

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

**REPORT ON THE VISIT TO THE FACULTY OF  
VETERINARY MEDICINE OF THE UNIVERSITY OF OLSZTYN, POLAND**

**From 21-25 May 2012**

**EXPERT GROUP**

**Prof. Dr. Dana Pusta, Cluj-Napoca, Romania**

*Expert Visitor on Training in Basic Sciences*

**Mr. David Black, Carlisle, UK**

*Expert Visitor on Training in Clinical Sciences (Practitioner)*

**Prof. Dr. Karl Schellander (Chair), Bonn, Germany**

*Expert Visitor on Training in Animal Production*

**Prof. Dr. Maria Fredriksson-Ahomaa, Helsinki, Finland**

*Expert Visitor on Training in Food Safety*

**Enrico Bortolotti, Padova, Italy**

*Student Member*

**Prof. Dr. Stefano Romagnoli, Padova, Italy**

*EAEVE Programme Coordinator*

**Ms. Zsuzsanna Nagy**

*EAEVE Office Rapporteur*

## CONTENTS

### Introduction

1. Objectives
  2. Organization
  3. Finance
  4. Curriculum
    - 4.1 General Aspects
    - 4.2 Basic Subjects and Sciences
    - 4.3 Animal Production
    - 4.4 Clinical Sciences
    - 4.5 Food Safety
    - 4.6 Professional, Elective, Optional and “Other” Subjects
  5. Teaching Quality and Evaluation
    - 5.1 Teaching Methodology
    - 5.2 Examinations
  6. Physical Facilities and Equipment
    - 6.1 General
    - 6.2 Clinical Facilities and Organization
  7. Animals and Teaching Materials of Animal Origin
  8. Library and Educational Resources
  9. Admission and Enrolment
  10. Academic Teaching and Support Staff
  11. Continuing Education
  12. Postgraduate Education
  13. Research
- Executive summary
- Annex 1 Indicators*
- Annex 2 Student`s Report*

## INTRODUCTION

The basic structure of the Polish education system is briefly described in the Introduction. All University Faculties are under the Ministry of Science and Higher Education (MSHE). There are no major differences from the way most universities are organized in Western Europe.

The Faculty of Veterinary Medicine of Olsztyn (FVMO) is one of the 6 state owned veterinary faculties in Poland. A chart with geographical location of all Polish faculties is included as Figure n° 1. Poland, which is divided in 16 Voivodeships (or Palatinates = equivalent of Provinces) has historically had 4 FVMs, Warsaw (established in 1927), Lublin (1944), Wrocław (1945), and Olsztyn being the youngest so far (1966). Recently, the Polish Government has decided to allow the establishment of 2 new FVMs, in Poznań (2011) and Kraków (2012). The 4 original FVMs accept each one approximately 200 students each year, while Poznań and Kraków have been allowed an intake of 70 and 60 students, respectively. After the first round of EAEVE visitation the four historical Polish FVMs were all approved, while following the second round Warsaw and Wrocław (2010) as well as Lublin (2011) were not approved.

Poland has a population of 38 200.037 (2010), and more than 14,000 veterinarians. The region where Olsztyn is located, called Warmia-Mazury (WM), with an area slightly larger than the island of Corsica, is one of the largest and most populated provinces of Poland both in terms of inhabitants (1,427,241) as well as in terms of veterinarians (Table n° 1). WM is mainly an agricultural district with a considerable animal population (Table n° 2). Olsztyn is a city of approximately 170,000 people, with about 70 small animal clinics

Voivodships	No. of vets
Dolnośląskie	1 153
Kujawsko-Pomorskie	711
Lubelskie	1 385
Lubuskie	274
Łódzkie	977
Małopolskie	747
Mazowieckie	2 928
Opolskie	362
Podkarpackie	513
Podlaskie	531
Śląskie	1 011
Świętokrzyskie	394
<b>Warmińsko-Mazurskie</b>	<b>1 081</b>
Wielkopolskie	1 185
Zachodniopomorskie	455
Total	14 441

**Table n° 1** – N° of veterinarians in each one of the 16 provinces (Voivodeships) of Poland (2010 data)

	Total head (x1000), Poland	Total head (x1000), WM
Cattle	5760,6	435,7
Pigs	15278,1	670,8
Sheep	267,7	10,8
Horses	264,2	16,3
Poultry	621,602	26,677
Dogs	≈ 9 000	≈ 140
Cats	≈ 11 000	≈ 200

**Table n° 2** - No. of animals (thousand heads) in Poland and in the Province of Warmia-Mazury (as of 31.12.2010).

The FVMO was first visited by EAEVE in 1999, and has been listed among the approved faculties since 2005 following a revisit. The current EAEVE visit took place in a very friendly atmosphere, with the Dean and all faculty members willing to provide as much information as possible to Team members. Hospitality, organization of the visit as well as degree of openness and collaboration were excellent.



**Figure n° 1** – Political map of Poland. The area south-east of the Provinces of Lublin and Subcarpathian was Polish land until 1945 when was annexed by the Soviet Union after World War II, and became part of Ukraine in 1991. In the city of L'viv (Leopolis) there was a Polish Veterinary School prior to 1945; when L'viv was lost to Russia, all the Polish veterinary professors were moved to the University of Wrocław, where a new Veterinary School was established.

## 1 OBJECTIVES & STRATEGY

### 1.1 Findings

The FVMO strategy focuses on the 4 fundamental objectives of undergraduate and graduate education, scientific research and the treatment of animal diseases. As indicated in the SER, the FVMO tries to accomplish these objectives by:

- a) monitoring teaching quality (see also chapter 5)
- b) adopting clear and objective criteria for promotion (see also chapter 10) which are strictly dependent on criteria used by the Committee for Research and Development of Science (a committee of the MSHE whose task is to classify Polish Faculties in one of 4 categories to determine resource allocation<sup>1</sup> (see SER page 1)
- c) raising research grants through the MSHE, the National Science Centre and the National Research and Development Centre (these grants are used to support didactic activity)
- d) trying to obtain the status of National Leading Science which would allow the FVMO to receive obligatorily additional finances from MSHE for an amount of € 845,700 yearly for 5 consecutive years.

<sup>11</sup> The FVMO is currently in the first MSHE science category which correlates with higher Faculty financing

## 1.2 Comment

The objectives are not divided into vision and mission, and in fact a vision is not clearly identified anywhere in the SER, let alone the web site of the FVMO. Objectives are lumped together, are not prioritized, and there is no method for their periodic review or for assessing their achievement. A strategic plan is apparently presented by candidates when applying for the position of Dean, but it is not scrutinized previously. Following a request of the Team, the strategic plan of the current Dean was briefly illustrated, which dealt mostly with improving the quality of teaching, research, publication, international relationship, increased international mobility of staff, promotion of the faculty abroad, development of external service and of collaboration with market companies as well as development of the infrastructure of the Vet School. This document was approved at a Faculty Council approximately 2 years ago, but it does not appear to be a regular feature of the work of the Dean at the FVMO.

Educational objectives are considered very important.. Research is also a very important objective, one which is frequently referred to in all discussions the Team had with the Faculty. However, although Research was mentioned more frequently than Teaching, the Team did not feel that such an objective was in actual facts prevailing over Teaching.

## 1.3 Suggestions

Mission and Vision are two important concepts which should be constantly kept in mind and updated, as well as featured on a faculty web site. While the Mission is regarded as what should be done now, the VISION instead refers to the capacity of looking into the future and getting a perspective of what will be our reality in 10, 20 or 50 years, and through this being capable of a) anticipating the needs of the changing society from our profession, and b) foreseeing potential crises or future developments of the profession of a veterinarian.

Vision for a Veterinary Faculty would identify the long term goals to be set, such as (for Olsztyn for instance) a) becoming (or maintaining the rank of) the most important scientific, professional and continuing education reference for veterinarians and society for the whole of Poland or perhaps for Eastern Europe, or b) becoming fully integrated with Western Europe and the rest of the Western World by gradually increasing the number of European College Diplomats (European Specialists) among its staff and also switching the language of all courses to English, thus becoming a fully international Veterinary School.

The faculty must be commended on the relevant number of PhD programs, and also on the relevant number of faculty members holding a PhD degree. However, PhDs are important for an academic career, but College Diplomates are equally important for professional activities. In Western Europe, faculties where there is a diplomate of a European College quickly become referral centers for that particular discipline. Also, College Diplomates have to undergo a re-certification procedure every 5 years, which means that their knowledge must be kept continuously updated (while holders of a PhD degree have no obligation to keep their knowledge up to date). It is worth noticing that Poland is one of the countries in Europe with the lowest the number of European College Diplomates. There are currently 23 Specialist Colleges in Europe (see [www.ebvs.org](http://www.ebvs.org)) with more than 3000 diplomates and with the countries of Western Europe having between 70 to 150 Diplomates each (and at least a few Diplomates from each College). Poland is way behind, and Olsztyn does not even have one European College Diplomate among its faculty members. **Increasing the number of European College Diplomates is an important aspect of faculty strategy which should not be left to the initiative of single faculty members. The Dean and the Faculty Council should have this as an important agenda item to be discussed on a regular basis** to check how things are going. It may take 20 years for a Faculty such as Olsztyn to acquire European Specialists from each one of the 23 Colleges. But if the FVMO does not put this item very high in its agenda, in 20 years from now the situation will still be the same as today, while perhaps other Polish faculties may have improved in this respect.

**Methods for assessment of achievement of objectives should be established and agreed upon, so that monitoring can be done at regular intervals.** FVMO's teaching objectives are fairly well defined; however, professional instruction of Faculty teaching staff in order to improve their teaching capacity and ability should be listed as an important objective, and courses aimed at reaching this target should be offered either by the Faculty or the University.

