# 2010

## **Self-Evaluation Report 2** of Veterinary Training in Switzerland



vetsuisse-faculty



# SER 2: Self-Evaluation Report of Veterinary Training in Switzerland

#### **Reporting Year 2010**

Coordinator of Authors: Prof. Dr. Thomas Lutz

Self evaluation report of the Vetsuisse Faculty Universities Bern and Zurich on the occasion of the accreditation of the Vetsuisse curriculum

- Chapters 1-10: Accreditation according to the EAEVE guidelines with Assessment procedures (AP) # 1 - 12
- Chapter 11: Accreditation according to the OAQ guidelines
- Chapter 12: Annex useful links

### Index

1 Chapter 1: Policy Statement (AP 1)	9
1.1 General Policy statement of the Vetsuisse Faculty (VSF)	9
1.2 Brief introduction of the two VSF locations in Zurich and Bern and their quality control system	ns 10
1.2.1 University level	10
1.2.2 Faculty level and VSF teaching committee	10
1.2.3 Student involvement in faculty politics and quality control at the student level	11
1.2.4 Continuous assessment of teaching quality	11
1.3 Brief introduction to the VSF curriculum and to the examination policy of the VSF	12
1.3.1 Organization of Examinations	12
1.3.2 Bachelor course	13
1.3.2.1 First year	13
1.3.2.2 Second and third year	13
1.3.3 Master course	15
1.3.3.1 Fourth year/first year of Master course	15
1.3.3.2 Fifth year/second year of Master course	16
1.3.4 Comments and suggestions for improvement	16
1.4 Qualifications for Federal Examinations and Diplomas	17
2 Chapter 2: Assessment of students, post graduate education and student welfare	18
2.1 Information of students graduating from high school and information day for 1st year students	s 18
2.1.1 Factual Information	18
2.1.2 Comments	18
2.1.3 Suggestions for improvement	18
2.2 Assessment of students prior to entering the VSF: aptitude test organized by CRUS	18
2.2.1 Factual Information	18
2.2.2 Comments	20
2.2.3 Suggestions	20
2.3 ERASMUS exchange program	20
2.3.1 ERASMUS students at the VSF Faculty University of Bern and University of Zurich	21
2.3.2 Factual information	23
2.3.3 Comments	23
2.3.4 Suggestions for improvement	23
2.4 Assessment of students during the undergraduate studies (AP 2)	24
2.4.1 Quality control of written examinations	24
2.4.1.1 Comments	26
2.4.1.2 Suggestions for improvement	26
2.4.2 Examination system	26

	2.4.2.1 Comments	27
	2.4.2.2 Suggestions for improvement	27
	2.4.3 Specifics about the general assessment of students after the first year	27
	2.4.3.1 Factual Information	28
	2.4.3.2 Comments	28
	2.4.3.3 Suggestions for improvement	28
	2.4.4 Evaluation of extramural training in veterinary clinics (5th year students)	29
	2.4.4.1 Comments	29
	2.4.4.2 Suggestions for improvement	31
	2.4.5 Summary of Comments about the Assessment System and suggestions for improvement	31
2.5	Postgraduate student education; academic track (AP 3)	31
	2.5.1 Factual information	31
	2.5.2 Postgraduate education UZH	32
	2.5.3 Factual information VSF Bern for students enrolled in PhD programs	33
	2.5.4 Factual information on the VSF PhD program (1995 to 2010)	33
	2.5.4.1 Comments	33
2.6	Postgraduate student education; professional track (AP 3)	33
	2.6.1 Factual information VSF Zurich	34
	2.6.2 Factual information VSF Bern	36
	2.6.2.1 Comments	36
	2.6.2.2 Suggestions for improvement	36
2.7	Student welfare (AP 4)	37
	2.7.1 Office for student affairs (VSF)	37
	2.7.1.1 The Offices for student affairs at the university level	38
	2.7.1.2 Comments and suggestions for improvement	38
	2.7.2 Child care	38
	2.7.2.1 Comments/Suggestions for improvement	39
	2.7.3 Students sport associations	39
	2.7.3.1 Comments	39
	2.7.3.2 Suggestions for improvement	40
	2.7.4 Mentoring programs at the VSF	40
	2.7.4.1 Mentoring program "VetMent"	40
	2.7.4.2 Bologna initiatives for academic recruitment (UZH)	40
	2.7.5 Health initiatives	40
	2.7.5.1 Health initiatives of the VSF in Zurich	40
	2.7.5.2 Health initiatives of the VSF in Bern	40
3 C	Chapter 3: Assessment of teaching staff (AP 5)	41

3.1	Assessment of teaching staff at VSF Zurich	41
	3.1.1 Evaluation of new teaching staff	41
	3.1.2 Evaluation of the entire teaching staff	41
	3.1.3 Evaluation of clinical rotations in the 2nd year of the Master course	42
	3.1.4 Center for University Teaching & Learning	42
3.2	Evaluation of teaching staff at VSF Bern	42
	3.2.1 Didactic courses	42
	3.2.2 Evaluation committee	42
	3.2.3 Students' evaluation	43
3.3	Teacher of the year	43
3.4	Rules for the Habilitation procedure - Required qualification and performance in research and	
tea	nching	43
	3.4.1 Specifics about the Centre for University Teaching and Learning (Arbeitsstelle für	
	Hochschuldidaktik der UZH) and the Zentrum für Universitäre Weiterbildung (UniBE)	44
	3.4.2 Guidelines for advancement and employment at the VSF	45
3.5	Comments	45
3.6	Suggestions for improvement	45
	Chapter 4: Assessment of learning opportunities (AP 6)	46
4.1	Library situation	46
	4.1.1 Student library VSF in Zurich	46
	4.1.2 Student library VSF in Bern	46
4.2	Further working area for students:	46
	4.2.1 Students' working areas at VSF Zurich	46
	4.2.2 Students' working areas at VSF Bern	46
4.3	E-learning facilities and information technology	46
	4.3.1 Evaluation E-learning situation in Zurich	47
	4.3.1.1 E-Learning Offer of the VSF Zurich	47
	4.3.1.2 Computer workplaces for Students in the Library of the VSF Zurich	47
	4.3.1.3 Infrastructure on the computer workplaces	48
	4.3.1.4 E-Learning offer on the computer workplaces	48
	4.3.1.5 The key that connects students and the university	48
	4.3.1.6 Worldwide access to intranet services	48
	4.3.1.7 Services of the E-Learning Coordination	48
	4.3.1.8 Evaluation of the E-Learning Offer	49
	4.3.1.9 Neptun	49
	4.3.1.10 Comments and Suggestions for improvement	49
	4.3.2 E-learning situation at VSE Bern	50

	4.3.3 Teleteaching - one faculty, one curriculum, two locations	50
4.4	Comments	50
4.5	Suggestions for improvement	50
5 C	Chapter 5: Assessment of training program and the award of the title of Veterinary Surgeon (	AP
7)		51
5.1	Assessment of training program - Information of students in Bern and Zurich	51
	5.1.1 Information policy	51
	5.1.2 Ways of communication	51
	5.1.3 Office for Student affairs	51
5.2	Award of the Diploma (Federal examination in Veterinary Medicine)	51
5.3	Comments	52
5.4	Suggestions for improvement	52
	Chapter 6: Assessment of quality assurance systems for clinics, laboratories and farm (AP 8)	53
6.1	Quality assurance in the clinical departments; VSF Zurich	53
	6.1.1 Department of Small Animals	53
	6.1.2 Equine Department	54
	6.1.3 Department of Farm Animals	54
6.2	Quality assurance in the clinical departments; VSF Bern	55
	6.2.1 Clinical service and content of the program	55
	6.2.2 Operational quality assurance: The following mechanisms/systems are in place	55
6.3	Quality assurance in diagnostic institutes VSF Bern and Zurich	56
	6.3.1 Institutes VSF Zurich	56
	6.3.1.1 Institute of Parasitology	56
	6.3.1.2 Institute for Food Safety and Hygiene	56
	6.3.1.3 Institute of Veterinary Pathology	56
	6.3.1.4 Institute of Virology	56
	6.3.2 Clinical/paraclinical departments and their quality policies at VSF Bern	57
6.4	Quality policy at the VSF Bern and Zurich	57
7 C	Chapter 7: Assessment of continuing education (AP 9)	58
7.1	Life long learning	58
7.2	Interaction with European Colleges	59
7.3	Interaction with Swiss Veterinary Society GST/SVS (see also chapter 10)	59
7.4	Involvement of the home universities in continuing education	59
7.5	Comments	59
7 6	Suggestions for improvement	59

8 Ch	apter 8: Assessment of research (AP 10)	60
8.1 A	Assessment of research and quality control at the VSF Bern	60
8	3.1.1 Background and recent developments	60
8	3.1.2 Research Evaluation at the Vetsuisse Faculty Bern	60
8	3.1.3 Extramural funding	60
8	3.1.4 Research publication output	60
8	3.1.5 Large-scale Research Evaluation	61
8	3.1.6 Gathering publication output using FactScience	61
8.2 A	Assessment of research and quality control at the VSF Zurich	62
8	3.2.1 Research focus of VSF Zurich	62
8	3.2.2 Academic reporting	62
8	3.2.3 The UZH is member of LERU	62
8	3.2.4 Research evaluation	63
8	3.2.5 Quality assurance in animal experiments	63
8.3 C	Comments	63
8.4 S	Suggestions for improvement	63
9 Ch	apter 9: Assessment of internationalisation of education and research (AP 11)	64
9.1 Iı	nternationalisation	64
9.2 S	Specific aspects of VSF Zurich	64
9.3 S	Specific aspects of VSF Bern	64
9.4 I1	nternational contacts via the ERASMUS program	64
9.5 C	Comments	65
9.6 S	Suggestions for improvement	65
	Chapter 10: Assessment of cooperation with stakeholders and society (AP 12)	66
	Performance agreement of VSF with the University of Bern and Zurich	66
_	10.1.1 Bern - Statement about performance agreement	66
_	10.1.2 Strategic planning at the VSF Zurich	67
-	10.1.3 Cooperation with stake holders (University of Zurich; Canton of Zurich)	68
	Cooperation with and information of the public (VSF Bern and Zurich)	68
10.3	Cooperation with veterinarians in practice (VSF Bern and Zurich)	68
	Alumni organizations	68
10.5	The year of Veterinary Medicine 2011 (planned activities of VSF Zurich and Bern)	69
10.6	Comments	69
10.7	Suggestions for improvement	69
11 ~		<b>5</b> 0
	Thapter 11: Additional information required by the Swiss accreditation authorities (OAQ)	70
111	Area 1: Mission and Objectives	70

	11.1.1 Mission and Objectives	70
	11.1.2 Participation in Formulation of Mission and Objectives	70
	11.1.3 System to assess the achievement of the establishment's general objectives	70
	11.1.4 Academic Autonomy	70
	11.1.5 Educational Outcome	71
11.	.2 Area 2: Study Program	72
	11.2.1 Study Program Models and Instructural Methods	72
	11.2.2 Structure, Composition and Duration of the Study Program	72
	11.2.3 Study Program Management	72
	11.2.4 Scientific Methods	72
	11.2.5 Basic Biomedical Sciences	73
	11.2.6 Behavioral and Social Sciences, Medical Ethics	73
	11.2.7 Clinical Knowledge and Skills	73
	11.2.8 Linkage to Veterinary Practice and Veterinary Public Health	73
11.	3 Area 3: Students	74
	11.3.1 Admission Policy and Selection Process	74
	11.3.2 Number of Students	74
	11.3.3 Student Support and Counselling	74
	11.3.4 Student Representation	74
11.	4 Area 4:Assessment of Students	75
	11.4.1 Assessment Methods	75
	11.4.2 Relationship between Assessment and Learning.	75
11.	.5 Area 5: Academic Staff/Faculty	76
	11.5.1 Recruitment Policy	76
	11.5.2 Personal Policy and Development	77
	11.5.3 Teaching staff evaluation	77
11.	.6 Area 6: Educational Resources	78
	11.6.1 Infrastructure	78
	11.6.2 Practical Clinical Training Resources	78
	11.6.3 Information Technology	78
	11.6.3.1 Information technology at the Institute of Pathology at VSF Zurich – Scan Scope	78
	11.6.3.2 Mobile Classroom at VSF Zurich	79
	11.6.3.3 Clinical record system at VSF Zurich and Bern	79
	11.6.3.4 Record system in pathology at VSF Zurich	79
	11.6.4 Research	79
	11.6.5 Educational Expertise	80
	11.6.6 Cooperation	81
	11.6.6.1 Mobility within VSE	<b>Ω</b> 1

11.6.6.2 Mobility by ERASMUS	81
11.6.6.3 Mobility for non-veterinarians and admission to the VSF curriculum	81
11.7 Area 7: Program Evaluation	82
11.7.1 Study Program Evaluation	82
11.7.2 Teacher and Student Feedback	82
11.7.3 Student Performance	83
11.7.4 Involvement of Stakeholders	83
11.8 Area 8: Governance and Administration	83
11.8.1 Governance Structures and Functions	83
11.8.2 Academic Leadership	84
11.8.3 Administrative Staff	84
11.8.4 Educational Budget and Resource Management	84
11.8.5 Interactions with the Health and Veterinary Sector	84
11.8.5.1 Interaction with government agencies	84
11.8.5.2 Interaction with the veterinary sector	84
11.9 Area 9: Continuous Renewal/Quality Assurance	85
12 ANNEX	86
12.1 Chapter 1	86
12.2 Chapter 2	86
12.3 Chapter 3	88
12.4 Chapter 4	88
12.5 Chapter 5	89
12.6 Chapter 6	89
12.7 Chapter 7	89
12.8 Chapter 8	89
12.9 Chapter 9	89
12.10 Chapter 10	89
12.11 Chapter 11	90

# **Policy statement**



vetsuisse-faculty

#### EAEVE guidelines (Chapter 1-10), OAQ (Chapter 11)

#### 1 Chapter 1: Policy Statement (AP 1)

#### 1.1 General Policy statement of the Vetsuisse Faculty (VSF)

The Vetsuisse Faculty emerged from the fusion of the two faculties of veterinary medicine of Bern and Zurich on 1 September 2006.

