European Association of Establishments for Veterinary Education

Association Européenne des Etablissements d'Enseignement Vétérinaire



## REPORT on the STAGE 2 EVALUATION VISIT to the FACULTY of VETERINARY MEDICINE, GHENT, BELGIUM

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by the EXPERTS

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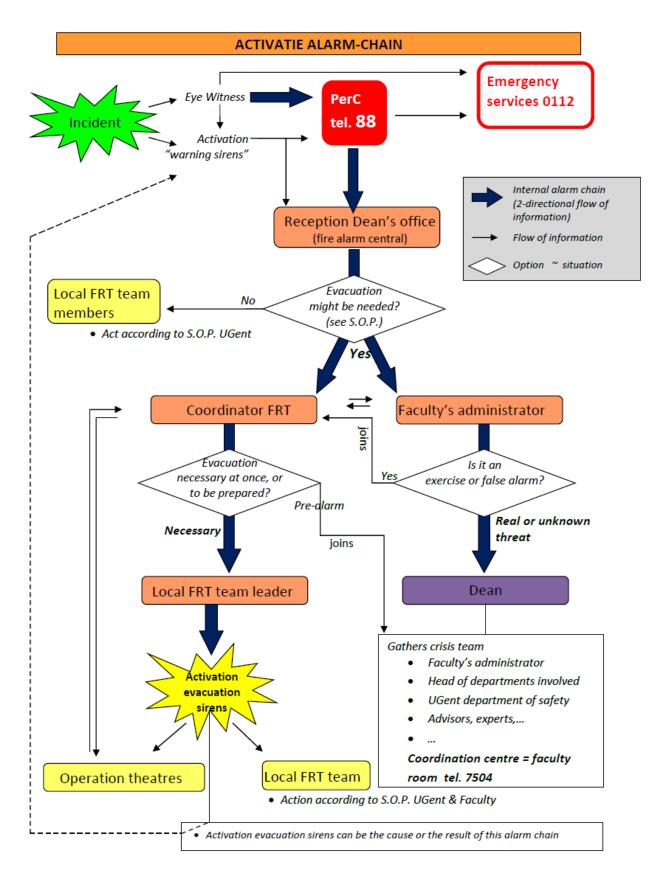
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## **INTRODUCTION**

The team found that measures for assessing quality have been in operation for a minimum of two years. Flow charts were provided for some, though not all of the assessment procedures. Full documentation of the assessment procedures was not available at the visit from day one, but examples of documentation of the assessment procedures were placed at the team's disposal upon request, as was a list of assessment procedures and a date in which they were implemented (see below). People responsible for quality assurance were available; communication in English was provided.

The way unexpected events are handled and documented was not mentioned in the SER but was explained on site and documentation was supplied (see Figure 1): There is a first incident team on faculty level, reporting to a safety Department at the university. Furthermore, each building has its own incident coordinator. There is an elaborate emergency plan in place and published on the Faculty webpage, covering emergencies ranging from fire to disease outbreaks. The emergency plan of the faculty reflects that of the university while taking into consideration the special demands of veterinary medical faculty. Practical guidelines specifying how to act are published and available in each unit. In addition, guidelines on how to act in cases of emergency are available for students and in student hostels. Drills are carried out regularly. After every drill and real emergency incidents are analysed so and summarized in a report. This report is used to draw up an action plan with measures that need to be taken. These measures are grouped according to urgency.





Information required was provided in the SER 2 and not by reference to SER 1. However, contents of SER 2 were unfortunately incomplete and did not reflect the level of quality assurance experienced by the team on site.

Table 1: Overview of the quality assurance measures at the FVMG

QUALITY ASSURANCE MI	EASURE		
	Year of implementation	Time interval	Regulations
2. Assessment of students, post graduate education & student welfare			
StudyProgrammeCommittee	1992	NA	OER art. 34
Academic staff evaluation (by students)	1993	3 years	OER art. 96 and 97
<b>Education Quality Control</b> Unit	1999	NA	OER art. 97
Learning time evaluation	<b>1999 (UGent)</b> 2002 (1st time FVMG)	After study programme changes	
ECTS system (label)	2004	NA	OER art. 37 and 41
Learning outcomes	2005	8 years	
Surveys amongst alumni by the FVMG	2005	6 years	
Evaluation by Alumni UGent	2009	3 years	
Evaluation full Bachelor's and Master's (UGent)	2010	2 years	
3. Assessment of teaching staff			
Academic staff evaluation (by faculty))	1991	2-4 years	
Academic staff evaluation (by students)	1993	3 years	OER art. 96 and 97
Training for lecturers	1998	Yearly	
4. Assessment of learning			

opportunities			
Evaluation full Bachelor's and Master's (UGent)	2010	2 years	
Internal survey (Libqual)	2012	Not determined	
5. Assessment of training programme and the award of the title of veterinary surgeon			
StudyProgrammeCommittee	1992	NA	OER art. 34
Academic staff evaluation (by students)	1993	3 years	OER art. 96 and 97
Education Quality Control Unit	1999	NA	OER art. 97
Learning time evaluation	1999 (FVMG 2002)	After study programme changes	
ECTS system (label)	2004	NA	OER art. 37 and 41
Learning outcomes	2005	8 years	
Surveys amongst alumni by the FVMG	2005	6 years	
Evaluation by Alumni UGent	2009	3 years	
Evaluation full Bachelor's and Master's (UGent)	2010	2 years	
6. Assessment of quality assurance systems for clinics, laboratories & farm			
Radioprotection service	< 1980	Yearly	
Healthandsafetydepartment (UGent)	1998	1-2 years	Laboratory and workplace regulation
Committee Safety Policy	2005	NA	
Internal audit safety and biosafety	2011	Continuously	

7. Assessment of continuing education			
Institute for Permanent Training	1992	NA	
Continuing Professional development (by Veterinary Chamber)	2013		Veterinary Chamber directives 2012
8. Assessment of Research			
Bibliometrische studie	2008	4 years	
Research plan FVMG	2010*	Yearly	
Research plan UGent	2001	5 years	
10.Assessmentofcooperationwithstakeholders and society			
Surveys amongst alumni by the FVMG	2005	6 years	
Evaluation by Alumni UGent	2009	3 years	

NA: not applicable.

### **FMVG: Faculty of Veterinary Medicine**

#### **UGent: Ghent University**

\*officially since 2010 but the Faculty Research Committee has been making a faculty research plan (for mobility of PhD students, info sessions for PhD students, 3-12 months grants for PhD students, ...) for more than 10 years.

## Chapter 1. POLICY STATEMENT

Findings

The relationship between teaching and research emerged clearly from the organisation of the activities performed by the FVMG. Teaching and research are interlinked by lecturers, who must give proof that they are qualified researches. This proof is provided by the Autonomous Academic Staff Evaluation Committees for appointed staff, assistants and technical staff (ZAP, AAP, ATP evaluation committees). Evaluations are performed according to standardized procedures every 2-4 years, evaluation being especially stringent in early stages of the career. 2 years ago, this new career model was implemented. It has been published in Belgian Stadtsblatt and Website of University. It defines the steps in the career and the prerequisites for each step. The regular career track provides that new lecturers should have at least two years' experience as post-doc researcher, and then they enter in a five year tenure track focused on research usually with the assignment of a teaching course. At the end of this period if the objectives are met the lecturer can became permanent professor with the rank of senior lecturer.

Research education of student is performed by the FVMG allotting a consistent amount of credits to intra-curricular research activities devoted to the Master dissertation (30 credits) and extra-curricular opportunities for research training, both in basic and clinical items (Summer Schools; Honours Programme).

Unfortunately, it remains unclear which standardized procedures / criteria are applied. Furthermore, the method of quality assessment is not described.

The strategy of the Faculty for quality and standards is not well defined. The quality assurance and the FVMG's strategy are mainly based on central administration procedures managed by UGent. As such, the FVMG does not define its own strategic plan but relies on that of the University. It is involved in the formulation of the strategic plan through representatives in the board of governors. The FVMG does, however, draw up a staff plan which is reviewed annually. In research, UGent's Department of Research Affairs has issued a research policy; the Office for Educational Quality Control regulates and supervises quality in education. On a faculty level, committees have been implemented – these are (mainly) the Study programme Committee, the Education Quality Control Unit and the Faculty Research Committee, who all report back to the Faculty Council.

No concrete indicators and goals reflecting the Faculty's strategic goals have been defined on Faculty and Department level. This happens only on the personal level, and is greatly assisted by APOLLO, a human resources module in which personalized teaching and research objectives are documented and the process of evaluation is documented and standardized (for appointed, assistant, technical staff).

Quality assurance of education is organized at the level of the University by the Department of Educational Affairs with its 4 offices. One of these offices, the Office for Education Quality Control, coordinates legally prescribed external quality controls of the study programmes.

At the level of the Faculty, the Education Quality Control Unit plays an important role in quality assurance. E.g.: it evaluates each member of the academic staff and each course at least once every 3 years by a student survey. Results of these evaluations are communicated with the lecturer and are used to make improvements, in which case the course is re-evaluate d in the following year. The final report of the teaching process is added to the lecturer's personal education file the Education Quality Control Unit is also responsible for study time measurement. The "Vademecum" of study programmes contains guidelines and timelines for actions of the Education Quality Control Unit.

Quality assurance of research at the level of the University is based on its research policy; every 4 years the university performs bibliometric analyses.

