

**European Association of Establishments for Veterinary Education**  
**European System of Evaluation of Veterinary Training**

**REPORT ON THE VISIT TO THE  
FACULTY OF VETERINARY MEDICINE  
TURIN**

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## **INTRODUCTION**

An EAEVE/FVE expert team carried out a visitation to the Faculty of Veterinary Medicine of the University Turin (FVMT) in 1999 during a transition period when the Faculty was leaving the old campus in downtown Turin for the newly-built site at Grugliasco, on the outskirts of the city. Teaching and services were not fully adapted to the new premises when the visitation took place, and numerous suggestions were made to the Faculty for improvements. In 2002, the major deficiencies had been rectified and the Faculty received EAEVE/FVE approval. Since then, the Faculty has grown and further developed in its new location and is undergoing continuous strategic and organisational improvement.

### **1 OBJECTIVES & STRATEGY**

#### **1.1 Findings**

A concise mission statement is published on the Internet; in summary it states that undergraduate, postgraduate and continuing veterinary education and formation shall be provided to the highest possible level and shall be in compliance with EU directives, the Bologna declaration, EAEVE/FVE Standard Operating Procedures (SOPs) and Italian national legislation.

Basic and applied research and services to the veterinary profession, the general public and other stakeholders are also an integral part of the faculty's objectives and strategy. Internal Quality Control is another important goal and certification of compliance with UNI EN ISO standards has recently been obtained. The Quality Control process is closely monitored by a university-wide committee on a yearly basis.

A national ranking system for academic institutions consistently lists FVMT among the first 3 of the 14 veterinary schools in Italy. Students and staff show a strong feeling of corporate identity and are generally proud to belong to the Faculty.

#### **1.2 Comment**

Objectives are clearly defined, regularly revised and realistic. The Faculty has a satisfactory research record and output, but "research-based teaching" is not transparent in the overall objectives.

#### **1.3 Suggestions**

Make "research-based teaching" a strong objective.

## **2 ORGANISATION**

#### **2.1 Findings**

FVMT is the smallest (approx. 1000 students) of 13 faculties forming the large University of Turin, which enrolls over 68000 students. Italian Universities are state owned, governed and financed by the Ministry of Instruction, University and Research (MUID). The study plan is based on national legislation, but allows a sufficient degree of freedom to the Faculty for making adjustments to the veterinary curriculum within the legal framework. The Bologna

recommendations are being taken into consideration, offering a Bachelor degree and a Masters degree in veterinary medicine (Dr.med.vet).

The Faculty organisation is classic, headed by a Dean, several administrative bodies, Departments (3) and Units (Institutes, Clinics) below Departmental level, a teaching hospital and a Faculty farm. It is governed by a rather large number of committees and boards.

The University Senate is the most important governing body at the University level. In the Senate, the FVMT is represented by its Dean; students are strongly involved in the decision making process as 8 out of 42 members of the Senate are students. At the Faculty level, the Departments have a high degree of autonomy in the allocation of their budgets.

Many committees and “dean’s delegates” seem to deal with all possible issues arising within the Faculty: curriculum, student affairs, finances, quality assurance and others. Students noted very positively the “job placement centre”, which assists students in job placement and also offers tutoring and orientation courses for high school students interested in studying veterinary medicine. Other committees involve the veterinary profession (the licensing body) in curricular matters and other issues concerning stakeholders such as continuing education.

The recruitment policy for Faculty and staff follows rigid nationally-regulated procedures. Didactic Faculties, specialist degrees and international qualifications are not sufficiently recognised nationally, either for promotions or for recruitment to the higher educational and research level.

## **2.2 Comments**

The administrative structure on the faculty level seems complex and its functioning cannot easily be fully evaluated during an on-site visit. But both staff and students seem, in general, satisfied with the democratic structure; students, for instance, feel that the structure of the University and the Faculty fits their needs. Departmental heads enjoy a substantial degree of autonomy, whereas the Dean’s office has little direct influence on the Departments’ strategic decisions.

The Team were concerned that there may be too many committees, with overlapping responsibilities, which might require Faculty staff to commit unnecessary time to tasks other than their teaching and research responsibilities.

Student welfare: the campus is well secured and locked during nights and weekends; students feel safe at the campus. They can participate in sports courses, offered by the University of Turin for a student-friendly fee. Since most of these activities take place in the City of Turin and not close to the campus, only few students take advantage of this facility

## **2.3 Suggestions**

As there is already a well-established Quality Assurance and Control system, the Team recommends a critical evaluation of the efficiency of the FVMT’s committee and board structure.

Students and new graduates should receive more tutoring for choosing post-graduate programs. International exchange programs should be better promoted. Recruitment procedures should be changed: especially for higher teaching and research positions (associate and full professor level); international advertising of vacant positions, competitive and transparent selection processes, taking into account research, teaching and specialist

qualifications (EBVS Diplomates) as well as the position and status of a “Resident” should be recognised at national (governmental) level.

### **3 FINANCES**

#### **3.1 Findings**

The Faculty receives the majority of its funding from the government. Running costs and teaching funds, calculated on the number of students enrolled in the Faculty, are channelled through the University; those funds are then allocated through the Dean’s office. Almost all salaries for employees on payroll (that is, except for a few positions created by external funding) are directly paid to individuals by the MIUD as employer (amounting to 84% of overall government funding).

Funds generated through services (clinics, laboratories), research and external sponsors are returned to the Departments and administered largely in autonomy. Departments may pay a percentage of generated income to those staff members who contributed to the income.

The number of students is the main parameter for Faculty funding. Student tuition fees are calculated in relation to family income. Government funding is generally insufficient to allow investment in equipment and personnel, necessary to keep up with increasing demands in teaching and in standards of service. Therefore, out of necessity, the Faculty is quite engaged and successful in generating external funding. Through these means, capital equipment has been acquired and/or replaced, an emergency service and a mobile clinic have been established and some technical staff has been employed. External funds are subject to a modest overhead fee of 2 – 7 %. Research grants, the sale of (farm-) animals and animal products (meat), on the other hand, is exempted from the overhead payment.

#### **3.2 Comments**

During the next 2 years, significant cuts in government funding, based on general austerity measures, are anticipated. To partly compensate, it is anticipated that tuition fees may be increased up to €500 for the highest tuition tranche. Personnel cuts will be one of the unavoidable sequels and replacement of some retiring teachers will not be assured. An employment freeze for government positions has been already announced. Consequently, adequate teaching and service standards can only be maintained by an increase in external funding.

But spending more time and effort on external fund-raising may have implications for research and teaching and this problem may be exacerbated by the fact that the new curriculum requires increased practical hands-on teaching and is therefore increasingly expensive and time consuming. Moreover, excellence in teaching is not rewarded by the University, specialist status (Diplomate) attracts no financial incentive and residents or interns cannot be employed on any university budget as these positions are not officially recognised.

#### **3.3 Suggestions**

The main parameter for allocation of funds by the government should be the number of students *graduating* each year and not the number of students enrolled. To compensate for the reduction in funding this would cause, other factors should be used to determine fund allocation, such as research output and quantity and quality of teaching. Teaching excellence and specialisation should be recognised both for financial reward and eligibility for promotion; if financial reward is not possible by law, a system of prizes or one-off awards for excellence in teaching could be introduced. The Quality Control system already in place, together with student evaluation of teachers, should allow identification of such merits.