The merger aims at serving quality assurance in research, teaching and service as well as Switzerland's international competitive position in veterinary medicine.

The following mission statement and the code of conduct of the Vetsuisse Faculty had been developed by a workgroup within which all categories of staff of both locations had been represented:

#### JOIN! - MITMACHEN!

Mission: Our Mandate

The Vetsuisse Faculty fosters the health and well-being of animals through application of excellent preventive and curative measures, as well as through innovative research and high-quality university instruction. The Vetsuisse Faculty advances quality and safety of products of animal origin in the interest of the health of humans and animals as well as protection of the environment. Furthermore the Vetsuisse Faculty fosters the development of animal models for human disease. Its tasks are:

- research with the goal of gaining scientific knowledge, as well as applying and distributing it
- fostering animal health and improving prevention, diagnosis and treatment of illness
- to prevent the spread of animal illnesses
- to advance the development and research of illness models on animals that are significant for human health
- to convey to students of veterinary medicine and persons in continuing education all necessary scientific fundamentals for the understanding of biological contexts and instruct them excellently in clinical veterinary medicine, in observance of the dignity of animals

In the implementation of these tasks, the existing University and Vetsuisse regulations, organizational and personnel development instruments as well as the Vetsuisse Code of Conduct are to be observed.

Vision: What are we striving for?

The Vetsuisse Faculty stands among the best veterinary medical and university competence centers in Europe. The two locations Bern and Zurich collaborate in teaching and research in accordance with the Code of Conduct. The departments at both locations are complementary. The Vetsuisse Faculty offers first-class primary and leading veterinary medical care for Switzerland under consideration of customer needs. All preventive, curative as well as research and instruction related measures are carried out under the best possible use of resources and in the interests of those involved and affected. Employees are appreciated by their supervisors and colleagues, and outstanding achievements are recognized. Mutual respect, trust, dialogue and sense of responsibility as well as willingness to change are part and parcel of daily business. The Vetsuisse Faculty strives for a positive culture of

error and thereby enables individual and organizational learning as well as optimization of performance, competency and quality.

Vetsuisse Code of Conduct: Our Value System (SEE ATTACHMENT Code of Conduct)

Join! - Mitmachen! as profession and reinforcement of a mindset of cooperative, integrating and appreciative collaboration, signifies that every Vetsuisse employee is conscious that he or she is dependent on the fundamental cooperation of others, affirms this in principle and thereby expresses the common Vetsuisse Mission. Relations between instructors and students are infused with respect and fairness.

Join! as professional and social relationship it is possible for agents and for those affected by actions or intentions thereof to recognize whether the so-called three-question-test can be answered positively:

- is it better?
- is it worth it?
- is it fair?

If intentions, actions and interactions make a common endeavor better, make it a worthwhile undertaking that can be conducted fairly, then the Vetsuisse Vision can be seen as achieved and the Code of Conduct considered implemented.

## 1.2 Brief introduction of the two VSF locations in Zurich and Bern and their quality control systems

Our teaching quality is assessed at three levels: (1) at the University level, which includes qualification rules for teachers and involvement of external peers and former students for the assessment of teaching quality, (2) at the faculty level (VSF teaching committee), and (3) at the student level.

#### 1.2.1 University level

Quality assurance at the teacher's level is governed by University concepts. Importantly, a central mandate requires that teaching at the University has to be research-based. Therefore, teachers are recruited from qualified researchers. Only qualified researchers may qualify as University teachers. The University also runs didactic centers, where teachers of all levels may improve their teaching skills. Participating and completing such courses is mandatory for qualifying in professional teaching. The periodic assessment of teaching quality at this level is described in subchapter 1.2.4. For more information see also chapter 3.

#### 1.2.2 Faculty level and VSF teaching committee

The joint teaching committee is one of the three standing VSF-wide committees. It has 18 members (for each of the two locations in Bern and Zurich: 4 professors, 3 members of the junior staff or assistant level, 1 student, 1 representative of the Office for Student Affairs). The joint teaching committee has a wide variety of duties and competences that are laid out in the VSF Regulations of the Faculty ("Fakultätsreglement"; SEE ATTACHMENT VSF Regulations) and in internal regulations.

Briefly, the main duties of the teaching committee comprise coordination, evaluation, and further development of our curricula.

Moreover, the VSF has an associate dean of teaching at each of its two locations (Bern: Prof. Steiner; Zurich: Prof. Ackermann). Both associate deans are part of the joint VSF teaching committee and also maintain connections to the university-wide committees that deal with all aspects of student education and quality control.

#### 1.2.3 Student involvement in faculty politics and quality control at the student level

The Vetsuisse Faculty guarantees student involvement in all committees that are relevant for the academic self-organization. Students are organized in a student committee, which is free to select its representatives. Importantly, student representatives are full voting members of the VSF teaching committee. Moreover, student representatives also participate at both levels of Faculty meetings (local assembly in Bern or Zurich; Vetsuisse assembly). Thus, students are informed about and participate in the process of the development of the faculty.

A few exceptions involve committees that decide on career promotion in the faculties and similar affairs because members of these committees are required to have achieved that academic level by themselves. The guidelines can be found in the organization Rules of the VSF ("Organisationsreglement der Vetsuisse-Fakultät"; SEE ATTACHMENT Organization Rules).

The VSF highly values the contact with student representatives. For that purpose, the VSF runs Offices for Student Affairs at both locations. Currently three employees (Zurich; 200%) and two employees (Bern, 150%) take care of all aspects of student affairs at the faculty (see also subchapter 2.7.1). The students also nominate their representatives who serve as contact person between the Office of Student Affairs and the respective cohort of students. Typically, each of the five classes elects one representative. Together, they form the students' union (<a href="http://www.fachschaft-vetmed.ch/">http://www.fachschaft-vetmed.ch/</a>). Regular meetings between the students' representatives and the local deans guarantee a direct flow of information. This is considered very important for direct student feedback about problems that might not be identified via the official evaluation procedures.

Student participation in teaching evaluations: The Office for Student Affairs is in charge to run the student's evaluation office, which is involved with the student's input to periodic assessment of the quality of teaching and practical education. Students are encouraged to participate in evaluations, a means of influencing faculty development. Official evaluation forms are provided from the University's office for evaluation. Our Office for Student Affairs makes those forms available, takes scans from the returned forms, and analyzes the collected data. The return-rates of our surveys vary from 65% to 95%. Results are reported back to the target group within a few days. Measures for improvement are discussed at that same occasion.

Thus, student concerns are being communicated to the institution through different channels.

#### 1.2.4 Continuous assessment of teaching quality

Both Universities (University of Zurich (UZH) and Bern (UniBE)) have a stringent evaluation policy and require complete evaluation of the teaching quality in cycles of six (UZH quality assurance system) and four years (UniBE quality assurance system), respectively. The most recent teaching evaluation dates back to 2007 and was performed by the EAEVE.

The quality assurance system to be operated by the teaching committee at both VSF locations is not yet fully developed, since the new curriculum and its associated quality control are just being

established. However, it is the explicit task of the teaching committee to both coordinate and evaluate our curriculum.

The evaluation of courses and teaching personnel by our students has a long tradition at both VSF locations. At the Bern location, the annual evaluation of teachers has been mandatory since 2005. In Zurich, the system is less stringent, relying more on voluntary evaluations. However, formal admission to teaching as well as prolongation of teaching duty and academic promotion, all require affirmative student evaluations.

More details about the continuous assessment of the teaching quality will be described in Chapters 3 through 8 of this report. However, we want to draw the attention to a very extensive recent evaluation of the entire E-learning repertoire of the VSF Zurich. This evaluation (see also chapter 4.3) will help to decide on future financial allocations into E-learning projects that will guarantee the best possible benefit for student education. Further, we will describe in detail the quality policies of clinical and paraclinical departments, including their participation in the European College System.

#### 1.3 Brief introduction to the VSF curriculum and to the examination policy of the VSF

The Vetsuisse curriculum and the examination system are based on the Bologna system with a 3-year education to reach the level of Bachelor of Veterinary Medicine and an additional 2-years to reach the level of Master of Veterinary Medicine.

See also studies regulations; ATTACHMENT Studienreglement

#### 1.3.1 Organization of Examinations

The ECTS credit point system has been fully implemented. Examinations take place at the end of each module, typically during the semester breaks. The dates of examinations are announced at the beginning of the academic year. The Swiss grading system is from 6 to 1 (see below). The passing threshold is "4", i.e. the full number of ECTS points is given when students grade 4 or better.

6 = excellent

5 = good

4 = satisfactory

3 = unsatisfactory

2 = poor

1 = very poor

#### 1.3.2 Bachelor course

#### 1.3.2.1 First year

Scientific fundamentals in relation to veterinary medicine. Introduction to Anatomy, Comparative Morphology and Evolution, Physiology, Biochemistry, Molecular Biology, Animal Husbandry, Animal Welfare, Ethology, Ecology subjects. Details can be found in the Study Guide for 1st year students.

(SEE ATTACHMENT Study Guides;

http://www.vet.uzh.ch/Studium/studiengang/jk1.html

http://www.Vetsuisse.unibe.ch/content/studium/studiengang/1\_studienjahr\_bachelor/index\_ger.html).

**Examinations for students in the 1st year** comprise three theoretical, written examinations (E 1.1-1.3) in the following groups of subjects:

- E 1.1: Chemistry, Physics
- E 1.2: General Anatomy and Physiology, General Histology and Physiology, Musculoskeletal system (bones and muscles), Radiation Physics and General Radiology
- E 1.3: Biology I, Biology II, Biochemistry, Epidemiology and Biostatistics, Animal Husbandry Systems/Animal Welfare/Ethology

#### 1.3.2.2 Second and third year

Courses in the 2nd and 3rd years of the Bachelor program are divided into a non-organ systems approach (NOA) and an integrated organ systems approach (OA). The NOA courses typically comprise a 6-week block at the beginning of the semester which is followed by one day per week of NOA lectures for the rest of the semester, concurrently with the OA weeks.

Subjects of the 2nd and 3rd year:

The NOA courses consist of clinical fundamentals and courses in preclinical and paraclinical sciences that cannot be integrated into the OA. NOA (alphabetical order): Animal Nutrition, Bacteriology, Biochemistry, Breeding and Genetics, Clinical Introductory Courses including Topographical Anatomy, Clinical Introductory Courses, Environmental Hygiene, Evidence based medicine, Fundamentals of Veterinary Public Health (Food Safety, Diseases and Zoonoses, clinical Epidemiology, General Pathology, General Pharmacology and Toxicology, General Surgery, Immunology, Parasitology, Virology.

OA consists of eight organ system modules typically integrating the following subjects (alphabetical order): Anatomy, Diagnostic Imaging, Histology and Embryology, Internal Medicine, Organ Pathology, Organ-Specific Clinical Pathology, Pharmacology and Toxicology, Physiology and Pathophysiology, Surgery, Surgical Anatomy.

Students get all the important information by the course outlines (SEE ATTACHMENT) "Blockbücher Organblöcke".

Details for 2nd year students can be found in the following Study Guides

(SEE ATTACHMENT Study Guides;

http://www.vet.uzh.ch/Studium/studiengang/jk2.html;

http://www.Vetsuisse.unibe.ch/content/studium/studiengang/2\_studienjahr\_bachelor/index\_ger. html)

**Examinations for students in 2nd year** consist of four theoretical examinations (E); E 2.1 takes place at the end of the fall semester, E 2.2-2.4 at the end of the spring semester. Examination in Biochemistry is oral in Zurich and written in Bern. All the other examinations are written in the format of multiple choice or short-answer questions. Examination 2.4 is PC-based.

