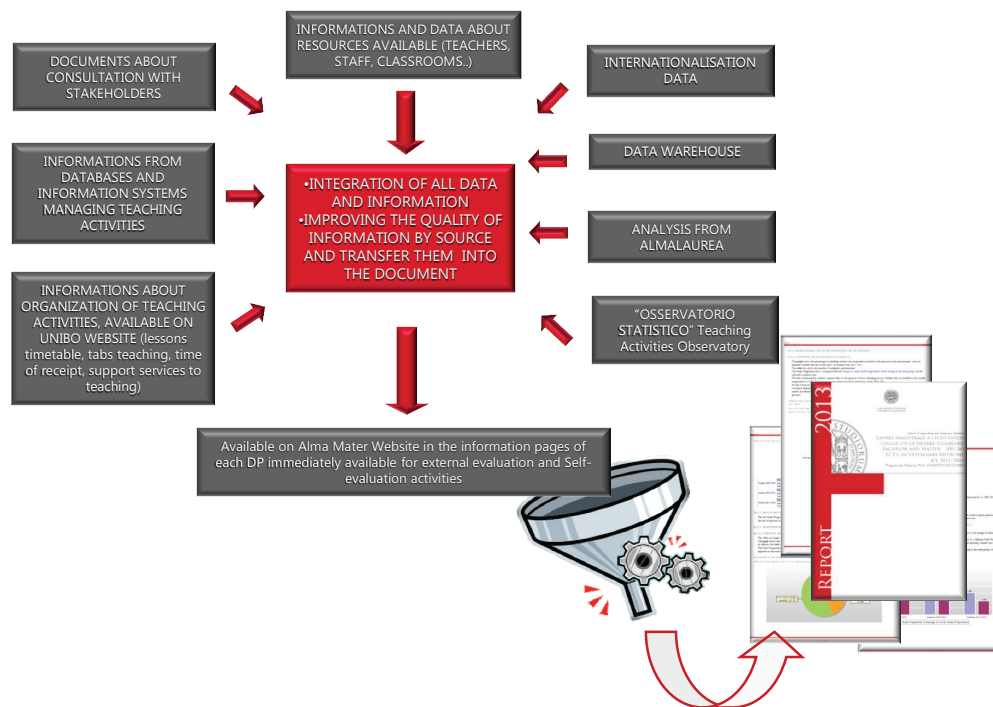


Fig. 5.2 - ARR preparation.

### Assurance concerning the participation of students in quality assessment activities

The students are active stakeholders in the QA system of the Alma Mater. Indeed, Quality Assurance via the AVA system establishes a crucial role for students. Students are elected onto all Academic Boards and attend the meeting on behalf of all the student bodies (student representatives). Students are present in the S-SJC of the SAVM (<http://www.agrariaveterinaria.unibo.it/it/scuola/organi/commissione-paritetica-docenti-studenti>), the DPB and the DPQAG of the DPVM.

Furthermore, all students are requested to complete an evaluation form at the end of each course unit. The results of the questionnaires are analysed and used in the ARR as a key indicator for defining any corrective actions.

A group of six students actively participated in the preparation of both the EAEVE Self Evaluation Reports, critically evaluating the different stages of drafting the chapters.

### Parameters assessed and procedures to monitor regular feedback from stakeholders and graduates

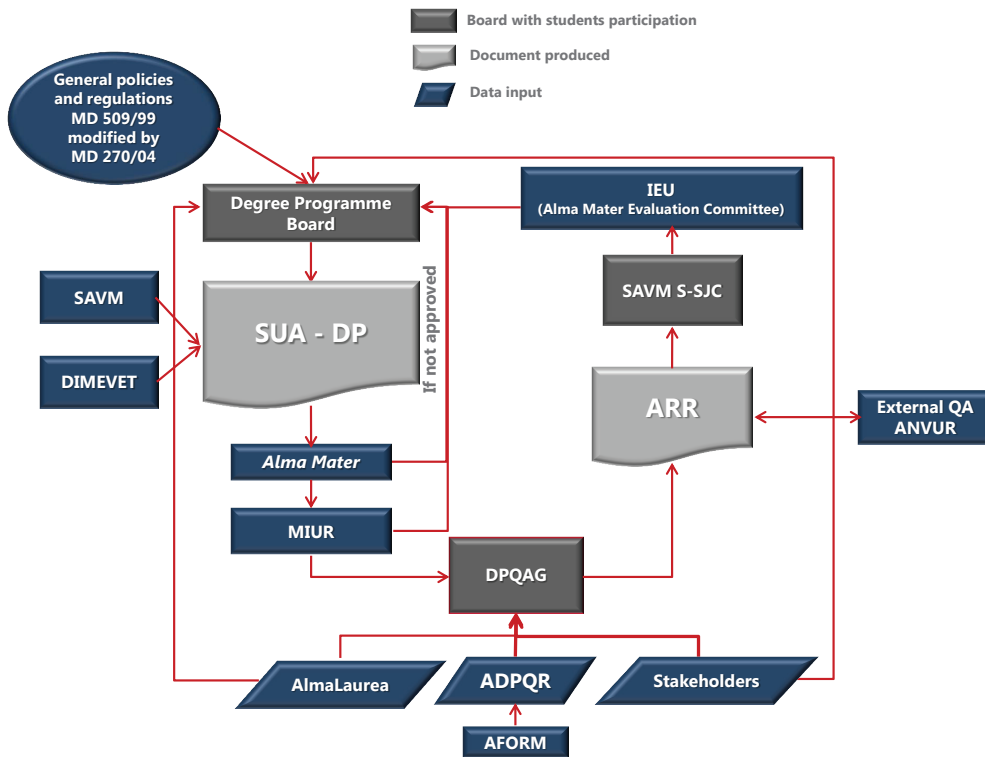
As previously described, a complete formal consultation of stakeholders was accomplished on AY 2007/2008 before the last draft DP approval. The feedback from stakeholders impacted the DP which begun in AY 2008/2009. Since the duration of the Degree Programme is 5 years, the consultation was supposed to be repeated every 5 years. Besides formal consultations, informal feedback from stakeholders has been collected since the last formal consultations. Seminars and congresses dealing with topics related to the labour market are the events which have typically offered an opportunity for informal consultations with stakeholders. Informal consultations may also be reported in the ARR.

Another very important tool for evaluating the effectiveness of the academic system and for assessing the attitude of the labour market towards graduates is represented by the result of the moni-

toring of graduates' access to the labour market within 5 years after graduation. The feedback is collected through a questionnaire administered graduates by the AlmaLaurea Consortium (<http://www.almalaurea.it/en/universita/occupazione>) and included in the ADPQR. Data is freely available. The most recent data available refers to 2011. 99 out of 104 graduates completed the questionnaire.

**Comments**

The general principles leading the establishment of DIMEVET were clearly stated at the time moment of its constitution (see pages 1-5 in **Annex 1.5**: "Proposta di innovazione organizzativa a medicina veterinaria: identita' culturale, obiettivi generali e ipotesi di lavoro"). They thoroughly match the concept of "One World – One Health", and are referred to each year in the annual budget report on the provisional financial statements (see **Annex 5.4, 5.5, 5.6**: "Relazione al bilancio di previsione" editions 2011, 2012 and 2013). They will be transferred in the forthcoming strategic plan 2014-2016, and include the recognition of vital importance of lifelong learning activities and continuing education (see **AP 9**). The DIMEVET policy is first and foremost to settle into its new organisation and ensure undergraduate teaching and, thereafter, to pursue progress in providing post-graduate continuing education.



**AP 7 - DP evaluation.**



## CHAPTER 6

# ASSESSMENT OF QUALITY ASSURANCE FOR CLINICS, LABORATORIES AND FARM

# 6 ASSESSMENT OF QUALITY ASSURANCE SYSTEMS FOR CLINICS, LABORATORIES AND FARM (AP 8)

## 6.1 GENERAL QUALITY ASSURANCE

DIMEVET is certified ISO 9001 (the first Department to obtain certification on 30 November 2000 was the Department of Veterinary Public Health and Animal Pathology) for the following activities: "Research and development activity, advice services, laboratory analysis and/or test analysis in the following science branches: Anatomy, Pathological Anatomy, Drugs and Toxicology, Physiology, Animal Welfare, Infective and Parasitic illnesses, Public Sanitary, Animal Production and Agricultural Economy, Food Technologies, Food Hygiene and Safety". Although currently the activities of the "Giuseppe Gentile" Veterinary Teaching Hospital (VTH) are still excluded from the certification, all staff are working to be included in the certification by the next external audit.

Ethical issues in research involving animals are taken in particular consideration at the Alma Mater, which established the Ethics and Welfare Committee in 1993 as an internal advisory board to the Rector. Any scientific project involving live animals has to be submitted to the Committee for review. Furthermore, at DIMEVET the Central Veterinary Service (CVS) has been operating since 1993: the purpose of the CVS is to supervise the health and welfare of animals during experiments to avoid lasting harm, pain, unnecessary suffering or distress according to the 3Rs and Italian law (D.L. 116/92). Special attention is paid to matters such as animal welfare, safety, client consent, financing and conflict of interest.

## 6.2 LABORATORY DIAGNOSTIC AND RESEARCH SERVICES

In the laboratories, quality control is carried out under the ISO 9001 procedure. Quality control is performed in compliance with the internal SOPs of the individual laboratory and the particular activity. The SOPs and MPs (Management procedure) in force are partly common (*e.g.* **Annex 6.1**) and include the action to be taken for:

- Management of research activities;
- Document Management;
- Qualification of suppliers;
- Process Control;
- Management of the tests, checks and inspections;
- Handling of test samples;
- Recording of test reports and measurement operations;
- Calibration of equipment and systems of measurement;
- Management of non-conformities;
- Management of corrective and preventive actions;
- Handling of complaints;
- Managing storage and preservation of samples and laboratory materials;
- Management of internal audits;
- Staff training.

