European Association of Establishments for Veterinary Education

European System of Evaluation of Veterinary Training

REPORT ON THE VISIT TO THE LITHUANIAN UNIVERSITY OF HEALTH SCIENCES, THE VETERINARY ACADEMY, KAUNAS,LITHUANIA

1 – 5 October 2012

by the EXPERT GROUP

Ana Bravo del Moral, Lugo, Spain

Visitor on Training in Basic Sciences (Chairman)

Julie Fjeldborg, Copenhagen, Denmark

Visitor on Training in Clinical Sciences (Academic)

Pierre Buisson, St. Galmier, France

Visitor on Training in Clinical Sciences (Practitioner)

Andrea Verini Supplizi, Perugia, Italy

Visitor on Training in Animal Production

Patrick Talty, Galway, Ireland

Visitor on Training in Food Safety

Ruth Rodriguez, Lugo, Spain

Student Member

Hans Henrik Dietz, Copenhagen, Denmark

EAEVE Programme Coordinator

CONTENTS

INTRODUCTION

The Lithuanian University of Health Sciences, The Veterinary Academy, Faculty of Veterinary Medicine in Kaunas is the only veterinary faculty in Lithuania.

The faculty was established in 1936 and has been evaluated by EAEVE in 2002.

The main building and several of the other buildings are original and protected buildings dating back to the 1930'ies. Many of the protected have been through a high quality renovation and renovation and building activities was in progress during the site visit.

The Self Evaluation Report was prepared according to the SOP laid down in the EAEVE guidelines.

The team experienced a very well organized site visit, greatest hospitality and an open door policy, where all requests from the team were professionally fulfilled.

Suggestions of Category I deficiencies have been made.

Suggestions for improvement have been made to help the Lithuanian University of Health Sciences, The Veterinary Academy, Faculty of Veterinary Medicine in Kaunas to improve even further.

1 OBJECTIVES

1.1 Findings

The faculty has 4 clear overall objectives covering

- content and quality of the veterinary program
- the scientific quality
- health care services at the highest level
- effective internal management including infrastructure and human resources.

Objectives are planned by a working group with members from the departments. A suggested plan of objectives is brought forward to the Faculty Council which on its side brings the suggested plan on to the rector and the Senate which finally brings the plan forward to the University Council for final decision.

Annually the list of objectives incorporated in the strategic plan is revised by departments and clinics and brought forward through the same chain of command to be coordinated by the rector with the chancellor (responsible for finances), presented to the University Council and incorporated in an annual report to the Ministry of Education and Science.

The 4 main objectives are followed by 17 issues (called tasks) to be understood as directly related to the execution of the objectives.

In the Introductory remarks the faculty encounters 12 major problems for the Faculty of Veterinary Medicine. Seven out of 12 problems are related to finances and 4 out of 12 problems are related to hiring, keeping and other human resources related issues while 1 problem is related to the study program *per se*.

The labour market demand for veterinarians in Lithuania is recognised as high, the candidates are rated excellently by the veterinary profession and especially the basic training is praised as being solid.

The organisational structure of the Faculty is considered as being adequate to assure the implementation and monitoring of the study program and with clearly defined responsibilities for the various bodies at different levels.

Ten recommendations (SER p. 13) all of them directly relating to the veterinary program are given by the Faculty itself.

1.2 Comments

The objectives are directed very clearly towards serving the Lithuanian society and to a much lesser degree towards internationalization of student training, research or management. The 17 tasks listed as necessary to execute the objectives plus the 12 non-related issues encountered as major problems plus 10 recommendations adds up to 39 challenges which are serious challenges to be addressed by the Faculty.
It is commendable that the Faculty readily realizes that there are focal points of potential improvement.

The Faculty has provided itself with an excellent, long and rather clear list of both short term and long term issues to be addressed effectively by the University and the Faculty.

On its website under the heading Accreditation and International Recognition the LUHS states that: "Study programme Veterinary Medicine was given full accreditation in 2003. Veterinary medicine programme was also evaluated by EAEVE". The full accreditation is at a national level.

The Faculty mentions 11 residency programs, these programs are comparable to Masters Programmes, but they are not residency programs under the supervision of EBVS or other international bodies.

It is the opinion of the team, that the requirements regarding Objectives as they are laid down in Annex I of the SOP are met.

1.3 Suggestions

- The huge task of addressing multiple issues related to the objectives of the Faculty requires effective administration and a visionary leadership with sufficient delegation of power to execute decisions at all levels more than committees referring well stated and relevant issues upwards for decision at the top level in the university system. The chain of command and power to execute decisions at all levels should be considered.
- To prevent misunderstandings it should be clarified that EAEVE has not given full accreditation to the LUHS veterinary program in 2003 as stated at the LUHS website.
- The wording residency programs should be considered as this might be confusing with respect to residency programs under the auspices of EBVS.

2 ORGANISATION

2.1 Findings

The organisation of the Lithuanian University of Health Sciences covers the Lithuanian Veterinary Academy being the umbrella organisation for the Veterinary Faculty including tasks performed by the Lithuanian Government.

A diagram (Fig. 2.1) of the organisation of so-called administrative procedures is given on p. 16 of the SER, and a diagram (Fig. 2.2) of the structure of the Veterinary Faculty is given on p. 24 of the SER.

The Faculty is organised in a traditional university setting as a Veterinary Academy and Faculties together with the Medical Academy and Faculties being part of the Lithuanian University of Health Sciences, situated in the provincial city of Kaunas which was the former capital of Lithuania. Kaunas has a population of 360.000 of which 58.000 are students.

The Medical Academy governs the
- Faculty of Medicine
- Faculty of Odontology
- Faculty of Pharmacy
- Faculty of Public Health
- Faculty of Nursing
- 4 discipline related institutes and a museum

The Veterinary Academy governs the
- Faculty of Animal Husbandry Technology
- **Faculty of Veterinary Medicine**
- Veterinary Institute
- Institute of Animal Science
- A museum
- Centre for Continuous Teaching
- Vivarium (= Laboratory Animal unit)

The Faculty of Veterinary Medicine is subdivided into

- Department of Anatomy and Physiology
  - Centre of Digestive Physiology and Pathology
  - Laboratory of Immunology
- Department of Infectious Diseases
  - Centre for Pathology
  - Histopathology Laboratory
- Department of Non-Infectious Diseases
  - Laboratory of Animal Reproduction
  - Laboratory of Experimental and Clinical Pharmacology
- Department of Food Safety and Food Quality
  - Laboratory of Research of Animal Welfare
  - Laboratory of Safety and Quality Test of Animal based Raw Food Materials
- Dr. L. Kriauceliunas Small Animal Clinic
- The Large Animal Clinic

The University Council has 11 members and sits for 5 years. The way of election/appointment of members is described in chapter 2 of the SER. The same goes for the University Senate with 49 faculty, staff and students also elected/appointed for a 5 year period.

The Veterinary Faculty Council consists of 11 faculty, 3 students and 1 external person (named social partner). The dean is a *de facto* member of the council but she is not allowed to be chairman of the council.

The Rector is elected by the University Council and the Rector is assisted by pro-rectors and Chancellors. The Veterinary Academy is governed by a Chancellor and a Vice Rector for veterinary affairs and the Faculty of Veterinary medicine is governed by a Dean.

Deans are elected by the University Senate after a nomination by the Faculty Council. Selection of appropriate Department Head (& Institute and Clinic Head) candidates is conducted by a chairman appointed by the Medical Council. The Veterinary Faculty Council evaluates the selected candidates and submits relevant names to the Rector and the University Senate.

Vice Deans are appointed by the Rector at the request of the Dean.

The Study Program Committee (SPC) controls the quality of the veterinary program. Suggestions and reports are evaluated and approved by a Studies Commission. Members of the SPC are the vice dean, 3 professors, 2 students and the deputy director of the State Food and Veterinary Service as a representative of stakeholders.

Apart from mentioning the Lithuanian Centre for Quality Assessment in Higher Education (SER p. 17) a detailed description of the State Studies Foundation is also given. This Foundation supports students with state loans and state-supported loans.

The chain of command can be abbreviated to: Rector - University Council – University Senate – Faculty Council – Deans Office (Chancellor and Vice Rector) – Departments and Clinics – faculty – Staff – Students.

It was clear to the team that the Veterinary Academy and the Veterinary Faculty have adequate influence on university policy at the same level as other faculties.

2.2 Comments

It is not stated as a requirement that either the dean or the department heads nor heads of the clinics or institutes are veterinarians.

Although the importance of the Study Program Committee is appreciated eventual critical issues are not decided upon by the committee but merely sent upwards in the system for decisions to be made by the Faculty Council.

Overall it was the impression that there are some bureaucratic procedures which unnecessarily hinders even simple tasks. One example is acquiring e.g. material of animal origin like buying live animals for anatomy and organs for pathology and other courses.

It is the opinion of the team, that the requirements regarding Organisation as they are laid down in Annex I of the SOP are met.

2.3 Suggestions

- Apart from general financial decisions it should be considered to render executive power to the various levels of the organisation. One example is the Study Program Committee which may make suggestions and proposals to the Faculty Council but the committee has no power to implement changes. Other examples are strictly veterinary matters that should be decided at the relevant level within the organisational structure of the Faculty of Veterinary Medicine.
- Having such a high number of educations covered by EU Directive 36/2005 within the same university gives opportunities for cooperation on didactics, organisation, evaluation and quality control. These opportunities should be considered and the potential should be used to its maximum.
- Many decisions have to be made at a high university administrative level. It should be considered to delegate more autonomy to the Dean's level and below.
- Bureaucracy should be diminished at all levels and unnecessary control procedures should be abandoned leaving decisions to be taken at the lowest possible organisational level.

3 FINANCES

3.1 Findings

The financial support system changed in 2009 with a change in annual payment/student from the government from 4435 Lt/y to 9478 Lt/y. The dramatic increase was not followed by a change of financial support otherwise, so there was a real increase in the financial basis of the veterinary academy. However, students admitted before that date follows the original financial procedures until graduation.