- E 2.1: Organ System Modules: (1) Blood (incl. immune system and laboratory medicine); (2) Musculoskeletal System
- E 2.2: Organ System Module: Gastrointestinal System (including metabolism), Biochemistry
- E 2.3: General Surgery, General Pharmacology/Toxicology, General Animal Husbandry: Animal Nutrition, Breeding and Genetics
- E 2.4: Immunology, General Pathology

Details for 3rd year students can be found in the following Study Guides

(SEE ATTACHMENT Study Guides;

http://www.vet.uzh.ch/Studium/studiengang/jk3.html

http://www.Vetsuisse.unibe.ch/content/studium/studiengang/3\_studienjahr\_bachelor/index\_ger.html)

Examinations for students in the 3rd year of the program consist of five single examinations (E) and of cross-comparison of subjects (E 3.6; see below); E 3.1 takes place at the end of the fall semester, all the other examinations take place at the end of the spring semester, with the exception of E 3.3. Time of examination of E 3.3: Virology: end of spring semester 3rd year (UniBE and UZH) Bacteriology: end of spring semester 2nd year (UZH), end of spring semester 3rd year (UniBE) Parasitology: end of fall semester 3rd year (UniBE and UZH). E 3.3 and 3.4 are oral and E 3.1 and 3.2 are written in the format of multiple choice or short-answer questions. E 3.5 is a practical examination consisting of two parts: part one is the Clinical Introductory Courses (of small animals, horses, cattle and pigs) and part two is Topographical Anatomy. In both parts the students are tested in their practical knowledge at histological slides and examination skills. E 3.6, cross-comparison of subjects: This examination consists in an overall evaluation of the single subjects of integrated organ systems. To guarantee a sufficient level of knowledge in all subjects included in the integrated organ systems, students have to prove that they have reached at least 40 per cent of the points that can be earned in a specific subject. The main subjects included in this cross-section comparison are:

- Anatomy, Histology and Embryology
- Physiology and Pathophysiology
- Small animals (internal medicine, surgery and reproduction)
- Farm animals (internal medicine, surgery and reproduction)
- Pathology, organ Pathology
- Pharmacology and Toxicology

- E 3.1: Organ System Modules: (1) Heart, Circulatory System, Respiratory System; (2) Kidneys, Fluid and Electrolyte Balance
- E 3.2: Organ System Modules: (1) Skin, Thermoregulation; (2) Central Nervous System and Sensory Organs, (3) Reproduction and Mammary Gland
- E 3.3: Virology, Parasitology, Bacteriology
- E 3.4: Fundamentals of Veterinary Public Health, clinical Epidemiology, Evidence based medicine
- E 3.5: Clinical Introductory Courses and Topographical Anatomy
- E 3.6: cross-section comparison of subjects ("Fächerquervergleich")

After successful completion of years 1-3, students are awarded the title of Bachelor of Veterinary Medicine (B Vet Med).

#### 1.3.3 Master course

#### 1.3.3.1 Fourth year/first year of Master course

In the 4th year fall semester, the core curriculum includes selected clinical subjects, which have not yet been discussed in the organ courses, and a joint ZH/BE course on fish, zoo animals, wild life and exotic pets. Additionally, paraclinical subjects in pathology (gross pathology) and immunology are included. The clinical aspects of bacteriology, virology and parasitology are discussed using cases, and epidemiological aspects are considered when applicable. The Practice Management module consists of legislative and professional topics. In the Veterinary Public Health III module, the principles of zoonotic disease and other topics of public health are presented.

In the spring semester, the core curriculum includes diagnosis and treatment, based on chief complaints, of cases seen in the clinic. In the chief complaint week (1 chief complaint discussed per week), students work in small groups on cases (food animals, horses, small animals), which they present to the class during the final discussions.

In the Master course the Students have to choose one of six foci (or "tracks") of the clinical (food animals, horses, small animals, SEE ATTACHMENT <u>Blockbücher klinische Schwerpunkte</u>) or the non-clinical (Biomedical Research, Pathobiology, Veterinary Public Health) field. During the entire 4th year, patient handling and independent clinical examination is practiced in clinical exercises (clinical rotations during 12 weeks in Zurich).

Details can be found in the Study Guide for 4th year students

(SEE ATTACHMENT Study Guides;

http://www.vet.uzh.ch/Studium/studiengang/jk4.html;

http://www.Vetsuisse.unibe.ch/content/studium/studiengang/4\_studienjahr/index\_ger.html).

**Examinations for students in 4th year** consist of three theoretical examinations (E); E 1 and 4 take place at the end of the fall semester and E 2 takes place at the end of the spring semester. Examination 1 is a written, case based examination in the format of short-answer questions. E 2, E 3-5 are oral.

- E 4.1: Clinical Topics
- E 4.2: Chief complaints
- E 4.4: Veterinary Public Health, Animal Welfare Law
- E 4.5: Group examination in Infection and Immunity (Infektionsimmunologie)

The following credits are given based on active participation:

E 4.3: Credits for the focus curriculum are given based on active participation and presentations.

E 4.6: electives

E 4.7: emergency medicine and clinical duty

E 4.8: Veterinary legislation

#### 1.3.3.2 Fifth year/second year of Master course

In the 5th year of the program, students undergo a rotation among the various clinics and institutes of the Vetsuisse Faculty. One half is spent in the subjects of the core curriculum, the other in the selected focus. Furthermore, students must complete a 4-week externship in a veterinary practice or clinic not associated with a university and a 4-week externship in a veterinary work field associated with the selected focus.

**Examinations for students in 5th year** consist of formative assessments and the evaluation of the Master Thesis.

E 5.1: Rotations in the clinics, institutes and departments in the subjects of the core curriculum (including 4-week externship)

E 5.2: Rotations in the clinics, institutes and departments in the subjects of the focus curriculum (including 4-week externship)

E 5.3: Master Thesis

E 5.1-5.2 are evaluated by formative assessment by the supervising teacher. Furthermore, the performance in the rotation of the selected focus is assessed.

E 5.3 is a written thesis, which can be based on research or other field work during the 4th and 5th year.

Details can be found in the study guide for 5th year students

(SEE ATTACHMENT Blockbuch Rotationen;

http://www.vet.uzh.ch/Studium/studiengang/jk5.html

http://www.Vetsuisse.unibe.ch/content/studium/studiengang/5\_studienjahr/index\_ger.html).

Details to the Masterthesis can be found in the Studies Regulations

(SEE ATTACHMENT <u>Studies Regulations</u>) and in internal guidelines (SEE ATTACHMENT <u>Merkblatt Masterarbeit</u>).

Upon successful completion of year 4 und 5, the title Master of Veterinary Medicine (M Vet Med) is awarded. This entitles the students to sign up for the federal examination (Eidgenössische Prüfung in Veterinärmedizin). The federal (licensure-)examination consists of four practical examinations in pathology, food animals, horses and small animals.

#### 1.3.4 Comments and suggestions for improvement

The Bologna system has created a demand for frequent and numerous exams. Consequently, students and teachers as well as finances are challenged to the extreme. There is an imminent danger that these challenges are only met at the cost of the educational quality. For example, there is an unresolved

issue among the VSF faculty members about the minimal requirements that have to be met to successfully pass an exam. According to present rules, which were approved by about 80% of the VSF general assembly, some exams may be passed upon answering correctly to 40% of the questions (see Examinations for students in the 3rd year). Similarly, the top grade "6" can be earned by achieving 90% of the point total obtainable within a given exam (see "Procedure after analysis of examinations" within Chapter 2.4.3). Moreover, lack of knowledge in some areas may be compensated by knowledge from an unrelated field. Knowing little about the Central Nervous System may be compensated by having more knowledge about the Mammary gland (organ system modules). Similarly surgery may compensate for internal medicine and reproduction (cross-section comparison), and Virology, Bacteriology, and Parasitology may compensate for each other. Some faculty members, including the VSF Zurich vice dean of teaching, strongly believe that this does not help to forming better professionals\*. Such will be formed only if the students are forced to meet higher challenges. Accordingly, the requirements of the Bologna system should be reinforced more strictly. Obviously, this may increase the number of single examinations even more.

\*Of note, similar or even less strict rules of compensation (eg. full compensation without a "40% rule") are common procedure in many other faculties, including the faculties of medicine at UZH and Uni BE.

#### 1.4 Qualifications for Federal Examinations and Diplomas

For Swiss citizens and citizens of foreign countries whose parents legally reside in Switzerland, medical examinations are governed by federal regulations ("Medizinalberufegesetz"; Eidgenössische Prüfung in Veterinärmedizin [federal examination]). The federal diploma entitles the holder to practice all fields of veterinary medicine in all over Switzerland.

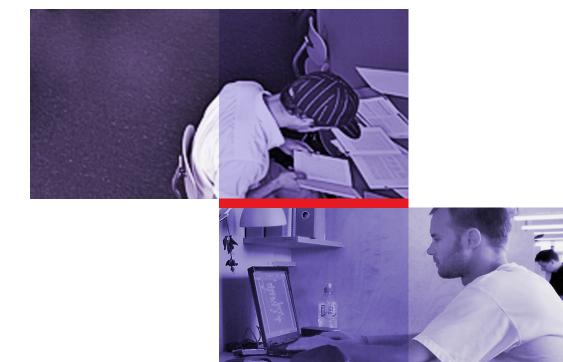
Importantly, only students who have successfully completed the accredited curriculum with an M Vet Med degree are eligible to sit the federal examination. All examinations of the Bachelor- and Master courses are governed by the VSF. The VSF awards the titles of Bachelor of Veterinary Medicine and Master of Veterinary Medicine, respectively (all rules are laid down in the Studies Regulations; "Studienreglement"; SEE ATTACHMENT <u>Studienreglement</u>). Examination procedures are defined in detail by specific regulations. This concerns publication of the dates of exams, content, mode of examination (MCQ, short essay, oral, practical), allowed documents during examination.

For further information, please read the "Bundesgesetz über die universitären Medizinalberufe" (Medizinalberufegesetz, MedBG) 23. Juni 2006 (SR 811.11), "Allgemeine Medizinalprüfungsverordnung" (Regulations for Medical Examinations in Switzerland) and über eidgenössischen der universitären Medizinalberufe die Prüfungen (Prüfungsverordnung MedBG) vom 26. November 2008.

http://www.bag.admin.ch/themen/berufe/00993/index.html?lang=de

The overall aims of study of successful candidates are laid down in the "Lernzielkatalog und Anhang". Please refer to: <a href="http://www.bag.admin.ch/themen/berufe/00408/00557/index.html?lang=de">http://www.bag.admin.ch/themen/berufe/00408/00557/index.html?lang=de</a> (SEE ATTACHMENT <a href="http://www.bag.admin.ch/themen/berufe/00408/00557/index.html?lang=de">Prüfungsverordnung und Erläuterungen</a>)

# Assessment of students, post graduate education and student welfare



# 2 Chapter 2: Assessment of students, post graduate education and student welfare

#### 2.1 Information of students graduating from high school and information day for 1st year students

#### 2.1.1 Factual Information

High school students are regularly offered information days on the career options in the veterinary profession and on the veterinary teaching curriculum. This is organized by the Offices of Student Affairs at university level. These information days usually last for 2 days

(http://www.maturandeninfo.uzh.ch/index.html (Zurich)

http://www.infotage.unibe.ch/content/index\_ger.html (Bern)

SEE ATTACHMENT Programm Studieninfotage UZH and Flyer)

The aim of these days is extensive information of future students about the possibilities and requirements during veterinary studies at the faculty. It is important for us to educate future students about the career options of the veterinary profession.

The "Erstsemestrigentag", i.e. the first day of the students at the University, offers a brief summary of what the students are going to experience during the 5 year curriculum. This also includes general information about the life as a student. Senior undergraduate students assist the incoming students to get acquainted with the campus and to give them a warm welcome. The program for the "Erstsemestrigentag 2010" can be found in the

ATTACHMENT Programm Erstsemestrigentag UZH

and on http://www.generalsekretariat.unibe.ch/content/tag\_des\_studienbeginns/index\_ger.html).

#### 2.1.2 Comments

These information days are much appreciated by new students. An example can be viewed via the following link: <a href="http://www.uzh.ch/news/articles/2009/25000ste-studentin.html">http://www.uzh.ch/news/articles/2009/25000ste-studentin.html</a>

#### 2.1.3 Suggestions for improvement

Most of our students are primarily interested in the curative aspects of veterinary medicine. It may be important in the future to attract a broader spectrum of students, including those that are heavily interested in veterinary public health (VPH), farm animals and in basic research-oriented aspects of veterinary medicine.

#### 2.2 Assessment of students prior to entering the VSF: aptitude test organized by CRUS

#### 2.2.1 Factual Information

Due to the high number of applications of students who want to study veterinary medicine, the Universities of Bern and Zurich enforce a numerus clausus system which allows only a predefined number of students to initiate their studies. These numbers have been set to 80 new students in the first year of the curriculum in Zurich and 70 in Bern, respectively. Considering our experience with the number of students who fail the 1st year exams, an average number of 60 students in Zurich (50 in

Bern) will then enter their 2nd year of studies. This corresponds to the capacity for high quality clinical training of our institutions at the VSF.

All students who want to study veterinary medicine have to sit an entry examination (aptitude test) organized by the CRUS (Conférence des Recteurs des Universités Suisses; aptitude test). In order to be admitted to the aptitude test, students must comply with the standards for general admission to university in Switzerland, i.e. have obtained the

- federally recognized "Maturität" (diploma of higher secondary education, Gymnasium)
- federal professional "Maturität" in combination with an additional federal exam ("Passerelle")
- Bachelor, master or equivalent diploma of a Swiss University
- Bachelor of a Swiss university of applied sciences or a Swiss university of teacher education

Admission to veterinary medicine (and medicine & dentists) is defined in the regulations for admittance to medical education at university level of the two Cantons

(for the Canton of Bern see <a href="http://www.sta.be.ch/belex/d/4/436">http://www.sta.be.ch/belex/d/4/436</a> 711.html). Admission of foreign students to Swiss Universities see attachment (<a href="https://www.crus.ch/information-programme/anerkennung-swiss-enic/zulassung/zulassung-in-der-schweiz/einzelne-laender.html?L=0">http://www.crus.ch/information-programme/anerkennung-swiss-enic/zulassung/zulassung-in-der-schweiz/einzelne-laender.html?L=0</a>.