Moreover, each lab defines additional SOPs and MPs to manage their routine activities.

In compliance with LD no. 206 of 12 April 2001, regarding the use of MOGM in research, DIMEVET obtained permission to operate with class 2 genetically modified organisms in 2007 and recently class 3 MOGMs that can be manipulated in the Biosafety Level 3 (BL3) laboratory funded by the Alma Mater.



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## 6.3 VETERINARY TEACHING HOSPITAL

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The VTH strives constantly to provide the highest level of patient care available in an environment that is ideal for student learning. The research activity of the staff members is the basis for updating professional and teaching activities. Quality Assurance at the VTH is a process of improvement, and is therefore constantly monitored and revised. The Departmental SOPs and MPs are now in place also in the VTH and others are being developed.

Functionally, the VTH is a consortium of several DIMEVET services which cooperate in clinical and diagnostic activities. The description of the different DIMEVET services is available at the following address: <http://www.scienzemedicheveterinarie.unibo.it/it/dipartimento/servizi>.

Each service has a person in charge, and the Head of DIMEVET coordinates the activities. The VTH has also an Health-Care Director (HCD), an official role required by the National legislation, acting as the guarantor that all the healthcare activities are carried out in strict compliance with laws and regulations (<http://www.fnovi.it/index.php?pagina=codice-deontologico>). The HCD is directly appointed by the Rector of the Alma Mater. His/her duties are not limited to the issues rising from the VTH, indeed the HCD is also responsible for issues concerning the health and welfare of laboratory animals of the whole DIMEVET.

The VTH is open 7 days a week, 24 hours a day; in case of avian and exotic animals, a phone contact for appointments and emergencies is available.

The VTH has its own website (<http://www.ospedaleveterinario.unibo.it/>), focused on owners, referring veterinarians and students necessities, including the information on the activities and clinical services offered.

### Clinical services

Clinical services are concentrated in three areas of interest: companion animal clinic, equine and large animal clinic, avian and exotic animal clinic.

The VTH provides the following activities:

- Reception;
- First opinion service;
- Referral (second level) surgery consultation (anaesthesia and resuscitation procedures, abdominal surgery, thoracic surgery, orthopaedics, ophthalmology, neurosurgery, dentistry, oncologic surgery, emergency surgery, video-endosurgery);
- Referral (second level) internal medicine consultation (gastroenterology, nephrology, neurology, endocrinology, dermatology, respiratory diseases, cardiology, oncology, haematology);
- Second level reproduction consultation (obstetrics, neonatology, andrology, gynaecology);
- Avian and exotic animals consultation;
- Diagnostic imaging;
- Intensive care;
- Post-operative care;
- Hospitalisation.

A Centralised Drug Service (SFC – <http://www.scienzemedicheveterinarie.unibo.it/it/dipartimento/servizi/centralized-drug-service-sfc>) aims to standardise the type and use of drugs used in DIMEVET in order to ensure the continuous therapeutic care of patients and provide medicine and medical supplies for educational and research purposes.

### VTH Activities

The VTH activities are described considering two different tracks:

- The patient, owner and clinician;
- The student: education and welfare.

### The patient, owner and clinician

#### The Patient

Preliminary information - complete information on the functioning and performance of the VTH is available on the VTH website: <http://www.ospedaleveterinario.unibo.it/>.

Reception and record system – At the front desk the patient data is entered in the electronic record system (Fenice®) (the system runs on an Intranet, it will be available on site for the EAEVE visiting team). The electronic patient clinical record is an essential tool for the quality of care and service provided by the hospital as well as for teaching activities. Permanent records of physical examinations, laboratory and imaging data, client communications, forms for owner (*i.e.* informed consent) and patient data archiving and retrieval (including images) are provided. These records are available on the intranet to be used not only for the client-related issues, but also in teaching classes and for the students' self-learning activities.

#### The owner and the clinician

Clinicians have to calculate and present a cost estimate to owners prior to the admission of patients to the hospital and/or to surgical/anaesthetic procedures. Owners and/or referral veterinarians may, on request, receive written material concerning patient care upon discharge.

Owners may give feedback by filling out a dedicated form on a voluntary base. Feedback is collected at the reception and sent for evaluation to the Health-care director.

Owner complaints are managed according to the Standard Operating Procedure (SOP) established by the Department (**Annex 6.2**). The result of the whole process is notified to all the responsible personnel by the head of the Service concerned.

Owner complaints envisaging legal consequences are sent to the Alma Mater Legal Office (<http://www.unibo.it/Portale/Ateneo/Amministrazione+generale/Aree+amministrative/155/default.htm>).

Clinicians may consult literature when assessing the quality of patient care. Relevant textbooks can be found in the intensive care unit. Furthermore, the centralised library provides immediate on-line access to the most relevant journals and textbooks (<http://www.biblioteche.unibo.it/veterinaria>).

Access to electronic patient records (Fenice®), Internet and the DIMEVET Intranet is available to staff members and students throughout the VTH.

#### Students: education and welfare

A significant part of vocational education at the VTH is the professional practical training activities. A dedicated website (<http://corsi.unibo.it/MagistraleCU/MedicinaVeterinaria/Pagine/tirocini.aspx>) provides information concerning a range of PPT issues at VTH:

- Enrolment;
- Rotations;
- Everyday organisation;
- Types of activities.

Daily rounds, led by a senior VTH vet clinician, offer an excellent opportunity to ensure the quality of clinical work. At the same time, the critical evaluation of patients during these rounds provides clear educational benefits for the participants. Journal clubs, where veterinarians present the latest literature reviews on interesting and important clinical topics, have been integrated as part of the regular meetings of the VTH units. Minutes will be available on site.

Moreover, workshops are organised to update the staff on VTH and DIMEVET procedures (<http://www.scienzemedicheveterinarie.unibo.it/it/eventi>).

Every day, rotating students take part in the clinical activity and ICU patient management. They participate in surgical procedures in surgery and reproduction services and in physical examinations of patients referred to the different VTH services under the supervision of a senior clinician.

Students can find VTH procedures and other relevant information on clinical training, and the number and type of procedures is continuously updated online on the VTP (<http://portaledidatticovet.unibo.it/>) and Professional Practical Training (PPT) web pages (<http://www.portaledidatticovet.org/tirocini-clinici.html>).

Additionally, other practical instructions (e.g. security in operating theatres as well as biosecurity) are available in a specific manual (<http://corsi.unibo.it/MagistraleCU/MedicinaVeterinaria/Pagine/tirocini.aspx>). Evaluations of clinical rotations are mandatory and questionnaires are completed by students at the end of their clinical rotation. The results are assessed by the teacher in charge and the other staff, and adjustments can be made if the need arises.

## **Mobile clinic**

(<http://corsi.unibo.it/MagistraleCU/MedicinaVeterinaria/Documents/2013/tirocini/AttivitaClinicaMobile.pdf>).

The mobile clinic was established in 2010, offering small groups of students the opportunity to take part in the daily activities of large animal practitioners in the field, in different stables across the country.

The mobile clinic was therefore conceived as a "light" structure with the main purpose of taking students into the field, and currently consists of vehicles (9-seater minibus or car) and a trailer suitably equipped to permit clinical field activities.

The activity takes place one day per week (every week of the year), usually starting in the morning. Students are taken by minibus to different stables where they meet the practitioners. Students perform hands-on activities, and each visit involves administrative and teaching (medical records of observed cases) recording. Results are discussed with the practitioner and the DPVM supervisor.

Records of the activities are traditionally kept by the Large Animals Hospital and the Emergency Service (SARGA). Together with the satisfaction questionnaire, at the end of the Large animals rotation students have to complete an assessment form focusing on the mobile clinic activity.

<http://corsi.unibo.it/MagistraleCU/MedicinaVeterinaria/Pagine/tirocinio-large-animals.aspx>

From AY 2013-2014, with the renewal of the PPT, mobile clinic activities also include visits to stables to address Welfare and Public Health issues.

## **Unexpected events**

The staff report unexpected clinical events to the head of the corresponding Service and to the HCD. In cases requiring administrative or financial measures, reports are addressed to the Department Administrative Service.

For matters concerning health and safety, such as dog/cat bites, complaints are addressed to:

- The Department Administrative Service;
- The DIMEVET Safety Service;

Occupational, Prevention and Protection medicine and health physics service (<http://www.unibo.it/Portale/Ateneo/Strutture/Strutture+di+servizio/501/default.htm>).

In the event of problems concerning buildings and maintenance, reports are submitted to AUTC - Buildings and Works management. The control point, collecting problems and supervising structural intervention, is the new Campus Manager introduced in 2013.

<http://www.unibo.it/Portale/Ateneo/Amministrazione+generale/Aree+amministrative/10900/default.htm>

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## 6.4 FARM FACILITIES

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University Dairy Farm (UDF)

The University Dairy Farm is included as an operating unit within the AUB and reports to DIMEVET. AUB performs experimentation in agriculture and livestock. The University Dairy Farm is located about one kilometre from the DIMEVET. Founded in 2003, it hosts on average 150 cattle. About half of the animals are lactating cows reared under a system of free stalls with bunks.