Research objectives are not well defined by the FVMO. These should be identified and prioritized among those that are more important for the local community and/or for the Province of WM. Examples could be:

- Study of transmissible diseases in animals;
- Surveillance of health status of animals from zoo parks and of the stray dog community;
- Immunological studies in animal parasitic diseases;
- Innovative research in plastic and reconstructive surgery;
- Manufacturing and testing of new veterinary products;
- Studies on the impact of pollutants, toxins and other substances on animal health and on the ecosystem;
- Metabolism of organic and inorganic nutrients;
- Quality and preservation of semen for reproduction management in domestic animals;
- Biosecurity and biosafety assurance in animal farms;
- Hazards of pollutants, additives, preservatives and drugs on human health;
- Risk and control critical points analysis in foodstuff of animal origin processing units;
- Genetic and clinical identification of hereditary disorders in farm animals;
- Anatomic-pathological and immunological changes in neoplastic and infectious diseases.

The importance of developing and making use of a strategic plan is evidently undervalued by the FVMO. A strategic plan can be a powerful tool to set standards and achieve goals. Without the necessary a) sharing of duties and opinions, b) long brain-storming sessions and c) dedicated team working, it is virtually impossible to produce a strategic plan document which is meaningful. **The FVMO should seriously consider adopting a drastic change in the way its strategic plan is approached.** EAEVE is available should help be needed for the FVMO to develop its strategic plan.

**Develop a Strategic Plan and review it every 3-5 years.**

**Develop methods for assessment of achievement of objectives**

**Increase the number of European College Diplomates**

## **2 ORGANISATION**

### **2.1 Findings**

The UWM is a State University which comprises a total of 16 faculties, and is organised similarly to most other European Universities, except for the fact that students of the Polish State University do not pay taxes. The Dean is elected once every 4 years by all full professors and a representation of adjunct and assistant professors (23%), students and PhD students (20%) and technicians (7%). The Rector can be elected from among the full professors, while professors or Doctors who are habilitated can be appointed for the position of Vice-Rector. The candidate for the Vice-Rector for Student Affairs position has to be approved by the student's member of the Election Committee.

The election of the Rector and Vice Rectors is performed by the Election Committee, which is composed of senior academic staff (50%, 200 persons), adjunct and assistant professors

(23%, 92 persons), non-academic staff (7%, 28 persons) and students and PhD students (20%, 80 persons). The number of representatives from each Faculty is calculated as a percent of the total people in each group. The representation of the FVMO in the 2012 Rector Election Committee was as follows:

- 16 - senior academic staff
- 4 – other academic staff
- 1 – non-academic staff
- 3 – students and PhD students

The Dean is responsible for all faculty matters except for the budget, which is a matter for the Rectorate and Senate. All developmental plans must be approved by the Rector. As in most other academic environments, influencing University decisions requires a great deal of lobbying and networking. At the UWM voting members of the Academic Senate include Deans and representatives of academic staff and students, as well as the 5 Vice-Rectors. A new Rector will take office in September 2012, and one of the newly appointed Vice-Rectors is a professor of the FVMO.

At the time of the visit the FVMO comprised 16 departments, with some of them consisting of as few as 4 people. For reasons (which are unclear to the Team) related to a new Ministerial Law, such a new structure was introduced in 2008, drastically altering what was then perceived as a good faculty organization with only 5 departments. The Polyclinic (providing a 24 hr service for small animals) is not a structure on its own; although it has a Head and a total of 19 veterinarians working there, these are all faculty members taking turns. The only two people working solely for the Polyclinic are technicians.

## **2.2 Comments**

The FVMO is presented with the usual advantages and disadvantages of a faculty embedded into a University. Although a vast majority of faculty members collaborate with each other well, it is the impression of the Team that the organization into 16 departments is not conducive to coordination between different teachers, clinicians and researchers. A classic example is the existence of 3 clinical chemistry laboratories (one in the Polyclinic, one in Internal Medicine and one in Clinical Diagnostics), where an inevitable duplication or even triplication of equipment, instruments, disposables etc occurs. When questioned, several faculty members admitted that it is not mandatory to have 16 departments, which probably means that the new Law allows but is not entirely responsible for the fragmentation of a faculty.

There are plans to restructure the clinics from the current discipline system to a species system. Presently some faculty members favour the species system. However, unless the necessary manpower, patient load and financial support are provided, this system may not be the optimal choice. The FVMO is encouraged to improve the current system, but a critical analysis of needs and resources must be implemented before such a decision is taken.

## **2.3 Suggestions**

The number of departments should be reduced in order to improve the integration and cooperation among the different disciplines and to consider the suggestion made in Chapter 6 concerning the future clinical structure.

### **Reduce the number of Departments**

### 3 FINANCES

#### 3.1 Findings

At the UWM all revenues from the sixteen faculties are retained within the UWM central administration and subsequently redistributed among various units based on per capita as well as “special need” criteria. The UWM budget operates on a calendar year basis, from January 1<sup>st</sup> to December 31<sup>st</sup>. The total budget of the UWM for 2011 was approx 48,263 million (Table 3.1). The University receives funding mostly through the MSHE, but also by renting and selling its own land (approx. 6000 hectares around the city of Olsztyn) or by purchasing agricultural land and reselling it when its value has increased. In recent years the sale of the land has accounted for a significant part of UWM revenues, which have also been used to the benefit of the Veterinary School. The Chancellor of UWM thinks that if a careful selling protocol is adopted, the UWM could continue to expand and flourish for at least the next 40 years. As to the FVMO, additional sources of income are research grants from the EU, the NSC and the NRDC, as well as revenues from services. The University retains 30% from general grant money, up to 60% from EU grants and 15% from money derived from clinical activities and services.

Funds are assigned to Universities and therefore to Faculties based on 70% of the previous year transfer, while the remaining 30% is calculated based on the following indicators:

a) the number of undergraduate and PhD students enrolled	(0.35/1)
b) academic staff component factor	(0.35/1)
c) balanced development factor	(0.1/1)
d) research component factor	(0.1/1)
e) permissions factor	(0.05/1)
f) international transfer component factor	(0.05/1)

The total budget for the above items in 2011 was approx. 2,362 million € (Table 3.1), 70% of which is used to pay for salaries, while building maintenance, teaching costs and other activities (library, physical education, foreign languages etc) are paid for with the remaining 30%. This part of the 2011 budget showed a substantial increase when compared to that of the previous 2 years. Funds for research come directly through the MSHE and for 2011 were a total of approx. 0.6 million € (Table 3.1), approx. 17% less than the previous year. These funds are divided among the different Departments according to their position on the Faculty ranking list. The FVMO has a very good record of scientific production and it is ranked in the highest evaluated group of faculties. Other principles of funds distribution includes: quality and quantity of scientific publications, revenues from research grants, services, revenues from organized meetings and conferences, and post-graduate studies. The FVMO has no financial independence. Whenever a payment has to be made by the Dean or a Department Head, bills are directed to the Rector's office.

The level of funding seems adequate, although the majority of resources in recent years have been derived from national or EU grants. Financial resources seem not to constitute a problem at the UWM, and money seems to flow from the Rectorate with little if any problem provided that a good justification can be put forward. Costs and revenues are not well balanced, as can be observed from tables 3.1 and 3.2 on page 26 of the SER, but this does not appear to be a problem due to the lack of financial independence of the UWM. Research and teaching funds have been well balanced through the most recent years, except for 2011 when a steep rise in research funds occurred.

Financial autonomy is limited by the fact that money generated by the Faculty flows directly to the central administration of UWM. However, after the University has retained whatever it needs to, the remaining sum is put on account for each single staff member and can be used

for research or administrative purposes. Whenever a payment needs to be made, the request is simply communicated to the Rectorate and the payment is made.

### 3.2 Comments and Suggestions

Although the ease with which money is distributed by the UWM is certainly a positive fact in itself, this should not exempt the FVMO from calculating its own budget each year. When administering a large body such as a Veterinary Medical School, a Dean should have a clear idea of how expensive teaching, research and services are. As the training of veterinary students is currently considered one of the most expensive of all the higher education courses (because of its length of study, the advanced facilities as well as the teaching intensity necessary and because of the costs of maintaining animals), a Veterinary Faculty must know exactly what these costs are. The fact that money is not a problem at this time cannot be held as an excuse, as in case of a financial crisis the lack of awareness of costs may be highly detrimental to the quality of teaching.

The lack of financial independence of the FVMO is considered a negative factor. Faculties should be able to count on a budget set by the University. Within a University, Faculties should compete with each other for extraordinary funding to buy new equipments or research tools or to build a new facility, as this stimulates managers, teachers and researchers to improve themselves thus raising the quality of teaching, research and services provided. The fact that money can be given provided a well-documented request is made does not stimulate people to plan their activities, as the only thing that is necessary is to demonstrate to University bureaucrats that the need to receive money is urgent. Failure to stimulate people to plan ahead prevents them from developing a vision for the future. Visionary leaders are fundamental for a University to establish itself as a centre of excellence and become internationally known. Vision is often an innate quality, but can undoubtedly be stimulated by the need to plan ahead, as such need will force managers to ask themselves what the future is going to be like, and how they can cope with a new situation.

Rectors have the responsibility to help their Deans, Division and Departmental Heads to grow as visionary leaders and good administrators. One good way of doing this is to give them a budget at the beginning of the year and test their ability to make the best use of it. On the other hand, Division and Department Heads should be able to count on the income they produce from their own services, as this would be an excellent stimulus to increase their own income by improving their services. Similarly to Deans, Division and Department Heads should be tested for their ability as administrators and their forward planning capacity

Administrative capacities and vision, or good leadership, should be stimulated in all leaders, starting from the level of Departmental Heads up. Departmental and Division Heads constitute a pool of leaders from which a Dean is eventually selected. Deans constitute a pool of leaders from which a Rector is eventually selected. If good leadership is not stimulated beginning with Departmental Heads, sooner or later the University will be guided by a Rector who is not a good, visionary leader. Furthermore, administrative capacities are an important asset for a leader, as otherwise s/he will depend on bureaucrats to run the budget, which can be highly detrimental to any institution as bureaucrats are often known to lack vision.