The main sources of income are

- Ordinary, state supported students
- Non-state supported students
- Revenue from services (to departments and clinics directly, no OH)
- Revenue from scientific projects incl. postgraduate studies (to departments directly, up to 15 % OH to the University)
- EU allocated financial support for infrastructure and development
- State funded, targeted support

During the years the ordinary state supported students have been supported by the government with an increasing amount of money.

Year	Support per student/tuition for self-supported students	Support per 5 – 6th year students/ tuition for self-supported students
2008	1284 €	-
2009	2745 €	-
2010-11	1^{st}-4^{th} 2646 € 5^{th}-6^{th} 3635 €	1^{st}-4^{th} 2646 € 5^{th}-6^{th} 3635 €

Based on the income from admission of students the University Council allocates the annual budget for the Faculty. Salaries for faculty are established based on nºof students and research activity. From 2010, the competence of distribution of salaries was transferred to the department heads.

There is a quarterly extra distribution of money for teaching purposes.

Income and expenditures are given in tables 3.1 and 3.2 at p. 30 of the SER. The Faculty runs a surplus every year and this has increased from 4 % in 2008 to 15 % in 2011. The surplus is generated by overhead on research projects and retained income from the clinical and laboratory activities. The Faculty is allowed to retain this revenue and invest it in infrastructure e.g. Retained money is not counterbalanced in the state funding for the faculty.

Tables 3.1. and 3.2. on p. 30 in the SER were incorrect, and the Faculty produced a recalculated set of tables given below.

Table 3.1. Income (thousands Lt)

Year	A. Funding from the Government to the Veterinary Academy (incl. anim.science)	B. Investments from projects aimed to renovation of infrastructure (science valley, EU, etc.)	C. Directly to the Vet. Faculty (share of the total funding (=A) from the State)	D. Income from services provided (clinics, diagn. labs. etc.)	E. Income from national research projects	Total = B+C+D+E
2011*	11696,8	8759,1	6169,4	2760,5	2006,1	19695,1
2010	13737,0	830,8	6698,6	3588,8	2560,6	13678,8
2009	16351,0	1023,2	5409,8	2872,4	3583,2	12888,6
2008	20060,2	1383,9	6542,6	1719,9	4435,5	14081,9

* year prior to visitation

The extra income for renovation of buildings earned in 4 years from different sources equals to 20 mil. Lt which are not included in the table. They would increase the total income by 50%.

In general, the data given in Table 3.1 lead to a conclusion that since 2008 until 2011 the state support of the Faculty of Veterinary increased by 84.2% whereas the income from services provided remained within certain limits. The income from scientific activity reduced from 4435, 5 to 2006, 1 thou Lt. The total income in the Faculty increased by 28.5%.

Table 3.2. Expenditures (thousands Lt)

Year	Salaries	Support to teaching	Support to research	Support to clinics	Other	Total
2011*	3487,4	7965,9	5352,7	288,4		17094,4
2010	2033,1	5387,6	4301,8	246,4		11968,9
2009	2713,4	4040,1	5080,8	225,4		12059,7
2008	2932,9	5181,7	5313,0	153,4		13581,0

* year prior to visitation

Although it may seem so the Faculty does not run a surplus every year, because an eventual surplus is incorporated in next year's basic funding given it is government money. Usual rules apply to e.g. EU-funding, where funding must be accounted for separately and the money may only be used for the specified purposes.

Maintenance and basic expenditures on housing etc. are centrally paid and these expenditures are not deducted from the funding available for the Faculty. The central administration retains 6.5 % from the governmental allowance every year and the rest of the costs of running the central university administration come from taxes on external fund (EU, research projects etc. (overhead)).

Extraordinary financial issues are generally discussed at the department level; suggestions/plans/projects are brought forward to the dean which brings them forward to the Faculty Council. And in case of larger investments the plans are brought forward to the university level.

In 2009 the Veterinary Academy received 30.3 mil. Lt (= 8.8 mil €) from EU for a business centre and a project "Development of animal health and nutrition and the infrastructure of science and studies of animal raw stuff; consolidation of scientific potential".

After restructuring of the university and faculties into the Lithuanian University of Health Sciences 50 mil Lt (= 14.5 €) were given to a project called Nemunas: "Renovation of the study infrastructure and basic equipment for development of the Lithuanian University of Health Sciences" of which the Veterinary Academy got 21.4 Lt (= 6.2 mil €).

During the last few years several, smaller, centrally funded projects have been achieved to renovate buildings, laboratories, central heating etc.

3.2 Comments

The faculty should be commended for running a financially healthy business even under difficult circumstances.And although extra funding has been sought and received it is unsatisfactory that the basic government funding of the faculty has actually decreased by 58 % since 2008. It is a very vulnerable situation that more and more of the Faculty's income is generated in a project driven way.

However, the Faculty itself states (SER, p. 32) that the model for financing the veterinary program is unclear. This is probably not solely dependent on the influx of money but also derived from a slightly non-transparent financial system with decisions taken at many different and from each other independent levels. As an example the team noted that the central financial group of the university had not been involved in producing the chapter on finances in the SER.

By discussions with the chancellor and the University finances office it became clear, that the financial situation of the veterinary faculty and the veterinary academy overall has been improved considerably

since 2009 and that the veterinary academy and faculty are treated at the same level as other comparable parts of the university in Kaunas.

It was clear to the team that the money derived from the NEMUNAS project has been used to the maximum to renovate buildings, research laboratories, student's laboratories, student's group rooms, auditoriums and offices. During the visit we saw building activities in many buildings, including the large animal clinic, the food hygiene building as we saw a brand research building.

The merging of Universities in 2010 to create LUHS meant a more efficient financial situation for the university and for the academy.

It is the opinion of the team, that the requirements regarding Finances as they are laid down in Annex I of the SOP are met.

3.3 Suggestions

- Together with other academies/faculties the university should try to influence the political decisions to a maximum to secure the basic funding of the veterinary program and others.
- A strategy for increasing salaries should be worked out to ensure recruitment and retaining of young faculty members.
- A strategy for investment in infrastructure should be worked out.
- If there are still students admitted before 2009 following the "old" financial support system it should be considered to change that procedure now to make the financial system more transparent and easier to operate.
- It should be considered to evaluate the financial system especially with respect to decision making and reducing bureaucracy. One system might be to allocate all the money agreed upon to run the Academy once a year, for the Academy to allocate all the money agreed upon to each of the Faculties once a year and for the Faculty to allocate all the money agreed upon to each of the departments, clinics and institutes once a year. If this is done in a 3 year frame (following the general 3 year financial plans) letting the departments retain finances from year to year it might help planning of investment in infrastructure etc.
- In p 9 of the SER the Faculty itself recognizes major problems related to financing. Some suggestions to ameliorate the situation:
    - To increase the prices for clinical and other services offered by the Faculty
    - To increase financing of master degree and postgraduate studies of students
- It is recommended to secure more transparency of the distribution of funds for the preparation of the final research work of students in the departments (the Faculty itself comments that in the SER p59).

4 CURRICULUM

4.1 GENERAL ASPECTS

4.1.1 Findings

The curriculum characteristics were found as they were described in the SER and were as prescribed by law. The degree in Veterinary Medicine lasts 5 ½ years (11 semesters), with the average duration of attendance currently being around 6 years.

The contents of study programme and subjects are analysed and evaluated by the Coordination Committee of Veterinary medicine programme. It makes suggestions and recommendations to the council and dean of the Veterinary Faculty. The renewal of the subject's contents may be initiated by the department/division or social partners. Veterinary Medicine Study Programme Committee (SPC)

(established following Rector‘s Order 17-10-2007; No 05-02-02) regularly assesses subjects and modules of the Study Programme in order to ensure the quality of studies.

The Centre for Quality Assessment in Higher Education (SKVC) (www.skvc.lt) assesses and accredits the study programmes of higher schools in the Republic of Lithuanian following the rendering of higher schools. It is authorized by the Ministry of Education and Science. The programme of veterinary medicine was assessed at national level by external experts in 2011 and accredited until 30 June 2017.

The veterinary course comprises 336ECTS.Each credit is considered as 26.7 working hours on average, comprising contact hours teaching, self-directed learning and individual study (average 39.5%).

The total **336 ECTS**credits that every student must follow in 5 ½are divided in:

- **22 ECTS** credits for general education (or 7% of the total volume of the programme according to national requirements) organised in several obligatory subjects: *Introduction to Education and Information Technology*; *Analytical Chemistry*; *Professional language*; *Philosophy*; *Foreign Language for Specific Purposes*; *Agricultural Economics and Management*)
- **250 ECTS** credits in 28 compulsory veterinary subjects
- **18 ECTS** in practice:
  - 3 ECTS credits in Laboratory Practice (course IV)
  - 15 ECTS credits in Clinical Practice (course VI)
- **12 ECTS** credits in Formation of Professional Skills (extramural work)
- **16 ECTS** credits for the final thesis work
- **18 ECTS** credits in elective subjects (listed in Table 4.3)

At the end of the study program the student has to defend his experimental thesis prepared starting from the 8th semester. Graduates of integral studies are awarded with a qualification of veterinary surgeon and master‘s qualification degree.

The time allocated to theoretical and practical teaching is summarised in Table 4.1. Tables 4.2 – 4.4 detailing curriculum hours in the EU-listed and non-listed subjects may be found in the SER (p38-40).

Table 4.1: **General table of curriculum hours taken by all students**

Year	Hours of training							
	Theoretical training			Supervised practical training			Other	Total
	Lectures (A)	Seminars (B)	Self-directed learning (C)	Laboratory and desk based work (D)	Non-clinical animal work (E)	Clinical work (F)	(G)	
First	313	34	676	577				1600
Second	387	16	624	493	80			1600
Third	375	18	536	472	125	74		1600
Fourth	306	12	663	147	198	274		1600
Fifth	287	39	695	178	134	267		1600
Sixth	84	31	349	96		400		960
Total	1752	150	3543	1963	537	1015		8960

The students choose electivesubjects in the 1st-5th course. They select 2 subjects in the 1stcourse and afterwards 1 subject a year. The students choose the subjects from various groups listed in table 4.3, p39 of the SER.