Since 2011 internal research visitations are organised by the university in which an international peer review panel evaluates selected research groups or disciplines based on SERs and site visits

Furthermore, the Commission for Scientific Integrity and the Interuniversity Expert Centre for R&D Monitoring perform evaluations.

Students are involved in quality assurance by periodically evaluating teaching; students evaluate courses on a voluntary basis yearly, whereas each teacher is evaluated on a three year basis. Students are also involved by participating in most committees and are aware of guidelines for the functioning of the committees, quality assurance and they produce report as representative. Furthermore, involvement of students in quality assurance is secured by the **D**iergeneeskundige **S**tudenten**R**aad (DSR), which can be translated as the *Board of Veterinary Students*.

#### DSR

This is the abbreviation of the veterinary student board. All the student representatives meet about once a month (except during the examination periods, January and June). During these meetings, they discuss over all matters that are going on in the faculty (e.g. examination schedule, results of the questionnaire over learning time, lack of place in the restaurant, ...).

#### President

This person is called the 'Didacticus' and is the contact person in the faculty for all matters involving the students. He/she prepares the agenda for the meetings of the DSR and also leads it. He/she also is a member of the presidium of the student society (VDK), which assures a good communication with all the students.

#### Vice-president.

He/she helps the president where needed and takes over the function of the president if the president is not available.

#### Secretary

The secretary writes and keeps the minutes of the meetings.

#### Year Representatives

Every curriculum year has one or more representatives (1 to 4 students). These representatives are the contact persons for the students in a specific year and are also in charge of trying to solve any kind of 'problem' that can happen in that year (e.g. if a professor cancelled his lecture and another professor has to be find to fill in the gap in the lectures schedule).

If there are problems with teaching over the years, they contact the main Representative of the bachelor or master years or even, if needed, the president/ vice president who will ask to discuss the topic on the next meeting of the Study Programme Committee or Faculty Board.

#### Student Representatives of the:

- <u>Faculty Board</u>: 7 students are member of the Faculty Board, each of them having one vote. In this board students have a say in the arrangement of the education and the programme (e.g. if there is a change in the curriculum it has to be approved in this commission). Also the lecturers, PhD students, etc. are appointed here and the students can check whether these nominations are fair.
- <u>Study Programme Committee</u>: 8 students are members of this committee. The Study Programme Committee is an advisory committee and the final decisions are taken by the Faculty Board. However, it is exceptional that the Faculty Board does not follow the recommendations made by the Study Programme Committee. The Study Programme Committee thoroughly evaluates the Study Programme and discusses proposals for improvements. Students definitely get a word in this committee and the members do listen to what students think and what they think is best for them.
- <u>Student Board from Ghent</u>: In this board, the DSR has one vote and it is a great opportunity for students to discuss with other student representatives and share experiences.
- <u>Quality Control Unit</u>: In this small committee, the most important role of the students is to make sure that 'something happens' with the evaluations (evaluation of lecturers, learning time, ...). Until now, students are satisfied on this matter. Students consider this a very pleasant committee where they can say a lot in confidence when they have a problem. The committee members will then advise, or help in the most appropriate way to solve the problem or to formulate the students' request.

For all the meetings of these commissions and boards, an agenda and documents for preparation are provided so that the meeting can be adequately prepared with all student representatives. At the meetings, student representatives defend the opinion of the majority of the students as a group. At a meeting, one of the students is responsible for making a report that will be posted on Minerva so that every student is informed of the decisions that were made. The organisation of de DSR is illustrated in Fig. 2.

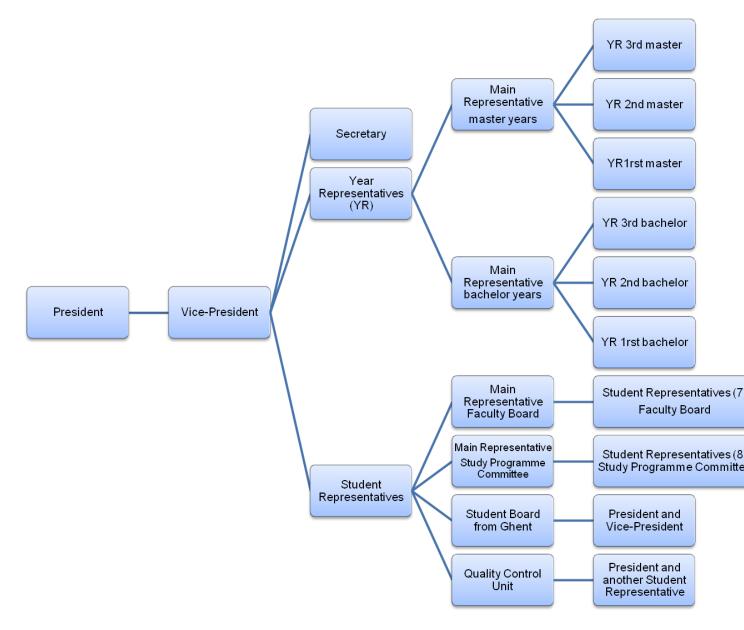


Figure 2: Student involvement in quality assessment of FVMG activities by their organisation as representatives

#### Comments

The Faculty has demonstrated awareness for quality. There are many quality assurance measures in place, though an overall quality assurance policy and a quality assurance system specific for FVMG is not yet in place and a systemized, organized approach and understanding of quality assurance is mostly lacking.

Rather, what the Faculty does is based on and is under the control of the guidelines of the central administration of UGent. Though it is clear that the Faculty must adhere to the rules laid out by the University, it must still have its own quality policy – not only in education and research, but on a holistic level as well. UGent consists of 11 rather heterogeneous faculties (Arts, Economics, Law, Medicine, Psychology, Veterinary Medicine etc...) – which means that UGent can only create a framework for quality and standards. It is then the task of each Faculty to develop the quality policy and quality systems that suit it best within this framework. Suggestions

The team suggests the development of an organized and holistic approach to quality assurance on Faculty level that provides a framework for the description and documentation of quality measures, definition of SOPs, document management, communication pathways, process ownerships and responsibilities. This organized approach also includes the implementation of reporting and analysing tools (indicators) on Faculty, Department and personal levels as well as feedback mechanisms for recognizing flaws in the system, thereby allowing learning effects to take place. Furthermore,

the Faculty is strongly encouraged to maintain and further increase certifications / accreditations issued by external quality assurance bodies.

On the website, the team suggests that a page on quality assurance be added to make all relevant procedures available at a glance: overall quality policy of the Faculty, description of all quality assurance procedures in place, their monitoring and revision, communication pathways, roles and responsibilities of governing bodies and individuals, SOPs etc... The establishment of a central coordination body for Quality Assurance / Quality Management on Faculty level is strongly recommended.

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

#### 2.1 Undergraduate education

Findings

On a university level, education and examination regulations are governed mainly by the Education and Examination Code (EEC), which is updated every year and approved by the Board of Governors. In particular, the EEC defines:

- Structure of the academic year
- Description of the academic system
- Enrolment regulations, including types of contract
- Rules pertaining to a study programme and/or course unit
- Examination regulations
- Rules pertaining to a PhD at UGent
- Complaints and appeals

Admission is regulated by the Flemish law. There is unrestricted access to all who hold a diploma of secondary education recognized by the Flemish government. Diplomas enabling access are published on the University website. This list also contains foreign diplomas or certificates. Other foreign diplomas may give access after positive evaluation by FVMG and the central administration of UGent. The main regulating measure is the language requirement (Dutch). Assessment of Student performance is performed regularly. Evaluation methods are proposed by the lecturer based on the EEC. They are approved by the Study Programme Committee and the Faculty Council and are published annually in the course catalogue, which includes all information on courses.

Two major types of student assessment are used: Continuous and end-of-term assessment. Exam periods are specified by the University and are published in the academic calendar. The evaluation system the FVMG is based on the concepts of validity, reliability, transparency, feedback, honesty, diversity and efficiency. IN the bachelor's programme, evaluation methods are based on the learning objectives and range from written exams and reports to oral exams, skills tests, presentations and assignments. In the higher semesters, oral exams and workplace based performance assessments, case discussions and –presentations as well as evaluation of clinical work are predominant ways of student assessment. Global pass rates per course are calculated after the summative assessments. They are checked and validated by the Education Quality Control Unit.

After each exam period, the exam results checked and discussed by the Examination Committees, who also validate the exam results.

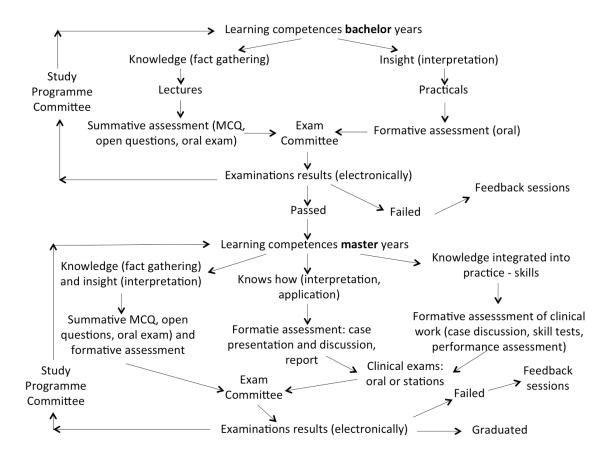
The Study Programme Committee analyses exam results each year and analyse the pass rates. At least once every 3 years every course is evaluated by the students. Evaluation includes an assessment of the examination system. Return rates amount to approx. 47% in the bachelor programme. Only evaluations with return rate larger than 30% are considered. If lower (as in the 5<sup>th</sup> year) results are pooled.