**The UWM should consider changing its rules of procedure in order to start allocating an annual sum of money to each Faculty using pre-determined criteria, similarly to what is currently being done in most if not all Universities of the Western World.** Funding should be allocated to the Dean's office to cover teaching expenses, and to the Department Head to allow them to cover basic costs incurred in providing services. Faculty and Department budgets should pay for functioning costs (heat, electricity, telephone, internet connection) as well as allowing Deans and Division Heads to pay for the costs of travel, public relations etc.)

**At the end of each year Deans and Division Heads should produce a financial report for the previous year and a budget for the following year, taking into account potential income and expenses associated with services as well as the maintenance of equipment.** Both the financial report and the budgets should be discussed at the Department/Faculty level and approved by the Department/Faculty Council.

At FVMO all academic staff are heavily engaged in teaching and research. However, due to the low salaries some of the clinical teachers are engaged in private practice which must be considered counter-productive in view of their official academic obligations. There is also some lack of technical support staff resulting in a shortage of support for teaching, research and clinical services. Clearly, more teaching animals should be kept available either at the faculty or nearby, and more positions for technical staff should be available, as often PhD students and teachers end up performing technical tasks, which may impact on the quality of their teaching. Also, some buildings are still in need of repair and renovation, both inside and outside, and there is a total lack of disabled access (ramps, elevators) in all buildings of the FVMO.

**The Rectorate and ministry should account for this situation and it is strongly suggested that the budget and monetary support for the FVMO is increased.**

**Consider adopting the habit of producing a financial report each year**

**Consider discussing with the Rector the possibility of Faculties to gain financial independence**

**Increase the amount of financial support from the University**

## **4 CURRICULUM**

### **4.1 GENERAL ASPECTS**

#### **4.1.1 Findings**

The higher education process in Poland is regulated by the Higher Education Act set by the MSHE on July 27, 2005 and its amendment of March 18, 2011 and Attachment 109 describing the minimum requirements for veterinary education in Poland. Such a document includes the list of day-1 skills which a veterinary graduate must obtain and is in accordance with EU directive 2005/36/EU. By law, studies should last 11 semesters, 5100 hours according to 330 ECTS. More than 4000 hours are defined by the 109 attachment. The remaining hours are at the disposal of the faculty, recommended by the Faculty Didactic Commission and confirmed by the Faculty Council. The 109 attachment defines the ratio between theoretical and practical training and limits the opportunity the faculty has to decide how to use the 960 hours left. The numbers refer to the new curriculum which has been in place since 2007/2008. Compared to the previous curriculum, teaching hours were increased from 4980 to 5130, a farm practical module (80 hours) was introduced, intramural clinical training (clinical rotations) was increased from 285 to 300 hours and concentrated into the last two semesters and species oriented training has started to be implemented instead of subject oriented approaches. According to Attachment 109 each student has to participate in courses like Latin and Modern Language, Physical Education, Etiquette, Protection of Intellectual Property and Work Safety. The faculty offers 42 elective subjects from which the students have to select 9 ECTS in the 10<sup>th</sup> and 11<sup>th</sup> semesters. Additionally humanistic subjects (90 hours) have to be taken. Obligatory extramural work is defined by Attachment 109 and covers 80 hours breeding practice (2<sup>nd</sup> year), 160 hours veterinary inspection practice (4<sup>th</sup> and 5<sup>th</sup> year) and 320 hours clinical practice (4<sup>th</sup> and 5<sup>th</sup> year). Extramural work is

done on the basis of specific arrangements between FVM and the host institutions (farms, veterinary clinics, veterinary inspection). Distinct supervisors from the faculty are denominated to be responsible for practical training. Denominators (including self-directed learning, which is not available in Attachment 109) are as follows: R6=1.18 (0.51-0.36); R7=1,47 (1.88-2.21) and R8=38.46 (0.51-7.87).

#### **4.1.2 Comments and suggestions**

The curriculum seems to be as indicated in the SER, however is fixed by law (Attachment 109) at about 80%. The clinical training figure in the SER corresponds to supervised intensive hands-on clinical trainings in small groups. The coverage of the curriculum is in general in accordance with 2005/36/EU, however visibility of rural economic teaching must be increased. The coverage seems to be acceptable in general (see also 4.2, 4.3, 4.4). The given amount of self-directed learning seems to be low, and is said to be limited by the regulation of Attachment 109. Starting with the year 2012/2013 there is expected to be a change correspondingly and self-learning will be implemented as stated in the SOP. The R6 and R7 indicators meet or exceed the requirements. There is a good organisation and offering of electives and extramural work arrangements.

## **4.2 BASIC SUBJECTS & SCIENCES**

### **4.2.1 Findings**

The basic sciences and basic subjects represent a total of 1,285 out of 5,100 hours (25.2%), 706 of which (54.94%) are of supervised training. All the subjects belonging to basic sciences and basic subjects are included into mandatory curricula, except ethics.

The majority of the basic science subjects are taught within the faculty. There are some subjects which are also provided for other faculties (such as Microbiology, Anatomy, Genetics, etc. for the students of Animal Bioengineering). Chemistry and Biochemistry are taught in the Faculty of Animal Bioengineering. Professional Ethics is missing as a subject, but the main aspects of this course are presented in History of Veterinary Medicine and Deontology (ethical problems in veterinary and moral norms in veterinarian activity in the context of medical ethics) and in the course of Ethology and Animal Welfare (ethical ways of treating farm animals, pets and wild animals in different situations – technologies of farm animal production, transport, slaughter- and laboratory animals in a humanitarian context).

In the anatomy laboratories the organs are preserved in formalin (for 12 months). In the pathology laboratory there are trolleys for the cadavers of large animals and the cadavers are preserved in a large cool-room till they are taken weekly by a specialist firm which manages these types of residues, and with which the faculty has a contract.

The students, at the beginning of each practical session are informed about safety procedures and have to sign a form making sure that they read and understood everything. There also exist in the curricula a subject named Work Safety (4 hours of lectures) for the students in the first year, first semester.

It was noted that some of the laboratories where chemicals are used are not provided with eye-washers (although many of these labs are not used for teaching).

The basic science subjects, such as: clinical anatomy, clinical physiology, veterinary pharmacology) are related to the future veterinary clinical activity. The students are usually in groups of 18-20 for basic sciences, although for practical sessions they may be divided into smaller subgroups (anatomy, physiology) when they are supervised by two teachers (or one teacher and one PhD student).

#### **4.2.2 Comments**

The majority of the basic science subjects are taught by veterinarians (except biochemistry) so the teaching is related to veterinary practice (clinical anatomy, veterinary genetics, clinical physiology, pharmacology and toxicology).

The plastinated organs and the coronary vessels prepared for the students are very useful and several are quite spectacular.

The laboratory of histology is endowed with special software for visualising microscope slides, which can be used in the lab, but it is also available on the faculty web-site so it can be accessed from the students' own computers.

The ratio between lectures and practical activities in basic subjects is well balanced..

The low financial support offered by the university may affect both, the quality of teaching (mainly in basic sciences) and also the daily life of teaching and supporting staff.

#### **4.2.3 Suggestions**

**Self-direct learning must be reconsidered and included into the student curricula.**

**There should be an increase in the financial support for the teaching activities and of the salaries of teaching and support staff.**

### **4.3 ANIMAL PRODUCTION**

#### **4.3.1 Findings**

The teaching of animal production subjects is done mainly by the staff of the FVMO. For the subject of animal breeding and husbandry and agronomy the faculty of Animal Bioengineering of the UWM is involved. The total number of hours offered is 375; 180 as lectures, 63 as seminars, 76 as laboratory and desk based work, 46 as non-clinical animal work and 10 others. Teaching starts in the second semester with agronomy, followed by animal breeding and husbandry, technologies in animal production, ethology and animal welfare, and animal nutrition and feedstuffs in the third and fourth semester. Veterinary disease prevention and veterinary dietetics are provided in the fifth year.

Extramural on-farm (intensive dairy, pig or poultry) practical training ("breeding practice") is compulsory in the second year. Distinct teaching of rural economy was not visible. The low number of farm animals in the faculty is compensated for by nearby farms (university farms of the faculty of bioengineering, for dairy cattle, horses, sheep and pigs) or more remote commercial farms visited during the practical parts of the technologies in animal production course.

#### **4.3.2 Comments**

There is a working farm where students can do practical work on animal production. However, especially in the first year no contact with livestock animals is provided for the students. Thus, early exposure to handling of farm animals is not provided, this should be changed in the future.

Teaching hours for animal production are at the lower acceptable range; however they cover in principle the animal production field. They are balanced between theory and practical approaches. Students are well educated in animal nutrition (including clinical and pet nutrition) and feed hygiene. Education in agronomy is theoretical and might not be sufficient.

Animal production subjects seem not be well integrated. There is a lack of integration of ethology and welfare (at least in livestock) with production technology subjects.

Animal production teaching (especially veterinary disease prevention) needs to be much more integrated with the herd-health management disciplines of the respective clinics.

There seems to be a lack of awareness of the integrated stable to table (farm to fork) food chain concept, since no linkage with the training in food safety disciplines was obvious.