A sort ofrotation in the practice (20 ECTS) is going in subgroups of about 15-20 students. From the 2nd year the students start practical skills in the clinics, farm, etc. Students collect 80 hours (or 2 weeks) of clinical or non-clinical work (depending on the course) during the school-year. Until 2012 the duty of

students used to last 1 x 10 days. Starting fromSeptember 2012, following the recommendations of experts of the National Accreditation Agency, it is planned to create conditions for students to practice (continuously) for one week. 5 students from different courses are working in the clinics every day together with the veterinarians. External activities are organized from 8 am to 4 pm on work days, during the practice of students. During the 4th-5thyear students participate in the mobile clinic activities.

The 12 ECTS credits in *Formation of professional skills* is based on extramural work of the students who come to practice in private clinics, farms, slaughterhouses, State Service of Food and Veterinary (VMVT) testing laboratories, etc.

The ratio of clinical training to theoretical and practical training in the core course of veterinary subjects is about 1:4.2 (1015:4252).

4.1.2 Comments

The teaching load (theoretical and practical) is high and it seems to be more related to the staff salary, based on the teaching contact hours, than to curricular optimization. For economic reasons it is also difficult to reduce the number of admitted students (see Admission and enrolment).

Attending theoretical and practical work (including clinical work) is not always mandatory.

The number of hours for basic science subjects is relatively high when compared to the Clinical Science hours.

The self–directed learning is in some casesmixed up with individual work.

The curriculum conforms to the duration and contents addressed in the EU directive 36/2005. However, considering the EAEVE recommendations(SOP guidelines, Budapest 2012), some topics present in elective subjects should be included in the compulsory courses (e.g. *Anatomy & Histology of the Fowl*, *Veterinary clinical microbiology*, *Felinology*, *Cynology*, *Surgical Topography and Traumatology in Small Animals*). Some contents related to Identification of main dog and cat breeds and Pet nutrition should be taught in compulsory subjects as well.

It was clear to the team that there is not a trueclinical rotation and the participation of students in the clinical work is partly done on a voluntary basis.

The overall ratio of theoretical training to practical and clinical training in the core course of veterinary subjects is about 1:0.65(5445:3515) which marks a curriculum with great emphasis on theoretical training. However, when the overall figures are broken down the ratios R6, R7 and R8 are satisfactorily met; unfortunately, this number of hours do not mean that all students are exposed to hands on training of all clinical subjects; just watching a teacher or other students doing a clinical procedure cannot be considered as relevant hands-on experience. (Vide in Curriculum of clinical sciences and in Methodology of teaching).

There is a sufficient integration among compulsory, electives & extramural work arrangements.

It is the opinion of the team, that the requirements regarding Curriculum, General aspects as they are laid down in Annex I of the SOP are met.

4.1.3 Suggestions

- The curriculum should be adapted to reduce the number of contact hours for Basic Subjects and Sciences and to increase the number of contact hours (especially practicals) for Clinical Sciences.

- A reduction in overall contact hours should be considered especially in basic subjects and sciences.
- The attendance to practicals, and especially to clinical work, must be compulsory, with a clear rotation scheme programmed for all the students in the clinics, e.g. in Large Animals students have to rotate through surgery, medicine in horses and production animals; in Small Animals they have to rotate in ambulatory practice, emergency service, surgery, anaesthesia and internal medicine..
- The hands-on trainingof the students should be increased, especially in the clinics where the caseloadis high to sustain it.
- It should be considered to increase the number of self-directed learning hours.
- It should be considered carefully to reduce the number of electivesubjects of general education by increasing the offer of clinical subjects.

4.2 BASIC SUBJECTS & BASIC SCIENCES

4.2.1 Findings

Basic subjects form part of the core curriculum and the Faculty controls its content, quality and grading through the Study Programme Committee (SPC).

All subjects considered as Basic Sciences in the EU-list are taught in the first 5 years of the course and Basic Subjects during the first and the second year. Overall Basic Subjects and Basic Sciences account for about 35% of the EU listed subjects (2844 hours or 107 ECTS) (Table 4.2 of the SER).

The basic sciences are well coordinated to avoid overlapping or gaps in their contents and are truly focused on covering Veterinary Medicine fundamentals.

The media of practical work for the Basic subjects is 41% and for the Basic Sciences 31.29%, having a lower balance of practicals in Physiology (21.8%) and Genetics (22%).The groups at the practices are large (15-20 students per group) but well assisted with 1 teacher and 1 technician so all students have access to hands-on supervised work in the laboratories. As it will be stated in more detail in chapter 7, cadavers for use in Anatomy and Anatomical Pathology are sufficient to guarantee hands-on training of the students.

All students are introduced to safety measures while working with sick animals, dangerous tools and/or products during practicals and must sign the rules and instructions of a safety logbook. In the 1st year students are informed of voluntary vaccination against zoonoses (rabies, tetanus, etc.) in the compulsory subject “Introduction to Veterinary Medicine Studies and Information Technologies”.

Waste management in the Faculty comply with the standards. There is a freezing chamber in the Pathology Centre of the Department of Infectious Diseases to collect cadavers, organs from slaughterhouses, euthanized animals from the Small Animal clinic and all biological waste in metal containers that are delivered by a special transport from *“JSC Rietato veterinarinė sanitarija”*. Animal carcasses with suspicion of an infectious disease are not used by the students but handled and sampled by authorized staff of the State Food and Veterinary Service, but students could watch.

4.2.2 Comments

The curriculum includes the major Basic subjects (Physics, Chemistry, Animal Biology, Plant Biology and Biomathematics) and Basic sciences (Anatomy, Histology &Embryology, Physiology, Biochemistry, Genetics, Pharmacology & Pharmacy, Toxicology, Microbiology, Immunology, Epidemiology and Professional Ethics), addressed in p18 of the SOP and in the Directive 36/2005, required for veterinary training so, the most important items of the basic disciplines are taught. The Faculty improved substantially the coordination of teaching but still have to increase horizontal and vertical integration amongst the subjects and alignment of the content.

The curriculum offers excessive contact hours of training in basic disciplines. In general, Basic Sciences have a good veterinary orientation; both in the content and in practical work, but this have to be improved in the case of Basic Subjects.

It is the opinion of the team, that the requirements regarding Curriculum, Basic Subjects & Basic Sciences as they are laid down in Annex I of the SOP are met.

4.2.3 Suggestions

- The organization of core teaching in the traditional independent subjects should be revised with the aim of enabling and encouraging interdisciplinary teaching.
- The Faculty should consider reducing substantially contact hours in Basic subjects and sciences, especially in Physics, Biomathematics, Epidemiology and Anatomy, Histology and Embryology.
- Physiology and Genetics should increase practicals to a minimum of 30% of the total hours.
- Basic subjects could be even better oriented towards veterinary medicine and the contents should be closely coordinated with the veterinary teachers.

4.3 ANIMAL PRODUCTION

4.3.1 Findings

The veterinary students have ample opportunities to use PI LUHS Academy of Veterinary Practical Training and Testing Centre (PTTC). The PTTC covers 815 ha land and has 464 cows with all relevant types of training premises. Students also have access to healthy animals (cows and horses) in the large animal clinic and laboratory animals in the *Vivarium*.

Agreements have been made with other livestock farms, small animal shelters, poultry farms, horse studs and zoological gardens.

From the 2nd year the students start forming practical skills in large animal clinics by taking part in all the clinical activities, at the PTTC etc. In this way they have the opportunity to handle animals in a pre-clinical period.

EU-listed subjects in the field of Animal Production are taught in sufficient hours as compulsory subjects: *Agricultural Economy and Management*, *Ecology and Protection of Nature*, *Animal Production*, *Animal Breeding*, *Feeds and Animal Nutrition*, *and Veterinary Hygiene and Animal Welfare*. There is generally a good balance between practical and theoretical subjects with the exception of *Animal production* subject which does not include practical activities. Integration amongst groups within related subjects is present and even with clinical activities concerning pathology related to nutrition and deficient management of animals.

Agronomy and Animal Nutrition are mainly included in the topic *Feed and Animal Nutrition*, but some aspects related to feedstuff quality, management and safety are discussed in other subjects related to animal production.

The subjects of animal welfare and certification for animal transportation are included in the topics *Veterinary Hygiene* and *Animal Welfare.*

Bio-security and bio-safety issues are taught in *State Veterinary and Public Health* course.

Artificial reproduction techniques are taught in *Veterinary Obstetrics and Gynaecology*.

4.3.2 Comments

The Animal Production course would benefit from more practical contact hours even whenin general, there is a good balance between practicals and theoretical hours. Farm animals are available in the PTTC and other farms located not so far from the VA. For particular topics (animal evaluation) students also have access to animals at the Institute of Animal Science located in Baisogala (100 km North of Kaunas).

There are buses and minibuses for student's transportation between the campus and farms to be visited.

New laboratories are equipped with last generation equipmentwhich has generally increased the level of research and services and therefore also increased the level of research based teaching.

Special topics on pet nutrition and management are not included ascompulsory subjects.

It is the opinion of the team, that the requirements regarding Curriculum, Animal Production as they are laid down in Annex I of the SOP are met.

4.3.3 Suggestions

- Practical work in *Animal Production* subject should be established since VA could offer very good access to animals.
- Basic knowledge on pet nutrition and management should be taught in compulsory subjects (e.g. in *Animal nutrition* and/or*Animal production and Animal husbandry*).
- More individual hands-on experience (farm animals care, manipulation, holding procedures) are suggested to make the best of the good access to animals.
- Topics included in *Animal Production* subject should be taught before those included in *Animal Breeding*.

4.4 CLINICAL SCIENCES

4.4.1 Findings

The Faculty runs an emergency veterinary service on weekends and holidays. It is the same for small and large animals. It is run after a rotation scheme for the students after normal working hours, 2 days at the small animal clinic and 2 days at the large animal clinic. The small animal clinic has an electronic patient filing system but also log the patients in a book. In the large animal clinic patients are filed in a book.

The faculty also runs a mobile practice. It is organized between 8 am and 4 pm on work days. Students participate on a voluntary basis, where the students chose themselves if they want to go. They have 2 cars but also a big bus is available.

Teachers of clinical subjects, together with the students, travel to animal farms and equine stablesin which the students train their practical skills (more than 20 equine stables are visited and they get an income for each visit). For the equine mobile practice 5 students can participate. Concerning the farm visits, around 20 students participated during the site visit. The farm had their own private veterinarian and the treatments were under his/her approval.