As students are allowed to repeat exams indefinitely, some “off course” students stay enrolled long-term without graduating; in response to this problem, a system should be explored in which tuition fees increase progressively commensurate with overly long and unsuccessful study time.

Positions for residents and interns should be created and financed. An austerity plan should be elaborated at the University level, taking the anticipated budget cuts into account. Time and effort for successful external fund generation should be specifically recognised. The University and the government should be reminded that quality veterinary training is the most expensive of all academic studies (approx. €20.000 per student/year).

## **4 CURRICULUM**

### **4.1 GENERAL ASPECTS**

#### **4.1.1 Findings**

The veterinary undergraduate course being taught at present is at an interim stage, with the first 2 years presently being taught according to the new curriculum, while the remaining 3 years are still working their way through the old curriculum – but with some modifications. This situation presented an extra challenge for the Team, because it can only consider what curriculum is actually being taught, not proposals for the future.

The general framework of the veterinary undergraduate course is established by Ministerial Decree promulgated by MIUD. Within that framework, the Faculty has some freedom to establish an effective curricular programme. Making use of that freedom - and with the support of the University of which the Faculty is a part - the new curriculum represents an evolutionary change from the previous one and was introduced in the 2009 – 2010 academic year. First, the detailed structure of the new curriculum was arrived at by formal discussions within the Faculty; then, after approval by the Self-evaluation Committee of the University, the curriculum was accepted and approved by the MIUD. The SER gives a comprehensive picture of the curriculum being followed by undergraduate students of the Veterinary Faculty.

In general, the team was satisfied with the balance of the curriculum although, within Departments, there were some imbalances which need to be addressed. These will be covered under the detailed consideration of the Departments.

Accurate assessment of the ratios of practical/clinical to theoretical teaching is a process fraught with difficulty. Overall, the team were satisfied both that a commitment to hands-on training is at the forefront of the Faculty’s mind and that it is making continuous efforts to improve. Although there is no room for complacency in this matter, the present situation seems to be satisfactory.

The Faculty has made great efforts over the last few years to improve the quality of its clinical teaching by increasing the amount of hands-on clinical training. In the Veterinary Teaching Hospital, this has been achieved in part by exploiting a potential weakness. Many Faculties have too few support staff; in Turin, this is partly alleviated by using students to act in the role which might otherwise be filled by veterinary nurses, so increasing the direct involvement of students in medical and surgical procedures.

#### **4.1.2 Comments**

Integration of teaching material between Departments was not obvious to the team “at ground level”. But the (rather complicated) committee structure of the Faculty provides a

vehicle for ensuring that there is cooperation between Departments to avoid both overlap and gaps in teaching. The general concept of research-based teaching is not completely understood by all academic staff.

### **4.1.3 Suggestions**

It would be good to see more evidence of multi-disciplinary, problem oriented teaching, particularly in the clinical years.

The concept of research-based teaching should be stressed and should uniformly be a primary objective of all teaching staff.

Horizontally coordinated system-related teaching should be given stronger weight and significantly improved.

## **4.2 BASIC SUBJECTS & SCIENCES**

### **4.2.1 Findings**

The teaching of Basic Sciences has been affected by the introduction of the new curriculum. Changes in the semester-position of some of the subjects seems to have improved not only the teaching structure in the difficult first year for students, but also has an impact on the better understanding of new subjects in subsequent semesters.

An adequate teaching, equipment and working environment provides an excellent infrastructure for undergraduates to gain the basic knowledge necessary to understand the biological principles which underpin animal health and disease. This offers a strong basis for the later clinical semesters. The lecture rooms and teaching laboratories are of a consistently high standard and the supply of necropsy material appears to be adequate for the needs of the students.

The Faculty Farm, the recently-opened Faculty Kennel and the International Horse Centre all provide facilities to ensure that students are exposed to live animals at the earliest opportunity and it is notable that this teaching is carried out in small groups, using practising veterinarians as necessary.

### **4.2.2 Comments**

FVMT makes efforts to alleviate the problems created by a student selection process which does not ensure that the most appropriate students are selected for the veterinary course – either in terms of their previous educational attainment or their motivation to graduate as veterinarians. The first year of the course is the time when the effectiveness of those measures can be tested.

### **4.2.3 Suggestions**

The team recognises the difficulties caused by the student selection procedures; it acknowledges the efforts made by FVMT to explain to potential students and their families the purpose and rigour of the course and to provide extra tuition to prepare students for their first year of study. The Team suggests that, in cooperation with other Veterinary Faculties in Italy, FVMT should ensure that MIUD is fully aware of the situation – and of the extra teaching burden this places on Faculties.

While the present situation continues, the Team suggest that active feedback is sought from those responsible for teaching in the first year of the course, so that the continued value of the measures can be monitored and adjusted as necessary.

### **4.3 ANIMAL PRODUCTION**

#### **4.3.1 Findings**

An experimental farm is located on the campus very close to the buildings of the Veterinary Faculty. Although it is administered as an independent, self-financing unit, it was established by - and is provided for the benefit of - the Faculty, and all Departments have access to its livestock. It obtains some of its income by providing facilities for veterinary and medical research, but also sells produce (red and white meat) to Faculty staff and students. The livestock includes a herd of cattle of a local dual-purpose breed, a small pig unit, small ruminants and poultry. Some welfare issues were identified here: farrowing crates were in use for sows which, despite the fact that it is the norm in this region of Italy, was thought by the team to be inappropriate in a campus farm used for undergraduate teaching. The Team witnessed small pigs being castrated, docked and having their teeth clipped.

The Faculty has recently concluded an agreement with the Municipality to operate a branch of the official dog pound for stray animals. Under this agreement, stray dogs which are identified as sick when they are captured are brought to the unit on the campus for treatment; after 10 days, they are then sent to the main municipal dog pound. While they are on site at the campus, they are available to all Departments of the Faculty for teaching purposes

The Animal Production Department makes use of the livestock on the Experimental Farm and the dogs at the Faculty Kennel to provide practical teaching from the first year in animal handling. Teaching may be provided by Faculty staff or by veterinary staff employed by the University (but not full time staff of the Faculty). This teaching is delivered to small groups of students; some farm visits are for the whole group.

The Faculty is closely involved with the management of the International Equine Centre at Venaria Reale, about 15 km from the campus and makes use of some of the resident horses there for teaching purposes.

Overall, the scope of the courses taught by the Animal Production Department and the balance between practical and theoretical teaching seems satisfactory.

Applied botany and Agronomy are taught within the undergraduate course and there is a small feed production plant on the campus, which is used for the preparation (from bought-in raw materials) of rations for the livestock on the Experimental Farm. The feed plant is used as a teaching resource.

The Team were not made aware of close cooperation between the staff of the Animal Production Department and clinical colleagues in the fields of herd health management or the management of nutritional disease, although the Department does offer a consultancy service to the Veterinary Teaching Hospital in nutritional matters.