Feedback is given to the lecturer, to the Head of the involved department and to the Chairperson of the Study Programme Committee. On the University level, a guide for adequate evaluation procedures has recently been distributed and practical guidelines for a correct evaluation procedure during examinations were provided by the central administration. Additionally on a regular basis the Department of Educational Affairs analyses specific items of the study programmes. Concerning the quality and validity of the evaluations, university-wide analyses have been made on the study progression of the students and on the evaluation of Master's dissertations.

Big modifications in the study programme are made every 6-8 years. Minor changes are made continuously based on demand. Furthermore, on University level, study programme evaluations by recent graduates and alumni are performed every 2 and 3 years, respectively. At the faculty level, the formative assessment of students during clinical activities has been standardized.

In an effort to formalize and standardize quality assessment measures, UGent is in the process of implementing a university-wide and uniform quality system in education. Examples of formative and summative assessment have been provided.

Figure 3: Flow chart from learning objectives to examination results, including the way students are informed



There are two ways in which problems in the student assessment system are dealt with. The first is defined in the EEC, the second is based on Ombudspersons and Institutional appeals Commissions. In case problems cannot be resolved, students may appeal to the Flemish Council for Disputes on study progress decisions.

Students who fail an exam have a second chance in the "second chance examination period" in August and September (4 weeks). In theory the student may make use of these two chances each year for every course for an indefinite period of time. However, the EEC defines a minimal study progression per year. Failing for one or more courses does not completely stop the study progress of students. The basic rule is that all previously failed courses have to be included in the curriculum when registering for courses of a higher year.

Results of continuous assessment are communicated to students by email or the electronic learning platform Minerva. Communication of end-of term results is regulated by EEC, the date and time at which exam results are communicated to students are predefined and announced to students at the beginning of each academic year. Results are available through the student administration system OASIS, which also allows students to print a transcript of records and view the distribution of grades for the specific course.

Involvement of students takes place largely by ways of feedback. The ways in which Master's theses are organized and evaluated are shown in the figure below.

Figure 4: Organisation and evaluation of the Master's thesis

<b>Central administration</b> University Education Committee (Thesis project evaluation ) University Technology Transfer Department						
	<b>FVMG</b> Thesis secretariat					
Student administration	Thesis coordinator	Clinical supervisors				
Thesis co	ommittee Curriculum	committee				
	Faculty council					
	<b>Project realization</b>					
<u>Supervisors</u>	Thesis secretariat	<u>Students</u>				
Individual project evaluation and assessment Evaluation committees : supervisors + referees + jury members Faculty examination committee of the master programme						
Global projec	Global project evaluation and assessment					
Thesis committee						
Curriculum committee						
	Faculty council					
Univ	ersity Education Committee					

#### Comments

It is evident that both education as well as examination procedures are subject to quality assessment. The procedures in place are in operation and considered highly sufficient by the team.

Suggestions

In order to give structure to quality assessment procedures in place each main procedure should be concisely described with the aid of SOPs, flow charts, showing communication pathways, process ownerships and responsibilities as well as feedback mechanisms and how individual Committees and Councils interact.

#### 2.2 Post-graduate student education; academic track

### Findings

The admission procedures at a PhD course at the FVMG (the procedure is that of the UGent) are essentially two:

- 1) via an open position that can be published on the website of UGent (job opportunities website for research staff) or
- 2) via a UGent, and specifically for the FVMG, professor who is qualified to act as a PhD supervisor. The candidate can either look for his/her own funding or he supervisor can apply UGent for a salary.

National candidates should have a Master degree or equivalent; Foreign candidates should have the same title or equivalent, approval of the research proposal and should demonstrate knowledge of the languages. The procedure to check this requirements may be some time consuming. Sometimes a predoctoral programme may be requested; PhD supervisors have to register their foreign candidates who have found grants via the on line tool PhD Wizard. All PhDs have to enrol themselves as student at the Central Student Administration Office of UGent and replicate the enrolment each following academic year until graduation.

Personal or project funding can be obtained in through different ways such as from the UGent, local foundations (Flemish Research Foundation) and agencies or international bodies, from Department financial resources or from the Federal Government.

The FVMG is deeply involved in PhD training at different level, supervision, teaching and encouraging to publish data and experimental results (Bonus are provided by UGent for high quality dissertation published on international peer reviewed journal with on the basis of the value of IF).

The assessment of the scientific programme/project is based on a public defence of the dissertation, approved by the Faculty Council and submitted to a Reading Committee and a Examination Board for the PhD examination. The Board is composed by five members, at least one external member is always provided. The PhD examination is divided into two parts: the first is the evaluation of the dissertation and of the merit and activity of the candidate, the second, if admitted, is the defence of the dissertation by candidate.

The results of the past two years are summarized in the following tables.

Year	Type of programme	Number students enrolled	Number students passed	Mean number paper per student	Mean number impact factor obtained per student
2011	PhD	33	33	3.222	2.582
2011	Master	NA	NA	NA	NA
2011	other	NA	NA	NA	NA
2012	PhD	50	49	2.419	2.390
2012	Master	NA	NA	NA	NA
2012	other	NA	NA	NA	NA

Table 2: figures for post-graduate academic education

NA = not applicable

Table 3: The number of completed Doctoral dissertations and the number of veterinarians who obtained a Doctoral (PhD) degree at the FVMG from 2007 to 2011

Year	Completed PhD's	of which veterinarians
2007	18	13 (72%)
2008	31	18 (58%)
2009	32	21 (65%)
2010	42	27 (64%)
2011	33	17 (51%)
2012	49	32 (65%)

#### Comments

FVMG has a large number of financed PhD and the training results of very good quality as the products of research for each candidate are appreciable (2-3 paper per student with an I.F. of about 2.4). This seems good pathway to assure a progression in the academic career for qualified researcher.

#### Suggestions

A standard method of quality in the enrolment, education, assessment of learning, evaluation of dissertation, and employment should be also introduced at Faculty level. A so wide range of time in completing the period of study/research project (3-7 years) is not considered favourable, and time allotted should be standardized in order to offer the same funded period, the same career opportunity to each candidate and not o waste time in the progression of the education and career.

#### 2.3 **Post-graduate student education; professional track**

#### Findings

The FVMG is largely involved in post-graduate education, as 56 European Specialists recognized as Diplomates of European Colleges are part of the staff. Several residency programmes/internships are managed in the Departments of the FVMG (Table 3 and 4). All interns or resident are financed by UGent. Admission procedure is not clearly stated as position for post-graduate professional specialisation are published on the website of the FVMG and suitable candidates are selected by senior staff (and not by Diplomates?) of the clinics independently from their nationality.

Cooperation with external clinics and institution are provided to allow rotations or other form of collaboration and activities.

#### Comments

No indication about the modality of selection is provided. However, FVMG has a post graduate education of high level, with a lot of European specialists, which are Diplomates in many of the EBVS colleges and in some cases in American Colleges.

#### Suggestions

The quality of post graduate education and external collaboration is quite high, but a well-established procedure for all activities regarding post-graduate student education should be adopted, in order to put on the chart the assessment of quality in post graduate education.

Table 4: figures	postgraduate	professional	specialisation
Tuble 4. Inguies	posigraduate	professional	specialisation

Diploma title	Number of	Number of	f residents	Success rate	Success rate
	Diplomates	n	n-1	n	n-1
ECVAA	2	3	3	0 out of 1	NC
ECVS	7 (one part time)	5	5	Large: 1 out of 1; Small: NC	Large: 1 out of 2; Small: 0 out of 1
ECVDI	4* <sup>a</sup>	3	5	1 out of 1	1 out of 1
ECVIM-CA	4**	2	3	NC	2 out of 2
ECVN	2	1	2	2 out of 3	1 out of 3
ECAR	4	3	1	NC	NC
ECVP	2* <sup>b</sup>	4	3	0 out of 2	NC
ECVCN	2	2	0	NC	1 out of 1
ECEIM	1	1	1	1 out of 1	0 out of 1
ЕСРНМ	7 (one part time)	5 (+1 alternative)	1	NC	NC
ECBHM	4* <sup>c</sup> (one part time)	0	0	NC	NC

ECVPH	3	0	0	NC	NC
EVDC	1 (part time)	0	0	No formal residency	No formal residency
ECLAM	1	0	0	No formal residency	No formal residency
ECVPT	1	0	0	No formal residency	No formal residency
EVPC	5 (one part time)	0	0	NC	NC
ECVD	1***	0	0	No formal residency	No formal residency
ECZM	2 (herpetology & small mammal)	0	0	No formal residency	No formal residency
ECPVS	1 (part time)	0	0	No formal residency	No formal residency

\* one also accepted as Diplomate in another specialty (\*<sup>a</sup> ECVS; \*<sup>b</sup> ECPHM; \*<sup>c</sup> ECAR)

\*\* one also Diplomate ACVIM

\*\*\* also Diplomate ACVD

n: 2010-2011; n-1: 2009-2010

NC: no candidate took the Diplomate exam

Table 5: Postgraduate professional specialization (interns)

Clinical discipline	Number of interns n	Number of interns n-1
Small Animal Rotating Internship	6	6
Small Animal Orthopaedics	1	1
Medical Imaging	3	0
Epidemiology	1	0
quine Internship (surgery & medical imaging)	3	3
Equine Internship (medicine)	2	2
Equine Internship (reproduction & obstetrics)	1	0
Parasitology	1	0
Bovine Health Management	1	1
Porcine Health Management	0	1

n: 2010-2011 n-1: 2009-2010

## Chapter 3. ASSESSMENT OF TEACHING STAFF

Findings

At the FVMG, the students fill out an anonymous electronic survey on each member of the academic staff and each course at least once every 3 years. Participation is not mandatory but strongly encouraged. A minimum response rate of 30% has been accepted by UGent to assure a statistically relevant response. The results of the evaluations are discussed within the Education Quality Control Unit of the FVMG with the representatives of the students. Afterwards a report of the evaluation is given to the lecturer, the Head of the Department and the Chairperson of the Study Programme Committee. The final evaluation report is included in the lecturer's personal education file.