Students are not insured by the Faculty. The Faculty does not have liability insurance during extramural work. They do not either have an insurance for the animals referred to the hospital and the mobile clinic in case of side-effects,etc.

Allocated hours are <u>not</u> adequate and in balance with the curriculum. Total number of hours (lectures, seminars, self-directed learning, lab work etc.) for the Clinical Sciences are 2558 hours (SER, Table

4.2, p38) with clinical work adding up to 473 hours including epidemiology. Furthermore an optional 78 hours can be taken (SER, Table 4.3, p39).

In September 2012 the Faculty started a new rotation scheme for the students in the small and large animal clinics. The rotation is for one week at the 4th and 5thyear. The rotations are neither discipline nor species organized, due to the fact that the balance between the species is at random.

The amount of hands-on clinical teaching is not fully sufficient. The real clinical work (students working and not only watching the teacher) starts at 4th year, where the students will be 1 week at the small animal clinic and 1 week at the large animal clinic. This is repeated at the 5th year. This makes only four weeks of clinical practice for real hands-on training of the students.

The University has agreements with private veterinary clinics. These clinics are meeting the requirements of agreements from the University but this clinical hands-on training of the students is not supervised by the Faculty.

The students perform necropsies in the 3rd, 4th, and 5th year of education. Necropsies available for clinical education are sufficient(SER, Table 7.6, p76). Groups for necropsies in Pathology are large (20 students) but well assisted by a teacher and 1 technician; unfortunately, hands-on training in the necropsy room is less than ideal since only 2 students are performing the necropsy while the others are watching.Some animal cadavers from the centre of pathology are used for surgical training.

The clinical caseload varies considerably between the different animal species. The caseload is sufficiently high for pigs, poultry and dogs, but low in relation to cattle, small ruminants and horses seen at the Faculty (SER, Table 7.2, p69). This is made up for by bringing the students to do clinical work in a number of farms ranging from smaller, traditional dairy farms via horse stables to large, ultramodern dairy facilities with huge numbers of animals.

The large animal clinic was being rebuilt during the visit, but several parts of the rebuilt clinic was already finished and being used. The rebuilding was of a high technical quality and taking into consideration that it is a preserved building.

The team found that the department of infectious diseases was not closely involved in clinical cases.

All students have access to free vaccination against zoonoses. An animal not vaccinated against rabies, will not be examined by a student. However, the team noticed that in case of stray cats and dogs this procedure was not followed and it was unclear whether all clients were asked about their animal's vaccination status and whether the status was actually controlled by inspection of vaccination certificates.

The students mostly participated as observers during parturitions, dystocias, displaced abomasums,etc.

Students are able to perform an ovario-hysterectomy on a cat or a dog alone, but only if they voluntarily take part in the shelter cases. In general, the students are not able to castrate a horse as a first day skill.

4.4.2 Comments

All students should participate in the mobile clinic.Attendance to this service now relies on a voluntary basis.

Students must be insured during their activities at the Faculty and also extramural.

The Faculty should guarantee that all students present in necropsy room are working in the necropsy procedure and not only watching two students to do the entire job during practicals.

The number of compulsory, practical, hands-on hours for the students is too low. Due to the way of organizing rotations in the clinics including a principle of voluntary participation in practical work, it

is not guaranteed whether all students acquire all essential day-one competencies before graduation listed in Annex IV of the SOP. This must be ensured and verified for all students.

In small animals, the exact amount of hands-on clinical training seems to be insufficient due to the policy that the owner decides whether a student can take part in the treatment.

X-ray pictures are not kept by the clinic, if the owner wants it home. It is important that copies of X ray- pictures are available for teaching purposes and for completing the clinical record as well.

With respect to clinical training in large animals, the extensive use of the farms and the mobile clinic secures that students have lots of hands-on training when they are participating in the courses.

The team verified in some clinical practicals the mixture of three different student levels (courses) in the same class, being difficult to follow by those students of lower courses with insufficient background.

4.4.3 Suggestions

- All students should participate in the mobile clinic.
- The number of compulsory, practical, hands-on hours for the students in the clinics, especially in the small animal clinical rotation must be increased immediately.
- Students must be insured during their activities at the Faculty and during extramural practice.
- Extramural practices of the students in the private clinics should be supervised by the Faculty.
- The students should be more active in the clinics and motivated by the teachers. This includes rethinking the rotation systems as mentioned in 4.1.3 and 6.2.3. and establishment of a clear plan for the clinical teaching.
- When x-rays are sold to the owners a copy/photo should be kept in the clinic.
- The Faculty suggests themselves that the students have to take more active part in animal care, castration, sterilisation and treatment which the team strongly approves.
- Department of reproduction and infectious diseases, should appear more clearly involved in the clinics.
- The small and large animal clinics should be considered as Teaching Hospitals/Clinics and this should be stated clearly to the owners.If an owner doesn't accept students participating in the clinical work it should be considered, whether this type of patients are interesting to the Faculty.
- A mixture of students from different courses during practicals/lectures should be avoided.

4.5 FOOD HYGIENE & TECHNOLOGY AND VETERINARY PUBLIC HEALTH

4.5.1 Findings

There are 148 hours of practicals with 44 topics and 54 hours of practice in slaughterhouses.

Areas such as HACCP are covered in seminars. In addition there are colloquia, consultations and self-study.

Horizontal integration is carried out in the 10th semester while teaching in Food Hygiene and Veterinary Law are parallel. Veterinary Law is linked to Food Hygiene and legal veterinary controls. There is linkage between Microbiology of food products, risk analysis and State veterinary and public health.

The vertical integration is related to such subjects as *Veterinary epidemiology and infectious diseases* (9th semester), *Veterinary pathology* (6th and 7th semester), *Veterinary microbiology* (5thsemester), etc. The 20 ECTS attributed to *Food Hygiene* are supplemented through the vertical integration with other

subjects. Teaching from the animal disease perspective seems to be well linked to teaching from the food safety perspective.

Training is mostly internal on-site except for slaughterhouse. There is a Livestock Classification laboratory and a number of laboratories which are shared with Food Safety studies.

Inspection experience in milk products, fish, meat and poultry is offered in laboratory except for meat inspection in the slaughterhouse.

Practical training of students in Food Hygiene is done in 5 external cattle, pig and poultry slaughterhouses located 50 to 200 Km away from the Faculty and 5 food processing companies. The visit was to a modern facility at Utena which slaughters cattle and pigs. Cattle slaughter was in progress at the time.

The conclusions of this visit were:

- Adequate time is given to student practicals. There were 9 veterinarians working at ante-mortem and post-mortem inspection which is more than the EU norm as there were no [Non-veterinary] technical meat inspectors.
- The company and the State Veterinary Service are accommodating.
- The facility and the Inspection Service are at least equal to EU standards.
- There is satisfactory training in animal welfare in lairage and at time of slaughter.
- The plant is licensed for Halal slaughter to Germany and is so equipped.

Wild species such as elk and wild boar are included in theoretical training. Practical training includes examination for trichinosis.

4.5.2 Comments

A new laboratory has been designed and approved. Construction has not yet commenced.

Study material is available for review through dissemination via intranet, email, etc.

It is the opinion of the team, that the requirements regarding Food Hygiene as they are laid down in Annex I of the SOP are met.

4.5.3 Suggestions

- Students are prepared for work to EU level at graduation and there is a parallel course in Food Safety.

4.6 ELECTIVES, OPTIONAL DISCIPLINES & OTHER SUBJECTS

4.6.1 Findings

In the current curriculum, there are an impressive number of optional courses summing up to 42 (Annex 2 + SER, p39). The variety of optional disciplines is large, and some are not in the veterinary field. Each year 3 ECTS points are for elective/optional disciplines. Most of the electives are lectures/seminars/laboratory and desk based work.

The curriculum contains no tracking.

Going through the curriculum it is difficult to see how the different species are taught and how the clinical rotations are run.

4.6.2 Comments

The number and diversification of electives is impressive and gives the student a good possibility to follow special interest. Some of the electives are foreign language teaching, which can help the students to improve possibilities of participating in exchange programmes.

There is no lower limit for numbers of students in each of the electives, which means that this may be burdensome for teachers.

It is the opinion of the team, that the requirements regarding Electives as they are laid down in Annex I of the SOP are met.

4.6.3 Suggestions

- It may be considered to introduce more hands-on in the optional courses.
- It may be considered to minimize the number of non-veterinary courses and have a lower limit for numbers of students necessary for a program to be carried out.

5 TEACHING AND LEARNING: QUALITY AND EVALUATION

5.1 TEACHING METHODOLOGY

5.1.1 Findings

The curriculum covers all major areas of Veterinary Medicine and, in general, offers a good balance between theoretical and practical work, but contact hours seem to beexcessive. All supervised practical training for the 5½ years account 3,515 hours or 39.22% of student's workload. Lectures and seminars for the 5½ years account 1,902 hours or 21.22% (table 4.1).

In addition to lectures and practicals, the Faculty recently introduced new teaching methods as interactive lectures, seminars and discussions, work in groups, student's presentations, case analyses, and role playing.

Computer aided or e-learning courses are developed for the first time 2 weeks before the visitation, by using the Intranet (Moodle platform) where some teachers publish materials as descriptions of laboratory practicals, recommended bibliographies, etc.Materials used in the lectures are provided to the students in advance. Students also use the e-learning resources available in the library.

Students are introduced to the objectives of the veterinary curriculum through the compulsory subject of the 1st year *Introduction to studies*. The objectives of the courses and subjects are published in the Faculty website, flyers and a local newspaper. Students are also introduced to the objectives of a given subject when teachers start teaching it.

In 2011, the veterinary curriculum was accredited by the National Agency for Quality Assurance for 6 years. The Faculty regularly collects feedback from students and graduates to help in the upgrading of the curriculum. The Study Program Committee (SPC) supervises the contents of the subjects and the quality of teaching and every 3-4 years carry out a self-assessment of the curriculum. Teachers would be requested to change parts of the subjects as a consequence of proposals from students, other teachers or stakeholders.

5.1.2 Comments

Teachers are overloadedwithcontact hours that make it difficult to keep a good research-oriented teaching.