#### **4.3.3 Suggestions**

Despite these criticisms, animal production teaching is moving forwards in a promising way. However, **early stage handling experience with food producing animals and distinct teaching of rural economics must be implemented.**

### **4.4 CLINICAL SCIENCES**

#### **4.4.1 Findings**

There are emergency veterinary services for all species run from the mobile clinics and the Polyclinic, within which students have scheduled times of compulsory attendance, including overnight duties. Over and above these, students are encouraged to organise and attend additional duties themselves, depending on capacity within each unit. In the current curriculum, in the last two semesters, 90 hours of hands-on clinical rotations are allocated to each of small animal, farm and equine, as well as theoretical studies prior to these sessions. The caseload of live animals appears adequate for each species, largely because of the busy small animal clinic and the mobile clinic; however access to large animal necropsies is poor meaning that these are demonstrated to large groups with limited hands on opportunities.

#### **4.4.2 Comments**

Despite there being very little clinical exposure prior to the last two semesters, the rotations during this time are intense, with a well described and ambitious wish list of procedures that each student should be able to perform and observe. Moreover there seems to be ample opportunity outwith routine classes for students to gain extra experience in areas of personal interest.

There is no doubt that the commitment, enthusiasm and approachability of the staff encourage students to take every opportunity to get involved if they so wish. However it was also felt that if some investment both in time and money was made in the infrastructure of the departments involved with clinical teaching, even greater benefits could be achieved.

There are several PhD students in each department, who are each expected to undertake a minimum of 90 hours teaching per year, and so are closely involved with small group clinical teaching (PhD students are not expected to lecture in class, but only to provide practical teaching). On the other hand, the numbers of support staff appeared inadequate.

The visitors felt that a basic level of “day one skills” would be achieved in each species, but that the opportunity to be very well prepared in an area of particular interest was also available. The employment environment in Poland means that graduates often set up their own practices at, or very soon after graduation suggesting they are adequately prepared by the Faculty; this view was supported by local practitioners who felt very comfortable employing Olsztyn graduates.

#### **4.4.3 Suggestions**

**Consider how the inter-connectivity of the various clinical teaching facilities, and the patient flow through these could be improved to enhance student learning.**

**Consider how the number of support staff to veterinary teacher ratio might be improved.**

**More investments both in time and money should be made in the infrastructure of the departments involved with clinical teaching,**

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

### **4.5.1 Findings**

Food hygiene and technology, and veterinary public health are taught at the Department of Veterinary Protection of Public Health. The discipline includes in total 520 h including 330 h core subjects, 160 h extramural practical training and 30 h obligatory elective studies. The core subjects consist of lectures (120 h), seminars (19 h), supervised practical training (152 h) and other works (39 h). Most of the core subjects are taught during the 4th (meat and milk hygiene) and 5th (hygiene of products of animal origin) years.

The Department organises 4 elective courses (each course is 15 h): (1) approval of food industry establishments, (2) systems of food quality, (3) hygiene of aqua-cultural products and (4) sensory analysis of food. At least 2 of the proposed courses have to be chosen by the students. The elective courses are for the students in the 10th and 11th semesters.

Additionally, specialisation training in Hygiene of slaughter animals and food of animal origin is organised by the department. The specialisation lasts 2 years and can be commenced after 2-years in practice. At the moment, 40 veterinarians are participating in this specialisation training.

The department is active in research even though the teaching load is high. Teaching hours for professors are 210 h, for assistants and habitants 240 h, and for PhD students 90 h in the year. At the moment, there are 4 PhD students at the department (2 in food hygiene and 2 in milk hygiene). The main research topics are (1) sensory analysis of traditional meat products, (2) *Salmonella spp.* in chicken, (3) *Staphylococcus aureus* and (4) *Mycobacterium Avium subsp. Paratuberculosis* in milk. For these topics, 3 grants have been awarded.

At the moment, there are 2 full-time professors, 1 associate professor, 4 assistant professors working at the department. Additionally, 3.3 support staff are working with teaching (33 %), research (33 %), services (24 %) and administration (10 %).

#### *Extramural practical training*

There are two obligatory extramural practical training periods. In the fourth year (8th semester) there is 2-week (80 h) training in a slaughterhouse and in the fifth year (10th semester) 2-week (80 h) training in a food processing plant. The training has to be done during the holidays. The students mostly organise the training and pay the costs (travelling and living costs) themselves. The training has to be done in selected slaughterhouses located in Poland which slaughter pigs and/or cattle. Usually 2-3 students train at the same time in the same place.

#### *Internal and external training*

Internal supervised training (laboratory and desk-based work) is included in three subjects: (1) hygiene of slaughter animals and meat, (2) hygiene of milk and milk products and (3) hygiene of other food products of animal origin (poultry, eggs, fish). The laboratory work is done in groups of around 20 students which are further subdivided into small groups of 4 students. The training mostly takes place at the veterinary faculty but the practical training of

milk products (including different heat treatments, fermentation, cheese, butter and ice cream production) is located in the very new didactic dairy processing plant at the faculty of Food Science. The training is obligatory.

The external supervised training is performed in slaughterhouses and food production plants including dairy plants co-operating with the University of Warmia and Mazury. The slaughterhouses and food production plants are located within a distance of 7 to 71 km from the faculty. Each student performs a 2-3 hours practical training in a group of around 15 students (which is further divided into a subgroup of 5 students), with 2 academic teachers and an official veterinary officer in slaughterhouses, in a dairy plant and in food processing plant. Each student will get familiar with cattle, pig and poultry slaughtering, processing of milk and milk products (including cheese) and meat products. Also these training sessions are obligatory.

#### **4.5.2 Comments**

In total, 520 h (about 10 %) teaching is given by the department, which are less than the 12 % recommended by EAEVE.

The food hygiene teaching including meat inspection is not clearly linked to farm level and the “farm-to-fork” concept is missing. It also remained unclear if the importance of food chain information is taught in the lectures and learned at the slaughterhouses. The animal welfare (transportation, lairage, ante-mortem and stunning) aspects are taught in lectures and learned during the practical training at the slaughterhouses. No ritual slaughtering is performed in the slaughterhouses where students do their practical training, however, there does exist one slaughterhouse, which performs ritual slaughtering for cattle without stunning but by using a special equipment.

The supervised external training is done in small groups of 15 students, which are further divided into subgroups (5 students) at the slaughterhouses and meat processing plants, which is very learning friendly. During the visit to a red-meat (pig and cattle) and a poultry slaughterhouse, both of which also include meat processing plants, it became clear that the co-operation between the department and the companies works well. This is a prerequisite for successful external training.

There may be growing difficulties in organising the extramural training in the future because two new faculties have recently been established. The students seem to have some difficulties finding training places already this year. One reason is that fewer slaughterhouses and processing plants are willing to take students for practical training.

#### **4.5.3 Suggestions**

The proportion of time spent on food microbiology, and biological and chemical food safety hazards are adequate. However:

**The time spent on food spoilage could be increased.**

**The time spent on a risk-based approach to ensuring food safety and quality should be increased.**

**In the food hygiene training, there should be a clear link to farm animal health and welfare, and zoonosis.** One possibility is to organise different elective “farm to table” courses; for example pig or poultry production from farm to table. Every student should take one of these courses to get familiar with the whole food chain concept.

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

#### **4.6.1 Findings**

A long list of 42 elective subjects is available on pages 31-32 of the SER. The students have to choose at least 6 of them during the 10th (2 subjects) and 11th (4 subjects) semester, for a total teaching load of 90 hours and 9 credits. If interested, students can also take more than just 6, provided that the course is actually organized (as a minimum of 12 students is necessary for the course to be offered). Furthermore, students have to also take three courses (for a total of 30 hours) in humanistic subjects such as Aesthetics, Cultural Anthropology, Cultural Heritage, Economics, Ethics, History, History of Art, History of Poland, Law, Logic, Music Education, Knowledge and Culture, Philosophy, Philosophy of Culture, Philosophy of Nature, Psychology, Sociology, Study of Polish Language and Culture. There is no tracking.

#### **4.6.2 Comments and Suggestions**

The offer of elective subjects is quite good and well structured. The effort of improving the students' humanistic preparation is to be appreciated.

### **5 TEACHING QUALITY & EVALUATION**

#### **5.1 TEACHING METHODOLOGY**

##### **5.1.1 Findings**

The teaching methodologies are comprised of multimedia presentations by the lecturer and practical work sessions in basic sciences generally begin with 10-15 minutes of general PowerPoint presentations and after that the students perform different experiments and finally they analyse and compare the final results. In anatomy they use bones, organs, models (plastinated organs, dry inflated organs) while in physiology, pharmacology, toxicology they use experimental animals (such as frogs and mice). In anatomy there are three-dimensional models of bones and organs available on the university website and in histology a wide collection of slides which can be accessed by the students after they log in.

The specific objectives are set for each course and they are presented to the students at the beginning of each semester and they are also available on the university website.

The students use their own hand-notes from the lectures, the teacher's textbooks and also some extra-information previously prepared by the teachers from research articles. In histology the slides are processed with special software so that the students have access from the university website.

At the end of each course there is an evaluation of teaching methodology by the students using multiple choice and open questions.

The teachers are also evaluated as to their didactic and research activity every two years, according to the law. The results are announced at the Faculty Council.

In basic subjects the supervised training and theoretical classes are well balanced (54.94%).

For supervised activities in basic sciences, at the end of each important part of the subject, the students have a quiz (2-4 per semester) and this is taken into consideration at the final exam (oral or written during the exam session period). Every student can retake an exam a maximum of twice.

Each clinic is composed of: internal medicine, surgery, obstetric and infectious disease. The practical rotations are followed by students during the 10th and 11th semesters and they

have to do 270 hours divided in 90 hours for “small animal clinic”, 90 hours for “equine clinic” and 90 hours for “farm animal clinic”.