Whenever the Education Quality Control Unit judges that improvements are possible or needed, a formal meeting with the lecturer is organized to discuss and monitor possible ways of remediation. Consequently, the course is re-evaluated the following year to measure the effects of the changes.

A lecturer's teaching performance is an important element of governing his/her promotion: Every 2 to 4 years, the staff members are evaluated on the basis of their job descriptions by the Autonomous Academic Staff Evaluation Committee (ZAP-evaluation Committee). During these meetings, every autonomous academic staff member is evaluated based on his/her teaching, research and service to the community both internal at faculty or university level. Since October 2012, for promotion from Professorship to Full Professorship, every lecturer of the permanent staff has to fill out his/her objectives for the 5 coming years in the fields of teaching, research and service to the community. Teaching and research are the 2 most essential parts in this promotion system. Both the quantity (teaching load) and the quality of teaching are evaluated. The quality of teaching is evaluated based on evaluation by the students, content of the course, and evaluation forms.

The content of the course include criteria such as topicality of the course unit, research based teaching, and coherence of the course unit in the general curriculum. The evaluation forms cover the validity of the exams, the reliability, and the transparency of the examination forms

Management and further development of the teaching staff assessment system is mainly organized by the central administration of UGent. To maintain and improve the teaching skills of the academic staff, UGent organizes a series of training sessions for the teaching staff every year. Trainings are organized both for lecturers ("docententraining") and assistants ("assistententraining").

The FVMG has an award policy that honour teaching excellence. At the level of UGent the "Wijste prof" (Wisest Professor) award is awarded annually since 2007 by the students after a university-wide voting. Since 2011 UGent additionally awards 3 prizes for excellence in teaching (Minerva Award), research (Prometheus Award) and public and scientific engagement (Hermes prize).

#### Comments

It is evident to the team that the assessment of teaching staff is in practice, functions well and involves evaluation by students, by teaching success and by scientific merit.

#### Suggestions:

In order to give structure to quality assessment procedures in place each main procedure should be concisely described with the aid of SOPs and flow charts, showing communication pathways, process ownerships and responsibilities as well as feedback mechanisms.

### Chapter 4. ASSESSMENT OF LEARNING OPPORTUNITIES

#### Findings

Lecturers are free to choose their own didactic and examination methods, in accordance with UGent directives and with approval of the Study Programme Committee. For each course, the didactic and examination methods are specified, approved and published in the programme catalogue of the UGent annually. There exists an electronic learning platform, Minerva, which all lecturers and students must use. In Minerva, course syllabi, course notes, supplementary material and background information are available.

Controls of course documents are carried out at the time of staff evaluations (every 2-4years) or in case of negative course evaluations. Updates are stimulated because course materials automatically removed every year and need to be uploaded afresh every year.

The number of visits and downloads for each document on Minerva can be monitored on-line by the teaching staff. An analysis of the use of Minerva has been performed by UGent.

A Veterinary Digital platform, launched in 2011, aims at optimizing e-learning. In the clinics, electronic patient files are open to students, who are encouraged to use these databases for tracking patients. Study support is offered by the central Advisory centre for students and a Monitoring service as well as Ombudspersons. IT facilities are ample and include 70 computers, disk space on the central servers, hard- and software offers and webmail.

The faculty library and 17 department libraries as well as an e-library are available to students. Quality assessment of library services is managed by the Interfaculty Library Board, who invited an external expert to evaluate the quality of

the interlibrary loan services in 2010. In 2012 the University Library carried out a satisfaction survey (Libqual) in which all UGent libraries asked their customers about the quality of the service using an online survey as well as a screening of the digital library.

The library of the FVMG is managed by the Faculty Library Committee. Both students and members of academic and administrative staff are members. The Information and Communication Technology Department of UGent is evaluated by the University's Computer Committee in which all faculties and students are represented.

Finally the assessment of students' learning opportunities is included in the students' course evaluations and in the study programme evaluation by the university and the Education Quality Control Unit of the FVMG.

#### Comments

FVMG is dedicated to providing learning opportunities for its students. By means of student surveys and –evaluations and regular checks of staff, courses and study programmes, quality assurance measures exist that monitor the academic environment. Students are involved in all processes; revisions are based on feedback, are documented and regularly carried out. IT learning opportunities are being expanded continuously.

#### Suggestions

In order to give structure to quality assessment procedures in place each main procedure should be concisely described with the aid of SOPs and flow charts, showing communication pathways, process ownerships and responsibilities as well as feedback mechanisms

## Chapter 5. ASSESSMENT OF TRAINING PROGRAMMES AND THE AWARD OF THE TITLE OF VETERINARY SURGEON

#### Findings

The intended learning outcomes and essential competences required at graduation have been determined and are published in the Programme Catalogue of UGent. These learning outcomes have been redacted by the teaching staff of the FVMG and have been discussed and approved by the Study Programme Committee and the Faculty Council. The published version of intended learning outcomes on the website is from 2007. A project was started in 2010 to update them; alumni were contacted to give their opinion on proposed learning outcomes. These results are currently being discussed by the Study Programme Committee. The revised version of the learning outcomes of the Bachelor's and Master's programmes will be published in the UGent Programme catalogue of the academic year 2013-2014.

Procedures for curriculum and teaching programme approval are described in the EEC. The FVMG's Study Programme Committee and Education Quality Control Unit develop, supervise and evaluate the study programme offered. An accreditation organisation called "Nederlands-Vlaamse Acreditatie Organisatie" (NVAO) has been installed that accredits all curricula and study programmes in Flanders and in the Netherlands after evaluation by a peer review panel. The accreditation by EAEVE was homologated by the NVAO in 2005 and led to an accreditation of the bachelor and master programme until 2014.

At the FVMG, the Education Quality Control Unit evaluates every course at least once every 2-3 years through an anonymous electronic survey filled in by the students. The results of these evaluations are discussed within the Education Quality Control Unit in the presence of student representatives, and are reported to the lecturer, the Head of the Department and the Study Programme Committee. The final evaluation report concerning the teaching process is added to the lecturer's personal education file. Whenever the Education Quality Control Unit judges that improvements are possible or needed, a meeting with the lecturer is organized to discuss and monitor possible ways of remediation. In these cases the course is re-evaluated the following year to follow the effects of the changes. The Education Quality Control Unit is also responsible for the organisation of the study time measurement, which is performed at least after each study programme update to evaluate the study load of each course. This allows to monitor and avoid an excessive study load per course and hence in the overall study programme. Since the academic year 2006-2007 this system is a prospective system in which students are allocated to small cohorts (approximately 10 % of the total number of students) and asked to record their actual time dedicated to studying.

In addition, the Study Programme Committee organizes a survey of the alumni every 6 years for monitoring practical use of the study programme. The results of these surveys are discussed within the Study Programme Committee and are used to adapt and improve the study programme. Furthermore, the Department of Educational Affairs of UGent organizes general evaluations of all study programmes: Every 2 years full Bachelor's and Master's programmes are evaluated by the students that recently graduated and every 3 years inquiries are made among alumni.

These results are discussed within the Department of Educational Affairs of UGent and distributed to the respective Study Programme Committees for interpretation and feedback. UGent was amongst the first universities in Europe that successfully applied for an ECTS label in 2004. It was re-awarded the ECTS label in 2009 (valid till 2013). The ECTS system is fully in use in FVMG.

Participation of students in the development of the study programme and of all quality assessment activities is regulated by UGent. All committees related to educational affairs must include students' representatives. At the level of the faculty, the Study Programme Committee has to include at least one third of students with voting rights (EEC, Article 34), the Education Quality Control Unit has to include at least 2 students (EEC, Article 97, \*5) and the Faculty Council must include (a maximum of) 25% of students.

Life-long learning is promoted especially by the Institute for Permanent Training ('IPV'), which organizes two types of education:

- Modular continuing education (separate courses)
- "Vakdierenarts": intensive training of practitioners in a specific species

#### Comments

It is evident to the team that FVMG puts great efforts into the assessment of its training programme with high involvement of students and alumni. The FVMG has established procedures for programme and course development and improvement. The team congratulates the FVMG on the award of the ECTS label, which is considered highly beneficial and indicative of an international mind set. The Institute for Permanent Training ('IPV') provides a framework in which structured life-long learning can take place and is highly appreciated.