The aptitude test is not a knowledge test. It tests the applicants' capacity to acquire new knowledge. The test is offered at 9 different locations in all language regions of the country on one single day. In 2009, a total of 297 students participated in the test in order to be assigned one of 150 study places in veterinary medicine (80 in Zurich, 70 in Bern). Although the successful candidates may indicate their favored university of study, it is the CRUS which decides about the allocation of the students to the two universities.

Criteria for the assurance of the quality of the test are published in an annual report. The rate of successfully passing the first year of study is highly correlated to test results. It has been demonstrated that the students performance (with respect to the first year) clearly correlates with the result of the aptitude-test. (For details: SEE ATTACHMENT <u>Bericht Eignungstest 2008</u>).

Table 1: Applications to the VSF and success rate of students in the admission examination aptitude test

	2009/10		2008/9		2007/8	
	UniBE	UZH	UniBE	UZH	UniBE	UZH
Number of students applying	195	176	195	170	195	216
Withdrawals	37 (19.0%)	37 (21.0%)	39 (20.0%)	39 (22.9%)	58 (29.7%)	58 (26.9%)
Numbers of students admitted	73	83	75	85	68	83
% of foreign students	3/73	4/83	5/75	4/85	3/65	3/83

#### 2.2.2 Comments

Over recent years, the number of applicants was relatively stable and exceeded the VSF's capacity by about 2.5-fold. Even though the results of the aptitude test seems to mirror closely the later performance of students, it needs to be discussed whether potential candidates for a career in farm animal medicine or VPH may be discouraged to even sit the aptitude test.

#### 2.2.3 Suggestions

As a considerable lack of food animal practitioners in Switzerland is predicted for the near future, measures to counteract this potential problem have to be discussed and implemented. Similarly, only few students are willing to select the VPH track or get involved in basic research. A possible scenario might be to offer a separate and specific type of aptitude test for applicants with a strong interest in food animals or VPH. Alternatively, some type of well-structured interview for applicants with a strong interest in food animals or VPH might replace the aptitude test. The goal should be to allow a number of students to enter the studies of the VSF that is adequate to satisfy the needs of the veterinary market in Switzerland.

#### 2.3 ERASMUS exchange program

The two locations Bern and Zurich collaborate in the ERASMUS exchange program and all contracts with European partners are valid at both Vetsuisse locations

(see also: <a href="http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte/ERASMUSInfo2010.pdf">http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte/ERASMUSInfo2010.pdf</a> <a href="http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte.html">http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte.html</a>; <a href="http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte.html">www.vet.uzh.ch/Studium/vetmed/austauschprojekte.html</a>; <a href="http://www.vet.uzh.ch/studium/vetmed/austauschprojekte.html">www.vet.uzh.ch/Studium/vetmed/austauschprojekte.html</a>; <a href="http://www.vet.uzh.ch/studium/vetmed/austauschprojekte.html">http://www.vet.uzh.ch/studium/vetmed/austauschprojekte.html</a>; <a href="http://www.vet.uzh.ch/studium/information\_und\_beratung/erasmus/index\_ger.html">http://www.vet.uzh.ch/studium/vetmed/austauschprojekte.html</a>; <a href="http://www.vet.uzh.ch/studium/information\_und\_beratung/erasmus/index\_ger.html">www.vet.uzh.ch/studium/information\_und\_beratung/erasmus/index\_ger.html</a>).

In the frame of the ERASMUS exchange program, the Vetsuisse Faculty has contracts with 20 European Veterinary faculties. Students can spend one or two semesters at their faculty of choice. Application is via the ERASMUS coordinators of the faculty. Over recent years, more and more students applied to the ERASMUS exchange program to spend time at another faculty for practical clinical training. This is partly due to the differing study programs in European faculties. The differences in the curricula are often the reason why students are unable to fulfill all requirements of their home university during a specific year of study.

#### Partner faculties of Vetsuisse

Country	University
Austria	Veterinärmedizinische Universität Wien
Belgium	Université de Liège
Belgium	Universiteit Gent
Germany	Freie Universität Berlin
Germany	Justus-Liebig-Universität Giessen
Germany	Ludwig-Maximilians-Universität München
Germany	Tierärztliche Hochschule Hannover
Germany	Universität Leipzig
Spain	Universidad Complutense de Madrid
Spain	Universidad de Las Palmas de Gran Canaria
Finland	University of Helsinki
France	École Nationale Vétérinaire de Lyon Marcy-l'Etoile
France	École Nationale Vétérinaire de Maisons Alfont
France	École Nationale Vétérinaire de Nantes
Italy	Università degli studi di Padova II Bo
Italy	Università degli studi di Parma
Italy	Università degli studi di Teramo
Italy	Università degli Studi di Torino
The Netherlands	Rijksuniversiteit Utrecht
Norway	Norwegian School of Veterinary Science

#### 2.3.1 ERASMUS students at the VSF Faculty University of Bern and University of Zurich

#### 1. Application for a SOCRATES/ERASMUS Fellowship

The deadline for the registration for a "mobility stay" for both summer and winter semesters is February 20 (Zurich) or March 31 (Bern). Applications that arrive after this date are accepted if additional places are available, but the applicants may not receive a stipend.

Basic information regarding a "mobility year" or "mobility semester" can be obtained at the applicant's own university; either at an International Relations Office or at a SOCRATES/ERASMUS Coordination Office. The respective information can also be found on the website of the VSF Faculty. These contacts are responsible for the allocation of the fellowships that were agreed upon.

A learning agreement must be discussed first with the International Relations Office coordinator at the applicant's own university. The chosen course program should mainly agree with the program offered during the planned semester at the University of Zurich or Bern. It is also possible to select courses from other years of study if it does not disagree with the teaching schedule. The learning agreement, signed by both the coordinator and the applicant, is then submitted for approval to the SOCRATES/ERASMUS faculty coordinator at the University of Zurich. If approved, the contract is signed by the faculty coordinator and returned to the student.

Since the places in the clinics are limited, it is mandatory to contact the ERASMUS coordinators before students file their application. This will allow optimal allocation of incoming students into the rotation schedule and guarantees the high standard of practical teaching in small groups of students.

ERASMUS coordinators

Prof. Dr. med. vet. Meike Mevissen (Bern)

Prof. Dr. med. vet. Thomas A. Lutz (Zurich) Institute of Veterinary Physiology

#### 2. Registration at the registration office

Foreign student counter ("Auslandschalter") in the University main buildings in Bern and Zurich.

#### 3. Stipend

The Swiss Federal Office for Science and Education offers students monthly stipends of CHF 220.00 to CHF 250.00 in order to help them cover some of the extra costs during their stage at VSF (separate regulations apply for students from Rumania and Bulgaria).

#### 4. Language Proficiency

The majority of courses at the Universities of Bern and Zurich are taught in German. For students of the SOCRATES/ERASMUS program, a three-week, intensive German course is offered twice yearly, four weeks prior to the commencement of lectures. This course, however, is not suitable for beginners; a basic knowledge of German is required. Registration is not required, and there is no fee. This course is highly recommended for all incomming students of the SOCRATES/ERASMUS program whose native language is not German. It not only serves to improve German language skills, but it also provides insight into daily Swiss life.

In addition to this intensive course, other free German courses (intermediate and advanced levels) are offered during the semester. For further information: <a href="http://www.sprachenzentrum.uzh.ch">http://www.sprachenzentrum.uzh.ch</a>

5. For additional administrative questions, students are usually referred to the central offices of the Universities of Bern and Zurich:

Universität Bern Internationales Büro Hochschulstrasse 4 CH-3012 Bern Tel +41 (0)31 631 41 75 Fax +41 (0)31 631 34 72

http://www.int.unibe.ch/content/incoming/erasmus/index\_eng.html

University of Zurich Ressort Internationale Beziehungen Rämistrasse 71, 8006 Zürich 8006 Zürich

http://www.int.uzh.ch/index.html

http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte.html

 $\underline{http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte/ECTS\_Information\_Package\_06\_07\_e.}\\ \underline{pdf}$ 

#### 2.3.2 Factual information

Incomings: In 2008-2009 VSF UZH accepted 33 exchange students from 12 universities (Berlin 5, Giessen 3, Hannover 6, Helsinki 1, Leipzig 1, Liège 2, München 3, Nantes 1, Oslo 1, Padova 4, Parma 1, Wien 5)

	Bachelor level	Master level (excluding clinical rotations)	Clinical rotations
FS 2008	5 (UZH) / 4 (UniBE)	0 (UZH) / 3 (UniBE)	1 (UZH) / 4 (UniBE)
HS 2008	7 (UZH) / 2 (UniBE)	2 (UZH) / 4 (UniBE)	6 (UZH) / 4 (UniBE)
FS 2009	4 (UZH) / 1 (UniBE)	2 (UZH) / 2 (UniBE)	7 (UZH) / 4 (UniBE)
HS 2009	0 (UZH) / 1 (UniBE)	0 (UZH) / 3 (UniBE)	5 (UZH) / 5 (UniBE)

#### Outgoings:

	UZH	UniBE
2008	2	1
2009	2	2

#### 2.3.3 Comments

VSF seems to be highly attractive for incoming students, specifically during the master course. Unfortunately, the number of clinical training positions is restricted by the capacity of the clinics. Hence, we can typically accept only about 50% of applications for clinical training. Our partner universities are informed about this fact. The quality of training throughout the master course is also highly appreciated by our own students, a fact, which makes them reluctant to apply for ERASMUS at this stage. In contrast to the master course by far, not all ERASMUS positions are being filled during the bachelor course of studies.

A major problem for all mobility students seems to be the incongruity of curricula throughout Europe. This has been improved with the introduction of the Bologna system in some but not all European countries.

One further problem for incoming ERASMUS students is the lack of sufficient knowledge of the German language. All lectures are given in German (with very few exceptions); during clinical and practical training, this may be less of a problem but interaction with animal owners is hampered due to insufficient language skills. Language issues are also a problem for examinations.

#### 2.3.4 Suggestions for improvement

In general, incoming exchange students are highly appreciated by the professorship. Therefore, more efforts should be made to encourage also our own students to take better advantage of student exchange programs. The ECTS brochure

(http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte/ECTS\_Information\_Package\_06\_07\_e\_.pdf) needs to be routinely updated to make students aware of the specifics of our teaching schedule. The Office of International Relations is very helpful in this respect. Nonetheless, examinations of incoming ERASMUS students usually need to be organized on an individual basis. This is very time

consuming for the Office of Student Affairs as well as for the ERASMUS coordinator. Switzerland recently became a full partner of the ERASMUS program. Hopefully, this will lead to a better coordination of application deadlines. Many partner universities have later deadlines for applications, which hampers a good coordination of the available capacity for incoming students, in particular for the clinical rotations.

#### 2.4 Assessment of students during the undergraduate studies (AP 2)

Students are assessed regularly according to the Bologna based ECTS system (Studies regulations; SEE ATTACHMENT Studienreglement). The criteria of assessment are published; all written examinations are organized by the help of the Institute of Medical Learning (IML) of the University of Bern (see below; 2.4.1). Detailed blueprints underlie the examinations. Hence, the contribution of individual disciplines to a specific teaching module is closely mirrored in the respective examination. Examination criteria are published at the beginning of every academic year; criteria are published online, in the study guide (SEE ATTACHMENT Study Guides) and in the respective guidelines for the different instructional units (organ-centered modules).

The students are informed about the program objectives of the curriculum, including the predefined day 1 competences (SEE ATTACHMENT <u>Day-1-skills</u>). Day-1-skills were defined according to EAEVE-specifications. They are the principal basis for the final federal examination (see catalogue with overall aims of the curriculum; "Lernzielkatalog"; SEE ATTACHMENT <u>Lernzielkatalog</u>).

Examinations during the Bachelor and Master course are no longer under the guidance of the Federal Office of Public Health (BAG) but of the VSF. VSF Zurich created an examination committee that supervises all examinations and serves as mentoring board for students. The committee is headed by a local veterinary practitioner, the two other members are the Vice dean of teaching of VSF Zurich and the head of the Conference of the heads of VSF Zurich's clinics (Klinikdirektorenkonferenz; KDK). At Vetsuisse Bern the tasks are being fulfilled by the student's office in close collaboration with the local representatives of the Vetsuisse teaching committee.

Results of assessment are being documented in databases of the local universities (UZH: SAP Campus; BE: ePUB). Students are informed online and are provided annually with official certificates testifying their results. The two local offices of student affairs are in close contact to the administrative staff of the databases mentioned.

#### 2.4.1 Quality control of written examinations

All written examinations are supervised by the IML of the University of Bern. The IML is involved in all technical aspects of written examinations (server platform to manage all exam questions) and in quality assessment and assurance (see <a href="http://www.iml.unibe.ch/en/services/">http://www.iml.unibe.ch/en/services/</a>).

The aim of the "Abteilung für Assessment und Evaluation" (AAE)/IML is to support the VSF Zurich in maintaining and improving the quality of structured written examinations. The tasks of the AAE/IML include:

- operation of a secured database of examination questions
- revision and validation of questions (form and formulation on the basis of international research result in medical education)

- preparation and proofreading of examination booklets
- analysis of test statistics (score distribution, reliability) and item statistic (difficulty, selectivity, distractor pattern), indication of defects, proposal for elimination and/or improvement of questions
- suggestion for a cut off (pass) mark, based on an equating procedure with reused marker questions ("Rasch-Modell")
- production of a list with individual results of the candidates and of feedback letters for the candidates, production of a subscore chart
- feedback on form and formulation of statistically striking questions
- individual double-checks of results on demand, e.g. in the case of appeals and inspections by candidates

#### Briefly, the IML guarantees:

#### Assessment/testing

Using scientific principals, the AAE supports the development, implementation, and evaluation of structured examinations. Its goals are a high level of accuracy in its measurements and fairness in its evaluations.