Teaching in Veterinary State Medicine seems to be provided almost by osmosis, as students spend 100 hours over a period of 3 months working alongside official veterinarians in the field.

#### **4.3.2 Comments**



The State Veterinary Service has a very significant and positive input into the undergraduate course. Although the veterinarians providing the training are not paid by the Faculty, they are supplied with a detailed curriculum to follow by tutors who are part of the Faculty, they assess (and mark) the students on their performance and are themselves assessed by the students on their performance as teachers. This can therefore be regarded as a part of the formal, intramural course, rather than informal, extramural and unsupervised training. Discussion with senior State Veterinarians confirms that this is covered by official collaboration agreements and is regarded as part of the official duties of the State Veterinary Service. It is not anticipated that, even in the present economic climate of cuts in Government expenditure, this service to the Veterinary Faculty will be curtailed.

### 4.3.3 Suggestions

Overall, the team felt that there is room for improvement in the teaching of animal welfare both of animals on farm and during transportation. Although it appears that animal welfare aspects are included in a number of the obligatory courses, the Team felt that the importance of this aspect of veterinary teaching requires that time should be devoted to the topic in its own right.

## 4.4 CLINICAL SCIENCES

### 4.4.1 Findings

**Farm animals:** there is an experimental farm for food-producing animals within the campus, housing bovines, sheep, goats, swine and poultry, which are all used for teaching of Propaedeutics. The herd of cattle consist of bulls, beef cattle, heifers and cows nursing their calves for about 4 months of age. The swine, poultry and caprine sections are also very well equipped, offering all possibilities for an adequate hands-on training for the students.

In the bovine section, there were only beef cattle present and no dairy cattle. Students can only manipulate lactating cows during the mobile clinics. It is the choice of the Faculty that there is no milking parlour.

The porcine section has all the different pig categories( lactating sows with piglets, weaned pigs, fattening unit), Fattened pigs are slaughtered at the Faculty abattoir and used to make the 'faculty salami'. Students are able to manipulate the pigs during their clinical weeks, e.g. castration, tail docking, getting informed about pig husbandry and health management

There is very little exposure to individual cases of diseased food animals within the Faculty. Nevertheless, the increased activities of the ambulatory clinic, which strongly developed during the two past years, offset this previous inadequacy. The newly built isolation unit for farm animals and horses is an appropriate, dedicated facility, including all necessary bio-security measures.

**The mobile clinic**, established and fully operative since 2008, is using three mini-busses (2 for the transport of students and bio-security equipment and one larger truck, well equipped with all necessary instrumentation for field exams and mobile laboratory testing). Students accompanying the mobile clinic activities are divided into small groups of 4 - 6. Visited farms are in a range from 15 to 100 km from the Faculty and the visits last half a day on the average (8h-14h). The visits are regularly scheduled or may be organised on a call or emergency call basis. For that purpose, the Faculty has contracts with 37 practitioners.

The ambulatory clinic is active on an every-day basis for the 4<sup>th</sup> and 5<sup>th</sup> year students. For the 4<sup>th</sup> year students, the first day of a visit is devoted to preventive veterinary medicine (arrangement with local sanitary authorities, that is the official veterinary service); subsequent visits are in the field of reproduction (2 days), internal medicine (one day) and large animal surgery (one day/cattle and horses). For the 5<sup>th</sup> year students, the ambulatory clinic is devoted to obstetrics (2 days), internal medicine (2 days) and large animal surgery (1 day/Swine). For reproduction, there is a formal agreement with 4 farms (100-300 cows) and 52 farms are visited regularly for health and herd management. Internal medicine teaching is clearly benefitting from an increase of the number of clinical cases in internal medicine (39/N-2, 168/N-1, 348/N). There is also an increase in small ruminant cases (3/N-2, 15/N-1, 35/N) and in swine cases (8/N-2, 60/N-1, 54/N). For reproduction teaching, the increase of the number of visited farm is important (316/N-1, 1800/N). All the cases seen are based on agreements with local practitioners (referred or on demand). There is no visit without demand and the practitioner is always present during the visit. The practitioners seem to value highly this form of collaboration. The students appreciate also the progressive learning experience in the ambulatory clinic. The good collaboration with practitioners can also be deduced from the relatively high number of referred necropsy cases in pathology. All the services within the frame of the ambulatory clinic (consultation, laboratories exams, necropsies...) are free of charge.

Elective courses in food animal clinics complete the formation of interested students.

There are two Diplomates of European colleges (Bovine Health management) on staff but financial constraints prevent organisation of a residency programme in cattle medicine.

The new curriculum will provide an increase in theoretical and practical teaching hours for some pedagogic units (for example an increase of 30 hours in pathologic anatomy).

We noted good Faculty supervision of students in all parts of the curriculum and an ongoing improvement in the frequency of farm animal hospitalization within the faculty (also based on the new isolation unit and the well functioning ambulatory clinic) where the ratio was only R11 = 0,11 (range = 2,47- 1,73).

**Isolation facilities** for large and small animals are purpose-built, spacious and functional.

**Companion animals and horses:** Patient numbers of companion animals are satisfactory with 80% of them being referral cases, especially in small animal surgery. Small animal medicine and surgery are highly successful enterprises; on the other hand, maintaining adequate teaching and clinical standards in equine medicine and surgery is difficult, not least due to a relative lack of experienced permanent staff. This area, although at the present time fulfilling requirements mainly through the experience and the services of temporary staff (foreign Diplomates on sabbatical) and long-term guest lecturers, warrants continuous and special attention. The team, however, received convincing evidence that the position of one board certified guest lecturer in Equine Medicine&Surgery is about to be transformed into a permanent staff position and filled with a Diplomat. Also, there is a graduated veterinarian on staff in equine medicine, employed and paid on the technician level and engaged in clinical tasks and teaching. At the present time, although the Faculty started the emergency service for equine patients, the facility is not yet fully operational due to lack of staff. The equine in-hospital case load and hands-on teaching on horses may at the present be considered adequate, yet needs definitely continuous attention in the future. The availability of additional horses for teaching in the State-owned extramural Equine Centre is, however, an important asset.

Although the anaesthesia service is run satisfactorily by dedicated junior staff, time and expertise for further specialisation is unavailable.

A 24-hours emergency service for companion animals has opened in 2010 in addition to the pre-existing hospitalization service 24/7. The service is fully operational and is a service as well as a teaching unit. It is operating during the whole year (the hospitalization service is operating during 50 weeks per year).

Overall in the Hospital, the number of Board certified specialists is low and residency programmes have not been instituted in all areas staffed with Diplomates. A rotating clinical internship programme is completely lacking.

There is a definite shortage of technical assistance especially in the area of veterinary nursing staff.

There is a general lack of recognition hierarchically and by authorities of teaching efforts, of effort and time spent in clinical services and a serious underestimation of the value of clinical research.

#### **4.4.2 Comments**

At the teaching and experimental farm it would be of a great interest for the students to see also dairy cattle, which are not present for technical reasons and lack of personnel.

Besides bulls, it would also be very interesting to collect semen from rams, boars and stallions, so that the students get some knowledge about the different collection techniques and quality of semen. This seemed not to be allowed by Italian law and the Faculty would need specific authorisation.