#### Suggestions

In order to give structure to quality assessment procedures in place each main procedure should be concisely described with the aid of SOPs and flow charts, showing communication pathways, process ownerships and responsibilities as well as feedback mechanisms

## Chapter 6. ASSESSMENT OF QUALITY ASSURANCE FOR CLINICS, LABORATORIES AND FARM

Findings

Amongst the structures of the FVMG there are four units accredited by external quality assurance bodies.

The Department of Public Health and Food Safety has been has accredited by BELAC in 1997 (BELAC nr. 066-TEST) according to the ISO norm ISO/IEC 17025 and applies to the screening of residues of antimicrobial substances (Laboratory of Hygiene and Technology) and to the confirmation of residues of veterinary medicines and forbidden substances in products of animal origin (Laboratory of Chemical Analysis). The re-accreditation is renewed every 5 years.

Being part of the Department of Pharmacology, Toxicology and Biochemistry, the Laboratory of Pharmacology and Toxicology is accredited by the Institute of Public Health. The Lab performs pharmacokinetic, bioavailability, residue and safety studies and bioanalysis of veterinary drugs. The laboratory has been accredited since 2001. An independent quality assurance manager and the Head of the department are responsible for full compliance with GLP guidelines. The laboratory is regularly checked every 2 years. Latest inspection was in February 2012.

The Ambulatory Service of the Department of Obstetrics, Reproduction and Herd Health has been accredited as GVP structure after audit by external quality inspectors and in the same department, the Equine Semen Laboratory has been recognized as a reference centre for artificial insemination by the Flemish Government and the certification is acknowledged by the Ministry of Agriculture and the Federal Agency for Food Safety ("FAVV"). The accreditation is checked on a yearly basis.

Many laboratory services of the Departments of the FVMG are controlled for quality assurance internally or externally as reported in Table 6.

Table 6: Departments (	$DI(0\mathbf{X})$	providing	laboratory	services at the	FVMG and t	vne of au	ality assurance
rable 0. Departments (	DIUM	providing	aboratory	services at the		ype or qu	anty assurance.

Department	Laboratory services	Provided for	Quality as	ssurance
			Internal	External
DI 01 Comparative Physiology & Biometrics	Consultancy	FVMG Scientific community		
DI 02 Pharmacology, Toxicology & Biochemistry	Pharmacokinetic, bioavailability, residue and safety studies, bio-analysis of drugs for veterinary use Pharmacological and toxicological analysis of biological material	FVMG Scientific community Commercial enterprises	1	√
DI 03 Morphology	Histology Scanning electron microscopy Transmission electron microscopy	FVMG Scientific community Private companies	1	
DI 04 Virology, Parasitology & Immunology	Diagnostic Contract research Consultancy	FVMG Practitioners Commercial enterprises	V	
DI 05 Pathology, Bacteriology & Poultry Diseases	Diagnostic Contract research	FVMG Practitioners	V	
DI 06 Veterinary Public Health & Food Safety	Analysis	Private companies Research centres Federal Agency for the Safety of the Food Chain	V	√
DI 07 Animal Nutrition, Genetics & Ethology	Consultancy Genetic analysis Imaging (IVIS Lumina)	FVMG Practitioners Animal owners / trainers Scientific community Commercial enterprises	1	
DI 08 Obstetrics, Reproduction	Contract research	FVMG	$\checkmark$	

& Herd Health	Consultancy	Practitioners		
	Analysis	Scientific community		
		Commercial enterprises		
DI 09 Medicine & Clinical	Diagnostic	FVMG		
Biology of Small Animals		Practitioners		
DI 10 Surgery &	Diagnostic	FVMG	$\checkmark$	
Anaesthesiology of Domestic Animals		Practitioners		
DI 11 Medical Imaging of	Diagnostic	FVMG	$\checkmark$	
Domestic Animals and Orthopedics of Small Animals		Practitioners		
DI 12 Internal Medicine &	Diagnostic	FVMG		
Clinical Biology of Large Animals		Practitioners		

Other areas such as farm facilities (Agri-Vet) are controlled to assess quality of procedure and animal welfare. In fact all the staff assigned to Biocentre Agri-Vet works according to the Belgian legal requirements in terms of education and training. Staff also has completed the formation courses that are required to work with and handle experimental animals (FELASA A or FELASA B). The laboratory director of Biocentre Agri-Vet, who completed the necessary and provided courses (FELASA C), is the final responsible for control of animal welfare, supervision of staff, researchers and students involved in animal experiments. The Biocentre Agri-Vet are regulated by the guidelines issued by UGent regarding the working environment, physical or psychosocial items. Moreover, on a 3 months basis, a member of the Ethical Committee of the FVMG visits all animals under experiment at Biocentre Agri-Vet to check if good quality of animal conditions and welfare are respected.

Regarding quality assurance activity Agri-Vet take part in several external quality assurance bodies such as: - IKM – Integral Quality control for Milk 204217 (06/05/2011 - 06/05/2014):

- Animal health
- Animal welfare
- Milk production and hygiene
- Environment

-Autocontrol for Primary Plant Production SGS-SG-012-0207892576 (06/05/2011-05/05/2014),

- -IKKB Standard for Primary Plant Production 847375976303 (06/05/2011 05/5/2014)
  - Grains, oil- and protein crops without after-harvest activities
  - Forage crops with after-harvest activities
- -G037 Autocontrol for Primary Animal Production BE ACS037-110590 (06/05/2011 05/05/2014)
  - Production of forage crops
  - Breeding/feeding of production animals (cattle)
  - Breeding/feeding of production animals (pigs)
  - Milk Production

#### Comments

A lot of efforts has been made by the FVMG to assure the quality in clinics, laboratories and farms, but these should be clearly stated and made available and transparent for both the staff and students of the FVMG and external bodies and stakeholders.

#### Suggestions

Organisation in the management and assurance of quality should be regulated and implemented in the clinics, diagnostic service units, laboratories and farms.

## Chapter 7. ASSESSMENT OF CONTINUING EDUCATION

Findings

The Institute for Permanent Training (IPV) on behalf of the FVMG organizes each year a lot of courses for continuing education in specific areas of basic and practical veterinary medicine. The IPV is organized as follows: one Director, responsible for the coordination, objective, and results and 2 full time secretaries. However, the post-graduate courses are organized with help of several coordinators, normally a professor of the FVMG (usually a European College Diplomate) and the coordinators are specialists in ruminants, horses, swine, small animals, veterinary public health and practice management.

Each coordinator is responsible for determining the specific programme of the course. This takes place each spring and in very close collaboration with practitioners, other veterinarians and representatives from veterinary organisations and institutes from outside the FVMG (e.g. the porcine programmes are set up in collaboration with the Board of the Belgian branch of the International Pig Veterinary Society). At least once per year, the Director, the secretaries, the Dean and the different coordinators have a meeting to discuss the feedback, the next year's programme and the functioning of the Institute for Permanent Training. A report that should be approved by the Faculty Council of the FVMG is prepared.

Table 7: Courses organized by the IPV in the years 2010-2011

Activity	Participants	Hours of	
	1.5	THEORY	PRACTICE
A) Long term postgraduate course "Vakdierenarts Paard (Specialized Equine Practitioner)" (1 <sup>rst</sup> year)	15	66	47
B) Long term postgraduate course "Vakdierenarts Gezelschapsdieren (Specialized Small Animal practitioner" (1 <sup>rst</sup> year)	23	105	56
C) Separate courses on large animals			
Prescription and use of medicines: day 1 & 2	23	16	-
Capture of wildered animals	9	1	2,5
Parasitology in cattle: novelties	39	3,5	-
The use of ovsynch & timed artificial insemination on cattle farms	26	3,5	-
Problems in young stock on beef farms	63	3,5	-
HACCP, what should a cattle practitioner do?	49	3,5	-
Residues in milk; causes and consequences	47	3,5	-
Herd management (cow) (practical)	2	-	3
Case study cows (practical)	15	3,5	-
Bacteriological and parasitological examination by cows; what is possible?	16	3,5	-
The use of ultrasound in reproduction of cows (practical)	12	1	2,5
Tooth problems and navicular bone diseases	12	3,5	-
Update on respiratory diseases (horses)	41	3,5	-
Ataxia in horses	45	3,5	-
Practical radiographic diagnosis (horse)	3	-	3,5
Practical ultra sound (horse)	5	-	3,5
Practical regional anaesthesia for horses	10	-	3,5
Practical dental care (horse)	11	-	3,5
Porcine circovirus type 2 and porcine multisystemic wasting syndrome	79	3	-
Animal welfare and chemical castration	54	4	_
D) Separate courses on small animals	54	+	-
	77	6	
Respiration problems in dogs and cats	77	0	-

Dermatology: case study: diagnose and treatment	33	3	-
The internet: use and useful tips for vets	44	1	2
Haematology in small animals	61	6	-
Practical exercise: placement for dysplasia of the hip and	12	-	3
the elbow			
Contrast medium in practice	36	-	3
Interventional ultra sound	31	3	-
Practical exercise: interventional ultra sound	22	-	3,5
Ear problems in dogs and cats	70	3	-
Practical exercise: ear surgery (dogs and cats)	16	-	3
Tumours and other proliferations in the mouth	33	3	-
Case study: dental problems: diagnosis and treatment	17	-	3
Obstetrics and reproduction in dogs and cats	199	-	6
Canaries and finches	56	6	-
Birds of prey in practice	31	3	-
Case study reptiles: diagnosis and treatment of the most	34	-	3
common diseases			