The use of new teaching methodologies is commendable but it still needs more development and implication of all subjects.

The Faculty runs a program of self-assessment of quality through the work of the Study Program Committee but should improve the feedback from students and stakeholders and should also analyse and compare the failure rate of subjects leading to proposals for correcting measures in case of a very high rate of failure in a given subject.

It is the opinion of the team, that the requirements regarding Teaching Methodology as they are laid down in Annex I of the SOP are met.

5.1.3 Suggestions

- Overload of teaching hours of teachers should be analysed and ameliorated.
- Most teachers should make use of the intranet (Moodle platform) to facilitate e-learning and to promote student-centred learning.
- The Study Program Committee should have more autonomy in the proposals and should promote and take into consideration the feedback from the students, alumni and stakeholders.

5.2 EXAMINATIONS

5.2.1 Findings

A school year is divided into semesters; autumn semester – from September 1stto January 31st, spring semester – from February 1stto June 30th.Students have one week to prepare for the examination at the end of courses. Sessions or examination time may be extended for students due to justified reasons. The dates for taking the examination of each module are reported in the module's schedule.

External examiner from different veterinary fields are used.

If a student did not take a module's examination because of some justified reasons or if the student took a module's examination but failed, he/she will be able to take/re-take the examination once; there will be no fees charged for such repeated taking of the examination. In case of failure for the second time, retaking is possible only one year later with the next course (he/she has to pay a fee). After a second failure it is possible to retake only one more time one year later (a maximum of 5 retakes are possible). Students of the sixth course (11th semester) are allowed to defend the final work only after passing all examinations and credits of the programme. Studies are terminated for students who have not fulfilled the curriculum of studies by the end of the registration term for the semester.

Student's knowledge and skills are assessed with mid-term evaluations (colloquium, defence of practical works, tests, course work, case-records) and a final examination.

Description ofthe cumulative score is provided within every givensubject. Usually, the examination shall consist of a written test which may be supplemented by evaluation of practical skills.Accumulative on-going tests usually represent at least the 50% of the final score of theexamination. Achievements of the student are assessedusing a 10-point assessment scale; the lowest positive score (grade) is five.

A studentrepeating one or several subjects is not allowed to study other subjects at the same time if these subjects require knowledge and skills of repeated subjects. For this reason a student must acquire at least 20 ECTS per semester to be admitted to the next one.

5.2.2 Comments

The regulations concerning examinations are clear.

The drop-out rate out of 33% after two years and 50% at the end of the program (6thyear) could in part be related to some subjects that seems too difficult to pass.However, as pointed out in chapter 9.1 in this report a low percentage (39%) of the admitted students have veterinary medicine as their primary target for education. This warrants that special emphasis should be put on motivation.

The mid-term evaluation helps students to be continuously stimulated to study the subject, improving at same time their knowledge and facilitating the final examination.

It is the opinion of the team, that the requirements regarding Examinations as they are laid down in Annex I of the SOP are met.

5.2.3 Suggestions

- Special emphasis should be put on motivation of students with 61 % of a class not having the veterinary program as their first choice of university program.
- A permanent educational commission (even the SPC) should control if the rate of students not passing a subject examination is too high and in case it occurs it should locate and correct the reason(s) for unexpected high failing rates.

6 FACILITIES & EQUIPMENT

6.1 GENERAL ASPECTS

6.1.1 Findings

Lithuanian University of Health Sciences (LUHS) is divided into two separate campuses: Medicine Academy (5 Faculties, 4 Institutes and 1 Museum) and Veterinary Academy organized in 2 Faculties (Animal Husbandry Technology and Veterinary Faculty), 2 Institutes (Veterinary Institute and Animal Science Institute), a Veterinary Museum, 1 Centre for Continuous Teaching and Consultation, 1 *Vivarium* to house laboratory animals for research and/or teaching, and a Student's Union building. There are also 4 student residencies to house up to 650 students and a modern sports hall. Other premises are the Large Animal Clinic, Small Animal Clinic, National Food and Veterinary Risk Assessment Institute, and the Infectious Diseases building. Students also enjoy two study buildings and 1 canteen. All premises were built from 1936 to 1974. Most of the buildings have been reconstructed and modernized with new equipment over the last 10 years. The team verified that the renovation of the Large Animal clinic, Infectious Diseases and Anatomy Buildings are finished, only pendant of the furnishing. New and renewed facilities partly comply with accessibility for handicapped persons, but half of the premises (old buildings) are not (no entrance ramp, lift, etc.).

The number of lecture halls and laboratories are adequate. Veterinary Academy is provided with 7 lecture halls: 4 large ones for 210-280 students, 1 medium size for 105 (lecture hall number 5) and 2 small ones for 40/50 students. They are sufficiently and well equipped for the theoretical training with digital video projector and in 3 of them also with video and audio equipment. Also, three computer rooms (120 places) are available for the two faculties of the Veterinary Academy.

Pathology is equipped with 2 dissection tables for necropsy of Large Animals and 4 tables for Small Animals; a hoister is used to perform vertical dissection of Large Animals. There are also sets of dissection instruments, scales, freezers, fume hoods and refrigerators. A sufficient number of vehicles for student's transportation are available: one large bus with 28 seats, two minibuses with 14 seats each and two minibuses with 8 seats each. For animal transportation the Faculty uses one car Peugeot

406 for Small Animals and a trailer for Large Animals. Cadavers of food producing animals are collected for necropsy by a trailer of the LUHS Maintenance Division. Also a vehicle for emergency service of the Small Animal clinic is available on call. Ambulatory clinic for food producing animals (and practicals with students on duty) are developed using two cars at a time when required with 9 and 5 seats.

The need for equipment and materials is analysed every year to prioritize the updating.

Not all premises for teaching meet the standards for health and safety in work places. Some laboratories for practicals using potentially dangerous chemical products are not equipped with safety devices (eye-washers e.g.). First aid recommendations are not clearly visible in all working rooms. Not all lecture halls and laboratories for practicals etc., are equipped with smoke detectors, fire protection and safety devices.

In laboratories students wore gowns and gloves. In the clinics and necropsy room students wore gowns and disposable shoes and gloves.

6.1.2 Comments

The concentration of facilities and equipment within LUHS provides good possibilities for the Faculty to cooperate with the Medicine Academy and research institutes.

Whereas there are national requirements for workplace health and safety the level of awareness at the Veterinary Academy and Faculty appears to be low, which was confirmed by meetings with staff. The staff in old buildings seems not to be concerned or even know the standard safety measures in the laboratories despite the evaluation and risk assessment developed by theOccupational Safety & Health Service of the University.

Multiple local and international funding resources, including EU Structural Funds, are successfully combined to improve the quality of premises and to update research and teaching equipment. For example, new equipment for lecture halls and laboratories was upgraded using project funds.

Bureaucracy hindering furnishing of renewed buildings for Anatomy and Infectious diseases is delaying the move to the new premises and negatively affects the quality of practicals.

Facilities in Pathology were rebuilt and appropriate but a sanitary pool in the exit door from the necropsy room should be put in place as soon as possible to guarantee disinfection of boots.

6.1.3 Suggestions

- The old premises must be adapted to improve accessibility with access ramps and elevators. Corridors must be free of obstacles, especially in the way to an emergency exit. All laboratories working with potentially hazardous material must be properly equipped with safety and first-aid devices.
- The Occupational Safety & Health Service of the University should develop a more aggressive campaign to promote the implementation of and respect for safety measures among staff anmd students.
- Anatomy, histology and embryology and infectious diseases should move immediately to the renewed premises.
- Pathology should install a sanitary pool in the exit door from necropsy room.

6.2 CLINICAL FACILITIES AND ORGANISATION

6.2.1 Findings

There are 4 departments in the Veterinary Faculty (Anatomy and Physiology, Food Safety and Quality, Non infectious Diseases and Infectious Diseases), 2 clinics (Small and Large Animal) and the Pathology Centre. Furthermore other LHUS faculties take part in the veterinary education (p66).

The campus including the small and large animal clinics, are located in a quiet area a at the periphery of the centre of Kaunas.

Many of the buildings are from 1936 including the Small Animal Clinic which was reconstructed in 1996 and the Large Animal Clinic being currently reconstructed and renewed.

Several laboratory facilities exist and they do carry out external work.

Concerning the Large Animal Clinic, the clinical facilities have 9 boxes for horses and 6 for cattle.The numbers of cattle have been very low due to reconstruction of the clinic and infectious diseases in cattle, which have been treated at the farm but the team verified the number of cattle seem high due to the access to farms with contract with the University for training of the students.

Concerning the Small Animal Clinic, the clinical facilities have 18 boxes for dogs and 9 for cats. It must be noted that surgery is performed at the first floor and there are no elevators or other means of supporting transportation of diseased/injured animals from the first floor to the second floor.There is also a clinical laboratory, with a qualified technical staff operating e.g. a new IDEXX machine. This laboratory does not serve external clients (private practitioners, farmers, etc.).

The team didn’t see any isolation unit neither in the Small Animal nor the Large Animal clinics. Cats and dogs are kept together in the same rooms.

We found a good digital X -ray device in large animal clinic, while the Small Animal Clinic ran a rather old conventional x-ray machinery. However, the gloves (only one set of gloves!), aprons etc. were new and fully functioning. It was surprising that dosimeters were not used on the day of the visit, as they were sent for renewal. Directly asked the team was told that this was a routine procedure which was approved by the clinic's management. Apart from that breach of safety and health regulations it was noted that x-ray pictures were not marked properly with owners name, etc. but that this information was added in hand writing at a later stage.

Most of the sutures in the rolls in the Large Animal clinic were expired.

For Small Animals the number of consultation rooms are 6, and the team saw one functional surgery room. The hospitalisation boxes, x-ray examinations and surgery are done on different floors without a lift connecting them.

It was clear from the inspection, and students confirmed this, that participation of the students in the clinical work in the Small and Large Animal Clinics rely mostly on a voluntary basis and is handled in an uncoordinated and uncontrolled way. However, a rotation scheme is available for the students.

The team was informed that the staff at the Small Animal Clinic was almost totally renewed this year.