Each student has an evaluation syllabus where all the activities of the day is described, for every case they are required to report the anamnesis, symptoms, treatment, laboratory exams, prognosis; at the end of which the tutor has to evaluate the student’s practical activity with a score and sign to testimony his supervision. Only if a good level of manual ability of day-1 skills is reached can the syllabus be signed.

Clinical practice is followed by students after the 8th and 10th semesters during the summer holidays. Each student must choose a clinical division in which they are interested and spend 160 hours after the 8th semester and 160 hours after the 10th semester working with the supervision of teachers and PhD students. It is allowable to spend this period with a private veterinarian that has been approved by the Faculty. The student has to register all the activities done in a “practice diary” (similar to the clinical rotation one) and at the end of the period the tutor signs the diary as testimony of the work made.

### *Student Welfare*

Although the academic and teaching staff at the Faculty appear very approachable, and this was confirmed by the students the visitors spoke to, there seems to be no formal system of student support. There was no structured additional support for students struggling with the course, which may be a factor in why so many have to repeat years. There appeared to be nothing in place for a student with family, social, or mental health problems, or any way that a student could alert the Faculty to a colleague they were worried about.

There is a lack of access to food or drink within the Faculty – we understand that this is due to state-aid laws associated with refurbishment grants, but it is not acceptable for students to have long days without ready access to refreshments or food. Vending machines were available within one of the buildings of the FVMO until recently, but they have been moved further away on campus, at a distance which renders impossible to take a short break for a snack.

### **5.1.2 Comments**

The teaching methodologies in basic sciences are very modern and they are both problem-oriented and also based on the most recent research. It was the team’s impression that the teachers in basic sciences prepare well the students for their future clinical activities. The students have access via their website to very modern methods of learning (especially in histology and anatomy).

Unfortunately the evaluation score doesn’t sufficiently influence the professor’s curriculum.

The amount of hours that each student spends in practical rotation is really optimal, because it guarantees a sufficient number of clinical cases, a quite complete overview of the clinic of all species and also the chance to see less common diseases.

### **5.1.3 Suggestions**

**The teacher evaluation must consider both aspects of their role - both their teaching activities and their research.**

**The best teachers should be rewarded for achieving the best results.**

**In the case of a teacher with bad results the situation must be analysed and taken into consideration**

**Consider a formal system of mentors, or year-tutors so that students have a clear route to discuss problems they may be having – this should be backed up with access to counselling and health care.**

**Consider how students may have ready access to refreshments somewhere within or close to the Faculty – perhaps by re-establishing vending machines where they were originally.**

## **5.2 EXAMINATIONS**

### **5.2.1 Findings**

The University rule allows a maximum of four exams with a minimum 30+/-3 ECTS each semester. Besides that, there is no central examination policy for the individual examination. They can be oral, written, practical etc. depending on the decision of the people responsible for the teaching subjects. Information on the examination procedure to be used is always given in the syllabus at the start of the corresponding courses.

There are winter- and summer sessions for examination which are approved by the UWM Senate. Sessions are free from teaching, additionally retake sessions are considered. There is generally only one examiner, thus no external examiners are involved.

According to UWM regulations students must pass all the first year compulsory subjects. If they fail to pass they are suspended from the University. Starting with the second year two retakes, before suspension, are allowed. In this case, suspended students are allowed to apply for re-admission within three years.

The examination system seems to be effective. There were no general complaints from the students. Students have in general to sit and pass examinations before they are able to continue with the next semester.

The DVM degree is achieved through the acquisition of at least 330 ETCS (minimum of 5100 h) but without any final written work. Credits can only be earned by passing the final exam for each course. There are a maximum of 4 exams in each semester. There are two exam periods free from teaching in the year.

There are no external examiners.

The students can retake the exams twice. However, students who have failed 3 times, can apply for re-admission within 3 years. The students can also appeal the fairness of the exam and apply for examination in front of the commission (vice dean of study, examiner, second teacher, tutor, student).

There is no central examination policy for the form of exams; however, the information about the type of assessment to be used has to be explained in the syllabus available on the website of the faculty. Oral examinations, written tests (including short essays and multiple choice) and practical tests are all used. The obligatory practical work sessions are assessed by examining the learning diary and/or oral examinations depending on the teacher.

### **5.2.2 Comments**

During the first year, students have to pass all the exams in the compulsory subjects to be able to continue. Currently about 20 % of the students are expelled and only around 80 % are able to start the second-year studies.

The examinations at the FVM are regarded by the students as fair but challenging. The form of examinations is based upon the individual decision of the examiner, including the requirements to get admission to the respective exam.

There is no clear assessment of the quality of the examination across the different courses.

### **5.2.3 Suggestions**

In the interests of fairness, **the team recommends to allow at least one retake of the first year exams.**

## **6 PHYSICAL FACILITIES & EQUIPMENT**

### **6.1 GENERAL ASPECTS**

#### **6.1.1 Findings**

The building of the faculty is 30 years old but it has been almost completely renovated. The four amphitheatres are renovated and well equipped with multimedia presentations. The laboratories for student's activities are provided with modern equipment (special software and data presented on a website). The dissection room was provided with two tables for small animal and one for large animal necropsies, trolleys and cooler chamber for preserving the cadavers. The library is very modern with a large number of books and periodicals available for the students.

The students are transported by three vehicles belonging to the mobile clinic to the farms. There is also a practical period (animal breeding) of one week for the students in the second year and also two weeks of practical stage (one per semester) for the students in the fifth year. There is also a vehicle for transportation of large animals (2 places) to the veterinary faculty.

In the newly renovated area there exist biohazard warnings on the doors of the laboratories.

The equipment for research is modern and allows for modern research.

#### **6.1.2 Comments**

There are no marks for the validity of the fire extinguishers, they seemed to be marked only with the fabrication date (2003 till 2010) and no validity or signs of period verification is marked. Some of the fire extinguishers were completely missing from their places.

The exit ways are generally marked (in the renovated area), but some of the doors open inwardly so this would be a serious impediment in case of fire.

In some of the laboratories where the personnel are exposed to chemicals the eye-washers are missing.

In some laboratories the chemicals and drugs are freely exposed on shelves.

#### **6.1.3 Suggestions**

**The fire extinguishers must be checked for their validity and it is necessary to replace the missing ones.**

**The renovation of those parts of the buildings which have not been renovated yet should be completed.**

**In the entire faculty there should exist facilities for disabled people.**

**It is necessary to mark all the bio-hazard areas.**

## **6.2 CLINICAL FACILITIES & ORGANISATION**

### **6.2.1 Findings**

The Veterinary Faculty is situated within the large Kortowo campus of the University of Warmia and Mazury. This is in a beautiful setting on the outskirts of Olsztyn with well-maintained grounds including lakes, and with all student facilities on site. The Veterinary Faculty itself is housed mainly within two large buildings, both about 30 years old, but well through a complete refurbishment program.

There are 16 separate departments within the Faculty as well as the Polyclinic and a base for the Mobile Clinic but due to reorganisation of departments over the years, teaching areas, research areas and laboratories are not logically arranged and are dispersed throughout the buildings. There are several laboratories throughout the Faculty and there is a good range of modern diagnostic and imaging equipment, including a modern electron microscope and an MRI facility, which appears to be well utilised.

The Polyclinic provides a full out of hours' services for most of the private clinics in the area ensuring a good supply of emergency cases and which includes a basic intensive care facility. The Mobile Clinic also provides a 24/7 service for large animals, There is a relatively new small animal isolation facility, which can also accommodate wild animals (such as bats and foxes in case of suspect rabies). A large animal isolation facility is newly completed – this would be appropriate for two large animals, and is built to a very high standard with monitoring cameras, a sewage treatment facility shared with a new high biosecurity poultry research unit, etc.

### **6.2.2 Comments**

Overall the facilities are in good repair, although some areas are almost derelict including some basements. There is very little sharing of facilities other than the larger lecture theatres, and this is particularly noticeable of laboratories; such little centralisation of resources, would indicate both excessive costs of establishment and running these facilities. Although many departments claim to provide external services, it seems that in real terms this is limited to the poultry and fish departments. The visitors would like to have seen a greater emphasis on teaching facilities rather than research, but accept and understand that the nature of funding in Poland causes a skew towards this type of investment.

Clinical facilities seemed adequate, with the Polyclinic “feeding” cases to the more specialised departments. Theatres and animal housing were in good condition, clean and suitable for the intended species. One curiosity was the penchant for owners to want to stay with their pets throughout nearly all procedures except surgery – this meant some areas can become crowded with pets and owners.

The visitors had a general feeling of the many departments being disjointed. It seemed to the visitors that there could be better connection between the Polyclinic, - which is a “virtual” department staffed by an amalgam of vets - and the specialisms, and particularly between the ambulatory large animal services. For example, the clinics use different patient record computer systems and there is no coordinated reception or waiting areas for small animal patients.

### **6.2.3 Suggestions**

**Consider some rearrangement of the facilities with more sharing to enhance the teaching experience and reduce capital and running costs.**

**Consider an overall strategy to better integrate clinical departments, including computer systems and public areas.**

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

### **7.1 Findings**

There is a busy first opinion small animal clinic on site – the Polyclinic - which is also one of only two in the area providing an out of hours' service. This clinic performs over 12,000 consultations per year generating cases for further investigation by the specialist departments (surgery, medicine, reproduction and diagnostics), which also take referral cases from local private practices. Students are expected to attend the Polyclinic as part of their clinical rotations and to do at least one full night duty in each of the last two semesters, while also attending practical classes in the specialisms.

There is also a mobile clinic for farm animal and equine cases, which was established in 2003 and now has 3 vehicles and 5 vets – two students with each vet are scheduled to attend visits, which include emergency ambulatory work and pre-arranged herd health and fertility visits.