Table 8: Courses organized by the establishment itself in the years 2009-2010

Activity	Participants	Hours of THEORY	Hours of PRACTICE
Specialized Veterinary Surgeon: small animals (third year, lecture		INEUKI	FRACTICE
series 1)			
group A: third registration year	10 (A)	108	9
group B: second registration year	2(B)	108	)
group C: first registration year	2(B) 10 (C)		
	10(C)		
Duration of the course: approximately 19 lecture days per			
academic year, for a period of three years			
The total number of hours of theoretical and practical courses			
slightly varies from year to year			
Separate courses small animals	17	25	
K-01 Sudden blindness in dogs and cats	17	3.5	0
K-02 Perianal gland fistulae	17	3.5	0
K-03 Dyspnoea in the dog	25	3.5	0
K-04 Seizures in the dog	12	3.5	0
K-05 The limping dog	22	3.5	0
K-07 Expovet: surgery	31	3.5	0
K-08 Perianal gland fistulae - veterinarians from Limburg	35	3.5	0
K-09 The use of feeding catheters in practice	8	1.5	2
K-10Hyperthyroidism in the cat from A to Z	17	3.5	0
K-14 Stomatology: general course	11	14	0
K-15 Two new drugs in practice: Alizin and Suprelorin	19	3.5	0
K-16 The use of drains in practice	9	1.5	2
K-17 Surgery in exotic animal species	26	7.5	0
K-18 Vaginal cytology and sperm analysis in the dog and the cat	/	/	/
K-19 Haematology - Cytology	7	1	2.5
Separate courses on large animals			
GV-01 Results of practice-oriented field studies of "Veepeiler-	41	3	0
varken"			
GV-02 Update of PRRSV infection	45	3	0
GV-03 Pig farms with high (re)productive performance: farm	56	3	0

		•	
management practices and economic aspects			
GV-04 National and international perspectives of pig production	88	3	0
GV-05: The use of antibiotics in pig production: update and	88	3	0
perspectives			
GV-06: Strategies to improve health and productivity in recently	39	3	0
weaned pigs			
GP-01 Regional anaesthesia and joint punctures of the distal limb	9	0	3
GP-02 Practical approach to diastemata and peridontitis in horse's	6	0	3
teeth			
GP-03 What if a horse does not walk as it should: is it the neck or	47	3	0
the back?			
GP-04 Reproduction and obstetrics in the horse: cases	33	5	0
GP-05 Pre-purchase examination in the horse	65	7	0
GP-06 Regional anaesthesia and joint punctures of the proximal	7	0	3
limb			
GP-07 Skin diseases of the distal limbs in the horse	50	3	0
GR-01 Practical tricks and tips for the management of transition	63	3	0
cows			
GR-02 Interesting medical facts about small camelidae	21	3.5	0
GR-03 The use of echography in the medical examination of the	/	/	/
thorax and abdomen of cattle			
GR-04 Is there already more know about?	75	3	0
GR-05 Exploration and monitoring of the udder health status on	56	3	0
modern dairy farms	20	5	Ŭ
GR-06 A glimpse at some evolutionary developments in the	39	3	0
genetic selection of cattle	0,5	0	0
GR-07 Cattle: case reports	12	3	0
GR-08 Emergency slaughter: what and how?	46	3	0
GR-09 EXPOVET: control of IBR and BVD today	56	3	3
GR-10 Practical approach to dairy farms with udder health	6	0	1.5
problems	0	0	1.0
GR-11 Screening of top dairy farms	4	1.5	1.5
GR-12 Screening of top beef cattle farms	7	1.5	0
GR-13 SQT, SMA, in Belgian White Blue Cattle	54	3	0
GR-14 Fertility on cattle farms: interpretation and improvement	69	3	2.5
GR-15 The use of echography in cattle reproduction	5	3 1	2.5
GR-16 Herd health management	/	/	/
GK-10 Hold Italia management	/	/	
F-01 Topics on parasitic zoonosis	57	3	0
F-01 Topics on parasitic zoonosis F-02 The use of water in the food chain	55	3	0
	55 72	3	0
F-03 Guidelines in primary animal production: implementation of	12	3	0
good manufacturing practices and the role of the veterinarian	20	2	
F-04 Topics in bacterial zoonoses	82	3	0
F-05 Influenza as zoonosis	92	3	0
F-06 Process control	105	3	0
F-07 Decision making in poultry inspection, an interactive	42	3	0
discussion based on statistics	70	2	
F-08 Legislation on food safety: why and how?	70	3	0
Continuing observing interesting	Variable	Variat 1	14
Continuing education internship	Variable	Variable	14
Permanent education residency	Variable	Variable	24

Permanent education in scientific research	/	/	14

 Table 9: Courses organized at the establishment by outside bodies

Activity	Participants	Hours of	Hours of
		THEORY	PRACTICE
International Pig Veterinary Society-	50	3 times/year	Lectures + workshop
Belgian Branch (IPVS-BB)			
Flemish Bovine Practitioners ("Vlaamse	80	once/year	Lectures
Rundvee Practici")			
Belgian Equine Practitioners (BEPS)	240	1 time /year	Lectures
World Veterinary Poultry Association	70	4 times / year	Half a day lectures +
(WVPA)	70	4 times / year	discussion of cases
Physiotherapy in domestic animals (IRSK-	20 / year	2 years of 20	40
wings)		sessions of ½ day	
		each (20)	
Basic module	15 / year	6 days	
Module horse	10 / year	10 days	
Module dog	10 / year	13 days	

The participants of each module or course are awarded a certificate of attendance released by the IPV. The attendance of veterinarians in such permanent education courses is compulsory for veterinarians who want to obtain the "Good Veterinary Practice" certificate. Since January 1<sup>rst</sup> 2013, the Veterinary Chamber has made continuing professional development obligatory for all practitioners.

#### Comments

Thanks to the activity of the IPV the FVMG organises periodically (yearly)several courses addressed to continuing education of graduates in veterinary medicine in practically all the areas of interest of the professional activities. Colleagues attending the courses gave good feedback both directly to the IPV after at the end of the course (Table 10) and to the Stage 2 team during the specific interview with the alumni.

Table 10: Results of feedback post course by attending veterinarians, overall evaluation (score 0-5) of IPV courses during 2010-2011 (0=insufficient; 5= excellent)

Title	Content	Applicability	Average
		in practice	
Pig-01: Expovet: resultaten praktijkgerichte onderzoeksprojecten	3.7	3.8	3.8
Pig-02: groepshuisvesting van zeugen: voor- en nadelen en hoe ver staan we?	3.7	3.8	3.8
			0.0
Horse-02: Expovet: verloskunde bij het paard	4.3	4.4	4.4
Horse-03: wondheling en wondbehandeling bij het paard: de nieuwste ontwikkelingen	4.3	4.1	4.2
Horse-04: CEM en EVA: is er een vuiltje aan de lucht?	3.5	3.6	3.6
Horse-05: tandextracties bij het rechtstaande paard (practicum)	4.9	4.6	4.8
Horse-06: "Kijk eens diep in mijn ogen" Oftalmologie bij het paard	3.5	2.5	3.0
Cattle-01: praktische 'tricks and tips' in de rundveepraktijk	4.1	4.1	4.1
Cattle-02: de microscoop: ook in de rundveepraktijk een handig middel om tot een exacte diagnose te komen	4.2	4.3	4.3
Cattle-04: melken met een robot: wat je er als dierenarts van moet weten	4	3.9	4.0
Cattle-05: ethiek en dierenwelzijn in de rundveesector	4.5	3.8	4.2
Cattle-06: Expovet: het antibioticumgebruik in de rundveesector	3.2	2.8	3.0

Cattle-08: atypische ziektebeelden bij BVD- infecties	4	3.8	3.9
Cattle-09: nieuwigheden in de voeding van melkkoeien	3.8	3.6	3.7
Cattle-13: de aanpak van een melkveebedrijf met uiergezondheids-	4.4	4.4	4.4
problemen			
Cattle-14: water: een vaak vergeten maar belangrijk onderdeel van het	3.6	3.2	3.4
rantsoen			
Cattle-15: het gebruik van de echografie in de voortplanting bij het rund	4.1	4.3	4.2
Cattle-17: interessante nieuwtjes gehoord op het wereld buiatrie congres	4.1	3.6	3.9
in Chili			
FS-01: dierenwelzijn en hygiëne bij leg- en vleeskippen	3.9	3.8	3.9
FS-02: expovet: Q- FSever als zoönose	3.6	3.8	3.7
FS-03: gebruik van water in de voedselproduktie	2.8	2.3	2.6
FS-04: keuringsbeslissingen bij varkens, een interactieve discussie op	3.7	3.4	3.6
basis van casuistieken			
FS-05: staalname voor BSE onderzoek, theorie en praktijk	4	4	4
FS-06: antibioticumresistentie in de veehouderij, een gevaar voor de	3.4	3.1	3.3
volksgezondheid			
FS-07: Eetwaren technologie: conserveringstechnieken	4.1	3.7	3.9
FS-08: opleiding verdachte monstername slachthuizen FSAVV - IPV	3.7	3.5	3.6
FS-09: extra opleiding in samenwerking met het FSAVV: TSE's en	4	3.6	3.8
neuropathologieën bij herkauwers			
FSA-01: auditing dag 1: de basiswetgeving: de hygiëne en	3.7	3.5	3.6
controlebesluiten over alle levensmiddelen			
FSA-02: auditing dag 2: commerciële kwaliteitssystemen en de controle	3.9	3.9	3.9
op dierlijke produkten			
FSA-03: auditing in de praktijk	4.5	4.3	4.4
FSA-04:auditing in de praktijk geïllustreerd aan de hand van een reeks	4.2	4.2	4.2
gevallen			
		1	I
Average Pigs	3.70	3.80	3.75