There were no standard operating procedures for:

- Handling of animals
- Use of dosimeters while they are controlled/renewed
- Hygiene before surgery, hand washing, use of antiseptics etc.
- Anaesthesia protocol, intubation method, etc.
- There were no drugs immediately available for emergency during induction of anaesthesia and surgery

The team did not see common treatment procedures performed by the individual staff members, which is especially problematic as they do not have any specialists in the Small Animal Clinic.

For equines and food animals the number of examination rooms is 2 and 1 surgical room

There is one well equipped operating theatre in a very good condition for large animals

The Faculty runs a 24 hour emergency service in both the Large Animal and the Small Animal Clinic and a 24 hour intensive care service. It is a mandatory rotation scheme for the students taking part in this service at the two clinics.

For small animals there exists a transportation possibility for owners with their pet.

There exist possibilities for additional animal materials from stables, farms and homeless cats. Cows at the farms and horses from the stables will be transported to the hospital for clinical procedures including surgery.

There exists an agreement between homeless animal care organizations and the small animal clinic, by which the animal number is increased. These animals are treated and taken care of by volunteers and the premises arenot under the control of the head of the Small Animal Clinic.

If it is discipline or species specific orientated depends on the qualification of the veterinarians acting at the moment. We can highlight that the dental care in LA for horses was at a very high standard.

The equipment is generally of acceptable standards, especially at LA clinic (gas anaesthesia, endoscopy, ultrasounds, digital X-ray, dental instruments). However, it was noted that the Small Animal Clinic does not have some basic equipment as an ophthalmoscope.

Registration procedures in the Small Animal Clinic were complicated and included a mixture of electronically records combined with prints and lab and x-ray results e.g. Large animal patients were registered in a book. Students did not have a real access to database of the cases.

6.2.2 Comments

Five days of undirected work in the small and large animal clinics is considered as too little to gain enough clinical knowledge to fulfil the day-one-competencies addressed in Annex IV of the SOP. The amount of controlled clinical hands-on is not sufficient for all students if students choose not to do voluntary clinical work.

The rotation scheme for the students are time-consuming for the both teachers and students, as every Monday two new groups will be introduced, one in the morning and one in the afternoon.

A number of laboratories are doing closely related analyses in different places.

6.2.3 Suggestions

- Isolation facilities must be established.
- The small animal clinic needs rebuilding or re-housing as it is not acceptable that patients of all sizes are carried by hand to the first floor for diagnostic imaging, examination and eventual surgery.
- The clinical work in the Small Animal Clinic must be reorganised to support a good learning environment.
- Students' participation in the clinical work of the clinics must be reorganised in a more coordinated, controlled and compulsory way. The Faculty has to rethink the traditional and

compulsory system of rotations for students, and specifically define it for each class to secure and control students' day one skills of EAEVE as laid down in theAnnex IV of the SOP.

- The number of cases at both small and large animal should be used to the most for teaching purposes and the students should be totally involved in the examination and treatment.
- It is needed to have many SOPs, and a person to follow and control the implementation of these procedures in the Small Animal Clinic, a person who is intimately familiar with the whole process of working in the clinic should be considered.
- A centralisation of all laboratory services throughout the Faculty should be considered.
- The room dedicated to stray animals should be moved and run under the authority and responsibility of the Small Animal Clinic.

7 ANIMALS AND TEACHING MATERIAL OF ANIMAL ORIGIN

7.1 Findings

Animal cadavers and samples for pathological anatomy practical work are collected from the clinics (including VA and private clinics), farms, the Zoo and Sea museum and slaughterhouses.

Food hygiene students carried out their practical training in the farms and poultry slaughterhouses. For Animal production practical training students visit the Practical training and testing centre (PTTC- 815 ha land, 464 dairy cows), public and private farms (including organic farms) and stud farms. Large animals and laboratory animals stabled at the Faculty are also available.

The animal material seen in the establishment clinics is detailed in the SER Table 7.3 (p 71).

Table 7.3: **Number of cases: a) received for consultation, and b) hospitalised in the Faculty clinics over the past three years.**

Species		Number of cases						Average
		Year 2011		Year 2010		Year 2009		
		a	b	a	b	a	b	
Food producing	Bovine	1	4	1	8	1	5	102.3
	Ovine, caprine	2	1	2	2	3	2	
	Porcine	102	18	89	22	24	20	
	Other farm animals**	-	-	-	-	-	-	
Poultry		8	-	9	-	8	-	35
Rabbits		11	-	24	-	45	-	
Equine		139	21	141	60	170	45	192
Companion animals, exotics	Canine	3545	275	2858	150	3277	192	4162.7
	Feline	698	131	485	98	560	114	
	Other**	34	3	29	6	31	2	

** Llamas, donkeys, lynxes, tiger-cats, ferrets, chinchillas, Guinea pigs, rats, exotic birds, reptiles

Table 7.4a: **Number of cases seen by ambulatory (mobile clinics) in the past three years.**

	Species	Number of patients			Average
		Year 2011	Year 2010	Year 2009	
Food-producing animals	cattle	4	8	5	7.7
	small ruminants	2	2	2	
	pigs	0	0	0	
	other farm animals **	-	-	-	
Poultry (no of flocks)		5	5	7	8.7
Rabbits (no production units)		3	2	4	
Equine		101	104	119	108
other **		6	5	7	6

** Lama, elk, monkey, white bear, tapir

Table 7.4b: **Number of patients seen on outside teaching in the past three years**

	Species	Number of patients			Average
		Year2011*	Year2010	Year2009	
Food-producing animals	cattle	1496	872	517	1031.3
	small ruminants	42	34	60	
	pigs	22	30	21	
	other farm animals	-	-	-	
Equine		1032	990	870	964
Other		32	50	12	31.3

The large animal clinic has appointments with around 20 farms, which they visit every Wednesday with a big group of students on large animal rotation. During their visit, they do propaedeutics and clinical examination of animals with symptoms of diseases (claw problems, GI, respiratory diseases etc.). There are very good possibilities for students to get hands-on training.

Practical training of students in Food Hygiene is guaranteed by visiting 5 external slaughterhouses located 50 to 200 Km away from the Faculty and 5 foodstuff processing companies. The exposure to slaughter of various species is adequate and there are numerous state veterinarians in the slaughterhouse to facilitate teaching and training. Access to materials for food hygiene training is adequate.

In Anatomy students are exposed to an adequate number of cadavers, organs and skeletons from different domestic animals; students also practice anatomy of the skin and annexes in the clinics by using live animals. Some anatomic models and a computer programme of canine anatomy are also used. Anatomy fresh material (cadavers, organs) come from the SA and LA clinics.

The caseload of necropsies in pathology is adequate and covers most of domestic animals and some wild and zoo animals (Table 7.2). Practicals in pathology use cadavers from the clinics, private small animal clinics, farms and slaughterhouses. Pathology has a division of the National Food and Veterinary Risk Assessment Institute to perform necropsies of infectious animals and forensic veterinary studies that can be watched by the students. Pathology service supply cadavers for anatomy and surgery.

7.2 Comments

Animals are available for practical activity in food-producing animals (farm animals) with regards to breeding and genetics, morphological evaluation, nutrition, rearing techniques and animal welfare. However, these animals are generally not brought to the faculty but the students are brought to the farms, where there are more than sufficient numbers of animals available.

The team wants to commend the Faculty for its good clinical training performed in the farms visited.

The team saw very good facilities for slaughtering with enough staff to perform very good teaching. This takes place in a large, professional, certified slaughterhouses working according to EU legislation.

To improve the training of students in Anatomy and Pathology of food producing animals, both subjects should have more access to normal and diseased organs, respectively, from slaughterhouses.

It is the opinion of the team, that the requirements regarding Animals and Material of Animal Origin as they are laid down in Annex I of the SOP are met.

7.3 Suggestions

- It should be made clear to animal owners that all animals brought to the clinics will be made available for students' clinical training under the supervision of teachers.
- The function of the mobile clinic with so few patients might be substituted by an agreement with one or more private practitioners.
- A renewed agreement and clear division of responsibility in the animal shelter currently being incorporated in the small animal clinic should be made. This could improve availability of dogs and cats for students' training.
- Cooperation between the staff working in the Dept. of Animal Husbandry and other departments could easily improve the number of poultry, rabbits and equine cases.
- The Faculty should allocate funds or facilitate transportation to bring organs from slaughterhouses to practicals in Anatomy and Pathology.

8 LIBRARY AND LEARNING RESOURCES

8.1 Findings

There are two libraries, one in the Veterinary Faculty and the other in the centre of the city. Both of them have a sufficient amount of new computers that students can use to search for information on the internet, as well as for doing academic works.

The *Library and Information Centre Veterinary* has a wide selection of relevant and new books on all subjects. The students have sufficient numbers of books to borrow. Borrowing time is for a maximum of 3 months, and students can re-borrow the same book twice during 3 months. The library is open daily from 8:00 a.m. to20:00 p.m.

The *Biblioteka ir Informacijos Centras* is very well equipped, has very good natural light, and a wide selection of books. The students can borrow as many books as they need. The opening hours are 7:00-22:00h (Saturdays and Sundays: 10:00-20:00 h). The library offers a 2 hours compulsory lesson in the use of library, and there are regularly offering free courses to manage databases.

Both libraries have many relevant and up to date journals at the shelves, and there is on line access to a wide range of international journals. The libraries have several different rooms for group work and many computers to search for information, watch videos, and study otherwise.

Both libraries are connected via the internet, and there is a common catalogue to search for books; students can find information for works on the databases too. Photocopying facilities are available for a fee.

Both libraries have a common access to 47 databases, 26 of them related to veterinary medicine or to human medicine.

At the *Biblioteka ir Informacijos Centras* there are some services offered to the students that they have to pay for e.g. interlibrary loan but students explained that that is not a problem as there are a sufficient amount of books in the Faculty library.

The departmental libraries are very accessible to students, they can manage to search the book in the catalogue and then in the library; also they can take a book with a card, in case they have any problem they can ask for help on the information desk. The team noticed that many books in the departmental libraries are very old, obsolete or in Russian.

8.2 Comments

The library is of an outstanding standard. However, the physical layout of the building includes many steps so disabled people can't reach it.