In addition to multiple-choice tests, short answer formats and combinations of the two are also supported.

The AAE also assists in the development and evaluation of procedures such as:

- Testing (clinical) thought processes and problem solving skills (structured oral examinations)
- Testing practical skills (e.g. OSCE)
- Formative testing of educational progress (e.g. portfolio methods)

#### Basic principles

The most important quality criterion of a test is its validity. It must test whether the candidates have the necessary qualifications to successfully continue their course of studies or the competence to work in their chosen fields. This means that the crucial elements of competence must be ascertained. In addition, the results must be objective and reliable.

Objectivity means that the results of the tests are as independent of the candidates and evaluators as possible. In order to assure reliability, the results must be as independent as possible of the specific selection of test questions/problems and of external factors such as guesswork or mistakes in the formulation of questions problems that will give an advantage/disadvantage to certain candidates.

- Achieve clarity about the explicit and implicit purposes of the test
- Define key competences and/or specific testing goals with classification of the cognitive level of aspiration (taxonomy)
- Select testing method(s)
- Develop a weighted content grid (blueprint)
- Train the authors of the test questions / problems

#### Testing methods

When selecting testing method(s), all the significant advantages and disadvantages of the different procedures must be weighed. There is no universally appropriate method. In the selection process, all who are involved in the testing must participate in the development of a best, most practicable solution. Usually more than one method will be necessary to test the knowledge and abilities of the candidates.

The AAE currently recommends and supports the following testing methods:

- Multiple choice questions (MC)
- Short answer questions (SAQ)
- Structured practical exam (SPP, OSCE)
- Structured oral examinations (SOE)
- Structured observation (SO)

The VSF currently applies the first four of these, but oral examinations are not under the IML guidance.

#### Administering tests

In the interests of objectivity, reliability and fairness, testing must be carried out in a manner to ensure that:

- All candidates are tested under identical conditions to the fullest extent possible
- The influence of external factors on test results (construct-irrelevant variance) is kept to a minimum

#### Interpreting test results

The knowledge of how to administer good, fair testing can be applied in every field of learning. The AAE uses standard scoring methods (score distribution, item analysis, suggestions for establishing standards, feedback to students) for all examinations carried out under our guidance.

In addition to standard scoring, participation in the development of the questions and the advice of examination commissions are factors in the assessment of the examination (e.g. medical board exams, veterinary exams).

#### **2.4.1.1** Comments

The availability of the IML for planning, performing, and evaluating our assessment procedures is certainly of high value. However, it is also expensive and its basic principles are not withstanding all opposition. Mainly due to high costs, there is a tendency towards reducing the number of assessments. This can be done by combining different topics, which are tested in one single exam. The advantage is that fewer exams have to be organized and that their costs can be reduced. The disadvantage is that lacking knowledge from within one discipline can be compensated by knowledge in another discipline. The latter fact may be seen as in opposition to the principles of the Bologna system.

#### 2.4.1.2 Suggestions for improvement

Each discipline could be examined by itself. Follow-up costs should be shared between the authorities and the students.

#### 2.4.2 Examination system

The Examinations system is fully based on the ECTS system and the curriculum is in agreement with the Bologna guidelines (Bachelor/Master system; see Studies regulations; SEE ATTACHMENT Studienreglement)

Since its introduction in 2003, the VSF curriculum examination system has been based on the ECTS credit system. One ECTS point corresponds to a student work load of about 30h. This includes lectures and practical training classes, time for self-study and preparation for the examinations. On average, 60 ECTS points can be earned per year (30 ECTS per semester). ECTS points are only awarded if the assessment for a given teaching and examination module is successful. Details about the structure of the curriculum in general and the examination system in particular can be found in the Studies regulations (SEE ATTACHMENTStudienreglement).

#### 2.4.2.1 Comments

Mainly due to financial restrictions, there is the danger (combination of exams) that the Bologna system may not be fully adhered to. It must be noted, however, that the Bologna declaration does not define the ideal size of teaching modules. Due to increased work load involved, the VSF is divided on the question whether each individual teaching module should have its own examination or whether combined examination, as currently implemented in the VSF curriculum and part of other curricula in the medical field, should be pursued. The current system was voted in favour by about 80% of the members of the VSF general assembly.

#### 2.4.2.2 Suggestions for improvement

Adherence to the Bologna principles should be strongly enforced.

#### 2.4.3 Specifics about the general assessment of students after the first year

The first year of studies provides basic teaching modules of natural sciences and the basis of veterinary medicine (e.g., anatomy, histology, physiology, biochemistry, etc.). Students must earn all 60 ECTS points before they can proceed to the second year. Since 2010, the first year examinations can be repeated twice (three trials total), if necessary. This is a change from the system used up to the year 2009 where only two trials were possible. The system has been changed based on the experience that the first year examination poses problems to a relatively large number of our French or Italian speaking students. For reasons of fairness, three trials are now possible (i.e. similar to the system of the former curriculum). The coming years will have to show whether the new system is viable or whether we may have to require higher scores in the aptitude test to allow selection of sufficiently qualified students.

#### 2.4.3.1 Factual Information

#### **UZH**

Year	# of candidates	Failures	Failures in %
2005	134	46	34
2006	130	50	38
2007	112	28	25
2008	117	31	26
2009	134	37	28

#### UniBE

Year	# of candidates	Failures	Failures in %
2005	95	45	47
2006	101	51	51
2007	97	41	42
2008	96	39	41
2009	97	40	41

The failure rate in the first year examinations averages 25-30% in Zurich, 40% in Bern.

#### **2.4.3.2 Comments**

Students with French or Italian as native language seem to be at a disadvantage compared to German speaking students. About one third of the students at the Bern faculty are of French native language, which explains the higher rate of failure at this location. This was the major reason for a change in the examination system as mentioned above.

We were previously concerned that many students may fail the first year examinations due to subjects not directly related to veterinary medicine (in particular chemistry and physics). This does not seem to be true. The failure rates are similar throughout all examination modules.

As a more general comment, many teachers feel that the average level of students entering the university has decreased.

#### Procedure after analysis of examinations:

After analysis of all examinations by the IML, all involved teachers meet with IML representatives to discuss the grading for this cohort of students ("Notenkonferenz"). The IML proposes a grading system that is based on mathematical models (Rasch Modell). These models aim at a "normalization" of the grading system based on the overall performance of the cohort of students, on the degree of difficulty of the examination etc. The Notenkonferenz decides on the pass/fail level for all written examinations. As a general rule, it was decided, though not without opposition, that students have to achieve at least 90% of points in order to be awarded a grade "6".

Similar "Notenkonferenzen" are also organized for the later years of studies.

#### 2.4.3.3 Suggestions for improvement

We intend to improve the statistical evaluation of the students' performance. This will help us to better coordinate teaching and examinations.

As mentioned, the first year examination can now be repeated twice; the main reason was to improve the chances of students whose mother tongue is not German. This is in principle in contrast to the idea of a true "assessment stage" in the first year; however, we intend to supervise the consequences of this change closely and will take appropriate measures if necessary (see above, 2.4.3).

#### 2.4.4 Evaluation of extramural training in veterinary clinics (5th year students)

The performance of our students during extramural training is evaluated by the supervising veterinarians. This is taken as some quality control of our curriculum in respect to the preparation of our students for a life as a practicing veterinarian. The training periods last for four weeks. The Faculty has a list of veterinarians that are entitled to supervise students during this four week period in the frame of the core curriculum (there are less obligations for the supervision of students during their chosen focus, other than that the second four week training period must conform with the chosen focus).

The veterinarians have been chosen in collaboration with the Swiss Society of Veterinarians (GST/SVS). The training period in the core curriculum aims at providing basic insight into the professional life of veterinary practitioners in Switzerland.

Veterinary practitioners who accept VSF students for extramural training are invited to participate in a continuing education course that deals with supervision of trainees. The course is typically organized every two years. Veterinary practitioners earn continuing education points (awarded by the Swiss Veterinary Society [see chapter 10]) for their participation.

#### **2.4.4.1 Comments**

The VSF sees the four-week compulsory training in a Swiss veterinary practice as an absolute minimum and essential part of the preparation of our students for their future professional life. The VSF does not adhere to the illusion that a 4-week period is sufficient to prepare the students to independent work but it considers this training as an important and essential first step. The supervisors have reported that it is always a big challenge to provide proper guidance for the students and to give them a comprehensive insight into the veterinary business.

The following evaluation is based on surveys from the years 2008 and 2009:

Evaluation of extramural training in veterinary medicine, UniBE

	2008 / 20	09			2009 / 201	O		
	poor	acceptable	good	very good		acceptable	good	very good
1. Skills								
Independence	-	1	17	23	-	2	23	34
Responsibility	-	-	7	33	-	-	7	51
efficiency at work	-	5	18	20	-	2	32	23
initiative at work	-	2	12	28	-	3	14	40
Handling of animals	-	2	10	30	-	2	17	40
operational skills	-	-	18	22	-	2	19	38
2. Knowledge								
General and vet	-	-	20	20	-	3	34	22
profession								
specific veterinary	-	1	25	16	-	-	35	23
analytical capabilities	-	1	21	18	-	-	31	28
3. Behavior								
comprehension of task	-	-	13	28	-	2	18	40
knowledge transfer	-	3	26	12	-	2	30	29
handling of clients	-	2	12	29	-	2	15	41
team skills	-	3	5	34	-	-	8	50
communication	-	5	8	28	-	4	12	42
self awareness	1	-	18	23	-	-	18	41
handling criticism	-	-	11	30	-	1	15	42
4 3 A - C C				0.4		-	44	1.1
4. Motivation	-	-	6	34	-	2	11	44

Evaluation of extramural training in veterinary medicine, UZH

	2007/2008	118 111 / 0101			2008 / 2009			
	poor	acceptable	Good	Very good		acceptable	Good	Very good
1. Skills						-		
Independence	-	2	25	22	-	5	20	33
Responsibility	-	-	7	42	-	-	10	47
efficiency at work	-	3	28	18	-	4	28	26
initiative at work	-	5	23	21	-	2	20	34
handling of animals	-	3	14	23	-	2	18	33
operational skills	-	4	22	23	-	2	23	23
2. Knowledge								
General and vet	-	5	24	20	-	3	26	31
profession								
specific veterinary	-	6	18	25	-	1	28	30
analytical capabilities	-	2	31	16	-	2	27	28
3. Behavior								
comprehension of task	-	-	19	30	-	-	18	39
knowledge transfer	-	3	30	16	-	2	24	31
handling of clients	-	2	15	32	-	-	14	44
team skills	-	-	7	42	-	-	10	47
communication	-	1	23	25	-	1	15	42
self awareness	-	2	18	29	-	2	23	32
handling criticism	-	1	12	36	-	1	17	41
4. Motivation	-	1	7	41	-	-	8	51

Most supervising veterinarians are satisfied with the performance of our students. The students are motivated, interested and helpful. However, more than half of the students is less than "very good" when evaluated for their practical skills and knowledge.

While there is clearly room for improvement, we believe that the evaluation by practicing veterinarians reflects our efforts to provide a good mix of theoretical and practical training.

#### 2.4.4.2 Suggestions for improvement

We aim at further improving the education of our students by providing excellent teaching opportunities. While practical aspects of training are certainly important, our major goal is to provide studies at a high academic level. See also chapter 10, collaboration with the Swiss Veterinary Society GST/SVS.

#### 2.4.5 Summary of Comments about the Assessment System and suggestions for improvement

Our Assessment System successfully meets most challenges and is guided only by the best intentions. Yet, although nominally in accordance with the Bologna system, part of the VSF questions the validity of combined examinations (as described above). These have been instituted based on pragmatic and financial reasons. It has been agreed, that the current status will be evaluated within the next three years.

#### 2.5 Postgraduate student education; academic track (AP 3)

The academic track includes Postgraduate Master Programs(master after the master), Dr. med. vet. and PhD program. The former (MS) is still under construction.

#### 2.5.1 Factual information

Dr. med. vet.: This degree can be obtained following one to two years of research work, usually in a university institute or clinic, leading to a doctoral dissertation. Many graduates opt for the Dr. med. vet. since the doctoral title is still attractive in practice. The doctoral students have a supervisor, usually a senior faculty member, who supplies the theme, resources and guidance. After completion, the faculty members are notified and the doctoral thesis is availably over a period of four weeks for scrutiny at the dean's office. Final acceptance of the thesis is decided by majority vote in the VSF faculty council. The doctoral diploma is issued by the university rectorate. Rules and regulations of the Dr. med. vet. program are laid down in an official document at both universities (Promotion regulations; SEE ATTACHMENT <u>Promotionsreglement</u>)

In general, admission procedures to the Dr. med. vet. program do not discriminate between local and foreign students. For students involved in the Dr. med. vet. program, the typical procedure is that open positions are posted locally at the VSF and electronically via the institutes', VSF's or university's homepages. Students apply for these positions and admission depends on the direct interaction between supervisor and candidate.