Average Pigs	3.70	3.80	3.75
Average Horse	4.10	3.84	3.97
Average Cattle	4.00	3.80	3.90
Average Veterinary Public Health	3.81	3.62	3.72
Global Average	3.92	3.73	3.70

FS: food safety and veterinary public health; FSA food safety auditing

Some general negative comments:

Pig-01: do not plan courses on Saturday anymore

Pig-02: more cake should be provided

Horse-06: very little interaction with the audience, difficult to keep attention

Cattle-04: the notes are too compact

FSA-01: use the microphone also during the question and discussion session FSA-04: rather passive, not enthusiastic, few interaction with the audience

General positive comments on the courses:

Pig-02: excellent discussion session

Horse-05: very pleasant course, interesting tips

Cattle-13: the most practical course I have ever attended at IPV

FS-07: very interesting, the speed of the lectures was very high

FSA-04: all speakers are experts in their field

Suggestions

The Faculty describes the quality assurance it possesses to monitor and promote specific areas of practical veterinary medicine. However, the FVMG should systemize quality assurance by defining standard operating procedures that should be followed and monitored by all people involved in continuing education.

## Chapter 8. ASSESSMENT OF RESEARCH

Findings

In its pursuit of research excellence, the UGent has defined its own research policy which lays down the 7 main strategic research goals:

- UGent must maximize its research capacity
- UGent must increase its research effectiveness from an academic, societal and economic point of view
- UGent must improve its research efficiency
- UGent must ensure an attractive HR management policy for researchers
- The research structures in and around UGent must support research performance
- An effective quality assurance system in research must serve to position, motivate and, if necessary, sanction
- UGent must use effective tools for research management

To that account, the University offers research support (Research Coordination Office of UGent and Department of Research Affairs of UGent) and regulates integrity of scientific research (Commission for Scientific Integrity).

At regular intervals, research at UGent is subject of evaluation. In 2008-2009 a bibliometric benchmarking analysis of UGent (period 1997-2007) was performed and this study was repeated in 2012 (period 2002-2011). The results were still in discussion at the time of the site visit.

Since 2010, each faculty of UGent must draw up its own research plan. At the FVMG, this was done by its Faculty Research Committee and thereafter discussed and finalized by the Faculty Council.

The research plan of the FVMG for the period 2011-2015 focuses on actions stimulating research leading to a doctoral degree, actions stimulating mobility of doctoral (PhD) researchers and post-doctoral researchers as well as determination of research areas to be stimulated at the FVMG through attracting of research professors (permanent staff members specially dedicated to research but provided by UGent).

Research at the FVMG is coordinated by the Faculty Research Committee. Each department is represented in the Faculty Research Committee by one autonomous academic staff member. The committee also includes a member of the academic assistant staff, the administrative and technical staff, the faculty representatives of the Special Research Fund of Ghent University (BOF) and the Flemish Fund for Scientific Research (FWO), as well as the Dean. The committee meets 4 times each year. The priority of the Faculty Research Committee focuses on all actions that stimulate outstanding research, preferably leading to a doctoral degree, at the faculty. Initiatives include information sessions for veterinary students, guidance of outstanding veterinary students, stimulation of doctoral research, stimulation of mobility of PhD students, guidance of post-doc applicant, and grants for study and training periods abroad.

The relationship between teaching and research and how research methods and results are conveyed into basic veterinary training as well as the role of research performance in staff promotion have been described predominantly in Chapters 1, 2.2 and 3.

The quality assurance of the research takes place at three main levels at the FVMG:

1. Research projects are quality assured by their respective funding bodies:

- fundamental research projects: Research Foundation Flanders (FWO-Flanders) and Special Research Fund of Ghent University (BOF UGent));

- more valorisation-oriented research: Agency for Innovation by Science and Technology (IWT), Federal Public Service for Health, Food Safety and Environment (FOD) and Industrial Research Fund of Ghent University (IOF UGent).

2. The quality of the research performed by doctoral (PhD) researchers is assured by Doctoral Schools at UGent, and by the Faculty Research Committee. Furthermore, quality is assured by the instalment of a doctoral guidance committee, and a reading and examination committee for each doctoral (PhD) researcher. Moreover, UGent provides a research quality bonus.

3. For publications, a bibliometric benchmarking analysis of UGent was performed in 2008 and 2012. These bibliometric analyses, performed every 4 years, take place on University, and Faculty level. On occasion (e.g. promotion) bibliometric data are analysed on individual level.

#### Comments

The FVMG is clearly devoted to performing top research and fostering junior researchers. At the FVMG about 300 PhD students are involved in differently financed research projects with a ratio of about 0.75 PhD guided by a professor per year. The minimum prerequisite to obtain the PhD degree of "Doctor in Veterinary Sciences" is that the PhD student research produce at least 2 full-papers (in journals belonging to the top 50% of the ISI ranking of the subject category, or with an impact factor of  $\geq 2$ ) or 3 original articles published or accepted for publication in international peer reviewed scientific journals with the candidate as first author. Journals with an impact factor of < 0.3 are not considered. This may exit to the fact that the period of PhD study may be from 3 till 6-7 years long.

Under-graduate students are involved in research. In fact, for the end-of-study Master's dissertation all students are trained in collecting and critically evaluating scientific data, writing a literature review report, plan and perform a research project (either in a basic, applied or clinical veterinary topic), and present the results both in written reports and by an oral public presentation of their work. Total time allotted to this project amounts up to 26-30 credits. Truly, on the other hand, this mean a great overload of work for students

Considering all these aspects the team's impression was that research, as managed at FVMG, is intended to provide opportunities for student scientific training. In addition, it is mandatory for staff promotion and produce a considerable amount of good quality publications.

#### Suggestions

The efforts of FVMG done in PhD and post-doc programmes, the involvement of under-graduate students in research, the existence of a bibliometric analyses to evaluate the quality of research, indicate that research is considered by the FVMG as a tool to improve quality, also in teaching and services.

In order to give structure to quality assessment procedures in place each main procedure should be concisely described with the aid of SOPs and flow charts, showing communication pathways, process ownerships and responsibilities as well as feedback mechanisms. Furthermore, the team suggests shortening the intervals and increasing the depth of bibliometric analyses on Faculty level. It may be worth considering whether FVMG would benefit from monitoring bibliometric data on a yearly basis on Faculty, Department and individual level. This way, the contribution of each unit to the performance of the Faculty as a whole could be reviewed regularly.

# Chapter 9. ASSESSMENT OF INTERNATIONALISATION OF EDUCATION AND RESEARCH

#### Findings

At UGent, a platform for the cooperation opportunities was created, offering numerous possibilities to postdocs & tenured staff. This platform includes initiatives from UGent, the Flemish government, the Belgian Federal Government, and participation in International Cooperation Programmes initiated by the European Commission and other Organizations.

Promotion of international post-graduate education/research at the FVMG occurs by the Faculty Research Committee (FCWO) of the FVMG, the Doctoral School of Life Science and Medicine, the Special Research Fund of the University (BOF) and funding agencies outside UGent such as the Research Foundation Flanders, the Belgian American Educational Foundation, the Flemish Interuniversity Council - University Development Cooperation (VLIR-UOS) and the European Marie Curie Fellowships.

Veterinary students and newly graduated students are engaged in international mobility predominantly by the UGent's structured programme for the Erasmus exchange including the Erasmus Belgica, the standard Erasmus, Erasmus Mundus Master programmes, bilateral agreements outside EU and Erasmus Mundus Action 2 projects. Exchange of students inside the FVMG is coordinated by the Faculty Committee for Internationalization.

The Erasmus programme for the incoming students was reorganized in 2008 mainly as a result of inadequate English language proficiency of incoming students. This reorganization included the establishment of 3 Erasmus programmes for the incoming students: equine, ruminants or small animals. Each Erasmus programme runs over a period of 12 weeks, either in Autumn (October - December) or in Spring (February - April). During these 12 weeks incoming students are very actively involved in the clinics and practical exercises within the chosen species, which allows for a better integration, education and evaluation. The number of incoming Erasmus students is limited to 18 per year (6 equine, 4 bovine and 8 small animals). The selection is based on motivation and basic knowledge of English language.