It is commendable that many relevant textbooks are in English.

It is the opinion of the team, that the requirements regarding Library and Learning Resources as they are laid down in Annex I of the SOP are met.

8.3 Suggestions

- The library building must be accessible for disabled people.
- Textbooks in English should continuously substitute older and obsolete books.

9 STUDENT ADMISSION AND ENROLMENT

9.1 Findings

There is a selection procedure based on a competition score calculated summing the relative score for Biology, Chemistry, Lithuanian language and a foreign language (e.g. English, French, Russian, and German) obtained at the Matura examinations.

The number of students' entrance is limited to 200 each year and this number is fixed following discussions in the Faculty, Recto rate and Senate taking into account governmental decisions. Availability of staff and facilities are factors that may influence the admission rate.

Based on the procedure for general admission to higher education institutions, students can indicate in the application those study programmes in which they would like to study in a prioritized order; among 171 admitted students in the Faculty only 68 (39%) indicate Veterinary Medicine as the first choice. This could determine a lack of motivation and could represent, as reported in the SER, one of the factors contributing to the high-drop-out rate (50%).

The budget of the Veterinary Academy and hence the Veterinary Faculty depends among other factors on the number of students admitted.

According to the legal background (Law on higher education and research 30 April 2009 No XI-242 Vilnius - Article 7) referred to in the SER the number of admitted students is not clearly linked to the national need for veterinarians but more upon the decision of the Faculty.

The number of admitted students is important to support costs. Considering that 97 students are supported by State grants, it seems that the faculty try to increase the number of admitted students.

Foreign students are admitted to courses taught in English during the first two years. Starting from the third year to attend lectures in Lithuanian. Foreign students must follow a course in Lithuanian language.

9.2 Comments

The absence of an entry examination or interview procedures limits the ability to guarantee the selection of students having the aptitude, knowledge base and motivation for veterinary studies.

The team was repeatedly told that a number of students lack motivation and that they are uninterested in the veterinary program.

It is the opinion of the team, that the requirements regarding Admission and Enrolment as they are laid down in Annex I of the SOP are met.

9.3 Suggestions

- It should be considered to establish an internal educational commission to analyse in depth the problems with the very high dropout rate consequently leading to a reduction of the very high dropout rate.
- Generally it is a question of leadership to motivate students, staff and faculty. It is suggested that the Faculty should analyse the whole situation with lack of motivation. An evaluation system requiring a minimum level of knowledge should be considered.
- The number of admissible students must be also related to available resources and national need for veterinarians.
- It should be considered to introduce grants for highly motivated students to avoid students dropping out for financial reasons.

10 ACADEMIC AND SUPPORT STAFF

10.1 Findings

The ratio of teaching staff *versus* students is 7.89 and the ratio of teaching staff *versus* support staff is 2.10 and the professors and doctors make up 52.7% of the total academic staff. Veterinarians constitute 82.2 % (80.14 of 97.15) of the academic staff.

The composition of personnel is decided by the Rector, who also decides to eliminate posts by notifying the person in the position. Allocation of staff is announced by a public tender for a term of 5 years. Invited teachers and scientists may have a contract for no longer than two years. Posts which become vacant are not automatically filled and movement of staff between departments and research institutes is not common.

The academic and research staff are tested every 5th year and the teachers are encouraged to improve their qualifications by taking part in courses, conferences, seminars,etc. It is indicated that teachers can go for internships, conferences or similar events in foreign countries.

Teachers working in the clinical units are specialized according to the type of animals and disciplines. The team noted only a low specialisation in disciplines.

The veterinarians working in the hospitals do not have a clear organisation of their time devoted to teaching, clinical duties, research and other non-teaching-related academic activities.

Teachers can be awarded professor's or docent's titles before expiry of their first term employment if they fulfil the qualification requirements.

Movement within the faculty is indicated as rare.

Teachers' salaries are indicated as low in comparison with the average of the country. Salaries are differentiated in accordance with the position and activity. There isa promotion system, where the 5 most active teachers are annually selected and awarded.

In general, teachers complain of the heavy workload of contact teaching hours that limit considerably their dedication to research work.

10.2 Comments

It was unclear also during discussions with senior or junior staff whether there is sufficient support staff but in general the team did not hear severe complaints about supportive staff.

Though the salaries may be low, the announcement of positions should be more international. Furthermore the positions to some extend should be announced public.

It didn't seem as if the University could afford to send considerable numbers of the academic staff out for continuing education.

It is the opinion of the team, that the requirements regarding Academic and Support Staff as they are laid down in Annex I of the SOP are met.

10.3 Suggestions

- It should be considered to establish a central system of funding (e.g. scholarships) for continuing education (CE) especially participating in CE abroad. This will also increase the internationalisation of the faculty.
- The level of salaries should be considered to ensure a continued influx of the best qualified candidates for junior and senior positions.
- A more transparent way of employment including attempts to attract international academic staff should be considered.
- Efforts should be made to reduce teachers teaching workload to facilitate their dedication to research work.

11 CONTINUING EDUCATION

11.1 Findings

The Order N° B-897 sets out that every licensed veterinary surgeon must follow at least 32 hours of continuing education every 2 years. Using the opportunity given by this order, the Faculty takes active part in continuing education in close cooperation with the Veterinary Continuing Education and Consultation Centre.

The Lithuanian Veterinary Association pays for these courses directly to the Faculty.

The topics of Continuing Education (CE) courses are chosen in cooperation with the practitioners associations, so a good attendance usually about 100 practitioners is often the case.

11.2 Comments

The involvement of teachers in CE programs is on voluntary basis, and is done according to personal objectives of career.

It is the opinion of the team, that the requirements regarding Continuing Education as they are laid down in Annex I of the SOP are met.

11.3 Suggestions

- It could improve the incomes, and strengthen the relationship between private vets, students and faculty if a strategic plan of the Faculty policy in terms of continuing education courses were in place.

12 POSTGRADUATE EDUCATION

12.1 Findings

The Faculty offers two types of post graduate courses, Clinical Specialty training (equivalent to a Master course) and Research training.

From 2006 the Faculty offers 11 national residency programs for different clinical specialties that are not certified by the EBVS (Table 12.1). Graduates following any of these programs receive a state stipend for residency studies. The number of residents graduating annually fluctuates from 10 to 15.

There is no rotating internship program in place.

There are PhD-students in the Faculty but not PhD specific programs, students simply integrate in any of the research groups directly. All PhD-students before 2009 were funded by the state and from 2010 they are funded from EU structural funds. The number of PhD students in the Faculty is 5-8 new students/year (SER p122, Table 12.7).

From 2002 doctoral studies require of the preparation and defence of a research PhD work and to provide 2 papers, at least 1 in an international indexed publication. Table 12.13 (SER p125) shows the number of publications of PhD-students.

12.2 Comments

The number of postgraduate students is very low taking into consideration the size of the Faculty.

The number of postdoctoral places available and grants for PhD-students is very limited. Increasing the number of the postdoctoral places would help devoted graduates to start a research career.

The faculty uses the term residency programs, but it should be clarified to Lithuanian veterinarians that this is not a program supported by EBVS and that the residents do not acquire diplomate status at the end of the programs.

It is the opinion of the team, that the requirements regarding Postgraduate education as they are laid down in Annex I of the SOP are met.

12.3 Suggestions

- The Faculty should consider encouraging and helping graduates to prepare for European diplomas especially in clinical sciences.
- The Faculty/University should consider increasing the number of postdoctoral places and PhD-grants e.g. supported with private companies and funds.

13 RESEARCH

13.1 Findings

In recent years research activity has been reorganized. Relevant funds were used to implement structures and to acquire facilities. Moreover, some institutes and activities were centralised, reducing expenses. Many researchers are involved in EU projects (see below), concerning food quality and safety, animal welfare and also clinical topics.

Students participate in scientific activities of the Student Scientific Society (currently 98 members). Since preparation of the final experimental work is compulsory, all students from the 4th year are involved in research activity. There are small funds allocated to the departments' realization of the whole study process including for the preparation of the final thesis of students (consumables, equipment etc.). From 2011, departments began to receive some funding according to the number of the final theses prepared at the department.

The research is actually related to limited subjects and area. However, the great implementation of structure and equipment, and a new state-of-the-art, modern veterinary institute for research represents the starting point for a common development of research involving different experts.

There are many smaller laboratories spread around the campus, but in some of these the team also noted both advanced and expensive equipment.

During meetings it was clear that the Faculty does have a common research strategy involving three main areas but it is very broad and in effect encompassing all areas of research. The research strategies are more local at the departmental level and strategies are mostly driven (as in every Faculty) by the availability of external funding.

In recent years the number and quality of publications has significantly increased but researches doubted the impact of research journals in Lithuanian and they clearly expressed that they wanted to publish in international journals.

Funding to VA faculties grew in 2010–2011 due to „Nemunas"project. Support of Ministry of Agriculture to the Institute increased in 2008, mostly thanks to the funding for preserving genetic resources of Lithuanian farm animals (AHI).

The degree of research funding is reported in table 13.5.

Table 13.5: **Funds from agreements of LUHS VA faculties and international projects in 2010 and 2011**

Year	*Lithuania's agreements with foreign countries*		*International projects*		**Aggregate funds** (thousand Lt)	**Valley „Nemunas" project** (thousand Lt)	**In total:**
	Number	**Funds** (thousand Lt)	**Number**	**Funds** (thousand Lt)			
2010	25	1.670,0	9	44,4	**1.714,4**	1 764,0	**3.478,4**
2011	35	1.985,2	11	67,1	**2.052,3**	10 100,2	**12.152,5**

External funding was mainly obtained via the Nemunas Project and Lithuania‘s agreements with foreign countries and EU projects.

Actually, doctoral students admitted to the studies of biomedical sciences are funded from the European Union structural funds in the framework of Researchers Career Programme and on topics of national complex programmes.

A doctoral degree in Veterinary Medicine can be awarded to a person who successfully completed full-time (up to 4 years) or part-time (up to 6 years) doctoral studies, prepared and defended a thesis, or to a person who defended his/her thesis prepared in an external research environment.

In 2012, 25 full-time and 11 part-time doctoral students were operating in the VA.