The purposes of the structure, closely related to the institutional activities of DIMEVET, are teaching and research. All the DPVM students undergo a period of training in the UDF.

A Cheese Factory is connected to the UDF. Opened in 2008, it operates with two main objectives: teaching and research. The cheese factory also sells its products to the public.

<http://www.scienzemedicheveterinarie.unibo.it/it/dipartimento/Scienzaelatte/index.html>

As already mentioned, all DPVM students perform a period of Professional Practical Training (PPT) at the University Dairy Farm (<http://corsi.unibo.it/MagistraleCU/MedicinaVeterinaria/Pagine/tirocinio-zootecnia.aspx>).

A safety manual for access to the farm buildings is available on-line: before attending the farm, students must complete a self-assessment questionnaire on safety. Each student is given personal protection equipment to wear before entering the UDF premises.

At the end of the PPT, students are asked to complete an evaluation form. Operating procedures concerning safety and management issues are in annex (**Annex 6.3**)

Economic and operational needs are estimated annually, Weekly shifts and emergency procedures (unscheduled absences) are prepared. Monthly reports and comparisons with predictions are made. The senior staff in charge of the Farm report to the AUB Committee (chaired by the Head of DIMEVET) twice a year. This report incorporates data on both productivity and morbidity, and provides the basis for decisions about initiatives to further improve the quality of the Farm.

The UDF obtains a significant part of its income from the services provided to DIMEVET and other SAVM Departments for scientific research.

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## 6.5 THE ARTIFICIAL INSEMINATION CENTRE (AIC)

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<http://www.aziendaagraria.unibo.it/AziendaAgraria/Centri/INFA/default.htm>

AIC is also included as an operating unit within the AUB and reports to DIMEVET.

It is located in Cadriano, approximately 22 km from DIMEVET, opposite the Experimental Learning Centre.

The AIC is active in the production and collection of bovine embryos, for embryo transfer purposes and to support research programmes carried out at DIMEVET. Other activities include the collection and storage of equine semen.

Teaching and research activities are carried out in conjunction with DIMEVET; the AIC provides Practical Training and rotations for DPVM students. Furthermore, AIC carries out activities related to the pathophysiology of animal reproduction and artificial insemination, on behalf of national and international operators.

All DPVM students attend AIC structures during the PPT rotation (<http://corsi.unibo.it/MagistraleCU/MedicinaVeterinaria/Pagine/tirocinio-clinica-ostetrica.aspx>).

A safety manual for working at AIC is available: before attending, students must complete a self-assessment questionnaire on safety. Each student receives personal protection equipment to wear before entering the farm buildings. At the end of the practical training, students are asked to complete an evaluation form (**Annex 6.4**).

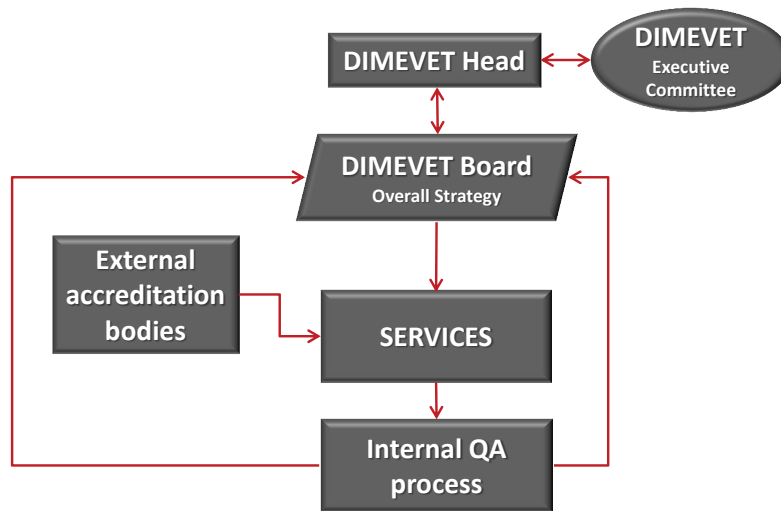
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## 6.6 EMPLOYEE WELFARE

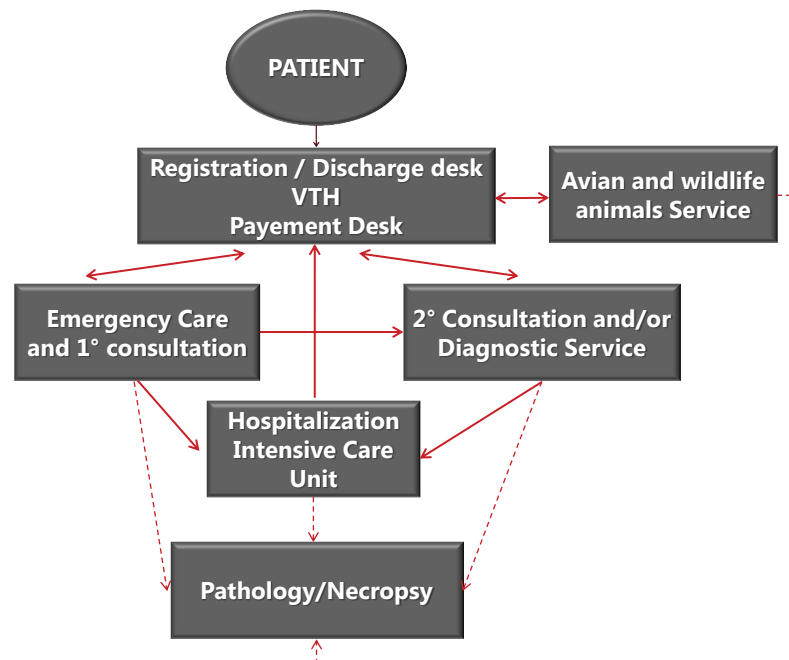
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The VTH staff are members of the DIMEVET personnel. Therefore, the VTH follows guidelines issued by the Alma Mater regarding the physical and psycho-social working environment. Furthermore, the heads of the services regularly organise meetings to address staff welfare issues.

The staff can find information on physical and physiological safety on the Intranet. A fully comprehensive Safety Manual is available, describing the risks present in different areas of DIMEVET related to specific activities. The DIMEVET Safety Committee and the Alma Mater Prevention and Protection Service is in charge of maintaining the Manual up-to-date. All employees undergoes periodic medical evaluation focused on the specific risks they are exposed to. A Safety Record containing all the information on the risks connected with the activity must be completed and updated regularly (see **Annex 2.4**).



AP 8 - Assessment of quality for clinics, laboratories and farm.



AP 8 - Patient flow at VTH.



# CHAPTER 7

## ASESSMENT OF CONTINUING EDUCATION

## 7 ASSESSMENT OF CONTINUING EDUCATION (AP 9)

Maintaining professional skills by continuing education (CE) is a legal obligation for lifelong learning in different professions and, currently, there is legal basis for mandatory CE for Italian veterinarians. DIMEVET is pro-active in this direction, with the goal of lifelong learning for veterinarians.

In Italy, clinical CE for private practitioners is highly developed and mostly provided by private companies working nationally, since historically Italian Universities were not very competitive in providing appropriate continuing education in that area.

Besides the previously described specific post-graduate education, DIMEVET runs courses and seminars to increase veterinarians' knowledge and also offers the expertise of its teaching staff to other establishments traditionally involved in CE for veterinarians in Italy as private associations (e.g. SCIVAC <http://cms.scivac.it/en>, AIVPA <http://www.aivpa.it/>, UNISVET <http://www.unisvet.it/>).

The Department is involved in providing CE for veterinarians through seminars and courses. Although currently there is no dedicated committee for organising, monitoring and programming CE activities, the DIMEVET teaching staff are always involved in planning scientific programmes.

In addition to CE education for private practitioners, every year DIMEVET organises a number of seminars for PhD students. The seminars are advertised on the DPVM website homepage and are open to all postgraduate students and DIMEVET teaching staff.

Similarly, seminars for rotating students are open to postgraduate students and private practitioners, and are advertised on the DPVM website homepage. Seminars occasionally involve international lecturers, guests of DIMEVET.

- CE provided by DIMEVET in 2011-2013 can be divided into the following categories:
- CE for veterinary surgeons and postgraduate students: 65 courses for a total of 425 hours;
- CE for PhD students: 47 seminars for a total of 198 hours;
- CE for undergraduate and post-graduate students: 37 seminars for a total of 91 hours;
- CE for postgraduate students in the framework of the agreement between DIMEVET and the Emilia Romagna Region.

DIMEVET has always sought national and international collaboration in supporting CE events, organised both on the veterinary campus and elsewhere.

From the international point of view, it is worth mentioning the organisation of the ESVN-ECVN Neuroscience Advanced Courses in 2010 and 2014. These biennial courses, held once in USA and once in Europe, provide two weeks' "full immersion" CE for ECVN and ACVIM (neurology) residents waiting to sit the exam. The Ozzano Veterinary Campus was chosen for both the 2010 and 2014 European editions (<http://www.ecvn.org/edu/nc/2014/bc-venue.aspx>).

Similarly, in Summer 2014 DIMEVET will host the two-week ECVP/ESVP Summer School.

From 2012, CE courses were evaluated by the participants, who completed a questionnaire (**Annex 7.1**) to assess:

- The quality of the presentation(s);
- The quality of the teacher(s);
- The practical relevance;
- The perception of the usefulness of the education provided;
- The quality of the facilities.

In the absence of a dedicated DIMEVET Committee, the results of the questionnaires are analysed by the newly established DIMEVET Teaching Committee (2013) which has the task of critically evaluating each event, giving feedback in terms of possible improvement.