Table 11: Incoming Erasmus students in the FVMG

	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Sending University	006	007	8008	009	010	011	012	013
A - Wien - University of Veterinary Medicine		•	•	2	•	•	1	
Cz - Brno - University of Veterinary & Pharmaceutical sciences	2	2	2	2	2	3	3	1
De - Hannover - University of Veterinary Medicine Hannover Foundation						1		
Dk - Kobenhagen - University of Copenhagen						2		1
Ee - Tartu - Estonian University of life Sciences					3		1	1
Es - Madrid - Universidad Complutense de Madrid			1					
Es - Valencia - Universidad Cardenal Herrera							1	
Es - Zaragoza - Universidad de Zaragoza	2	2				2		1
Fi - Helsinki - University of Helsinki								2
Hu - Godolo - Szent Istvan University	2	1	1		2	2	2	
It - Padova - Universita degli Studi di Padova	1		2	2	2	1	1	2
Pl - Lublin - Akademia Rolnicza w Lublinie								1
Pl - Warsaw - Szkola Glowna Gospodarstwa Wiejskiego		1						
Pt - Lisboa - Universidade Tecnica de Lisboa	2		2			1	1	
Pt - Vila Real - Universidade de Tras-os-Montes e Alto Douro						2	2	2
Ro - Iasi - University Ion Ionescu de la Brad	2	2						
Se - Uppsala - Swedish University of Agricultural Sciences			1					
Sk - Kosice - University of Veterinary Medicine	2	2	2	2	2		1	2
SI - Ljubljana - University of Ljubljana								1
Total incoming exchange students per year	13	10	11	. 8	11	14	. 13	1

Table 12: Outgoing Erasmus students from the FVMG

	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Host University			8		0			ω
A - Wien - University of Veterinary Medicine	3	2		2		2	1	
Cz - Brno - University of Veterinary & Pharmaceutical sciences								
De - Hannover - University of Veterinary Medicine Hannover Foundation			1					
De - Leipzig - Universität Leipzig		2	2	1		2		
Dk - Kobenhagen - University of Copenhagen	1							
Ee - Tartu - Estonian University of life Sciences								
Es - Madrid - Universidad Complutense de Madrid			2			1		
Es - Valencia - Universidad Cardenal Herrera								
Es - Zaragoza - Universidad de Zaragoza								
Fi - Helsinki - University of Helsinki	1	1	2	2		2		
Fr - Ecole Nationale Vétérinaire de Lyon	2	2	2	2				
Hu - Godolo - Szent Istvan University								
It - Padova - Universita degli Studi di Padova								
NI - Utrecht - Universiteit Utrecht			2	2		1		
N - Oslo - Norwegian school of Veterinary Medicine	2							
PI - Lublin - Akademia Rolnicza w Lublinie								
PI - Warsaw - Szkola Glowna Gospodarstwa Wiejskiego								
Pt - Lisboa - Universidade Tecnica de Lisboa			2					
Pt - Vila Real - Universidade de Tras-os-Montes e Alto Douro								
Ro - Iasi - University Ion Ionescu de la Brad								
Se - Uppsala - Swedish University of Agricultural Sciences		1	1	1				
Sk - Kosice - University of Veterinary Medicine								
SI - Ljubljana - University of Ljubljana								
Total exchange students per year	9	8	14	10	0	8	1	0

Other initiatives for encouraging internationalization include the Honours programme, the exchange of residents, extramural training of final year students and the Exchange students track Ruminants with FVM Utrecht

#### Comments

UGent is especially active in the promotion of international post-graduate education and co-operating research projects. The number of outgoing undergraduate students seems to be decreasing in the last 2 years, however. The standardized and structured systems applied by the FVMG to assure quality are not quite clear.

#### Suggestions

In order to give structure to quality assessment procedures in place each main procedure should be concisely described with the aid of SOPs and flow charts, showing communication pathways, process ownerships and responsibilities as well as feedback mechanisms.

## Chapter 10. ASSESSMENT OF COOPERATION WITH STAKEHOLDERS AND SOCIETY

#### Findings

The FVMG maintains contact with its stakeholders in several ways: It has formal and long-standing participations in a wide range of national and international professional and scientific organizations and organizes continuing professional development (CPD) courses in close co-operation with its stakeholders. In addition, it takes care to integrate practitioners in extra mural training of students.

There is no alumnus association but the FVMG maintains close contact and communication with its former students by (for example) organisation of the surveys amongst alumni. These surveys are organized by the FVMG on a 6-year basis and are primarily aimed at getting statistically relevant and formal feedback from the profession concerning the structure and development of the study programme offered by the FVMG

Additionally, UGent organizes surveys among alumni every 3 years, during which, amongst other items, "client satisfaction" with the study programme and training is evaluated. In order to inform the profession on the results of this survey, they are published in the Flemish Veterinary Journal.

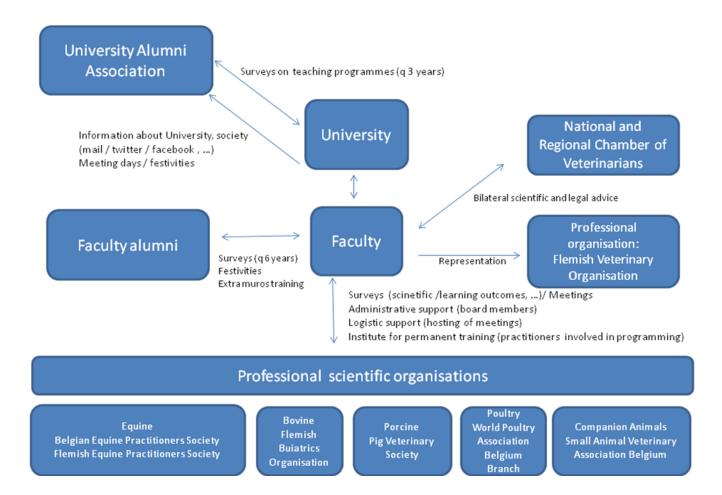
The main and first source of information for the general public and especially for prospective students is the FVMG's website. Most information is available in Dutch and in English. Additionally, brochures are updated annually and distributed to prospective students at high schools, during Study Information Days and during other contacts of UGent with the general public. Information on the study programme is also regularly published in a more scientific format in the Flemish Veterinary Journal. These publications aim at providing factual information to FVMG's major stakeholders, i.e. the veterinary practitioners, and can also be used as a source of reliable and objective information for the general public.

Since 2012 "open classes" are organized by UGent during which prospective students can attend several regular lectures in order to obtain an impression on the course content and teaching methods at the university level

Additionally, high school students are annually offered Study Information Days, where information on the veterinary study programme and their career options in the veterinary profession are provided.

The general public is addressed by "Open Door Days", organised every two to three years and guided tours. The FVMG furthermore informs the general public by active engagement in initiatives, such as the annual "Science week".

#### Figure 5: Interaction of UGent and FVMG with main stakeholders and society



#### Comments

It is clear to the team that FVMG holds close contact with its alumni and veterinary practitioners. This is greatly appreciated. What remains unclear are the ways in which some of the initiatives directed at prospective students and general public (e.g. open door days, open classes) are quality assured.

#### Suggestions

The team suggests defining quality assurance measures for its main points of contact with the general public and prospective students. Furthermore, main procedures should be concisely described with the aid of SOPs and flow charts, showing communication pathways, process ownerships and responsibilities as well as feedback mechanisms.

### **Executive Summary**

The team found that measures for assessing quality have been in operation for a minimum of two years. Flow charts were provided for some, though not all of the assessment procedures. Full documentation of the assessment procedures was not available at the visit from day one, but examples of documentation of the assessment procedures were placed at the team's disposal upon request, as was a list of assessment procedures and a date in which they were implemented. People responsible for quality assurance were available; communication in English was provided. The way unexpected events are handled and documented was explained on site and documentation was supplied. Information required was provided in the SER 2 and not by reference to SER 1. However , contents of SER 2 were unfortunately incomplete and did not reflect the level of quality assurance experienced by the team on site. The latter may be due to the fact that the clarity of EAEVE guidelines on preparation of the SER and the stage 2 visitation could be optimized. Performance of the Faculty as a whole as well as performance of students, academic, support and technical staff is monitored regularly. The ways in which this is done is transparent. Teaching load and research performance are the main factors governing budget allocation to the Faculty and the departments. Responsibilities of the principal bodies and individuals are known and understood by those concerned; descriptions, guidelines and responsibilities can be found to a large extent on the website. Students are well involved in quality assurance procedures.

The Faculty has demonstrated an awareness for quality. Many quality assurance measures have been developed and implemented; there are four examples of best-practice at the Faculty:

- The laboratory of Pharmacology and Toxicology (part of the Department of Pharmacology, Toxicology and Biochemistry) has been accredited by the Scientific Institute of Public Health. Its GLP compliance according to 2004/9/EC has been verified,
- The Department of Veterinary Public Health and Food Safety has been BELAC accredited in accordance with ISO/IEC 17025,
- At the Department of Reproduction, Obstetrics and Heard Health, the Equine Semen Lab has been accredited as a reference lab by the government and
- The ambulatory service (of the same Department) has received the "Good Veterinary Practice" label.

For the most part, however, a systemized, organized approach and understanding of quality assurance is lacking.

The team suggests the development of an organized and holistic approach to quality assurance on Faculty level that provides a framework for the description and documentation of quality measures, definition of SOPs, communication pathways, process ownerships and responsibilities. This organized approach also includes the implementation of reporting and analyzing tools (indicators) as well as feedback mechanisms for recognizing flaws in the system, thereby allowing learning effects to take place. Furthermore, the University is strongly encouraged to maintain and further increase certifications / accreditations issued by external quality assurance bodies.

On the website, the team suggests that a page on quality assurance be added to make all relevant procedures available at a glance: overall quality policy of the Faculty, description of all quality assurance procedures in place, their monitoring and revision, communication pathways, roles and responsibilities of governing bodies and individuals, SOPs etc... The establishment of a central coordination body for Quality Assurance / Quality Management on Faculty level is strongly recommended.

Based on the above findings the team suggests "conditional accreditation".

#### ECOVE DECISION: FULL ACCREDITATION