The Faculty does not have international PhD-programmes but students can apply for ERASMUS mobility or short period training (NOVA and BOVA projects).

In 2011, 35 agreements with foreign countries and 11 EU projects (FP6 and 7, Eureka and Cost) resulted to be in progress.

13.2 Comments

The Faculty should take great pride in the fact that it has reached a considerably high level of research in several departments and institutes. This is due to a concerted effort from the Faculty as a whole.

The team saw a varying standard of research laboratories but a number of high quality laboratories are already prepared with furniture and equipment that will be operative in a short time. The team was under the impression that bureaucratic obstacles caused considerable delay in getting these laboratories ready for use.

The quality of equipment including very modern instruments in different fields represents a great opportunity for high level research in different topics of the veterinary science.

Excellence in some fields is evidenced by EU projects and high scored publications.

It is the opinion of the team, that the requirements regarding Research as they are laid down in Annex I of the SOP are met.

13.3 Suggestions

- Bureaucracy regarding use of new buildings should be reduced.
- Introduction of an international PhD-program may be beneficial to the research as a whole and also and specifically to the different research groups.
- It should be considered to centralise some of the research laboratories as well as the students’ laboratories. This will help optimize staff activities, maximize use of expensive equipment and reduce cost for their service and maintenance, and it will pave the road for increased research cooperation between the departments.
- Researchers should be encouraged to submit their research publications to international journal instead of using national journals with a low impact factor.

EXECUTIVE SUMMARY

The team experienced a very friendly welcome and was professionally treated and served throughout the entire site visit and the team was supplied with all further information asked for.

The self-evaluation report was a most helpful tool, reflecting the true status of the Lithuanian University of Health Sciences, The Veterinary Academy, Faculty of Veterinary Medicine in Kaunas.

The team was really impressed with the huge improvements made by the Faculty since the last evaluation and we take pride in having met so many good and enthusiastic colleagues and students.

A rather complicated organization focused on teaching and research but also to some extent service to the community (95 accredited analyses in the diagnostic laboratory) has given the Faculty its good position. Apart from this the financial status of the faculty is relatively healthy, and the academy as well as the faculty has benefitted from successful applications for national and EU grants allowing for high quality renovation and construction of new teaching facilities.

With an on-going process of renovation the framework for high quality research, clinical activities and teaching will be fully in place in a few years given the present pace of renovation. This will be beneficial to students, animal owners, and community.

The Faculty has a list of 12 major problems encountered by the Faculty and another list of 17 tasks to be performed. This adds up to a total of 29 issues that the Faculty in its own opinion must address. These lists do not include renovation of the small animal clinic.

However, for the quality of the clinical training to be improved the Faculty needs to prioritize an extensive improvement program for the small animal clinic. The physical frame for the small animal clinic is not up to date and the equipment in this clinic, as well as in the large animal clinic, needs to be supplied with new equipment. As an example an ordinary ophthalmoscope was not at the disposal for the clinical examination of patients.

The team was not fully satisfied with the organisation of the small animal clinic and noted that introduction of Standard Operating Procedures (SOP's) for all the most common procedures (introduction to the client, examination of patients, use of special equipment, diagnostic imaging, anaesthesia, preparation for surgery, etc.) would be absolutely beneficial for technicians, students and veterinarians and in the end also to the clients and the patients.

The system of clinical records, and its use within the faculty, needs to be revised, so it is absolutely clear who has done what, at what time and with what result. Introduction of a professional record system with full student access should be prioritized and until this is in place it is recommended to organize the present system of partly computerized data (transformed from handwritten forms) and paper data (X-rays, lab. results e.g.) in a retrievable way to make sure that information is not lost during the various rewriting and filing procedures.

The agreement with an NGO organisation to run the shelter should be renegotiated to ensure full faculty influence and responsibility over animals placed in university buildings.

Isolation facilities must be established.

In order to increase the possibility of establishing EBVS approved residency programmes, a large case load is a must. A large case load is dependent on relevant and up to date facilities and equipment which again is a prerequisite for attracting highly qualified staff and faculty. This on its side attracts more both primary patients and referrals.

There is a variation in the quality of practical clinical teaching among different clinical units and disciplines. In general, undergraduate students should get more opportunities to take advantage of the good caseload flow, doing real hands-on work and experiencing teachers on the floor. The clinical caseload could be improved to assure an efficient patient flow to the benefit of the students.

Hands on training in the clinics must be improved and increased immediately.

The faculty benefits of the support from the university in an area like the library, which is of outstanding standard.

The team was not satisfied with the general level of safety procedures and bio-security measures. It must be mentioned that it is absolutely unacceptable that staff operating the X-ray equipment with the consent of the management does not wear dosimeters continuously. In general the team noticed that eye washers were not available in all laboratories, escape plans and escape signs were not in place in all areas, fire extinguishers or hoses were not in place in all places, hand washing basins and soap was not readily available in all rooms where dirty procedures took place, ventilation hoods were not available or functioning correctly in all places and, finally, the faculty lacks a strategy for adapting the facilities to disabled people. The team strongly suggests that the faculty take up this task immediately in a professional way e.g. by establishing a strong safety and bio-security committee with executive power. This might best be done with external assistance linking to national and EU legislation.

Overall the team found indications of problems within

- safety, health and bio-security procedures
- insufficient hands-on training in the clinics
- lack of adequate clinical procedures in the small animal department
- Lack of a compulsory teaching program for the clinical departments. Students are not supposed to decide themselves what they feel is interesting to do in the clinics. This must be coordinated, executed and controlled by the Faculty and/or departments
- there are no isolation facilities which is a must in the SOP

Visiting farms is a very important tool for practical teaching. Therefore, the team commends the Faculty for its efforts to bring students into real farm environment thereby increasing the patient material considerably.

The Faculty would benefit from more research staff in many departments and clinics, taking into consideration the high numbers of students, the need for more intensive practical clinical teaching and increasing administration load.

Veterinary medicine is a fast developing field. New integrated concepts, like stable to table approaches, herd health management, veterinary public health, and animal welfare have emerged and become important. A modern veterinary school should teach students analytical thinking and problem solving, which is in general terms even more important than specific individual skills. These concepts must be presented to students as a whole and not *per partes*, in fragments. Therefore, as in almost all veterinary schools, a better coordination, better horizontal and vertical integration and better communication among all organizational units is strongly recommended to cope with these new challenges.

Annex 1 Indicators (Budapest version June 2012)

Ratio for Kaunas, Lithuania, (Budapest June 2012 denominators)	**Numerator/Denominator calculated by faculty**	**1/Denominator faculty figures**	**Established range of denominators**	**Notes**
R1 p105 SER	97.15/767	1/7.89	8.832 (UL)	Above level = better than
R2 p105 SER	140.15/1243	1/8.87	9.619 (UL)	Above level = better than
R3 p105 SER	80.15/767	1/9.57	11.389 (UL)	Above level = better than
R4 p105 SER	80.15/80	1/1	2.203 (UL)	Above level = better than
R5 p105 SER	97.15/204.75	1/2.10	0.474 – 1.944 (Range)	Slightly outside range = more support staff than demanded
R6 p44 SER	5445/3515	1/0.65	0.576 (LL)	Above level = better than
R7 p44 SER	1015/2500	1/2.46	1.952 (UL)	Above level = better than
R8 p44 SER	*3543/8960*	*1/2.53*	*2.576-103.746 (Range)*	*Slightly below range*
R9 p44 SER	587/8960	1/15.26	0.725-98.437 (Range)	Within range
R10 p44 SER	587/74	1/0.13	0.061-0.881 (Range)	Within range
R11 p76 SER	80/102.3	1/1.28	0.956 (LL)	Above level = better than
R12 p76 SER	80/1039	1/12.99	7.345 (LL)	Above level = better than
R13 p76 SER	80/36	1/0.45	0.307 (LL)	Above level = better than
R14 p76 SER	*80/192*	*1/2.4*	*2.590 (LL)*	*Slightly below level*
R15 p76 SER	*80/35*	*1/0.44*	*0.505 (LL)*	*Slightly below level*
R16 p76 SER	80/4162.7	1/52.03	43.462 (LL)	Above level = better than
R17 p76 SER	80/8.7	1/0.11	0.040 (LL)	Above level = better than
R18 p76 SER	80/134	1/1.67	0.998 (LL)	Above level = better than
R19 p76 SER	80/318.3	1/3.98	0.547 (LL)	Above level = better than
R20 p76 SER	80/293	1/3.66	1.498 (UL)	Above level = better than

Annex 2 Listing of suggested Major Deficiencies

1. It is the opinion of the team, that the number of hours for practical, clinical training as they are laid down in Annex I of the SOP are not met and that this may warrant a Major Deficiency. Chapter 4.4.2.
2. It is the opinion of the team, that the requirements regarding student care (insurance) as they are laid down in Annex I of the SOP are not met and that this may warrant a Major Deficiency. Chapter 4.4.2.
3. It is the opinion of the team, that the requirements regarding Physical Facilities in general with respect to safety and health procedures as they are laid down in Annex I of the SOP are not met and that this may warrant a Major Deficiency. Chapter 6.1.2.
4. It is the opinion of the team, that the requirements regarding Physical Facilities, Clinical with respect to securing a good working environment in the small animal clinic conducive of a good learning environment as they are laid down in Annex I of the SOP are not met and that this may warrant a Major Deficiency. Chapter 6.2.2.
5. It is the opinion of the team, that the requirements regarding Physical Facilities, Clinical with respect to isolation facilities (large as well as small animals) as they are laid down in Annex I of the SOP are not met and that this may warrant a Major Deficiency. Chapter 6.2.2.

Annex 3 Student's Report

The student's observations and contributions have been added within the text in the single chapters.

ECOVE DECISION: NON APPROVAL

List of Major Deficiencies:

1. The extent, nature and form of practical clinical training, as laid down in Annex I of the SOP, are not met;

2. The requirements regarding student care and safety, as laid down in Annex I of the SOP, are not met;

3. The requirements regarding Physical Facilities in general and with respect to safety and health procedures, as laid down in Annex I of the SOP, are not met;

4. The Clinical facilities are inadequate and not conducive to a good learning and working environment;

5. The isolation facilities (both small and large animals) are lacking.