The list of the most important courses/seminars organised in 2013, together with results of participant assessment is provided below (**Tab.7.1**).

The current DIMEVET policy focuses primarily on establishing an appropriate organisation for undergraduate teaching and, thereafter, ensuring progress in post-graduate continuing education.

**Tab 7.1** - Courses/seminars organised in 2013.

DATE	COURSE TITLE	NO. OF PARTICIPANTS	TYPE OF EVENT	EVALUATION	RELEVANCE	QUALITY	EFFECTIVENESS
31.01.13	Urogenital surgery in the mare	61	seminar	no	NA	NA	NA
13.03.13	EndNote Web and online digital archives	NA	seminar	no	NA	NA	NA
19.04.13	Genetically modified lines: technical aspects and management	NA	seminar	no	NA	NA	NA
20.04.13	XIII SIAV day of veterinary acupuncture	NA	seminar	no	NA	NA	NA
07.05.13	Nutrition of the critically ill patient	38	seminar	yes	4.25	4.43	4.12
14.05.13	Veterinary Education: how to make the programme efficient and promote active learning of students	58	seminar	yes	4.52	4.44	4.12
15.05.13	Enzymes	NA	seminar	no	NA	NA	NA
04-05.13	Special training for the preparation of histological sections	24	practical session	yes	4.8	4.9	4.8
20.05.13	Morphology and genetics in cats	NA	seminar	no	NA	NA	NA
24.05.13	External Fixation in small animals treatment of mandibular fractures by external factors	28	seminar	yes	3.44	3.48	3.15
29.05.13	Transfusion medicine part 1 (morning)	44	seminar	yes	4.6	4.7	4.4
29.05.13	Transfusion medicine part 2 (afternoon)	24	seminar	yes	4.4	4.2	4
31.05.13	Molecular basis and methods of classification of the coat in dogs and cat	18	seminar	yes	4.56	4.62	4.56
20.06.13	News from gut: neural stem cells, glia and diseases	NA	seminar	no	NA	NA	NA
26-27.06.13	Flexible and rigid endoscopy of the digestive, respiratory, genital and urinary tract in small animals	20	course	yes	4.1	4.2	4.05
30.11.13	2nd Course of Herpetology	NA	course	no	NA	NA	NA
30.11.13	Feeding in equine reproduction	31	seminar	yes	3.2	3.4	3.3
09.12.13	From the forest to the living room: biology, management and domestication of the wolf and wild cat	120	seminar	no	NA	NA	NA

Relevance (media) (score 1-5: 1 not relevant, 5 extremely relevant)

Evaluation of quality (media) (score 1-5: 1 low quality, 5 excellent quality)

Evaluation of effectiveness (media) (score 1-5: 1 low, 5 extremely high)

## Interaction with other societies

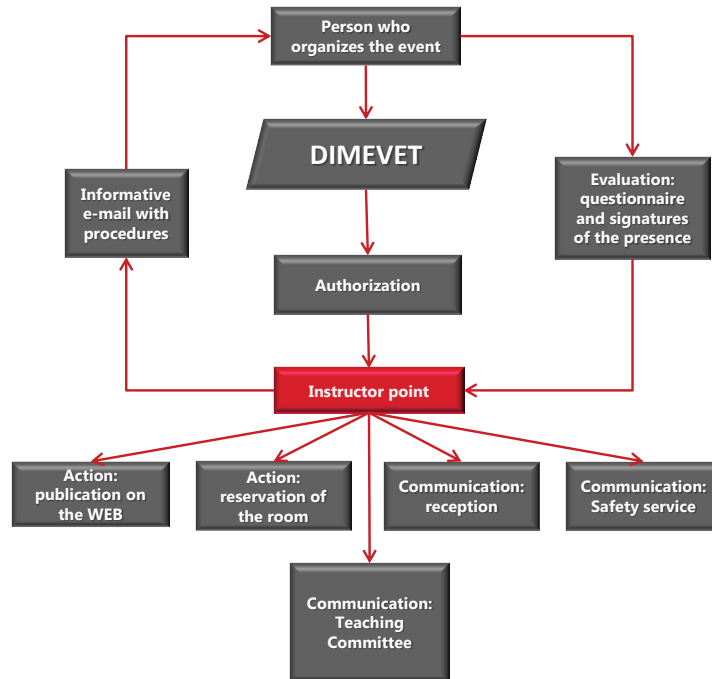
Some DIMEVET teachers are actively involved in CE in veterinary meetings in Italy and abroad. For example, some staff members are lecturers for the Società Italiana Animali da Compagnia (SCIVAC), Associazione Italiana Veterinari Piccoli Animali (AIVPA), Unione Italiana Società Veterinarie (UNISVET), European School of Advanced Veterinary Studies (ESAVS). The teachers of the courses run by these organisations are thoroughly evaluated by the participants using standardised questionnaires. The results are fed back to the teachers and also count in their reconfirmation for future activities.

## Comment

DIMEVET considers CE an important tool for establishing relations with practitioners and veterinarians involved in the Public Health Service. The CE activity of DIMEVET is considered to be of good quality, and the organisers of the various courses were, on average, very satisfied with the feedback and the number of participants.

To date, the major weakness of the DIMEVET CE system is the lack of specific planning and a dedicated CE committee. The participation of Alma Mater to QACEP (Quality Assurance of Higher Education Institutions' Continuing Education Programmes) European project produced practical tools for CE quality assessment, operational indications and guidelines for technical solutions and a set of concrete examples. DIMEVET future efforts are oriented towards the application of the provided policy to

establish a better controlled programme of CE in Veterinary Medicine <https://www.qacep.eu/default.aspx> (**Annex 7.2**).



**AP 9** - Assessment of CE.



# CHAPTER 8

## ASSESSMENT OF RESEARCH

## 8 ASSESSMENT OF RESEARCH (AP 10)

### 8.1 RESEARCH AT ALMA MATER

As a natural place of interdisciplinary knowledge and scholarship, the Alma Mater must interpret and provide guidance in the changes of today, by guaranteeing the development, innovation, transfer and enhancement of knowledge to the benefit of individuals and society as a whole (University General Statute, Art. 1).

Alma Mater has a Vice-Rector for Research. The structures dedicated to research are the Departments and the Interdepartmental Research Centres.

<http://www.eng.unibo.it/PortaleEn/Research/Research+Structures/default.htm>.

The Quality of research at the Alma Mater is assured through a clear statement of objectives into the STP (**Annex 1.2**), the monitoring activity of Teaching Staff scientific products by the internal Research Observatory (RO). The RO comprises a Chairman and 14 members, representing all the subject areas identified by the National University Council (CUN).

An external evaluation of research at the Alma Mater as a whole, and of each research structure on a national basis, is performed by ANVUR. The last VQR process (Evaluation of the Quality of Research) considered the period 2004-2010.

For the Alma Mater, investing in research means investing in young people: 6 million EUR in research fellowship funding. Eleven million EUR on the other hand are provided annually for PhD scholarships; in addition to this figure, the departments receive 4 million EUR in direct funding.

The first of its kind in Italy, since 1997 the Alma Mater has been evaluating the results of its research on an annual basis. ANVUR ranked the Alma Mater second among the largest universities in research evaluation (2004-2010). Key positions are held in some areas: Chemistry, Medicine, Agriculture and Veterinary Medicine, Architecture, Engineering, Economic and Statistical Sciences. Scientific production was assessed by the ANVUR as 24% greater than expectations.

Research is a fundamental lever for competition and employment, the Alma Mater and the multi-disciplinary nature of its research support a synergic network of relations with the international research world and institutions, and active commitment to exchanging knowledge with the business world. These are the pillars of the Alma Mater strategy and its key role was demonstrated by the many achievements over the years:

- Around 13,000 products developed on average every year;
- 177 patents registered;
- 7 million EUR funded by the MIUR (Ministry of Education, Universities and Research) for the most recently approved PRIN (Research Projects of National Interest) and FIRB projects (Future in Research).

The Alma Mater established 4 Integrated Research Teams (IRT) <http://www.unibo.it/it/ricerca/progetti-e-iniziativa/integrated-research-team-irt> in fields of international research covering agri-food, the social economy and civil society, sciences and technologies for the cultural heritage and the integration of research skills in the Brazilian area and Latin America.

At the Alma Mater, research strongly focuses on international spheres while maintaining deep roots in the local community. The University takes part in the regional technological platforms through its 7 Interdepartmental Centres for Industrial Research (CIRI). Projects run from Agri-food to Mechanics through to Information Technology, from Materials and Industrial Eco-design to Energy Safety and Efficiency and Life Sciences and Health Technologies.

Within Europe, the Alma Mater stands out for the breadth of its competencies and its systematic policy of providing support services to researchers in their relations with the EU and in the preparation of research projects. Within the European Union's Seventh Framework Programme, funding worth 60

million EUR has been obtained for 190 projects. Today, the Alma Mater is the leading Italian university and the country's second organisation, after the National Research Council (CNR) for its ability to attract European funding for research (projects funded in the four-year period 2007-2010), and 27<sup>th</sup> in the European league tables.

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## 8.2 RESEARCH AT DIMEVET

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To counteract the fragmentation of research efforts, internal DIMEVET programmes for the advancement of research were carried out, providing a conceptual basis for research initiatives in alignment with the Alma Mater's strategic aims.

QA of research at DIMEVET aims to:

- Monitor the conditions of research activities;
- Establish research objectives to be pursued;
- Put in place what is needed to achieve them, removing any obstacles wherever possible;
- Monitor the regular implementation of activities and verify the degree of effective achievement of objectives.