There is a University farm where there are dairy cattle and horses – despite the facilities being old, “tired” and in need of investment they are currently adequate.

There appeared to be an adequate supply of preserved specimens, such as bones (skeletons), plastinated dissections, and fresh tissues for teaching. There is also a reasonably well-stocked museum of permanently preserved specimens. Any preserved specimens for student use are kept in formalised saline in sealed barrels before being rinsed thoroughly prior to dissection. These are not kept preserved for more than one year.

### **7.2 Comments**

The staff in all areas of clinical teaching seemed enthusiastic and motivated both as clinicians and as teachers and are to be commended.

In general, the numbers of animals seen appear very adequate with cattle numbers in particular increasing significantly. Although the number of equine patients seen at the faculty, of approximately 100 per year reflects the interest of equine clinicians at the FVMO in light of the difficult economic situation, there is a potential for improvement. R14 is slightly below the limit, however this is well balanced by the number of equine patients seen by the Mobile Clinic as well as on outside teaching services (see Table 7.4a and 7.4b of the SER)

Fewer farm animals are seen at the faculty clinic (only around 30 ruminants per year and no pigs, which is reflected by R11 being below the accepted range) despite there now being a dedicated vehicle to collect patients – economic reasons were given. However, the low R11 value is offset by both R12 (consultations outside the faculty) and R13 (number of herd health visits) being well above the limit. As with many other European Veterinary Schools, the difficulty in getting high numbers of food animals at the School premises is well counteracted by the mobile clinic service.

Rather confusingly there has just been established a different ambulatory service for large animals by the internal medicine department. This does not seem to be coordinated at all with the mobile clinic, and this approach seems to be inefficient in both commercial terms and access to clinical teaching.

It seems that the University Farm is not being used for animal handling classes, and is viewed as any other commercial farm seen by the mobile clinic. The farm is shared with the Faculty of Biotechnology and there are very good classroom teaching facilities that are not being used much. Some young cattle were seen tied by the neck, apparently for 24 hours per day and this is a practice that should be stopped.

Investment in this farm will be necessary very soon, and this was felt by the visitors to be a potentially excellent resource that was not being utilised. There would be opportunity for animal handling classes to be taken at this farm, earlier in the curriculum than currently scheduled, so that non-rural students had a better opportunity to become familiar with handling these species. Regular routine tasks such as disbudding calves, foot trimming, ear-tagging etc could all be introduced on this unit with good effect. There are no longer sheep on this farm, and there have never been pigs, which is a shortcoming.

There is limited access to pig farms for clinical teaching other than as passive visits. However, the number of pigs seen during Mobile Clinic as well as outside teaching services (see Tables 7.4a and 7.4b of the SER) is thought to be adequate.

There is an active poultry department at the faculty with access to material from the University's own farms and private clinics, which is reflected by R 19 being very good. And there is a recently established and growing aquaculture department with small numbers of fish on-site, and access to commercial units.

Some animals are utilised at the abattoir or sourced from a local dealer for teaching on – for example rectal examinations, abdominal surgery after pharmacologically inducing abomasal displacements, teat surgery etc. There was concern amongst the visitors that these procedures had animal welfare implications. When questioned about such animal welfare concerns, clinicians at the FVMO a) admitted that these procedures were started long time ago by a faculty member now retired, and b) accepted that the welfare implications were serious and declared that these would be stopped immediately.

The supply of necropsy experience is an area of concern, especially with regard to large animal numbers – in the last academic year, at the Faculty only 3 cattle, 6 small ruminants and 3 equine were subjected to necropsy, despite a very suitable necropsy theatre. This is reflected by R18 (number of large animal necropsies) being below the limit, and the visitors did not consider this adequate. When the issue was further investigated, it appeared that another 20-25 cattle or calves were necropsied on a yearly basis “on-farm” by the mobile clinic, and are being officially recorded by the Veterinarian on duty. Cost to the farmer/equine owner was cited as reasons for lack of submitted cadavers. It seems there is no central or government facility to provide gross pathology facilities for farm animals, so most farm animals that die are not subjected to a post-mortem examination – this is an unfortunate position. It was also felt by the visitors that an average of 21 cats per year was low and should be easily remedied, such as using euthanized stray cats.

There is very good exposure to cattle and pig slaughtering, but very limited/no access to sheep.

Barbiturates and sedatives were kept unlocked in the mobile clinic (for sedation and euthanasia of large animals), which is not ideal, where students or farm workers have access to them. They were kept in a locked steel cabinet within the dispensary at the Polyclinic.

### **7.3 Suggestions**

**Reconsider the role of the University ethics committee in assessing animal welfare when teaching medical or surgical procedure in healthy animals.**

**Consider ways to improve the access to large pig farms for swine herd health work.**

**Consider some early investment in the University farm and equine infrastructure and reintroduce sheep and even some pigs to give a broader range of animal handling opportunities.**

**Consider the “purchase” of live cases from farmers which would give students valuable teaching material on-site, and if unsuccessful would provide necropsy material as well. Unless the number of food producing animal and equine necropsies is improved there is a potential for a major deficiency.** There is also an opportunity for a win-win situation by providing a gross pathology service for farmers in the Olsztyn area; giving valuable information to the producer while providing enhanced teaching opportunities. It may be that equine cadavers have to be purchased but a plan must be put in place to remedy this deficiency.

**Consider finding additional drivers for the large animal collection vehicle and further promoting the availability of this service.**

**Consider having a lockable metal container in the mobile clinic vehicles for storage of dangerous drugs.**

## **8 LIBRARY & EDUCATIONAL RESOURCES**

### **8.1 Findings**

The university library is located in Kortowo II, it is a building of three floors with a total of 19.423 square meters, and with 140 full-time employees. The library can be used by the university students and also by the Olsztyn population, due to it being a public library service.

Students are trained at the beginning of each academic year on how to use the library and its facilities and technology. Each student is given a personal library account to get access to the data-base system called BMS (with alphabetic, author indexing) to borrow books and scientific journals and use their “student card” to collect the reserved books at the counter. They can use the books for 30 days (from the Loan Department) or for 150 days (from the Didactic Collection).

The library provides 54.746 veterinary books (in volumes), 337 veterinary e-journals (in titles), 1.637 veterinary e-books (in titles), 294 veterinary periodicals and journals each year (hard copies).

The timetable is from Monday to Saturday 08:00-22:00; during vacations from Monday to Friday 09:00-16.00.

The building also offers different rooms: 8 single-work rooms (with wireless internet), 4 group-work rooms (with wireless internet), 420 PC stations with internet service, a conference room for 320 people, and has relaxing and meeting spaces with a cafe.

### **8.2 Comments and Suggestions**

**~~Library preparation and information skills training for student and other library users should be provided.~~**

## **9 ADMISSION & ENROLMENT**

### **9.1 Findings**

Presently (30/10/2011) there is a total of 992 students at FVM. The available places per year between 2008 and 2010 was 208. In 2011 from 884 applications 179 students were finally admitted. The admission procedure is regulated by state and University law and is solely based on 3 grades (foreign language, biology, chemistry/mathematics/physics) of the final high school examination (matura). Thus, a selection to include other desirable traits (aptitude, motivation) is not possible. The number of annually admitted students is determined by the UWM-Senate based upon a proposal from the faculty. The faculty aims to decrease the intake, because of limited teaching and facility resources.

There is a link between the budget and the number of students, since the formula regulated money distribution from the MSHE includes also a term with number of students. The intake does not account for the national needs of veterinarians. The budget subsidy is composed of the basic (70%) and variable indicators (30%); the number of students (and PhD students) is one of these variable indicators and has a scale of 0.35, so the total percentage is 11% of the budget subsidy. The Olsztyn veterinary medicine faculty is reducing each year the number of admitted students to reach an optimum of 180 students; this decision has been taken to improve the quality of teaching (being able to follow more accurately each student) without a significant reduction of the budget that could badly influence the faculty system.

About 60% of the students complete their study in the standard time, about 20% resign and about 75% to 80% of admitted students finally graduate. The drop-out rate in the 11 semesters is about 30%, with 20% being in the first year. This high selection is due to the fact that 1<sup>st</sup> year students have to pass all compulsory subjects

The admission is based on Matura (the results of final exam of the high-school). The students are selected on the basis of examinations of 3 subjects: foreign language, biology and chemistry or mathematics or physics. The candidates apply for the studies electronically. The full-time studies are free of charge for EU citizens.

There are around 1000 candidates applying for admission and the intake of veterinary students is between 180 and 200. Of the around 1000 undergraduate students, 66 % are females and 34 % males. The faculty aims to reduce the number of admitted students not to exceed 180 per year.

The drop-out rate is highest (around 20 %) after the 1<sup>st</sup> study year. One reason for this is that the 1<sup>st</sup> year students have to pass all the compulsory studies (biology, histology and embryology, anatomy and biochemistry) and they are not allowed to retake the examinations if they have failed. The drop-out rate decreases drastically after the 1<sup>st</sup> year and around 60 % of the students graduate during the 6<sup>th</sup> year and the rest (10 %) later, usually in two year.

The number of the academic staff depends on the number of students. There is also a link between the number of students and the budget.

### **9.2 Comments and suggestions**

Admission is done according to state laws and based on average grades of final high school examination. Since the drop-out rate is moderate and the average study duration is in an acceptable range the system yields acceptable results.

Foreigners can apply for full-time study if they have appropriate certified knowledge in Polish language, and if they have exams equivalent to Matura.

Most of the students are females; however, the number of males (around 1/3 of all students) is high compared to other European veterinary faculties.

The academic staff is satisfied with the number of the students because the number of academic staff depends on the number of students; however, decreasing the admission of students from 200 to 180 will probably improve the quality of the teaching.