In the piggery, neither the requirements for identification of animals nor animal welfare were well respected.(2008/120 EEC). Bio-security measures were also not completely followed as it was for instance the case during the visits of the mobile clinic.

During the visits with the mobile clinic, one farm we saw was in a very poor general condition. Animal welfare rules were not followed and the accompanying teacher did not seem to alert the students or the farmer to this situation, nor was the low standard of animal welfare a subject of a post-visit discussion with the students. There are legal requirements for example for the feeding and watering facilities; but the impression was given that all of these requirements were of no concern

In the companion animal area, although specialisation and clinical referral services are most welcome, the Team encourages admission of a higher number of walk-in clients to provide more hands-on teaching in simpler, day-to-day clinical cases.

Clinical research and clinical services would greatly benefit from an increased number of residency programs; rotating internships also would improve services, would facilitate running the emergency service and would add another important dimension to clinical post-graduate training. Internships are a pre-requisite for entering residency programs, being therefore an important addition to the spectrum of offered continuous education programs.

#### **4.4.3 Suggestions**

Bio-security measures in the experimental farm could be improved. EU Directive 2008-120 "Minimal requirements for animal welfare in pigs" should be fully implemented and practical teaching and general awareness of animal welfare issues and of bio-security in farm animals should be given more weight.

A residency programme in farm animal medicine and other disciplines should be initiated, in which Diplomates are involved; in general, when clinical teaching positions become available and when hiring new academic personnel, precedence should be given to candidates with Board certification and the ability to organise and run residency programs.

The equine clinic needs specific attention, to assure continued coverage of teaching and services on the specialist level when temporary staff will leave.

The establishment of a dairy herd and milking facilities should be considered and students should have the opportunity for practical teaching in the collection and freezing of semen of different food animal species.

The teaching of small animal surgery would be improved if more simple cases (as opposed to the often highly complex surgical conditions being treated) were made available to the students.

Rotating clinical internships in small and large animals should be instituted.

## **4.5 FOOD HYGIENE & TECHNOLOGY AND VETERINARY PUBLIC HEALTH**

### **4.5.1 Findings**

Food Hygiene subjects are distributed in different disciplines of the 3rd and 4th years as Food Hygiene and Technology (6th semester), Inspection, Control and Certification of Food Products (7th semester) and Food Hygiene practical training. Specific lectures amount up to 185 hours (90h+95h) and the 70 hours of practical sessions are referred to 42 hours of laboratory and desk work (18h+24h) and to 28 hours of non-clinical work (12h +16h). The overall time dedicated to these subjects in the Faculty amounts to 255 hours.

Students perform practical classes, both within and outside the Faculty, in different types of subjects: 24 hours/student at slaughterhouses (8 sessions); 18 hours/student at the teaching laboratories (7 sessions); and, 28 hours/student in a variety of outside plants referred to milk and dairy products, meat processing, cold stores, poultry slaughterhouses, wholesale markets and collective catering services (6 visits).

Extramural training in Food Hygiene/Public Health is provided by the competent veterinary and public health authorities at the different local and regional services, summing up a supervised training period of 100 hours (4 credits). The supervision of this training is performed by official veterinarians and it is carried out according to a flexible program proposed by the supervisor and accepted by the student. The student performance is recorded on a log-book and has to be confirmed and signed by the supervisor.

Home work attributed to students in food hygiene and technology disciplines and extramural training amounts to 170 hours.

Sessions are usually performed in small groups (6-10 students), with the exception of the visits to outside plants, which are organized in groups of 20-24 students. Members of the teaching staff are present at each practical session and student attendance is recorded.

The links of food hygiene courses to animal production, pathology, transmissible diseases, pharmacology and toxicology subjects are mainly covered through the practical exposition of students during visits and extramural work to daily animal and public health issues (eg. live animal and animal products tracking; management of obligatory animal disease programmes; monitoring of meat and milk residues; safety monitoring and certification of small food businesses).

The teaching team of Food Hygiene Division includes one full professor, three associate professors, four assistant professors, three hired staff, two Ph.D. students and one technician.

Fish and seafood products, game meat, eggs and honey inspection, although not clearly mentioned in the SER, are also properly addressed.

#### **4.5.2 Comments**

The Team acknowledges the fulfilment and high standard of the Food Hygiene and Safety training in Turin Veterinary Faculty according to SOP recommendations.

The existence of a small but well equipped and functional Faculty slaughterhouse, allows all students to have an adequate and hands-on training in meat inspection. Furthermore, students do visit commercial slaughterhouses of different animal species, dairy plants, freeze stores, fish and seafood markets and collective catering units. There are also adequate laboratory facilities and seminar rooms for video presentations and discussions.

The additional 100 hours of extramural exposition of students at local Public Health units under the supervision of official veterinarians completes a comprehensive and high standard training in food safety and animal health regulations, covering areas such as the control of food retail distribution, veterinary medicinal products and residues.

Teaching staff is well prepared and motivated and was able to gain the collaboration of a significant number of public and private institutions as well as of official veterinarians that permit the performance of valuable practical activities outside the Faculty.

It is also of good notice that Food Safety, Hygiene, Control and Certification fields are gaining another 2 UCL credits for practical activities with the implementation of the New Curriculum and also that most of the practical activities components will be transferred for the last semester of the final year.

#### **4.5.3 Suggestions**

To keep the present high standards in the Food Hygiene and Safety training, the Team recommends that the Faculty gives special attention to the need to allocate sufficient funding to support external practical activities addressed to the large number of students. In particular, due to the need to expose students in small groups to that kind of training, it is suggested that the Faculty might grant financial resources to cooperating partners (food producing and processing plants as well as Public Health Districts), to compensate them for the reduction in productivity of operating lines. Such reward, following the present policy related to the farms visited by the mobile clinic, would be critical when all practical activities of Food Hygiene and Control will be concentrated in the last semester of the DVM curriculum, as previewed in the New Curriculum.

At another level, and considering that core course activities (slaughterhouse, laboratory analysis, visits to outside plants) organised for large student courses, the need to reinforce present support staff is urgent and requires a new laboratory technician or an administrative staff member.

### **4.6 ELECTIVES, OPTIONAL DISCIPLINES & OTHER SUBJECTS**

#### **4.6.1 Findings**

A range of electives of 3 different types is offered to students from the 2<sup>nd</sup> to the 5<sup>th</sup> year of the course. The Team notes that, in the last few years, APS electives (type 3) have become more popular. These are the most professionally-oriented electives and also appear to be the most flexible in their organisation. It was interesting to contrast the uptake over the last 3 years of the CIP (type 2) electives in canine and feline medicine, surgery and obstetrics with the APS (type 3) electives in small animal clinics.

#### **4.6.2 Comments**

The uptake by undergraduates of CIP electives is small by comparison with traditional and APS electives, even allowing for the fact that traditional electives are available to students earlier in the course. Indeed, it appears that the minimum viable number of students (5) completed some of the CIP courses and no course came close to reaching the maximum number (20) of students.