In particular, within the European FP7 DIMEVET researchers were requested to actively participate in the activities of the European and national KBBE Technology Platforms Food for Life and Global Animal Health to promote national research priorities and to increase the visibility of the DIMEVET profile internationally among scientific and stakeholder communities.

These activities led to an increased participation in FP7 calls, resulting in 2 funded proposals coordinated by DIMEVET researchers in 2012: E2BEBIS (<http://www.e2bebis.eu/?p=195>), POC4PETS (<http://www.poc4pets-fp7.eu>) and 1 funded proposal in which a DIMEVET staff was Work Package leader in 2013: BAKE4FUN (<http://bake4fun.eu/>).

DIMEVET coordinates one of the CIRI: Life Sciences and Health Technologies (<http://www.health-tech.unibo.it/>) and collaborates with other Departments, Universities and industry on several translational medicine projects focusing on:

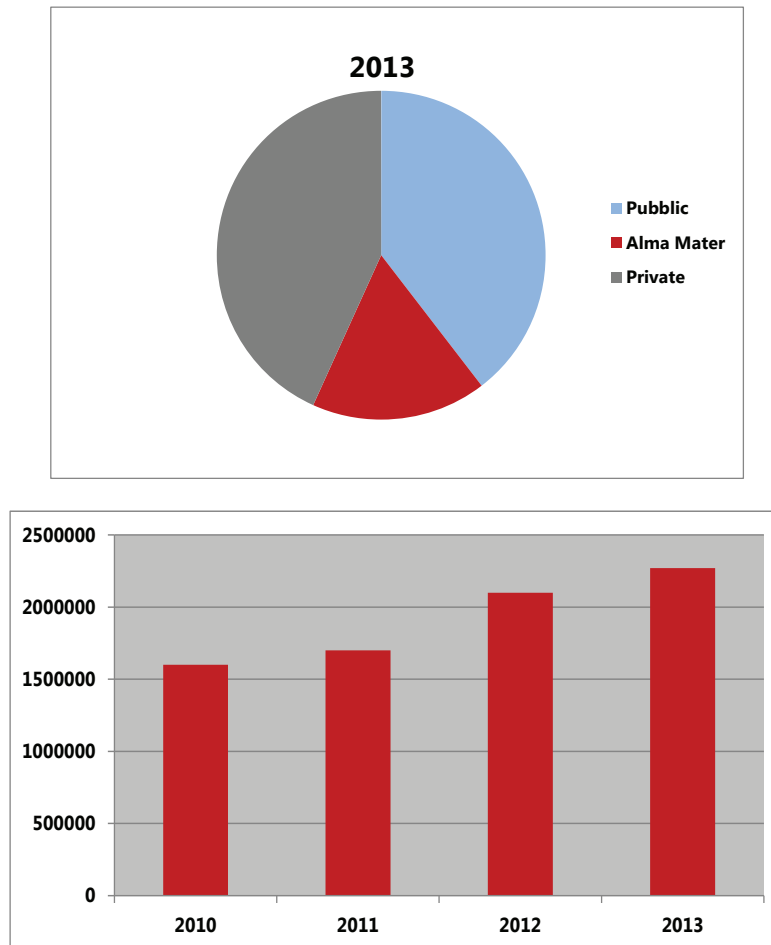
- Surgery;
- Transplantation;
- Regenerative therapies;
- Oncology;
- Cardiology;
- Orthopaedics;
- Ophthalmology.

During the period 2010-2013 there was an overall increase in research funding for DIMEVET (**Fig. 8.1**)

DIMEVET carries out multidisciplinary research in the following areas: Basic Sciences, Food Safety and Public Health, Clinical Sciences and Animal Productions.

In their strategic dimension, these research areas foster interactions between researchers in the field of basic and applied research.

DIMEVET recognises the importance of research quality, as demonstrated by its ISO 9001 certification. One of DIMEVET's priorities is to extend this certification to all the DIMEVET services and activities (see **AP 8**).



**Fig. 8.1** - DIMEVET research funding expressed in euro.

### Interactions between research and teaching

The quality of teaching is closely linked to the quality of research, and research plays a key role in the future of new generations and society generally. This profound belief underlies all the activities of the Alma Mater, which also include the skilful sourcing and use of national and international funds and the creation of strategic alliances with both institutions and the business world.

Research is a key criterion for the selection and promotion of teaching staff. Teaching Staff is recruited through selection processes, based on the objective recognition of scientific qualification.

According to Art. 16 of Italian Law no. 240 of 30 December 2010, teaching staff recruitment is based on the demonstration of continuing high quality performance according to scientific criteria (see **AP 5**). Every three years, Teaching Staff must be officially assessed through the critical evaluation of their performance, which largely includes the evaluation of research products.

Each teacher is responsible for revising the taught subject, including the review of teaching methods and updating of research knowledge. On an annual basis, the DPQAG of the DPVM and the DIMEVET Teaching Committee critically evaluate the specific learning outcomes described for each subject by the teachers during the preparation of the SUA-DP.

Students are trained by the Library Staff to explore the on-line scientific database and evaluate the quality of different scientific sources. In several subjects, students are required to collect and present research results in the field. In the practical training of many course units, students learn veterinary research methods (e.g. those pertinent to chemical and biochemical analyses, staining of cells and

tissues, physiological analyses on organs and whole animals, clinical examinations, clinical pathological analyses).

Students are required to join a research project for their dissertation, either a review or an experimental work. The latter is designed to facilitate the completion of a substantial piece of original research with a view to possible publication.

For the Alma Mater, PhD studies, the third level of education laid down in the Bologna Declaration, are fundamental for its own growth and the development of all society, preparing young people for research, the creation of ideas and innovation. The Alma Mater participates in the intra-regional PhD programme funded by the SPINNER consortium (2007-2013, <http://www.spinner.it/index.php?pg=170>) as well as advanced-level apprenticeship PhD programmes directly involving public and private enterprises. The strong DIMEVET research activity provides the foundations for its extensive PhD programme.

## **Exploitation of the research results**

DIMEVET researchers are aware of the generation of new knowledge and the development of new processes originating from their research projects. DIMEVET researchers are actively supported by the Alma Mater Knowledge Transfer Office (KTO), which aims to support the protection of IPR and/or commercial exploitation of the results. The KTO office, together with Almacube Incubator (<http://www.almacube.com/home>) fosters entrepreneurship by supporting researchers with consulting activities, management and drafting of contracts, conventions, agreements and business plans for the transfer of knowledge and the creation and accreditation of new companies, including spin-offs. Regarding Spin-offs, it is worth mentioning VETSPIN (<http://www.vetspin.com/>), a Contract Research Organisation specialising in pharmaceutical studies required for Drug Registration, founded in 2004 as an Alma Mater spin-off and still operating at DIMEVET.

## **Bibliometric methods**

The Italian Ministry (MIUR) supports the Italian University System by allocating some basic funding for research, which is partially allocated according to merit, assessed according to research performance, as shown by bibliometric data. The key external audit of research quality in the Departments is the periodic ANVUR Evaluation of Research Quality (VQR) and evaluations of the Alma Mater Research Observatory (RO).

### **ANVUR Evaluation of Quality of Research (VQR)**

The Evaluation of Quality of Research, VQR, was recently carried out by ANVUR on behalf of the MIUR with more than 100 participant organisations and almost 70,000 contributors. In the first semester of 2012 an expected total of 240,000 research products were evaluated. To properly understand the VQR process it is necessary to clarify how the research and teaching areas are divided. In MD of 4 October 2000 and amendments, the MIUR defined 14 Areas, in which Scientific-Disciplinary Sectors (SSD) are grouped in order to facilitate the organisation of higher education. Each SSD comprises a certain discipline (*e.g.* Veterinary Anatomy or Veterinary Internal Medicine) and is defined by an abbreviation (*e.g.* Vet01: Veterinary Anatomy). Teaching staff is divided according to the different SSDs, each expressing their scientific research and teaching competencies. Teachers of the DPVM belong to SSDs grouped mainly in the 07 area (Agricultural and Veterinary Sciences), covering 30 different subjects: 20 under Agriculture (AGR/01-20) and 10 under Veterinary (VET/01-10). Furthermore, some DIMEVET teaching staff fall under the 05 area (Biological Sciences). The DIMEVET teaching staff includes teachers from all the veterinary areas, three agriculture and two biological SSDs, respectively.

The VQR 2004-2010 report was published in July 2013. The overall research performances of DIMEVET can be summarised as follows:

The whole 07 scientific area of the Alma Mater ranked 2<sup>nd</sup> in the category of large universities and 8<sup>th</sup> place considering all Italian universities (small, medium and large).

Specifically, the Alma Mater veterinary medical area ranked first in Italy.

At national level, DIMEVET ranked 12<sup>th</sup> among the 72 Departments of the 07 scientific area and first considering the three Departments of the 07 scientific area at the Alma Mater. The specific rates of each SSD within DIMEVET are listed in **Tab. 8.1**.

**Tab. 8.1** - National ranking of DIMEVET SSDs.

DIMEVET SSDs	NATIONAL RATE
BIO/10 Biochemistry	2
BIO/12 Clinical Biochemistry	9
*VET/01 Anatomy	1
*VET/02 Physiology	3
*VET/03 Pathology	1
*VET/04 Food Hygiene	5
*VET/05 Animal Infectious diseases	3
*VET/06 Parasitic diseases	6
*VET/08 Internal Medicine	3
*VET/09 Surgery	6
*VET/10 Reproduction	1
AGR/01 Economy	12
AGR/17 Genetics	6
AGR/18 Animal nutrition	1
AGR/19 Animal production (large animals)	3
AGR/20 Animal production (poultry, rabbits, fish)	2

\*SSD presents exclusively in DIMEVET among Alma Mater departments.