The PhD program is governed by the University Graduate School and has well defined admission rules. Both VSF sites are connected to their respective Graduate Schools. We refer to the program

descriptions of the Graduate School in Bern (www.gcb.unibe.ch) and the Life Science Zurich graduate school (www.lszgs.ch). Rules and regulations are laid down in the respective bylaws. Importantly, the Master thesis from VSF (20 ECTS) is not considered as equivalent to a Master thesis from any faculty of natural sciences (90 ECTS). However, the lacking credits may be obtained throughout the Dr. med. vet. program. Briefly, as a gneral proceudre common to most programs, candidates apply for entry by submitting their credentials, research project and proof of financial support to the PhD committee. The graduate school committee then interviews candidates. Each approved candidate is guided by a major professor, a co-referee and a mentor (guiding committee). The latter is member of the PhD committee. Progress has to be reported to the graduate school in a standard format at annual intervals. The progress report is evaluated and commented on by the guiding committee. Besides the research project, candidates have to collect a number of course credits. These credits are given following successful examination (graded on a 1-6 scale). There is a midterm exam, consisting of a presentation by the candidate on his/her project followed by a question session by the mentor, supervisor, and co-referee. The exam is graded on a 1-6 scale. At the end of the PhD curriculum a thesis is submitted to the graduate school. The final exam consists of a public thesis defense following which the supervisor, co-referee and mentor assign a final grade (1-6). Upon successful completion of the final exam, the candidate receives a diploma from the university and the PhD title.

#### 2.5.2 Postgraduate education UZH

Students participate in various PhD programs offered at the Universities of Zurich and Bern. In Zurich, most PhD students are enrolled in the Life Science Zurich Graduate School, but a number of students, mainly but not exclusively from clinical disciplines, are enrolled in the Graduate School University of Bern. The table below lists all students in Zurich doing the respective degree, irrespective of the program that they are enrolled in.

Year	Type of program	# of students	# foreign	# of students	mean number	impact factor
		enrolled	students	passed	of papers per	(lowest and
					student/year	highest)
2009	PhD	65	43	11	0.47	1 to 10
2009	Master	14	2	11	0.11	0.98 to 3
2009	Dr. med. vet.	116	29	43	0.14	0.5 to 12.591
2009	Other: Habilitierende (16),	18	7	1	0.48	1.0 to 4.1
	Dr. med. (2)					
2008	PhD	63	32	10	0.42	1 to 10
2008	Master	9	0	6	0.11	none
2008	Dr. med. vet.	103	48	43	0.23	0.774 to 4.145
2008	Other: Habilitierende (5),	7	2	1	0.77	1.0 to 3.9
	Dr. med. (2)					

For the course programs available to students, please see:

http://www.weiterbildung.uzh.ch/programme.html

http://www.vorlesungen.uzh.ch/FS10/lehrangebot/fak-50000006.html;

http://www.vorlesungen.uzh.ch/FS10/lehrangebot/fak-50000006/sc-50017944.html

http://www.vorlesungen.uzh.ch/FS10/lehrangebot/fak-50000006/sc-50017945.html

#### 2.5.3 Factual information VSF Bern for students enrolled in PhD programs

Year	Type of program	# of students enrolled	# foreign students		mean number of papers per student	mean impact factor (lowest and highest)
2009	PhD	24	-	4	3	4.315
2008	PhD	25	-	5	2	2.065

#### 2.5.4 Factual information on the VSF PhD program (1995 to 2010)

Originally, VSF founded its own PhD program in 1995 that was exclusive to the two veterinary faculties in Bern and Zurich. However, since 2005 no new students have been accepted to this program. The reason being that Graduate Schools had been established both in Bern and in Zurich (see 2.5.2. and 2.5.3). VSF felt that participating in those graduate schools would be of high advantage for our students. Therefore, the original PhD program is now closing down. The students who were enrolled in this program and who graduated in recent years are listed below. During its entire time, a total of 57 PhDs have graduated from this program. The last graduation of a PhD student from this program was awarded on July 21, 2010. Thus, this program has ceased to exist.

VSF PhD program

	r - o -					
Year	Type of program	# of students	# foreign	# of students	number of	impact factor
		enrolled	students	passed	papers per	(lowest and
					student	highest)
2009	PhD	5	information not	4**	at least 2*	2.476 to 3.72
			available			
2008	PhD	9	information not	7**	at least 2*	up to 0.497
			available			

<sup>\*</sup>minimum required for graduation

#### 2.5.4.1 Comments

Unfortunately, the VSF does no longer award the PhD title itself. A significant part of the VSF Zurich would like to reinstall a VSF specific PhD program that may be linked to the graduate school Zurich. Preparations for such a new program are underway.

#### 2.6 Postgraduate student education; professional track (AP 3)

#### Internships

In the clinics, internships are offered consisting of a rotation through various disciplines for 12 to 15 months. Positions are internationally advertised. Suitable candidates are selected from all applicants regardless of nationality by the senior staff of the clinics. Completion of an internship is a requirement (from the European colleges) for entering a specialization program.

#### European and American specialist programs (specialist title see next table)

Both members of the VSF were among the first institutions in Europe to adhere to the transnational system of veterinary specialization in Europe, which is governed by the European Board of Veterinary Specialization (EBVS) and its respective specialist colleges. The staff at both VSF sites contains a large number of European college diplomates in a variety of disciplines, which are entitled to run residency programs. The residents pursuing a specialization at the VSF are subject to the rules

<sup>\*\*</sup> remaining students graduated in 2010

and regulations (constitution and bylaws) of the respective colleges. This includes recognition of training sites and their programs, admission and registration of residents, description of training/learning objectives, training requirements such as case log and formal education and description of the examination system. The college bodies concerned with quality assurance are the credential and examination committees. Residents are required to submit yearly progress reports in a standardized format. Upon completion of the residency, candidates have to submit a final report, case log and publications to the credential committee of the college. When approved, residents are qualified to take the examination. After passing the examination, they are awarded the title of diplomate (DECV). Thus, in the case of the European specialization programs, responsibility for quality assurance lies primarily in the hands of the specialist colleges/EBVS. Information: www.ebvs.org

In Bern, the quality of the local European specialist programs is additionally monitored by the specialization committee (Spezko). The activities of the Spezko are regulated by the Spezko Reglement (SEE ATTACHMENT Spezko Reglement), which safeguards the interests of the residents and keeps track of all programs. Each year the residents fill out a questionnaire evaluating their training. The results of these inquiries are revealed to the program leaders together with recommendations for improvement.

The success rate varies, because the residencies are spaced over one-year intervals; generally 1 resident/year is eligible for the board exam. Approximately 50 % of students pass the first time, most of the remaining students usually pass part of the exam the first time and complete the exam one year later.

#### National postgraduate clinical training programs (FVH)

These are regulated by the professional organizations (Swiss veterinary association and their respective species-oriented chapters), which can issue a so-called FVH title in a certain area of expertise (Small animal, Equine, bovine, porcine medicine, Veterinary public health, Veterinary Pathology). Rules and regulations are laid down in a series of documents (constitution and bylaws) addressing admission criteria, training requirements and examination (<a href="www.gstsvs.ch">www.gstsvs.ch</a>). Training includes practical work, accumulation of a number of continuing education credits, compilation of a case log and writing three case reports. The FVH title is awarded following successful final examination. Each candidate is supervised by a tutor. The training sites have to be approved according to a set of criteria laid down in the bylaws of the FVH system. The university clinics are approved training sites, where candidates usually spend only part of the program (e.g. an internship). Quality assurance of the FVH program is, thus, the responsibility of the FVH committee of the respective chapter of the Swiss veterinary association.

#### 2.6.1 Factual information VSF Zurich

In 2009 UZH had 59 of diplomates on staff with 18 different titles. Of the 59 diplomates 24% were from abroad.

In 2008 UZH had 55 of diplomates on staff with 18 different titles. Of the 55 diplomates 32% were from abroad.

#### Interns and residents:

2009: 18 (17% foreign) interns and 52 (29% foreign) residents; 2008 15 interns and 50 (32% foreign) residents.

(# foreign students)

(# loreign students	)						
Diplomate title offered	# of diplomates on staff	# of interns 2009	# of interns 2008	# of residents 2009	# of residents 2008	passed with degree 2009	passed with degree 2008
ACVIM	9 (4)	2(1)	2	13 (6)	11 (6)	5	-
ACVS	-	-	-	1(1)	1(1)	1	-
ACZM	1	1	1	1	-	-	-
ECBHM	4 (2)	-	-	-	2(1)	-	-
ECLAM	1	2	2	-	-	-	-
ЕСРН	1	-	-	-	-	-	-
ECVA	4	3	2	3	3	2	1
ECVD Dermatology	2 (1)	-	-	2 (2)	2 (2)	-	-
ECVDI	4 (3)	-	-	4 (3)	4 (3)	-	-
ECVIM-CA	8 (3)	1	2	4(1)	4(1)	-	-
ECVIM-CA Cardiology	1	1 (1)	-	2 (1)	2 (1)	-	-
ECVO	1	1	1	4	4	1	1
ECVP	6	1	1	3 (1)	2(1)	1	2
ECVPH	2	-	-	-	-	-	-
ECVS	13 (1)	4	4	13	14	5, (4*)	6, (4*)
ECZM (Avian)	1	-	-	2	1	-	-
EVPC	2	2(1)	-	-	-	-	-

<sup>\*</sup> fullfilled part of the requirements

#### National track specialization UZH

In 2009, there were 25 specialists on staff at VSF Zurich (2008: 10)

Success rate in examinations:

2009: 8 out of 11 trainees / 2008: 3 out of 4 trainees

National track specialization	# of specialists on staff	# foreign students 2009	# foreign students 2008	# of trainees 2009	# of trainees 2008	success rate 2009	success rate 2008
FVH Small Animals	-	-	-	2	2	-	-
FVH Laboratory	3	-	-	-	-	3	-
FVH Ruminants	4	-	-	1(1)	1(1)	-	-
FVH Pathology	7	1	2	-	1(1)	1	-
FVH Horses	11	-	-	8	-	4	3
Veterinary Specialist (Germany)	3	3	2	-	-	-	-

#### 2.6.2 Factual information VSF Bern

The Bern faculty has 46 full time European/American Diplomates on staff. Ca 20 % are from outside Switzerland. There are about 60 trainees in various programs (interns, residents, FVH), 50% of which are from abroad.

E/ACVIM	are from abroad.							
ECBHM         5         -         -         4         4         2         -           ECVA         4         1         1         3         3         1 Part         1           ECVD Dermatology         2         -         -         2         2         -         -           ECVDI         4         1         1         4         4         1 Part         1           ECVIM-CA Cardiology         1         -         -         -         1         1         -         -           ECVO         2         -         -         -         -         -         -         -         -           ECVP         7         -         -         14         14         2/2 Part         1/2 Pa           ECVPH         6         -         -         4         4         1         1           ECVS         7         3         3         5         5         1         2           ECVN         2         -         -         3         3         1/1 Part         1           ECVN         2         -         -         3         3         1/1 Part         1      <	Diplomate title offered		interns	interns	residents	residents		passed with degree 2008
ECVA         4         1         1         3         3         1 Part         1           ECVD Dermatology         2         -         -         2         2         -         -           ECVDI         4         1         1         4         4         1Part         1           ECVIM-CA Cardiology         1         -         -         1         1         -         -           ECVO         2         -         -         -         -         -         -         -           ECVP         7         -         -         14         14         2/2 Part         1/2 Part           ECVPH         6         -         -         4         4         1         1           ECVS         7         3         3         5         5         1         2           ECVN         2         -         -         3         3         1/1 Part         1           ECEIM         1         -         -         2         2         1 Part         1 Part	E/ACVIM	4	2	2	4	1	2	-
ECVD Dermatology         2         -         -         2         2         -         -           ECVDI         4         1         1         4         4         1Part         1           ECVIM-CA Cardiology         1         -         -         1         1         -         -           ECVO         2         -         -         -         -         -         -         -           ECVP         7         -         -         14         14         2/2 Part         1/2 Par           ECVPH         6         -         -         4         4         1         1           ECVS         7         3         3         5         5         1         2           ECVN         2         -         -         3         3         1/1 Part         1           ECEIM         1         -         -         2         2         1 Part         1 Par	ECBHM	5	-	-	4	4	2	-
ECVDI         4         1         1         4         4         1Part         1           ECVIM-CA Cardiology         1         -         -         1         1         -<	ECVA	4	1	1	3	3	1 Part	1
ECVIM-CA Cardiology         1         -         -         1         1         -	ECVD Dermatology	2	-	-	2	2	-	-
Cardiology         1         -         -         1         1         -         -           ECVO         2         -         <	ECVDI	4	1	1	4	4	1Part	1
ECVP         7         -         -         14         14         2/2 Part         1/2 Part           ECVPH         6         -         -         4         4         1         1           ECVS         7         3         3         5         5         1         2           ECVN         2         -         -         3         3         1/1 Part         1           ECEIM         1         -         -         2         2         1 Part         1 Part           ACVECC, Emergency         2         -         2         2         -		1	-	-	1	1	-	-
ECVPH         6         -         -         4         4         1         1           ECVS         7         3         3         5         5         1         2           ECVN         2         -         -         3         3         1/1 Part         1           ECEIM         1         -         -         2         2         1 Part         1 Par           ACVECC, Emergency         2         2         2         2         2         2         3         3         3         3         3         3         1/1 Part         1         1         1         2         2         3         3         3         3         1/2 Part         1         1         2         3         3         3         1/3 Part         1         1         2         3         3         3         1/3 Part         1         1         2         3         3         3         1/3 Part         1         1         3         3         3         1/3 Part         1         1         3         3         3         1/3 Part         1         3         3         3         1/3 Part         3         3         3         3<	ECVO	2	-	-	-	-	-	-
ECVS         7         3         3         5         5         1         2           ECVN         2         -         -         3         3         1/1 Part         1           ECEIM         1         -         -         2         2         1 Part         1 Part           ACVECC, Emergency         2         -         2         2         - <td>ECVP</td> <td>7</td> <td>-</td> <td>-</td> <td>14</td> <td>14</td> <td>2/2 Part</td> <td>1/2 Part</td>	ECVP	7	-	-	14	14	2/2 Part	1/2 Part
ECVN         2         -         -         3         3         1/1 Part         1           ECEIM         1         -         -         2         2         1 Part         1 Par           ACVECC, Emergency         2         -         2         2         -	ECVPH	6	-	-	4	4	1	1
ECEIM         1         -         -         2         2         1 Part         1 Part           ACVECC, Emergency         2         -         2         - <t< td=""><td>ECVS</td><td>7</td><td>3</td><td>3</td><td>5</td><td>5</td><td>1</td><td>2</td></t<>	ECVS	7	3	3	5	5	1	2
ACVECC, Emergency 2	ECVN	2	-	-	3	3	1/1 Part	1
	ECEIM	1	-	-	2	2	1 Part	1 Part
/ circled care	ACVECC, Emergency / cricical care	2	-	-	2	-	-	-

#### National track specialization UniBE

In Bern, this track is restricted to large animals. Several interns in the small animal clinic are registered in the FVH system but spent only their internship at the university. In addition to the full time interns, the clinics also host veterinarians from Switzerland or from other countries for limited periods of time (1-4 months).