#### **4.6.3 Suggestions**

The curriculum of the CIP electives should be examined, with input from students, to see if they could be made more attractive (or more relevant) to the needs and preferences of undergraduates.

## **5 TEACHING QUALITY & EVALUATION**

### **5.1 TEACHING METHODOLOGY**

#### **5.1.1 Findings**

Teaching methods are classic with lectures, practical sessions and labs; there is strong commitment to hands-on teaching. The concept of research-based teaching is not strongly emphasised. Learning objectives for specific courses are not formally set; in many cases, students learn about the objectives during the course.

As regards teaching materials, students mostly work from the Powerpoint presentations of the lecturer and from personal course notes. Textbooks are rarely used; this is perhaps a reflection of the Team's finding that availability of textbooks in the campus library is less than optimal. Most of the Powerpoint presentations are available on the faculty's webpage after student log-in. Unfortunately, some presentations in Powerpoint format are only available after the class. An e-learning platform, Moodle, was introduced a year ago and is used by a small, but growing number of teachers.

Problem-oriented teaching is not a notable feature, perhaps because of the relative power and autonomy of the Departmental structure.

Each course is evaluated by the students via the Intranet. After the evaluation period of one week, the Teaching Affairs Manager and a student representative inform the class of the result and if the outcome of the evaluation is negative, they analyse the reasons. All results are published on the webpage. No formal action can be taken against a teacher for poor teaching, but the Faculty tries to mediate and find a solution where problems arise.

Teachers also provide feedback to the Teaching Affairs Manager as to students' attention, interest, personal involvement in lectures and practical classes and examination performance. No external/independent evaluators are used for teaching evaluation. Practical teaching has become more important in the new curriculum; more disciplines are involved in practical training and students experience hands-on training from Day 1.

#### **5.1.2 Comments**

The concept of vertical integration could be better applied in pre-/para- and clinical courses. Also, horizontal integration, especially of subjects of the first years, could be improved.

In general, the students are satisfied with the quality of teaching. Where problems arise, they will be brought to the attention of the Didactic Committee so that a solution can be sought.

Students can evaluate courses and teachers' performances via the Internet after attending the course and before taking the exam, but only about 50 % of the students participate in

those evaluations. There is no professional system for evaluating the didactic quality of a course, nor any recognition or award for excellence in teaching.

The e-learning platform Moodle offers more features to both student and teachers than the faculty webpage, e.g. audiovisual files and chat forums for asking questions about areas of difficulty, feedback mechanisms, testing and other interactive tools. It will take some time and special seminars for teachers and students to spread the knowledge and the understanding of the advantages of an e-learning platform.

Although there are a limited number of farm animal patients for teaching on campus, the Faculty makes great efforts to compensate with a very active mobile clinic. In respect of small animal medicine, the students are involved in a significant number of practical training hours in the 24-hour-emergency-clinic, the animal kennel and in rounds at the Veterinary Teaching Hospital itself. However, especially in surgery, the large number of referral cases limits the exposure of students to “day-to-day” cases.

In the new curriculum, students are trained in the handling of domestic animals and the associated basic manipulations from first semester onwards.

### **5.1.3 Suggestions**

Awards for “teacher of the year” in different categories could be implemented to reward good performance in teaching. The awards, besides creating pride and honour, could also comprise technical equipment or personal benefits. These awards could be organized by the student body or by the Faculty, based on course evaluations.

The provision of didactic seminars for teachers should be mandatory before starting a teaching career and for re-training when the results of the course evaluations are not satisfactory.

The E-learning platform needs developing, so that there is one source of information to students, where all relevant information about each course, its structure, learning objectives, and examination requirements, all course notes, PowerPoint files, etc. can be found easily. Additionally, students and teachers could use the communication tools of an e-learning platform to discuss complex topics, FAQs, chat rooms as a virtual classroom, group announcements. Currently, there is no official coordinator for Moodle in the Veterinary Faculty, only some interested and ambitious teachers. The coordination of Moodle should be assigned to the Library as the general source of learning resources.

The introduction of problem-orientated teaching and learning in case presentations in earlier semesters and their relation to the basic subjects could be increased, in order to make the students aware of the importance of the knowledge of preclinical subjects. In clinics, problem-oriented case analysis and discussion should be introduced.

## **5.2 EXAMINATIONS**

### **5.2.1 Findings**

Under national law, the maximum number of examinations (major topics to be examined) which may be set as part of the curriculum is 30 and the rules of the examination system are set by the University. Those responsible for each course are free to decide the form of examination to be used and most lecturers combine several forms of examination. Some examiners assess theoretical and practical skills separately.

In some courses, interim (informal) tests are set, which may result in a lighter workload for students in the final examination for the course; participation in these interim tests is optional for the students.

No external examiners are used for Faculty examinations, though, to be allowed to practice, students must pass the final "State Examination", for which 8 of 12 examiners are external to the Faculty.

Although students may take a particular examination only 5 times during an academic year, there is no overall time limit for taking and passing examinations. However, the Faculty has decided that students must pass certain appropriate "propaedeutic" courses, before they can sit for the final examination in certain subjects.

Overall, students seemed content with the examination system as it stands, but there was a consensus in favour of the introduction of external examiners.

### **5.2.2 Comments**

The examination policy followed by the Faculty seems to be somewhat more stringent than is required by national law, but it still facilitates the existence of "off course" students, some of whom may take many years to graduate, or not graduate at all. At present, only 60% of students graduate in 5 years and the mean number of years to graduation is 6. But these are much better figures than for the University as a whole and better than the average of 7.2 years for other Veterinary Faculties in Italy.

### **5.2.3 Suggestions**

The Team holds the view that the introduction of external examiners for formal examinations, in addition to improving the transparency and objectivity of the examination system, would have advantages for both students and teachers. More central direction by the Faculty of the methods of assessment of students' skills and the type of examination might also be advantageous to teachers and students alike.

The Teaching Affairs Manager and the Teaching Affairs Committee should strive for better coordination of teachers in integrated courses and well structured exams. Especially for the very last exam, the students' practical performance should have more impact on the grading.

## **6 PHYSICAL FACILITIES & EQUIPMENT**

### **6.1 GENERAL ASPECTS**

#### **6.1.1 Findings**

The Faculty moved to its present, purpose built facilities on a campus shared with the Faculty of Agriculture about 10 years ago. All the facilities of the Veterinary Faculty are of a consistently high standard - and are more than adequate for the number of staff and students in the Faculty. The standard of equipment of the lecture rooms, laboratories and necropsy rooms is excellent. The Veterinary Teaching Hospital (VTH) is well designed and well-equipped; it includes lecture halls and seminar rooms and facilities for students on duty in the VTH. Health and safety requirements are met in full.

The Faculty abattoir, Experimental Farm, Feed Production Plant and Faculty Kennel are on the campus and so are easily accessible to undergraduate students. But it is also obligatory for students to visit commercial farms and abattoirs, the International Equestrian Centre at Venaria Reale and offices of the State Veterinary Service for extramural tuition. It does not appear to be routine for transport to be provided by the Faculty for these journeys and the



practice seems to be for students to find their own way, either using their own cars, or by public transport.