Very recently, to overcome the problems arising in the development of indicators for ranking large Departments (composed of a large number of members from different SSDs), ANVUR used a statistical approach in which each Department is compared with a "Virtual Department" or "Mirror Department". The "Virtual Department" comprises the same number of staff from the various SSDs of the department under evaluation, each with the assigned average score of the relative SSD.

Departments are then ranked on the basis of their deviation (positive or negative) from the "Virtual Department" score. By this simulation, DIMEVET ranked 2<sup>nd</sup> within the Alma Mater and 27<sup>th</sup> among the 846 Italian University Departments over the 14 scientific areas.

([http://www.anvur.org/index.php?option=com\\_content&view=article&id=620:vqr-2004-2010-collaborazione-anvur-crui-it&catid=23:vqr-2004-2010&Itemid=188&lang=it](http://www.anvur.org/index.php?option=com_content&view=article&id=620:vqr-2004-2010-collaborazione-anvur-crui-it&catid=23:vqr-2004-2010&Itemid=188&lang=it))

#### Alma Mater research Observatory (RO)

Publication activities have been monitored since 1997 when the Alma Mater established the RO, which is in charge of updating the Registry of the research products and identifying the criteria for research evaluation. The Teaching Staff must upload their publications to an on-line National database (U-GOV <http://www.cineca.it/en/content/u-gov>) and evaluation may be performed at different levels (national/local, individual/departmental). This evaluation represents the main instrument used to assess the scientific performance of researchers in order to obtain research funds from the Alma Mater budget.



The Quality Assurance process for assessing research performance of the DIMEVET Teaching Staff is thus based on data made available by the RO annually to the Head of Department (see **AP 5**). These reports include key performance indicators:

- Publications;
- Patents.

The data is used to divide the resources on a qualitative basis.

### DIMEVET Research Committee

Since its foundation, DIMEVET has always run a Research committee with the following main aims:

- To improve the (public and private) financial resources for Departmental research;
- To improve research groups and researchers with low financial resources and scientific production without penalising areas of excellence;
- To support multi- and interdisciplinary research;
- To encourage the international exchange of researchers in order to foster the development of international research networks and strengthen the ability to attract PhD students from abroad;
- To reorganise the research activity taking into account the strategic areas (Basic Sciences, Clinical Sciences, Food Safety and Public Health, Animal Production).

DIMEVET launched competitive internal research funding with its own resources (integrated Alma Mater budget) to promote multidisciplinary research in the four strategic areas. In this framework the DIMEVET Research Committee (and previously a Board composed of the most productive DIMEVET staff) was responsible for using bibliometric evaluations to allocate resources. The funded activities in the 2010-2012 period includes:

- Young researcher programme. Two-year start-up projects (€20,000) for young researchers of DIMEVET to facilitate publications with a view to obtaining subsequent external funds;
- Funding thematic projects and research fellow programmes (**Annex 8.1**);
- Scholarships for PhD students, research fellows and young researchers to allow them to foster international collaborations.

### List of Publications

In **Annex 8.2** (a-b), lists of publications from 2013, 2012 and 2011 representing year N, N-1 and N-2, respectively, are presented either as searchable file and grouped by publication type. The scientific production of DIMEVET in the 3 considered years consists of 440 papers (1.4/staff/year), 430 congresses (Abstract or Poster) and 47 Books or Chapters.

### Comments

Since January 2014 the RO has been replaced by the Committee for Alma Mater Research Evaluation (C-VRA) with the same composition and slightly modified duties (<http://www.unibo.it/it/ricerca/struttura-di-ricerca/commissione-per-la-valutazione-della-ricerca-di-ateneo-vra>).

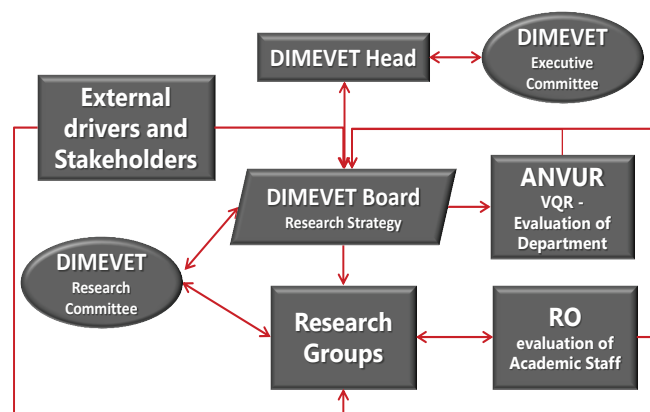
The C-VRA duties are:

- To draft the Alma Mater criteria for research evaluation;
- To evaluate the Alma Mater Teaching staff research products;
- To produce documents suitable for the definition of resource allocation policies;
- To liaise with the Quality Board and the IEU;.
- To interact with the national evaluation system (ANVUR);
- To activate, in specific situations, peer review evaluation procedures applied Alma Mater research structures.

From next year, and in line with the measures adopted for teaching activities, the ANVUR will introduce an All-inclusive Annual Profile of Departmental Research (SUA-DR). The SUA-DR, prepared and approved by the Department Board annually and made available to stakeholders by 31 December, must include:

- The research objectives of the Department;
- The quality and impact of the scientific production of teaching staff;
- Scientific responsibility of national and international research;
- Coordination of international research networks;
- Research funds available in the previous year;
- Management of or participation in editorial boards of journals, or publications of recognised standards;
- Participation in the scientific committees of international conferences of recognised standards;
- Teaching positions or fellowships at foreign and international highly qualified universities and research institutions;
- Management or scientific responsibility of national or international, public or private highly qualified research institutes;
- Participation in academies having prestige in the field;
- Awards and prizes for scientific activity;
- Results of technology transfer in terms of participation in the creation of spin-offs, development, use and marketing of patents, as well as other third mission activities such as services to society;
- Lifelong learning activities;
- A brief analysis of the results obtained with the proposed improvements.

This new tool will strongly improve the effectiveness of the Department in achieving objectives, counteracting threats and exploiting opportunities in the international research context.





## CHAPTER 9

# ASSESSMENT OF INTERNALISATION OF EDUCATION AND RESEARCH

## 9 ASSESSMENT OF INTERNALISATION OF EDUCATION AND RESEARCH (AP 11)

According to the available data, the Alma Mater is one of Italy's leading universities in the internationalisation of education and research (<http://www.censismaster.it/media/ClassificheAtenei2012>).

Within the policies of the Academic bodies, autonomous programmes, plans and actions aimed at internationalising education and research are implemented by the Departments and Schools of the Alma Mater.

Indeed, the Alma Mater three-year strategic plan (2010-2013) considers "strengthening the internationalisation of the learning opportunities" to be strategic. To achieve this goal, the DPVM together with DIMEVET and the DIRI (Department of International Relations of the University of Bologna) has made great effort to internationalise the Veterinary Medicine learning opportunities and regulate exchanges of incoming and outgoing students.

Within the Alma Mater's specific policy, DIMEVET is committed to:

- Increasing relations with other European Faculties, particularly those which are EAEVE certified, and with non-European Faculties certified by similar accreditation systems;
- Increasing the number of exchange students;
- Improving the quality of international partnerships;
- Increasing the number of students who graduate after having spent part of their studies abroad.

All elements and information for fostering awareness of international learning opportunities can be found on the dedicated Alma Mater Website: <http://www.unibo.it/it/internazionale/offerta-formativa-internazionale>.

The same page is translated into English for foreign students: <http://www.eng.unibo.it/PortaleEn/Students/International+Students/default.htm>.

In addition to the opportunities for Italian students, incoming students are informed about admission and administrative procedures, where to learn or improve their Italian language skills at the Alma Mater facilities, where and how to apply for scholarships, financial aid and specific services.

At DIMEVET, the internationalisation activities are managed by the Delegate for Internationalisation, who is directly appointed by the Head of Department. In 2011, the Office of International Relations was established within SAVM. The purpose of the Office is to centralise and perform the duties concerning the International Relations and student exchange programmes. The Office provides crucial support for future growth. Furthermore, in 2011 the Alma Mater introduced a web-based platform, AlmaRM, to control and manage all the international mobility procedures of students. A student tutor was introduced in 2013, aiming to support international affairs.

In DPVM, the percentage of graduates who have spent part of their studies abroad is steadily rising, and is above the Alma Mater average (<http://www.almalaurea.it/>) (**Tab. 9.1**).

**Tab. 9.1** - DPVM graduates who spent part of their studies abroad compared to the Alma Mater average.

	DPVM	ALMA MATER
2010	19.8%	16.2%
2011	20.6%	17.3%
2012	25.4%	18.1%

## 9.1 ERASMUS

Most student exchanges are part of the Erasmus programme. To date, 29 agreements have been signed with other European Veterinary Faculties. Overall, the agreements include 60 incoming and 56 outgoing positions. In 2013, after the conclusion of the Erasmus LLP, the new Erasmus+ programme led to the renegotiation and where required the re-activation of all the former agreements. Furthermore, 5 new exchanges were activated with the University of Bern, Zurich, Helsinki, Vienna and Istanbul.