Addtional track specialization UniBE	# of specialists on staff	# of trainees 2009	# of trainees 2008	Success rate 2009	Success rate 2008
FVH ruminants	5	4	4	3	-
FVH Horses	5	4	4	-	2
FVH Pigs	2	2	2	-	2

#### **2.6.2.1** Comments

Postgraduate education in clinical disciplines:

Unfortunately, many requests for clinical training possibilities have to be rejected due to the limited capacity in the clinics of the VSF. Clinical training of undergraduate students absorbs much of the capacities.

#### 2.6.2.2 Suggestions for improvement

It is expected that more training opportunities may be available after the opening of the new small animal clinic at VSF Zurich in August 2010. However, this will not solve the shortcomings of the training capacity in the horse or farm animal sector.

#### 2.7 Student welfare (AP 4)

#### 2.7.1 Office for student affairs (VSF)

#### **Factual information**

At the Zurich location, three employees (200% effort) guarantee a year-round service, at the Bern faculty 150% employment (one fulltime veterinarian and a 50% staff person) are allocated to the position. Students can always contact the Offices at their location. Typically, students are contacted by e-mail mailing lists; this is the official information channel and students have to provide their official e-mail address for this purpose. Students are encouraged to contact the Office via their representatives (one student per class). Apart from the mailing lists, information channels involve announcements in the students' library and at designated areas throughout the faculty. Further, the OLAT- platform (online learning and training, Zurich) and a online-database (stud-vet, Bern) are accessible for all students 24h per day. Study guides, information about block courses and all other information is distributed via multiple channels.

The Offices for student affairs of the VSF are connected to the Student Counselling Systems provided by the respective universities

UZH: http://www.lehre.uzh.ch/studienfachberatung.html,

UniBE: http://www.erz.be.ch/erz/de/index.html).

For general inquires about life as a student:

Zurich:

Student Counselling: <a href="http://www.studienberatung.uzh.ch/index.html">http://www.studienberatung.uzh.ch/index.html</a>

Psychological advice: <a href="http://www.pbs.uzh.ch/index.html">http://www.pbs.uzh.ch/index.html</a>

Career Services: <a href="https://www.uzh.ch/cmsssl/careerservices/index.html">https://www.uzh.ch/cmsssl/careerservices/index.html</a>
Service for disabled students: <a href="http://www.disabilityoffice.uzh.ch/index.html">http://www.disabilityoffice.uzh.ch/index.html</a>

Information about the stipend system: <a href="http://www.uzh.ch/studies/studentlife/advice/finance.html">http://www.uzh.ch/studies/studentlife/advice/finance.html</a>

Bern:

Student counselling for personal problems (learning, social etc.)

http://www.beratungsstelle.bernerhochschulen.ch/index.html

Career Services: <a href="http://www.infostelle.unibe.ch/content/index\_ger.html">http://www.infostelle.unibe.ch/content/index\_ger.html</a>

University's Students' Association: <a href="http://www.sub.unibe.ch/portale/studierende/index\_ger.html">http://www.sub.unibe.ch/portale/studierende/index\_ger.html</a>

Service for disabled students: <a href="http://www.infostelle.unibe.ch/">http://www.infostelle.unibe.ch/</a>

#### 2.7.1.1 The Offices for student affairs at the university level

University of Zurich:

The chancellery of the UZH is responsible for most administrative issues such as immatriculation services.

Kanzlei der Universität Zürich Rämistrasse 71 CH-8006 Zürich Telefon: +41 44 634 22 17 kanzlei@uzh.ch

http://www.students.uzh.ch/registration.html

University of Bern: Informationsstelle für Studierende Hochschulstrasse 4 CH-3012 Bern

http://www.infostelle.unibe.ch/content/studierende/index\_ger.html

Tel +41 (0)31 631 37 01 | Fax +41 (0)31 631 83 36

The Bern student information office is in charge of immatriculation but also deals with questions concerning doctorates, disability, stipends and career development.

#### 2.7.1.2 Comments and suggestions for improvement

#### Comments

The collaboration between the different Offices of student affairs is excellent at all levels. The Offices are mainly contacted for questions related to study organization and administration. Specific veterinary counselling is rather rare. The Offices value the direct contact to students with very high priority and all problems are dealt within the shortest possible time. Together with members of the teaching committee, students are regularly informed about upcoming changes in their study program. This happens by initiative of the Offices for student affairs or on request by the students.

#### Suggestions for improvement

Early detection of problems is of fundamental importance but not always easy. However, thanks to the excellent relationship to students and teaching staff, hints for imminent problems can often be coped with in advance.

#### 2.7.2 Child care

VSF Zurich:

The VSF in Zurich offers a child care system (Kinderhort).

Factual information

http://www.kihz.ethz.ch/kihz\_tagesstaetten/kihz\_tierspital

The child care of the VSF was opened in 2008. It is located at the campus area and financed by a foundation. Students and employees of the VSF have priority access over other employees of the UZH.

#### 2.7.2.1 Comments/Suggestions for improvement

The child care service is often used by VSF employees but only few students have own children. The VSF actively informs students about the potential problems of pregnancy and veterinary studies. Several activities that are compulsory parts of the curriculum cannot be fulfilled if pregnant (e.g., necropsy services, practical classes in microbiology, radiology or similar). Students are informed that pregnancy may prolong their study period.

http://www.sidi.uzh.ch/activities/arbeitsmedizin/doku.html

We are aware of two students who became pregnant during the years 2008 and 2009. We expect that they will finish their studies with a 1- to 2-year delay.

#### VSF Bern

In Bern, in the past years several initiatives have been taken to install a child care service at the veterinary school but were unsuccessful so far (mainly because of insufficient interest).

#### 2.7.3 Students sport associations

#### ASVZ in Zurich:

All 12,500 students of the ETH Zürich, 24,000 students of the University of Zürich, all 10,000 employees of both institutions as well as all the students and employees of the Zürcher Fachhochschule (ZFH) have access to the ASVZ. Over 60% of people take advantage in some form of the offer, resulting in grand total of 850,000 visits a year.

Students of the ETH Zurich and the University of Zurich have automatic membership to the ASVZ upon payment of their semester fees. Employees of the ETH, the university and the ZFH, as well as alumni (graduates) and partners of those entitled to join the ASVZ are able to benefit from the large variety on offer. Membership is available at low cost.

http://portal.asvz.ethz.ch/news/Seiten/default.aspx

#### unisport in Bern:

#### http://www.sport.unibe.ch/

Unisport provides an attractive program in sports and physical education to students, employees of the university and alumni enabling balancing out intellectual stress and intending to enthuse people for physical activities beyond their times at the university.

#### **2.7.3.1 Comments**

Membership at one location allows for guest membership at the other location. This regulation is highly appreciated. Over recent years, we made the observation that more and more students are confronted with problems of their physical health. In some instances, students could not perform the compulsory night and emergency service for this reason.

#### 2.7.3.2 Suggestions for improvement

We strongly encourage our students to benefit from the large variety of activities offered by the ASVZ and unisport Bern.

#### 2.7.4 Mentoring programs at the VSF

#### 2.7.4.1 Mentoring program "VetMent"

The VSF has recently started a mentoring program for undergraduate and postgraduate students (VetMent). The program is financed by the CRUS and the VSF. Two senior staff members are the contact persons at the two VSF locations (PD Dr. Nicole Borel, Veterinary Pathology, UZH; Dr. Christine Äschlimann, UniBE).

On behalf of the Vetsuisse-Board of Deans and supported of by a federal program for equal chances (Bundesprogramm Chancengleichheit) the VSF runs for the first time a structured Mentoring program "VetMent ". The program is open to advanced graduates, postdocs, PhD-students and Habilitation candidates with the objective of assisting young academics how to start an academic career. This mentoring program is open for female and male postdocs of both genders.

#### 2.7.4.2 Bologna initiatives for academic recruitment (UZH)

The UZH supports specific programs for Master students. The VSF was successful in obtaining financial help to organize "summer schools for veterinary students". These 2-day events aim at raising interest of our students for an academic career. We feel that the veterinary field (in clinical and non-clinical disciplines) faces an enormous lack of good candidates to fill vacant academic positions. One long term strategy is to advertise for this interesting branch in the veterinary profession early on during the students' life. The second summer school will be organized in 2010. As in 2009, we will invite international experts (veterinary professors from all over the world) to share their experience with our students. In 2010, undergraduate students from Bern will also be invited.

#### 2.7.5 Health initiatives

#### 2.7.5.1 Health initiatives of the VSF in Zurich

Students have easy access to rabies vaccinations. In 2009, the faculty launched a vaccination campaign against swine flu. This was organized by the Task Force "swine flu". http://www.sidi.uzh.ch/activities/arbeitssicherheit/influenza.html

#### 2.7.5.2 Health initiatives of the VSF in Bern

The Bern location set up an annual rabies vaccination-campaign for 4th-year students in collaboration with the Bern University Hospital.

# **Assessment of teaching staff**





#### 3 Chapter 3: Assessment of teaching staff (AP 5)

Chapter 3 will describe the procedures of teaching staff assessment at the two Vetsuisse locations in Bern and Zurich. Both locations are closely connected to their home universities. For this and historical reasons, the assessment procedures depend to a large extent on the procedures established at the Universities of Bern and Zurich. This is intimately coordinated with the respective Centers for University Teaching and Learning of the Universities Bern and Zurich. As a consequence, some assessment procedures differ within the Vetsuisse Faculty. Nonetheless, Vetsuisse established some common guidelines over the last few years that also affect the assessment and recruitement of new staff.

#### 3.1 Assessment of teaching staff at VSF Zurich

#### 3.1.1 Evaluation of new teaching staff

New teaching staff needs a recommendation from the director of the respective Institute or Clinicin order to receive a teaching assignment. The letter of recommendation together with the CV and a list of publications are to be submitted to the teaching committee of the faculty. The teaching committee has to approve the assignment. The publication list needs to be handed in every year in order to prolong the teaching assignment. Only staff who published regularly in peer-reviewed journals receives this prolongation. This is to assure high quality research-based teaching.

Only teaching staff holding an official authorization of teaching will be included in the official lecture list (<a href="http://www.vorlesungen.uzh.ch/HS10/lehrangebot.html">http://www.vorlesungen.uzh.ch/HS10/lehrangebot.html</a>) of UZH.

Continuous evaluation by the students during the first four semesters is compulsory for new staff members. The questionary includes both questions about structure, learning targets and documents of the lecture. Besides, there are questions about the teacher's teaching qualities, engagement, expression and interaction with students. An example of the evaluation forms is shown in the Appendix (SEE ATTACHMENT <a href="Fragebogen">Fragebogen</a>). Results of the evaluation are handed to the new staff member and if necessary to the Institutes or Clinics Directors.

Didactic and pedagogic training is provided by the "Arbeitsstelle für Hochschuldidaktik" at the University of Zurich. New teaching staff is encouraged to taking part in teaching courses held there.

At present 5<sup>th</sup> year students elect the "best clinical teacher of the year 2010". This will be the first award for teaching excellence at the faculty. See Chapter 3.3.

#### 3.1.2 Evaluation of the entire teaching staff

The implementation of the new curriculum started in 2003. In 2007, the Bachelor curriculum was officially implemented, and the implementation of the Master of Veterinary Medicine followed officially in 2010. There were no major changes from the curriculum as implemented since 2003 by the formal introduction of the Bachelor/Master system in 2007 at 2010, respectively.

Evaluation was mainly performed for new courses during the implementation period since 2003 (e.g., extensive evaluation of the combined, organ-centered teaching program in the 2nd and 3rd year of

studies). Specific evaluation of permanent staff was performed only on demand in order not to wear off the students and faculty staff as well with to many questionnaires.

The next evaluation of the faculty's complete teaching staff is planned for 2011 by the Evaluation Office of UZH and will be conducted on a biannual basis in the future.