The Faculty has its own small abattoir on the campus. This is specifically provided as a teaching resource, but is equipped to slaughter only cattle; food hygiene training in other species is taught at commercial abattoirs away from the campus, which have written agreements with the Faculty to provide training. Also by a formal agreement, the State Veterinary Service provides training for undergraduates in animal health, food hygiene, animal breeding and control of animal by-products at suitable premises off-campus.

Overall, the teaching facilities on campus are close to being exemplary for staff and students and show admirable attention to detail. For instance, in the Veterinary Teaching Hospital, inclined viewing windows at upper floor level allow students to watch surgery being carried out from one of their circulation and informal study areas.

### **6.1.2 Comments**

The facilities and equipment of the Faculty are at present only about 10 years old and no major expenditure will have been necessary for maintenance or replacement. In the present circumstances of financial stringency, such funding may be more of a challenge.

### **6.1.3 Suggestions**

During a conversation with the Rector of the University, the Coordinator mentioned that the Faculty will now have to identify alternative sources of funding (e.g the social foundation of a bank) for essential equipment and services. It would be wise for the Faculty to reinforce this message to the University Senate - with suitable examples – so that the financial support which the University has so far provided to the Veterinary Faculty remains, as far as possible, appropriate and sufficient.

## **6.2 CLINICAL FACILITIES & ORGANISATION**

### **6.2.1 Findings**

The Veterinary Teaching Hospital (VTH) is a state of the art facility, being in use for approximately 10 years and housing facilities for small and large animal (mainly equine) diagnostics, treatment and care. The VTH is part of the Department of Animal Pathology and is directed by a VTH Committee which consists of 11 members, including the Vice-Dean for teaching affairs and a hospital administrator.

The VTH has a separately administered budget with parts of the revenue, generated through clinical services, being returned to the Hospital; those funds may be used at the discretion of the Department head and the Hospital Committee for investments, maintenance and staff employment. A portion of the remaining funds are being distributed in form of a tri-annual financial bonus to the hospital staff, using a distribution key, linked to services rendered.

All premises visited were largely adequate for teaching and for all types of common clinical services. In particular, diagnostic laboratories are well equipped and accessible for students. Bio-safety measures are in operation. Surgery suites for small and large animals (horses) with appropriate annexes (anaesthesia boxes, recovery facilities) are state-of-the art. Medical Imaging is well equipped (digital radiology, ultrasound) and also has a superb CT-spin scan. Equipment and premises for speciality services such anaesthesia, dermatology, neurology, ophthalmology and cardiology are present and in use. An appropriate isolation unit for companion animals is operative and accessible for students with appropriate bio-safety measures.

There is a 24hr/7days Emergency Service running in dedicated facilities provided with all necessary diagnostic tools (clinical laboratory, x-rays, ultrasound) and with safety measures for protection of staff and students on night duty (video-surveillance etc.). An Intensive Care Unit is annexed to the Emergency service, staffed and operating also around the clock. Both services are attended by veterinary staff and by students on duty in small groups according to a schedule of compulsory rotations. For complex surgical procedures during off-hours (e.g. neurosurgery, gastric torsion etc.) senior staff are on call according to a published schedule.

A medical record system is in use with software specifically developed and tailored to the Faculties' specifications and needs. Provisions for retrieval of medical data are such that searches for retrospective studies are possible.

A separate building, comprising a large municipal kennel and treatment rooms for stray companion animals is attached to the VTH. This unit is financed and supervised by official veterinarians of the Piedmont Region but run on a daily basis by faculty staff under a special cooperation agreement. All animals admitted and housed within this unit are used for teaching.

### **6.2.2 Comments**

The following clinical areas require special and increased attention: equine clinics and anaesthesia. Hands-on clinical teaching needs improvement, especially in small animal surgery (orthopaedics and oncologic surgery) where a great number of highly specialized procedures are being performed at the expense of training in the most frequently seen surgical lesions and diseases. Problem-oriented teaching needs more emphasis. A clinical Internship programme would be in alignment of international standards, would provide graduates helping to staff the emergency service and overall would improve first-line hands-on teaching.

### **6.2.3 Suggestions**

Senior teaching staff (one professor each) should be appointed in equine medicine and surgery and in anaesthesia. Both positions should be filled with Board certified specialists. Diplomates should be required to train residents and should be encouraged to seek funding to employ residents. Generation of funds for resident employment should be valued similarly as obtaining research grants. Quality assessment, already in place in most areas, should better recognise and value more appropriately efforts and success in clinical teaching and in clinical research. A rotating clinical Internship programme in both small and large animal sciences should be instituted swiftly. Continued attention should be paid to clinical hands-on teaching in all areas and problem-oriented teaching should be improved. The shortage of veterinary nursing staff needs urgent attention and solution.

## **7 ANIMALS & TEACHING MATERIALS OF ANIMAL ORIGIN**

### **7.1 Findings**

The Experimental Farm and Faculty Kennel both provide students with good access to animals for teaching material, a facility which is utilised from the first year of the course. Teaching can also be provided at the International Equestrian Centre, the Equine Centre of the Italian Army and a large number of off-campus bodies with whom the Faculty has formal agreements.

The supply of carcasses for necropsies appears to be sufficient and, especially since the opening of the Faculty Kennel and the introduction of the 24 hour emergency service at the VTH, the supply of live clinical material has been improved. The mobile ambulatory clinic provides access by students in small groups to farm animals and this is supplemented by

herd health visits carried out in larger groups. The Faculty abattoir and student placements with Official Veterinarians also ensure that students are exposed to animal teaching material.

The Faculty has made strenuous – and successful – efforts to ensure that animal material is available for pre-clinical, para-clinical and clinical teaching. The combination of facilities on and off the campus satisfied the Team that students are exposed to sufficient animal material – alive and dead – to enable them to develop the necessary skills.

## **7.2 Comments**

The presence of a semi-commercial, full cycle pig unit on the campus, together with the other species present on the Experimental Farm assists greatly in introducing students to live animals in a real-life situation from very early in the course. The financial arrangements which support this enterprise were imaginative and innovative and have provided an excellent resource for the Faculty

## **7.3 Suggestions**

Although it is recognised that there is pressure on the budget for running costs of the Faculty, it would be helpful if the Faculty could provide transport for students to off campus sites, as this would further encourage full and prompt attendance at such classes. If this cannot be underwritten by the Faculty, perhaps a contribution could be required from students to support the provision of transport – this might also be more economical for the students themselves than bearing the cost of travelling in their own cars, or by public transport.

# **8 LIBRARY & EDUCATIONAL RESOURCES**

## **8.1 Findings**

The central Library on the campus serves about 2500 students and 200 professors of the Faculties for Agriculture and Veterinary Medicine. Additionally, there are 2 Departmental libraries in the Veterinary Faculty which are available to the students. The main Library employs 7 (FTE) staff, who are paid by the University, and one cooperative librarian, who is paid out of the library budget; in addition, 3-5 students have part-time jobs in the library. The library is open 5 days a week from 9.00 to 17.00/18.00. The staff is adequate and helpful to the students.