**Tab. 9.2** - Available exchange positions according with countries.

COUNTRY	POSITIONS	PARTNER UNIVERSITY
SPAIN	11	Barcelona, Valencia, Cordoba, Las Palmas, Leon, Complutense Madrid, Alfonso X Madrid, Murcia, Santiago de Compostela, Zaragoza, Caceres
GERMANY	3	Giessen, Hannover, Monaco
CZECH REPUBLIC	1	Brno
FRANCE	1	Nantes
HUNGARY	1	Budapest
LATVIA	1	Jelgava
PORTUGAL	1	Porto
ROMANIA	3	Bucharest, Cluj Napoca, Iasi
TURKEY	2	Ankara, Istanbul
FINLAND	1	Helsinki
SWITZERLAND	2	Bern, Zurich
AUSTRIA	1	Vienna
NETHERLANDS	1	Utrecht

### Erasmus outgoing

Information meetings are held to support and promote the internationalisation activities. The first meeting is held once the application has been announced (usually in January) and another is held after the closure of the selections (usually in April), with the selected students to provide all the information needed to complete the Learning agreement form and comply all other requirements.

A foreign language exam for applicants has been mandatory since 2010.

**Tab. 9.3** - Outgoing students in the last 3 years.

YEAR	ERASMUS OUTGOING STUDENTS
2011-12	27
2012-13	27
2013-14	33

### Erasmus incoming

An Erasmus welcome day event is held every year. The purpose of the meeting is to welcome the incoming students and explain how to complete their study plan, as well as provide general information on the learning activities.

An information banner on the English website helps students to find information.

**Tab. 9.4** - Incoming students in the last 3 years.

YEAR	ERASMUS INCOMING STUDENTS
2011-12	33
2012-13	27
2013-14	31

## Erasmus Teaching Staff

The Alma Mater funds both audit and monitoring visits and teaching at Partner Universities.

**Tab. 9.5** - Erasmus teaching staff mobility in the last 3 years .

YEAR	INCOMING TEACHING STAFF	OUTGOING TEACHING STAFF
2010-11	1	2
2011-12	7	2
2012-13	6	4

## 9.2 ERASMUS PLACEMENT

The Erasmus Placement Programme funds 3-month professional training periods in either a foreign university or private companies, anywhere in Europe. In the last few years, these financial resources were used fully, with no outstanding budget.

Furthermore, DIMEVET accepts foreign students wishing to attend the Practical Clinical Training within the same Programme.

**Tab. 9.6** - Erasmus placement incoming e outgoing students in the last 3 years.

YEAR	INCOMING ERASMUS PLACEMENT	OUTGOING ERASMUS PLACEMENT
2011-12	3	2
2012-13	3	5
2013-14	5	4

## 9.3 CSF PROGRAMME (CIÊNCIA SEM FRONTEIRAS)

The 'Scienza senza Frontiere CSF' programme is a special project encouraging and supporting the international exchange of Brazilian students, researchers and scientists at renowned research facilities all over the world. The Alma Mater agreed to the project, and within this agreement DIMEVET received 3 and 12 Brazilian students in Academic year 2012-2013 and 2013-2014, respectively.

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## 9.4 EXTRA-EU AGREEMENTS AND OVERSEAS EXCHANGES

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DIMEVET and the former Faculty of Veterinary Medicine have partnered with other Veterinary Faculties outside the European Union. To date, the agreements still active involve Sydney – Australia, La Plata – Argentina, Buenos Aires – Argentina, GranMa – Cuba, Belgrade – Serbia, Pretoria – South Africa and Kharkiv – Ukraine.

Furthermore, DIMEVET joined 14 agreements in 2012 and 31 agreements in 2014, signed between the Alma Mater and other non-EU universities. These agreements regulate and provide support for the Overseas exchanges of students and teachers. In AY 2013-2014 a DPVM student is spending a six month exchange at Melbourne University within the Overseas programme.

In 2013, the Alma Mater entered into an agreement with Simon Bolivar University (Colombia) and the Colombian Health Department concerning Veterinary and Human Public Health issues. The agreement encourages and supports exchanges of teachers, researchers and students.

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## 9.5 ERASMUS MUNDUS ACTION 2

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During 2013, DIMEVET received requests within the EMA2 programme from Argentina (1 teacher and 3 students), Myanmar (1 teacher), Belarus and Bosnia and Herzegovina (1 teacher), Brazil (2 students) and Colombia (1 student).

Funds were granted to the teacher from Bosnia and Herzegovina.

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## 9.6 SCHOLARSHIPS FOR LEARNING OPPORTUNITIES ABROAD

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Funds from both the Educational support funds of the Alma Mater and from the Internationalisation strengthening funds (DIRI) are used to support learning opportunities abroad, including the preparation of dissertations. The call for applications is launched twice a year.

**Tab. 9.7** - Number of scholarships for learning opportunities abroad in the last 3 years.

YEAR	SCHOLARSHIPS
2011	11
2012	11
2013	10

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## 9.7 TEMPUS

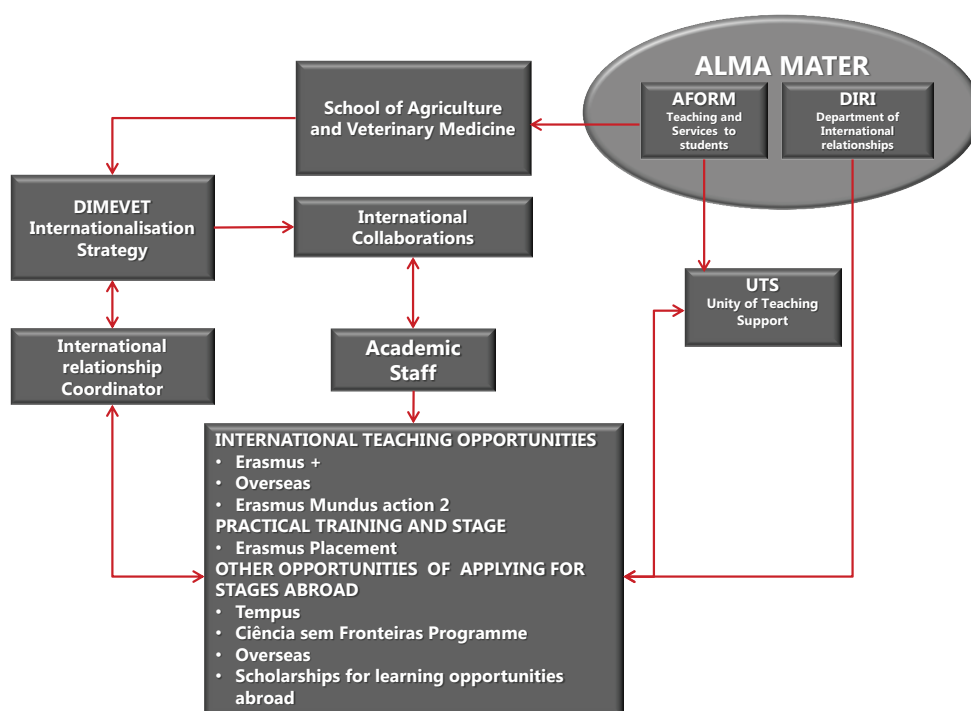
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DIMEVET has a partnership within the TEMPUS project "Serbia: striving towards excellence in veterinary education" - ref. no. 2013-4539/001-001, acronym EXCELVET, coordinated by the Veterinary Faculty of Belgrade. The project also involves the Veterinary Faculties of Ljubljana (Slovenia), Vienna (Austria) and Budapest (Hungary). The project was presented and funded within the framework of the Tempus IV call in 2013, and will run three years.

## 9.8 COOPERATION TO DEVELOPMENT PLANS

A Co-operation Project for aid to developing countries, the Hanga village in Tanzania, has been running since 2003. Within the project, students and teachers spend varying periods in developing countries and experience a challenging educational environment.

In accordance with Paragraph 8 Article 11 of the Framework Regulations, the Alma Mater automatically includes a certificate drawn up in Italian and in English (or in another language according to the specific agreement) together with the degree certificate or diploma, which summarises the learning activities completed by students for the award of the degree. The form used is that developed by UNESCO/CEPES and the European Commission, and introduced into Italian legislation and subsequent amendments (**Annex 9.1**).



AP 11 - Internationalisation.





## CHAPTER 10

# ASSESSMENT OF COOPERATION WITH STAKEHOLDERS AND SOCIETY

## 10 ASSESSMENT OF COOPERATION WITH STAKEHOLDERS AND SOCIETY (AP 12)

The Alma Mater considers students and society as its privileged counterparts.

### Students

The process of engagement with students starts even before enrolment, through the "Guidance Days" (<http://www.unibo.it/Portale/AlmaOrienta2013.htm>)

After enrolment, students are guaranteed by the Alma Mater the possibility of an integrated communication area, allowing them to express their needs.

The students' opinions are greatly valued by the Alma Mater, as demonstrated by the publication and dissemination of students' evaluations of the quality of the teaching.

### Society

The social responsibility of the Alma Mater implies the active involvement of citizens who rely on teaching and culture as important tools for improving future social relationships. For this reason, engaging, communicating and disseminating organisational choices and teaching methods, making available the largest amount of data, is considered strategic by the Alma Mater to allow people to consciously contribute to the different activities and identify the real existing needs.

Pursuant to Italian Law 190/2012 establishing policies for Transparency and Integrity, the Alma Mater introduced a three-year programme (**Annex 10.1**) to improve transparency and integrity. This programme is implemented through the active involvement of the Alma Mater website, the web magazine and the dedicated public relations office (URP).