The number of graduated students has so far met the national needs of veterinarians but in the future, it is likely that too many veterinarians will be educated for the national market because two new veterinary faculties have recently been established.

Admission of the students with the highest marks does not mean that the most motivated candidates have been selected; however, the students in this faculty seem to be very enthusiastic.

## 10 ACADEMIC & SUPPORT STAFF

### 10.1 Findings

The teaching load for academic teachers (teaching and research obligations) is 210 hours/year for professor, 240/year for assistant professor and assistant, 360 hours/year for lecturer. PhD-students (who normally receive a fellowship) are also expected to provide a minimum of 90 hrs of teaching per year, which is normally done as practical work sessions or laboratory sessions (not as lectures, which are done by professors). All academic teachers and lecturers are in full positions. As stated in the SER, Table 10.1, there are 171 FTEs, with a vast majority of them being veterinarian. 41/171 FTE are accounted for by technical staff.

As became obvious during the interviews, most of the academic staff have graduated from the FVMO. There are four levels of academic teachers. Promotion depends on the availability of a vacant position but also on the achievements in research and to some extent also in teaching. The *habilitation* is an essential condition to get promoted to an associate or a full professor. At the FVMO, a point system for selecting candidates for academic promotion has been in place for over 2 decades and is constantly being refined based on MSHE requirements (Table n°3). Promotion depends on the numbers of points acquired by individual researchers through their publications. There is an official ranking list of journals published by the MSHE. The number of points depends on the quality of the journal. JCR journals give 13-40 points, while non-refereed, non-impact factor journals give a lower score (below 9). According to Faculty Council regulations only journals giving a minimum score of 9 points are taken into consideration.

No.	Degree/position	Number of MSHE points
1.	Admission to the doctoral <u>thesis defense</u>	40
2.	Obtaining a adjunct/assistant professor position	100
3.	Admission to the habilitation thesis defense	300
4.	Obtaining a UWM professor position	400
5.	Raising the procedure of conferring the full professor degree	500
6.	Obtaining a full professor position.	650

**Table n°3** - Number of points necessary for achieving academic promotion at the FVMO. Points are based on the MSHE ranking of the scientific journals for career promotion

Additional criteria for promoting:

- Candidates for the adjunct/assistant professor, UWM professor and full professor position, as well as the candidates for doctoral and habilitation thesis defense must document that 50% of obtained MSHE points comes from first authorship.

- Candidates are allowed to apply for the adjunct/assistant professor position immediately after their doctoral thesis defense, if her/his points score fulfils requirements.
- Academic staff, particularly committed to clinic activity (documented with Polyclinic and mobile clinic patient list) are allowed to compete for the adjunct/ assistant professor position after obtaining 75 MSHE points or 350 points for UWM professor position.
- Candidates for the UWM professor position must additionally document their fund raising record.

## 10.2 Comments and Suggestions

This system appears to function well and to have eliminated most if not all friction among faculty staff, as when somebody has fulfilled the requirements the Dean will automatically forward the request for a position to the Rector. Historically, such requests appear to have a good chance of being met. FVMO faculty members are happy with this system as it has succeeded in eliminating endless discussions on the development of priority lists for promotion among different disciplines with the Vet School. The FVMO is the only faculty of UWM, and the only FVM in Poland to have adopted such a system. However, this system does not favor great teachers and in particular great clinical teachers. Those who spend most of their time teaching (clinical subjects) are less able to conduct research, less able to publish and less likely to publish in high impact papers. So promotion is likely to be delayed. A system that is fair should reward outstanding and committed teachers as well as researchers.

There seems to be a good opportunity for junior staff to go abroad for periods of time to improve their knowledge, as well as a fair possibility for support staff to attend continuing education courses. Mobility within the system seems to be ensured. Whenever a support staff position becomes available it seems to be filled up with no relevant delay.

The level of salary is quite low, which is why many professors (especially among clinicians) have their own private clinic or work privately during afternoons. This appears to create some degree of friction with local practitioners due to competition, but not more than in most other countries with a similar situation. Because of the low level of compensation (and because of language requirements), professor positions are not advertised internationally. Support staff are often requested to work extra time, and this frequently poses problems due to shortage in their numbers.

Ratios R1, R2, R3 and R4 are within the limits set by ECOVE, while R5 is below the limit, highlighting a lack of support staff, a need which was clearly understood and underlined by both faculty as well as support staff during our conversations with them.

**Develop a system to reward outstanding and committed teachers as well as researchers.**

**Increase the number of support staff**

## 11 CONTINUING EDUCATION

### 11.1 Findings

The focus of the Faculty is strongly in research, as this provides an income stream to support the teaching; CPD is mentioned in the statement alongside post-graduate training as

benefitting from high quality research. Although CPD is not compulsory in Poland, there are a range of 18 “specialties” offered by the Faculty of which 9 are currently running. These are mainly aimed at practitioners, but are available if demand is there for government, public health or feed industry veterinarians also. The courses are run over 2 academic years, usually one full weekend per month as well as attendance at relevant conferences. Participant numbers are currently between 20 and 30 per course. Assessment is carried out by independent examinations organised by the Polish National Veterinary Congress and lead to a Diploma and the right to use the title of “specialist”. Attendees pay a fee, which is split between the faculty, the course tutors and the organising committee of the specialist courses nationally.

The Faculty is active in organising and co-organising a variety of CPD conferences and events; approximately 7 per year across various specialities.

### **11.2 Comments**

These courses are popular, and appear to be well respected by practitioners.

### **11.3 Suggestions**

**Consider lobbying the authorities in Poland to introduce compulsory CPD in line with other EU countries.**

## **12 POSTGRADUATE EDUCATION**

### **12.1 Findings**

The postgraduate research training includes only PhD students training.

The requirements for a PhD student to defend their thesis is 40 points (a score obtained from the published papers in ISI journals and internal journals), and a minimum 20 points must be acquired as first author.

### **12.2 Comments**

There are no EBVS residency programmes approved.

There are no College Diplomates and no residents enrolled.

There is no Masters programme.

### **12.3 Suggestions**

**In the future it is recommended that postgraduate students and PhD students are encouraged to access the EBVS residency programmes.**

## **13 RESEARCH**

### **13.1 Findings**

Although not itemised and vaguely specified from a strategic point of view, the achievement of high level scientific research is among the objectives of the FVMO. A vast majority of professors at all faculty levels are engaged in research and try to publish their results in high ranking ISI journals with the highest possible impact factor, thanks to the point system used at the FVMO for academic promotion (see also Chapter 10). One of the professors is the

Associate Editor of the Polish Journal of Veterinary Sciences, a thick quarterly publication lavishly illustrated with colour pictures which has an impact factor of 0.5. This may seem low, but it takes a huge organizational and editorial effort to obtain an impact factor after publishing a high quality journal featuring refereed publications on a very regular basis for at least several years. Having an ISI publication run and produced locally should be considered as a plus for the FVMO, as the amount of energy put into such effort is extraordinary. The involvement of academic staff in scientific research is also demonstrated by the numerous publications in non-indexed national and international journals. This production is increasing year by year. The help of support staff is acknowledged and their names are sometimes included amongst the authors.

In some disciplines academic staff have published several books or book chapters directed at the students and the scientific community.

Polish University students do not need to write and defend a thesis in order to graduate. However, Students' Research Circles exist in Polish Universities and they are present also at the FVMO (a list can be found on page 123 of the SER). About 10% of all FVMO's undergraduate students are involved in research activities. The results of students' research were presented at the International Conference of Students' Research Circles or Scientific Conferences and published in Proceedings. Some results were also published in scientific journals, and a list of the most recent publications from students' projects is on pages 123-125 of the SER.

There is a vast array of PhD programs in almost all disciplines, although the Basic Sciences tend to have some difficulties in attracting students to their PhD programs. The majority of Faculty members seem to be quite effective in obtaining research funding from national and international organizations.

### **13.2 Comments**

Although students have the opportunity to participate in research projects within the framework of the Veterinary Medical Students' Research Circles, the Faculty does not appear to stimulate students to write and defend a thesis prior to graduation. Performing a small research project and writing it and presenting it in front of an audience are important tasks, which help students to grow professionally.

### **13.3 Suggestions**

**Stimulate students to engage in research by explaining to them early in their career (during the 2<sup>nd</sup> or 3<sup>rd</sup> year of study) the importance of scientific investigation as well as writing and presenting it for their professional development.**

**Develop a prize/reward system to reward those students who decide to participate in research projects**

## EXECUTIVE SUMMARY

The Faculty of Veterinary Medicine of Olsztyn (FVMO) is the youngest veterinary teaching establishment in Poland (not considering the two new Polish Veterinary Schools of Poznan and Krakow established in 2011 and 2012, respectively, and which have not produced vets yet). The region where Olsztyn is located, called Warmia-Mazury (WM), is one of the largest and most populated provinces of Poland both in terms of inhabitants as well as animals, veterinarians and small animal clinics (Tables 1 and 2). The FVMO was first visited by EAEVE in 1999, and has been listed among the approved faculties since 2005 following a revisit. The FVMO, which its veterinary curriculum in 1966, is a vibrant Veterinary School with a very good research output from its staff, a good caseload and a motivated student population busy with clinical cases.

The Dean and his staff are a group of active and efficient administrators who have been quite successful at raising funding (both within and outside of Poland) thanks to the good research output of their teaching establishment. The FVMO is well focused on research based on how often FVMO staff members refers to research in their discussions as well as in official documents. Although teaching may appear to be overshadowed by research, this is actually not the case as the Team's impression was that the quality of teaching was in general above average for European Veterinary Schools. Forward planning is not the main focus of the DVMO: a strategic plan does not appear to be a regular feature of the work of the Dean at the FVMO. A vision is not clearly identified anywhere in the SER (let alone the web site of the FVMO). Objectives are lumped together, are not prioritized, and there is no method for their periodic review or for assessing their achievement. The Faculty should dedicate more time to developing its strategic plan.