Via the Library's webpage, students can renew or reserve books, access electronic books and search for scientific papers in the databases when on campus. Currently, the Library subscribes to 392 scientific periodicals, of which 103 are specifically veterinary-related and 87 can be accessed online. Users of the campus library have free access to e-journals from the main University library and the campus library also has a cooperative agreement with the public library in Turin. The team was told that there are about 2000 loans per year; training and seminars for students in the use of libraries are offered, but are not compulsory.

The books in the Departmental libraries are also catalogued by the campus library. But in order to borrow a book, students must contact Departmental staff. The Team understand that little use is made of this facility, except when special literature is needed – e.g. for theses.

The Team was somewhat disappointed both by the number of standard veterinary textbooks available on the shelves for reference and by the fact that a number were old and in rather poor condition.

There are about 100 study places in the library; the Team was told that these are quite well used on a regular basis and there is significant pressure on places during examination periods. There is another room available in the Veterinary Faculty for private study, but some students find it too noisy.

The University webpage offers a log-in service for all students, where they can find presentations from the courses. A Moodle platform was implemented one year ago and will be further developed in the near future. Wireless Internet is available to students throughout the campus and is widely used.

## **8.2 Comments**

The number and quality of standard textbooks available in the main library seems inadequate and, especially during examination periods, students would welcome the addition of more study places. Students have access to open common areas, some with facilities to observe surgery being carried out, but small study rooms would be useful, to enable students to study, use their laptops and discuss and reflect in groups of 3 to 8.

## **8.3 Suggestions**

The number of copies and the variety of common standard text books, which students need for lectures, practicals and exams should be increased.

The further development of e-learning facilities is to be encouraged; this project should perhaps be coordinated by the permanent staff of the library.

The number of reading places in the Faculty library should be increased and other silent study rooms should be provided, where students can use their own laptops.

For more suggestions concerning the e-learning platform, see 5.1.3

# **9 ADMISSION & ENROLMENT**

## **9.1 Findings**

The admission of students to the undergraduate course is a contentious issue, as the SER recognises. The Faculty has little control over the process and it is frustrating that the most suitable and motivated candidates are not necessarily selected for entry to the course. This problem is built into the structure of the Italian education system and all the Team can do is to highlight it – as other teams have done over the years.

There is a *numerus clausus*, which is set at present at 120 students per year. The Faculty does not expect this to be raised by the Government; rather, it is anticipated that the total number of places for veterinary studies may reduce nationally over the next few years. In that connection, the Italian Ministry has recently said that Veterinary Faculties which do not achieve approval or conditional approval by EAEVE by 2013 will not, thereafter, be allowed to admit any new students.

The Veterinary Faculty requests that candidates who are successful in their application to the veterinary course, but have a poor background in science, should attend “bridging activities” in Chemistry and Mathematics before the official start of the undergraduate course. This helps to alleviate the deficit in these subjects, which is thought to be one factor in the high drop-out rate of veterinary students. About one third of the admitted students dropout or take more than five years to complete their studies. The average duration of studies at the Turin faculty is presently slightly more than 6 years.

## **9.2 Comments**

The selection process for admission to the veterinary undergraduate course is not ideal, but the Faculty has procedures in place to alleviate the situation as far as it is able. It may be that both the selection and the examination systems contribute to the relatively high drop-out rate and the mean number of years taken for students to reach graduation. But the figures for this Faculty are better than for students on other degree courses in the University of Turin and for Veterinary Faculties elsewhere in the country. Keeping the present number of student intake (120) and the policy to take around 20 EU and international students is strongly supported.

## **9.3 Suggestions**

Any measures which the Faculty could take to ensure that students must pass their examinations in logical order and which would limit the number of times students could fail any examination would be welcome in ensuring that motivated and industrious students complete their studies in reasonable time.

At the beginning of the first semester a compulsory seminar could be offered for all students, to provide support in the organization of the student's life at the university, in the management of the work/study load, in learning/studying methodology and in preparation for examinations.

In order to limit the high dropout rate, high school students should be informed in more detail about the complexity of the training process, the various job opportunities available and the labour market for veterinarians.

"Open Days" have already been implemented to raise the awareness of the general public to the topics mentioned above, but information could be provided to make the public aware that the veterinarian has been assigned by the EU full responsibility for controlling the food chain from "Farm to Fork".

Within the constraints imposed on the selection system by national legislation, it would be helpful to include interviews within the admission procedures, during which the motivation of potential students to join the profession could be explored.

# **10 ACADEMIC & SUPPORT STAFF**

## **10.1 Findings**

The ratio of teaching staff to students appears to be good, not only on paper, but when seen "on the ground" around the Faculty. Although financial constraints may affect the ratio to some extent in the short term future, this does not appear to present a major challenge for the Faculty. A high proportion (over 90%) of the teaching staff are veterinarians.

The SER acknowledges that there are too few support staff and there is some scope for employing additional staff - in the VTH in particular – using service income. The Faculty is alert to this possibility.

The average age of Faculty staff is relatively low and this is reflected in a good relationship between staff and students. Academic staff salaries compare well with those of private practitioners (though not so well with other professionals and officials), but job security and pension arrangements compensate, to some extent, for lower direct reward.

## **10.2 Comments**

The relatively small number of support staff presents the Faculty with some challenges, but there are sufficient teaching staff to maintain the level of small group and hands-on teaching.

### **10.3 Suggestions**

Opportunities to improve the provision of support staff should be taken whenever possible. For additional suggestions regarding academic and support staff, please **see 6.2.3 and 4.4.3**

## **11 CONTINUING EDUCATION**

### **11.1 Findings**

Continuing veterinary education – defined as services to the veterinary profession – is included in the objectives of FVMT and a comprehensive programme of continuing professional education is in place. At its core is continuing education provided for Official Veterinarians, who are obliged to acquire at least 50 CPE credits per year.

A Vice Dean for CPE has been appointed to coordinate the various streams of continuing education in which the Faculty is involved and members of the teaching staff are active both in organising courses and providing input. No distance learning facilities are provided at present, but the development of such a system jointly with the Regional Veterinary Diagnostic Laboratory for Lombardy and Emilia is under discussion.

Courses provided by FVMT for Official Veterinarians (ECM Courses) fall within the Quality Control system of the University.

### **11.2 Comments**

Mention has been made elsewhere in this report of the close involvement of Official Veterinarians and practising veterinarians in the education of veterinary students of the Faculty. The appointment of a Vice Dean for CPE should help to ensure better coordinated reciprocity in the efforts of FVMT to provide continuing education for veterinarians of various disciplines in the surrounding region.

### **11.3 Suggestions**

The development of a distance learning platform is to be encouraged.

## **12 POSTGRADUATE EDUCATION**

### **12.1 Findings**

As the SER recognises, post-graduate education at FVMT is somewhat handicapped by a lack of recognition – financial and professional - at national level for residency programmes and PhDs. Furthermore, Faculty members receive no recognition for supervising post graduate students. Also, there is no requirement for veterinarians in private practice to undertake continuing veterinary education (as there is for Official Veterinarians).