The Alma Mater is present on UNIVERSITALY (<http://www.universitaly.it/>), a web portal that helps schools, students and their families when choosing an university or continuing their studies at high school, and can assist universities with the facilitation of appropriate training. Universitaly is a simple and effective comprehensive source of accurate and up-to-date information, and contains significant parts of the SUA-DP.

DIMEVET and DPVM meet the above-mentioned Alma Mater Transparency and Integrity requirements and regularly publish a series of documents on their websites providing future students with objective information about the DPs and the Department as a whole. Each DP is required to publish the ADPRQ containing data on efficiency and efficacy of the DP on its website <http://www.unibo.it/QualityAssuranceEn/Reports2013/Report-8617-2013.pdf>.

DIMEVET has implemented several strategies to interact with the professional world and stakeholders in order to create a natural continuity between the DP and the professions.

DIMEVET interacts continuously with society, the National Professional Associations of Veterinarians and other professional associations. Some examples of interaction can be summarised in the following points:

- Consultations with stakeholders;
- Services provided to society;
- Agreements between DPVM and the Professional Association of Veterinarians;
- State examination for qualification to practice;
- Almalaurea and Job Placement;
- Student associations;
- Spring Festival.

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## 10.1 CONSULTATIONS WITH STAKEHOLDERS

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According to the requirements of Italian law 270/2004, the DPVM periodically involves stakeholders in a public consultation for the development and improvement of the curriculum (see **Chapter five**). Consultations for the revision of the curriculum are done through the administration of a questionnaire and the critical evaluation of the feedback. Other methods include round table discussions, joint meetings and workshops. The findings and feedback are included in the ARR. At European level, dialogue essentially aims to achieve the standards for accreditation and compliance with the EAEVE requirements.

The last general consultation was held in AY 2007-2008 (**Annex 10.2**). After that occasion the following events were organised:

- Practical professional teaching in the Faculty of Veterinary Medicine: role and issues of Veterinary Teaching Hospitals; 23 November 2009;
- European agriculture and new global challenges; 29 November 2010;
- The veterinary profession: ENPAV (National Welfare and Assistance Office for Veterinarians) and Professional Associations; May 21, 2012.

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## 10.2 SERVICES PROVIDED TO THE SOCIETY

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DIMEVET offers a range of clinical and non-clinical services and advice to the public and the local territory (<http://www.scienzemedicheveterinarie.unibo.it/it/servizi-al-pubblico/>). Clinical Services include both the admission service (<http://accettazione.vet.unibo.it/>), and in First Aid for Small Animals at the VTH (<http://www.ospedaleveterinario.unibo.it/>), which is responsible for providing emergency treatment to patients 24 hours a day, 365 days a year (see **AP 7**).

The VTH provides customers with a questionnaire to assess the quality and efficiency of the services. This form is available at the admissions desk. Moreover, to optimise communication between the VTH and Practitioners wishing to refer a clinical case, a referral form is available and can be sent to the VTH medical staff.

The University Dairy Farm is usually visited, for educational purposes, by primary and middle school students following request and authorisation (<http://www.scienzemedicheveterinarie.unibo.it/it/dipartimento/Scienzaelatte/stalla/index.html>).

The feedback from different users (pet owners, students, practitioners, etc.) are collected by Services and used to improve performance (see **AP 8**).

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## 10.3 AGREEMENTS BETWEEN THE DPVM AND THE PROFESSIONS

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Through the signature of agreements between the Alma Mater and private veterinary clinics, farms, agro-food industry, etc., the DPVM provides its students and fresh graduates the opportunity to attend private structures as trainees. During these vocational activities, companies interact with the university environment on an ongoing basis. Students are informed about all these opportunities in a dedicated website (<http://www.unibo.it/Portale/Guida/Convenzioni+e+tirocini/default.htm>).

Moreover, there is continuous interaction with the Professional Association of Veterinarians and the library facilities, including the "Ercolani" Central Library. In particular, there is an agreement with some Professional Association of Veterinarians, for book loans and access to databases, as well as the Document Delivery service, or the retrieval of articles or parts of documents held by the libraries of other agencies and institutions, in compliance with copyright laws.

## 10.4 STATE EXAMINATION FOR QUALIFICATION TO PRACTICE

Further contact between the graduates and the professions occurs during the qualifying examination to the profession of veterinarian, held in two separate sessions each year <http://www.unibo.it/it/didattica/esami-di-stato/informazioni-sugli-esami-di-abilitazione-1/veterinario-1/veterinario>. In order to present new graduates with the plurality of the practical work, the eleven members of the evaluating committee are chosen by groups of people from different categories of the veterinary profession:

- Retired academic professors and those on secondment;
- Heads of Experimental Zooprophyllactic Institutes;
- Officers of the High Commission for Hygiene and Public Health with the rank of inspector or higher qualifications;
- Heads of the veterinary bureau of the National Health Service or municipal slaughter facilities serving populations of not less than five hundred thousand inhabitants;
- Senior officers, veterinary practitioners with not less than fifteen years of praiseworthy professional practice (MD 9 September 1957 and amendments).

In the absence of a specific report, the external experts' evaluation may be gathered by the percentage of students qualified for practice in each session.

## 10.5 ALMALAUREA AND JOB PLACEMENT

The ALMALAUREA Interuniversity Consortium (<http://www.almalaurea.it/>) was founded in 1994 as an information website for families, young people, universities, private firms and companies; it collects data from roughly 70% of the total number of graduates in Italy and has the following goals:

- To gather information and opinions of fresh graduates (on graduation, and after 1 and 5 years) for the university, with the main purpose of providing objective data on their university careers and employment status.
- To make available online the curricula of graduates from different universities, facilitating the search by private companies for highly specialised profiles.
- To compare the efficiency and effectiveness of the same DP run by different Italian Universities (**Annex 10.3**). Specifically, data from graduates of the Alma Mater DPVM are compared with those of other universities, in terms of:
  - Percentage of satisfaction;
  - Time necessary for graduation;
  - Percentage of veterinarians employed after one, three and five years after graduation;
  - Average salary;
  - Percentage of graduates still looking for a job after one, three and five years after graduation.

The ALMALAUREA database was recently integrated into a new Alma Mater web service: JOB PLACEMENT. The portal offers relevant information goal to increase interaction between job seekers and job vacancies <https://jobplacement.unibo.it/>. The Alma Mater Job Placement Service also organises specific events <http://careerday.unibo.it/>.

The Almalaurea data are specifically discussed and used in the ARR (see **AP 7**) to provide proper feedback for the improvement of the DP in terms of its ability to prepare its students for the profession. This data is required to further steer the development of successful activities and reduce less relevant actions.

Due to the complexity of the Almalaurea website and the limited availability of information in English, the person in charge for QA is available on site to assist the experts in exploring the database.

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## 10.6 STUDENT ASSOCIATIONS

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The Alma Mater has a long tradition of student associations, and these are particularly active in university life. Two Student Associations run at DIMEVET:

- Omnia Universitatis;
- Student Office.

Student organisations are involved in:

- Coordination of student activities;
- Information on school activities and extra-curricular activities;
- Cultural activities and sports;
- Public relations with other student associations.

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## 10.7 SPRING FESTIVAL

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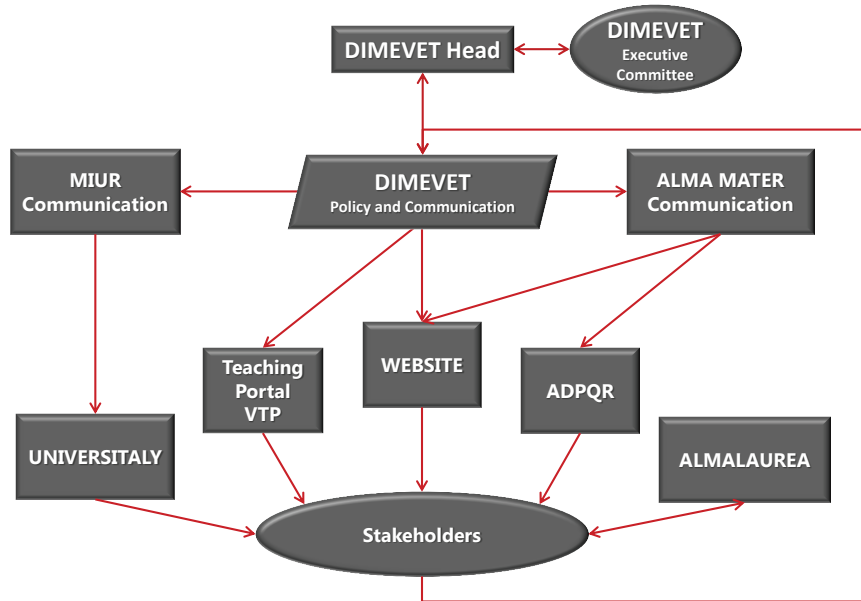
At the end of teaching each year, the DPVM organises an event involving both students and the entire DIMEVET staff (support and teaching staff). This event, also known as the "Spring Festival", is also an opportunity to meet the Academic, Scientific and local authorities, who have the opportunity to learn about the structure in an informal way (**Fig. 10.1**).



**Fig. 10.1** - Spring Festival.

**Comments**

In the Action Plan attached to the ARR 2013, a survey among post-graduate students hosted in external structures (e.g. private clinics and farms) attending post-graduate professional practical training ("tirocini post lauream") is scheduled for AY 2014-2015. The questionnaire will be used to gather the tutors' opinions on about the students' skills, with the ultimate aim of improving the DPVM curriculum.



AP 12 - Stakeholders.



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UNIVERSITÀ DI BOLOGNA

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