Financial resources are available basically on demand. The Faculty does not have a budget, the only finances being available to the Dean are those derived from the provision of services. Although positive in general terms, such situation is not helping the Dean and division Heads to improve their skills as administrators and leaders. The Rector of UWM should realize what a negative impact such set of national rules is having on the growth potential of UWM (as well as of other Universities in Poland). Most Western universities have overcome such problems long time ago.

The UWM is a State University which comprises a total of 16 faculties. The FVMO comprises 16 departments, with some of them consisting of as few as 4 people. Such an organisation is not conducive to coordination between different teachers, clinicians and researchers, and it was the impression of the Team that the FVMO could benefit from a reduction of the number of departments.

A new curriculum (made up of 11 semesters for a total of 5100 hours (330 ECTS), of which more than 4000 hours are defined by Law) has been in place since 2007/2008. Teaching quality is above average or good in most areas, with a few minor shortcomings (such as the absence of rural economy and lack of integration of animal production subjects; little clinical exposure prior to the last two semesters; the time spent on food spoilage could be increased; and in the food hygiene training, there should be a clear link to farm animal health and welfare, and zoonosis), and one major deficiency represented by large animal necropsy, an issue which the Team felt needed some urgent attention. In the last academic year, at the Faculty only 3 cattle, 6 small ruminants and 3 equine were subjected to necropsy. This was ruled as a **major deficiency**.

Clinical facilities are in good conditions, although some areas are almost derelict including some basements. There is very little sharing of facilities other than the larger lecture theatres, and this is particularly noticeable of laboratories, with 3 clinical chemistry laboratories offering the same service (with a duplication of triplication of expenses) and 2 mobile clinics (one from Reproduction and one from Internal Medicine) working almost independently from each other. The Polyclinic performs over 12,000 consultations per year.

The University farm is in need of investments, although still adequate for basic teaching purposes. There is limited access to pig farms for clinical teaching, but there is an active poultry department with access to material from the University's own farms and private clinics, as well as a growing aquaculture department with small numbers of fish on-site, and access to commercial units. Teaching at the slaughter house has included so far experimental procedures such as abdominal and teat surgery which are a reason of concern on animal welfare grounds. However, the Faculty has given the Team sufficient reassurance that such procedures will be stopped, although it was the Team's impression that the role of the University Ethics Committee in assessing animal welfare in teaching should be reconsidered.

The Team found no problems with regard to admission and enrolment, number of staff (although there is a shortage of support staff), and continuing education. The Faculty is very strong on research, and the Campus Library is of stunning architectural beauty and with an incredible level of effectiveness and sophistication (which made the Team very envious).

An excel file (*Calculation on corrected data for Olsztyn SER*) is enclosed, with the calculation for Ratios and various figures made using amended data following the visit.

**Annex 1 Indicators**

<b>Ratio</b>	<b>Numerator/Denominator raw</b>	<b>1/Denominator</b>	<b>Established range of denominators</b>	<b>Notes</b>
<b>R1U</b>	124 / 992	1 / 0.125 = 8.0	<b>9,170</b>	
<b>R2U</b>	---	---	<b>12,195</b>	
<b>R3U</b>	119 / 992	1 / 0.12 = 8.34	<b>11,095</b>	
<b>R4U</b>	119 / 153	1 / 0.78 = 1.28	<b>2,623</b>	
<b>R5a</b>	124 / 47	1 / 2.64 = 0.38	<b>0,577-2,115</b>	
<b>R6L</b>	2177 / 2561	1 / 0.850 = 1.18	<b>0,590</b>	
<b>R7U</b>	1035 / 1526	1 / 0.678 = 1.47	<b>2,197</b>	
<b>R8a</b>	136 / 5266	1 / 0.026 = 38.72	<b>21,433 - 144,645</b>	
<b>R9a</b>	375 / 5266	1 / 0.071 = 14.04	<b>5,335 - 39,095</b>	
<b>R10a</b>	375 / 80	1 / 4.687 = 0.21	<b>0,109 - 0,605</b>	
<b>R11L</b>	153 / 27	1 / 5.667 = 0.17	<b>2,032</b>	
<b>R12L</b>	153 / 8793	1 / 0.017 = 57.47	<b>8,945</b>	
<b>R13L</b>	153 / 196	1 / 0.78 = 1.28	<b>0,411</b>	
<b>R14L</b>	153 / 71	1 / 2.15 = 0.46	<b>2,291</b>	
<b>R15L</b>	153 / 108	1 / 1.42 = 0.70	<b>0,406</b>	
<b>R16L</b>	153 / 12625	1 / 0.012 = 82.5	<b>51,344</b>	
<b>R17L</b>	153 / 19	1 / 8.053 = 0.13	<b>0,087</b>	
<b>R18L</b>	153 / 126	1 / 1.21 = 0.82	<b>0,961</b>	
<b>R19L</b>	153 / 1340	1 / 0.11 = 8.76	<b>0,400</b>	
<b>R20L</b>	153 / 327	1 / 0.47 = 2.14	<b>1,737</b>	

## **ANNEX 2 STUDENT'S REPORT**

### **Organization**

The Faculty is characterised by a big problem: until 2008 there were five departments (Infectious and Invasive Disease, Functional Morphology, Clinical Science, Pathology and Pharmacology, Veterinary Protection and Public Health) but now there are sixteen departments and a polyclinic was created. This causes a division of competencies and a waste of money for the organisation; in addition some very small departments were created (four or five people working in each) and this negatively influences the research and the budget because there is limited collaboration between different departments.

On the other side in the last few years a large amount of money has been invested in the reconstruction and modernization of almost all buildings and laboratories. The creation of a modern and well-equipped Campus is a big opportunity to improve the teaching level for students.

### **Admission and enrolment**

The admission criteria are based on three topics: foreign language, biology and mathematics or physics or chemistry. The ranking takes in consideration only high school results and is not confirmed by any kind of entry examination (multiple choices, oral discussion). This type of admission doesn't consider the different level of quality of students coming from different Polish high schools.

The Faculty admits 192 students and the number proposed each year by the Faculty Council to the Academic Senate is gradually decreasing because they want to reach 180 students admitted at the first year to reach the perfect ratio of students to teaching staff.

The enrolment is performed on the Faculty website.

### **Student accommodation, safety, union facilities, social programs and sport**

The Kortowo campus offers accommodation for around 30% of all students in well-equipped dormitories with wireless internet connection.

Library, medical ambulatory and a campus church are available for students. A University radio station (UWM FM), Kortowo television and magazines, a student's festival "Kortowiada" and many sports facilities (the Faculty is very close to two big lakes with boating and fishing facilities, an athletic court, several soccer, volleyball, tennis, basketball courts) are only some examples of the many services present for students.

### **Teaching methodology and examinations**

The classes are composed of theoretical lessons and practical laboratory sessions. The organization of each course, the topics that will be discussed, Polish and English textbooks suggested and the examination method are described at the beginning of the semester. During classes PowerPoint presentations are given; a shortcoming of this system is that the only language used for the presentations and for the discussion during teaching is Polish, so foreign students that want to follow the vet curriculum at the UWM must have a minimum knowledge of Polish language.

There is a free policy about examination methods but usually written or oral tests are taken and, if laboratory or practical classes were taken during the semester, the evaluation made by professors is taken into account towards the final grade.

### **Teaching quality and the assessment thereof**

At the end of each semester there is an evaluation of the teaching methods utilised with anonymous multiple choice and open answer tests.

Unfortunately there is no consequence either for well or badly evaluated professors. Some kind of reward (extra money salary, curriculum points' acquisition) should be assigned to the best teachers to improve pedagogic development.

### **Clinical learning and hands on applications**

During the eleven semesters vet students have two different opportunities for clinical learning: Clinical Rotations and Clinical Practice.

The practical rotations are followed by students of the 10th and 11th semesters. Students have to do 270 hours divided into 90 hours for "small animal clinic", 90 hours for "equine clinic" and 90 hours for "farm animal clinic". Each clinic is composed of: internal medicine, surgery, obstetric and infectious disease.

Students have an evaluation syllabus where all the activities of the day are described, and for every case anamnesis, symptoms, treatment, laboratory exams and prognosis have to be reported; at the end of the process the tutor has to evaluate the student's performance in practical activities with a score and her/his signature as confirm supervision. The syllabus can only be signed when a good practical skills level of day 1-skills is reached.

The clinical practice is followed by students of the 8th and 10th semester during the summer holidays. Each student must choose a clinical division in which they are interested and spend 160 hours after the 8th semester and 160 hours after the 10th semester working under the supervision of teachers and PhD students. It is allowed to spend this period with a private veterinarian who has been approved by the Faculty. The student has to register all the activities done in a "practice diary" (similar to the clinical rotation one) and at the end of the period the tutor signs the diary as confirm that the work was done.

The amount of hours that each student spends in practical rotation is regarded as optimal, because it guarantees a sufficient number of clinical cases, a quite complete overview of the clinic of all species and also the chance to see less common disease.

Students wanting to improve their clinical skills in their extra or spare time are always accepted at the polyclinic for helping teachers in their daily work.

### **Library**

The Kortowo campus library gives students the chance to not only easily find a very high number of textbooks, magazines and research articles (which they can borrow for a sufficient period of time) but also to find a very comfortable study environment with private rooms, group rooms and 420 PC internet-connected stations.

## **ECOVE DECISION: CONDITIONAL APPROVAL**

### **Major deficiency identified:**

#### **1. Necropsies for instructional purposes are insufficient;**