### **12.2 Comments**

Supervision of post graduate students is poorly rewarded and it may therefore be accorded a lower priority by teaching staff. But the continuing progression of FVMT towards excellence depends on postgraduate education. The SER makes a number of useful suggestions for improvement, some of which require a change in attitudes at national level.

### **12.3 Suggestions**

Together with postgraduate teaching, the time spent in administration by Faculty members receives little financial recognition. The Faculty should therefore ensure that its administration is as efficient as possible, so that administrative tasks do not encroach on the time available to teachers and they have greater freedom for academic work. For further suggestions regarding residency training programs and rotating internships, **see 4.4.3**

## **13 RESEARCH**

### **13.1 Findings**

The Dissertation thesis of students under the tutorship of a supervisor (permanent member of the teaching staff) is mandatory for all students. The dissertation may be a review or an original experimental work. In fact over 97% (216 of 221) of the dissertations presented over the last 3 years at the Faculty were experimental. Officially the thesis work corresponds to 300 hours (15 credits) but an experimental thesis usually needs more time. Clinical sciences are the more frequently selected topics (between 150 and 200).

Very motivated students have been admitted early in their first years to selected research units, mainly in the Basic Sciences area, participating in all lab activities (on average, 4 students/year).

Since 2007, 4 PhD programs have been organised, with 23 students enrolled. Admission of candidates to the PhD programs requires a public competition.

Public and private-funded positions are available annually. Research grants are available each year at the Faculty

### **13.2 Comments**

Research in basic sciences is excellent with PhD programs, grant acquisitions and an international profile. Public funding of grants for PhD students has decreased with the financial crisis. Clinical research is important with a great number of students but it needs greater support and recognition to develop appropriately.

### **13.3 Suggestions**

The economic situation and cuts in funding by the central government impose new strategies – at the University but also Faculty level - to find alternative funding sources, mainly from the private sector. Applications to European research funds should be encouraged.

Actions should be taken at the national level for: official recognition of the title of European Diplomate; better recognition of the PhD title for non-academic public posts (e.g., in the National Health System or in the national network of Veterinary Diagnostic Laboratories).

Finally, the Faculty should consider the need for better academic recognition of the time invested by tutors to train a postgraduate student involved in a residency training program or a PhD program.

## **EXECUTIVE SUMMARY**

The Faculty of Veterinary Medicine of the University of Turin is among the best veterinary teaching institutions in Italy. The Team was able to confirm this classification made recently by a national academic evaluation agency. For the last 10 years, the Faculty has occupied a purpose-built campus just outside Turin, which is shared with the Faculty of Agriculture.

**Objectives** are clear, unambiguous and geared towards excellence in teaching and research with a strong emphasis on quality assessment and management. SO certification of the entire Faculty was recently obtained.

The **organisation** of the Faculty is classic, with departments and the school headed by a Dean; there are a relatively large number of committees, some with rather similar terms of reference which must impose a heavy administrative load on individual Faculty members. Nevertheless, the outcome seems to justify the situation.

**Teaching** standards conform to EU-directive 36/2005, the EAEVE recommendations of first-day skills and the National legislation on the latest version of the veterinary study program. In fact, a new curriculum has been implemented for 2 years, yielding several improvements, especially in terms of hands-on teaching, which is overall satisfying. The curriculum is balanced, in general; some improvements are recommended in terms of problem-oriented and research-based teaching, bio-safety, animal welfare and in horizontal integration of some basic science topics with clinics. As the new curriculum is progressively implemented in clinics, hands-on and practical teaching will further improve.

The **Veterinary Teaching Hospital (VTH)** is a state-of-the-art facility and is largely adequate for all types of clinical services and teaching. All areas are well equipped with some diagnostic tools being excellent, such as in Medical Imaging. The 24/7 emergency service with Intensive Care Unit and the presence of the municipal kennel are other positive points. Although specialisation of clinical referral services is most welcome, the admission of a higher number of walk-in clients is encouraged to provide more hands-on teaching in simpler, day-to-day clinical cases. Small animal medicine and surgery are highly successful enterprises; on the other hand, maintaining adequate teaching and clinical standards in equine medicine and surgery is of concern - not least due to a relative lack of staff. This area, although at the present time fulfilling requirements, warrants continuous and special attention. Overall in the Hospital, the number of Board certified specialists should be increased and residency programmes in all areas of specialisation should be instituted. The constitution of a rotating clinical Internship in small and large animals is strongly recommended. The number of support staff especially in the clinical areas (veterinary nurses and technicians) is low and should urgently be increased.

The position and title of EBVS-specialist, EBVS-College resident and Intern, hitherto not officially recognised, should be acknowledged by the national authorities for the creation of posts, for recruitment and for promotions. Also, Faculty positions are presently filled by a national system of search and allocation; this system should become more transparent and internationalised.

Efforts and excellence in teaching should be appropriately recognised for recruitment, promotion and remuneration of staff.

**Animal Production** teaching is satisfactory and greatly facilitated by the proximity of the Experimental Farm and a well equipped and functioning Mobile Clinic.

The high standards of **Food Hygiene** training, as outlined in the SOP's, were fully confirmed. There is a small, well equipped and functional Faculty slaughterhouse, and food hygiene training in different animal species, in dairy plants, cold stores and fish and seafood markets is provided.

**Facilities and equipment** are of a consistently high standard - and are more than adequate for the number of staff and students. The standard of equipment of the lecture rooms, clinics, laboratories and necropsy rooms is excellent.



**Student Admission** is a contentious issue of concern in Italy as the Faculty has little control over the admission exam process; selection of the most suitable and motivated candidates for veterinary medicine is not necessarily assured by the design of the national entry exam.

**Research** in some areas, especially basic sciences, is excellent with PhD programs, grant acquisitions and an international profile. Clinical research, on the other hand, needs support, recognition and should develop accordingly.

**In conclusion**, the Faculty is an excellent teaching, research and service facility, fulfilling all standard requirements to produce graduates with satisfactory first-day skills in all areas as outlined in EU directive 36/2005. There are many positive areas, no serious deficiencies and among the weaker points, the equine clinic needs specific attention and continued support to maintain and improve standards. Specifically, **no category 1 deficiency was identified and full approval is recommended.**

*Decision by ECOVE : FULL APPROVAL*

## Indicators

Ratio	Numerator/Denominator raw	1/Denominator	Established range of denominators	Notes
R1	4,4		8.85-10.42	
R2	5,21		8.75/12.54	
R3	9,42		10.62-12.62	
R4	0,93		4.91-7.21	
R5	1,16		0.53-2.20	
R6	0,63		0.51-0.36	
R7	1,22		1.88-2.21	
R8	96,5		0.51-7.87	
R9	0,09		Still open	
R10	0,28		Still open	
R11	0,11		2.47-1.73	
R12	8,27		0.51-7.87	
R13	1,23		0.20-0.09	
R14	1,1 (2,71)		1.78-0.92	

## Final Report

<b>R15</b>	0,16		0.58-0.37	
<b>R16</b>	54,4		48.74-37.94	
<b>R17</b>	0,01			
<b>R18</b>	2,48		0.75-0.46	
<b>R19</b>	2,08		0.26-0.12	
<b>R20</b>	1,92		1.26-0.89	