#### 3.1.3 Evaluation of clinical rotations in the 2nd year of the Master course

All students are required to fill out an online evaluation form after each rotation. The online form can be found in the ATTACHED FORM (<u>Rotationsumfragen</u>). The results of this evaluation are taken as the basis to improve the supervision of students and to improve clinical and paraclinical training.

#### 3.1.4 Center for University Teaching & Learning

High quality teaching is also assured by strict requirements for candidates who aim at achieving the highest academic level that the faculty offers, i.e. the Habilitation. This procedure includes the requirement of courses aiming at increasing the teaching quality, e.g. offered by the Center for University Teaching and Learning (Arbeitsstelle für Hochschuldidaktik).

#### Attachment:

- 1) Questionnaire for lectures held at Vetsuisse Faculty (SEE ATTACHMENT Fragebogen)
- 2) Overview of staff evaluation in 2009 (Zurich) (Diagramm)

	FS 2009+HS2009 (%)	Anzahl
excellent	46	529
good	41	470
fair	11	125
acceptable	2	18
not acceptable	0	2

#### 3.2 Evaluation of teaching staff at VSF Bern

#### 3.2.1 Didactic courses

The university of Bern offers didactic courses for all teaching faculties of the university. These courses are compulsory for anyone seeking a teaching appointment at the VSF Bern. <a href="http://www.zuw.unibe.ch/content/index\_ger.html">http://www.zuw.unibe.ch/content/index\_ger.html</a>

#### 3.2.2 Evaluation committee

The VSF Bern has an evaluation committee consisting of senior faculty members from various departments. The committee plays a pivotal role for the academic career of junior faculty members. A junior faculty member who seeks "habilitation" has to submit a request in a standardized format to the evaluation committee with a letter of intent, his/her CV including publication list and a research plan for the habilitation thesis. These documents are scrutinized by the members of the habilitation committee and each case is discussed at one of the regular meetings of the committee. Based on these discussions, the president of the committee prepares a written assessment of the candidate with

recommendations for the faculty council meeting. The president of the evaluation committee reveals the assessment, the case is discussed and acceptance is decided by majority vote. The same procedure is used for promotions to lecturer (Dozent I or II) or clinical educator, both of which entail the license for teaching and tenure. Rules and procedures of the evaluation committee are laid down in a "Reglement" (SEE ATTACHMENT "Beförderungsrichtlinien der VSF")

#### 3.2.3 Students' evaluation

Quality in teaching is being monitored by a standardized procedure at the university level. All teaching staff has to be evaluated in a four-year cycle. Students must be informed about their feedback. We have presently (June 2010) reached midpoint of the 2nd cycle.

Staff with non-acceptable teaching quality are asked to participate in didactic courses (<a href="http://www.zuw.unibe.ch/content/wbzuw/hd/index\_ger.html">http://www.zuw.unibe.ch/content/wbzuw/hd/index\_ger.html</a>) offered by the center for continuing education at university level or have themselves be externally monitored over a certain period of time.

Overview of teaching staff evaluation from 2005 to fall semester of 2009 (Bern); ); total of 1945

questions in questionnaires

	N teachers	%
Excellent	10	20
Good	21	42
Fair	13	26
Acceptable	4	8
Not acceptable	2	4

The majority of evaluations was graded "excellent" or "good".

#### 3.3 Teacher of the year

VSF Bern has a long tradition that students vote for the "teacher of the year". Each year the veterinary students elect a teacher of the year; the award is delivered at the occasion of the annual students party (Weihnachtskommers) in Bern. Evaluation by students relates to teaching engagement, didactic qualities, provision of support/learning material and the raising of student interest in respect to life long learning. Judgment does not follow given standards, but follows a majority vote. A teacher may not be elected teacher of the year more than once every five years.

VSF Zurich recently decided a similar system should be set up. The students of VSF Zurich themselves created an award for the best supervisor during clinical rotations in the 5th year of study. The award will be given for the first time in 2010 ("best clinical teacher of the year").

# 3.4 Rules for the Habilitation procedure - Required qualification and performance in research and teaching

(The Guidelines for the Habilitation; )SEE ATTACHMENT <u>Habilitationreglement</u>) <a href="http://www.Vetsuisse.ch/assets/VS-Habilitationsreglement\_20091209.pdf">http://www.Vetsuisse.ch/assets/VS-Habilitationsreglement\_20091209.pdf</a>) are common to both sites of the VSF

#### Guidelines are:

- a. Doctoral degree in Veterinary Medicine or a research area related to veterinary medicine. Previous research done in the frame of a PhD program can form part of the habilitation but the habilitation thesis and the previous PhD thesis must not be identical.
- b. Work in the specific area of veterinary medicine that conforms with the area for which the Venia legendi will be requested
- c. A minimum of 1-year work outside of the VSF in the specific area of veterinary medicine
- d. Didactic training offered by a university institution (e.g., Arbeitsstelle für Hochschuldidaktik der UZH)
- e. Regular teaching assignment for at least 2 semesters in the specific area of veterinary medicine for which the Venia legendi will be requested. A regular teaching assignment is considered when the candidate offers an entire course at the Bachelor, Master or Doctoral level. One teaching course per year must be evaluated in by independent authorities. The results of this evaluation are part of the candidate's application forms.
- f. Active involvement in the planning and performance of own research projects, including the presentation at scientific meetings; normally, candidates should have been successful in obtaining third party funding.
- g. In addition to the Habilitation thesis, the candidates need a good publication record in their specific field for which the Venia legendi is requested. Publications must be in peer-reviewed scientific journals or in open access journals with a review process.

### 3.4.1 Specifics about the Centre for University Teaching and Learning (Arbeitsstelle für Hochschuldidaktik der UZH) and the Zentrum für Universitäre Weiterbildung (UniBE)

http://www.fwb.uzh.ch

http://www.afh.uzh.ch/index.html

http://www.zuw.unibe.ch/content/wbzuw/hd/index\_ger.html

didactica - Centre for continuing education of the UZH and Swiss Federal Institute of Technology ETHZ

www.didactica.uzh.ch www.didactica.ethz.ch

«didactica» offers a wide range of courses for continuing education. It is free for staff from the UZH. Didactica collaborates closely with the Arbeitsstelle für Hochschuldidaktik, the E-Learning Center (ELC) of UZH and the ETHZ (Didaktikzentrum DiZ und Network for Educational Technology (NET).

University teaching and learning places the focus on the university as a provider of education. This can take the form, for example, of the design of study programs, analysis of the teaching and learning processes for modules and courses, or the planning and implementation of performance assessments. The Centre for University Teaching and Learning at the University of Zurich and the "Zentrum für

Universitäre Weiterbildung" at the University of Bern are home to an extensive range of knowledge and experience in this field which they make available to lecturers and teaching staff in a range of different formats and services: as a point of orientation in the form of contextual and technical knowledge, and as a proven repertoire of teaching and learning skills.

#### 3.4.2 Guidelines for advancement and employment at the VSF

(SEE ATTACHMENT Beförderungsrichtlinien)

The VSF has clear guidelines for promotion of its staff ("Beförderungsrichtlinien der VSF") <a href="http://www.Vetsuisse.ch/assets/VL-VS-Befoerderungsrichtl\_090610.pdf">http://www.Vetsuisse.ch/assets/VL-VS-Befoerderungsrichtl\_090610.pdf</a>

These guidelines have been officially approved by the Vetsuisse Faculty in 2009. Promotion is based on an evaluation of teaching, research and (if applicable) clinical service work in the clinical departments of the faculty (SEE ATTACHMENT <u>Promotionsreglement</u>, <u>Beförderungsrichlinien</u>. A specific educator track has also been installed in VSF (Educator Track at the VSF; SEE ATTACHMENT <u>Educator Track</u>).

Evaluation is based on a credit point system which helps to rate the candidate's performance over recent years. The credit point system should be seen as a general guideline and helps both the candidates and their supervisors to rate the performance. However, a candidate who achieves a given number of credit points has no implicit right for promotion. The latter may necessitate open positions and competition with other candidates.

#### 3.5 Comments

Time constraints make it sometimes difficult for teachers to free enough capacity to attend continuing training courses in didactics. A recent discussion forum also elaborated on these questions and on the problem of combining career development and life as a family. The latter is of upmost importance considering the high number of female students in our field.

See <a href="http://www.vet.uzh.ch/events/Vortraege/WissenschaflichkeitinderMedizin.htm">http://www.vet.uzh.ch/events/Vortraege/WissenschaflichkeitinderMedizin.htm</a> for more information.

#### 3.6 Suggestions for improvement

The offer for continuing education of the Centers for University Teaching and Learning is excellent and covers a wide range of courses. UZH will organize the second "Day of Teaching" to underline the importance of excellent teaching for the attractiveness of UZH. The VSF also has its own initiatives to increase the awareness for these issues, such as the "Summer school academic career" which will be organized for the second time in 2010 and the discussion forum "Wissenschaftlichkeit in der Veterinärmedizin"

(http://www.vet.uzh.ch/events/Vortraege/WissenschaflichkeitinderMedizin.html).

# **Assessment of learning opportunities**





#### 4 Chapter 4: Assessment of learning opportunities (AP 6)

#### 4.1 Library situation

#### 4.1.1 Student library VSF in Zurich

see also www.vetbiblio.uzh.ch

- opening hours 08h30 20h00 (Mon through Fri)
- studying area for 40 students
- 19 of these equipped with full scale computers (PC work stations; basic computer programs, video teaching programs, 48 E-learning programs)
- 1 additional working station for video programs
- 12 of these without computer, but plug-ins with internet access for personal notebook computers
- 8 seats without bench space
- free WLAN Access-Point in the entire library area

#### 4.1.2 Student library VSF in Bern

There is one part-time librarian who is supported by members of the dean's staff. The faculty library is part of the university's library.

see also <a href="http://www.vetbibl.unibe.ch/content">http://www.vetbibl.unibe.ch/content</a>

• official opening hours with presence of librarian 0830h - 180h (Mon through Thu); 0830 - 1600 (Fri). Additionally, students have the opportunity to get access to the library 24 hours a day, 7 days a week (without presence of librarian).

Students have access to 64 learning booths at the library provided student-volunteers are supervising the study hall. There is free WLAN available for personal laptops.

#### 4.2 Further working area for students:

#### 4.2.1 Students' working areas at VSF Zurich

3 study rooms that are also accessible on week-ends; equipped with PC working stations and free WLAN access

#### 4.2.2 Students' working areas at VSF Bern

Eight study rooms (also used for teaching/learning in small groups), are available, all equipped with PC working station, sound and projection system and free WLAN access

#### 4.3 E-learning facilities and information technology

Both sites have a good infrastructure, which is well equipped. Facilities are not only available from the Faculty level but, additionally, from some institutes and clinic (see Chapter 11, section Information Technology)

#### 4.3.1 Evaluation E-learning situation in Zurich

(E-learning team: Dr. med. vet. C. Manera, E-Learning Coordinator; A. Maldonado, MSc UZH IT-Officer)

An in-depth survey was conducted in 2009 at the Zurich location, the report being presently published (April 2010). It is a first of its kind, further surveys are planned (Bern location) and will be conducted periodically. The survey is based on interviews with the responsible heads of institutes and departments and on questionnaires for students and teachers. It inquires user habits and attitudes towards e-learning in general.

Individual E-Learning productions are evaluated as they are released. Since production is monitored by a central agency at the Zurich location, evaluation of single productions contribute to overall quality improvement.

#### 4.3.1.1 E-Learning Offer of the VSF Zurich

E-learning is an integral part of teaching and learning. With a proportion of 28% of E-Learning assisted lessons, the VSF is well above the average of all faculties at the university of Zurich (19%). The VSF is one of the three faculties of the university of Zurich that most widely uses e-learning. Students qualify e-learning as particularly meaningful and useful to support their self-study periods (results of the e-learning evaluation 2008/2009). The e-learning offer is composed of e-learning applications that are in part external and in part internal developments.

Those that were developed outside of the VSF are provided to our students on the local workstations in the Vetsuisse library. This foreign offer is composed of 94 learning programs and 71 educational movies.

Most of the e-learning applications, which are actively involved in teaching and self-study, were developed internally at our faculty. This offer is composed of 31 course-oriented tools, 44 case-oriented tools, 17 interactive learning programs and 18 educational films. The list of the e-learning tools, which were developed at the VSF can be found in an Attachment (SEE ATTACHMENT E-Learning Curriculum), including integration into the curriculum. In order to simplify the search of e-learning tools for students and to provide a fast overview on how to access the different tools, a database was developed under the link

http://www.e-Vetsuisse.uzh.ch/elearningmedia/medverz.html.

In this database, the entire offer of e-learning products is provided with detailed metadata as description, species, integration in the curriculum, application location, etc.. The VSF aims at offering an online access of their e-learning offer in order to provide location- and time-independent access to e-learning application, which is very important for the support of self-study.

#### 4.3.1.2 Computer workplaces for Students in the Library of the VSF Zurich

The computer clients in the library are managed by a server forming together the n-Computing ultrathin-client system. The n-Computing system is based on a hardware virtualization environment enabling independent virtual reproductions of the host computer (comparable to a terminal server) desktop session.

#### 4.3.1.3 Infrastructure on the computer workplaces

Each computer workplace is equipped with the following hardware components: Ultra Thin Client device, LCD HD display, keyboard, mouse and headphones. The server's and client's operating system is Microsoft Windows 2003 R2. All client systems are connected over the server to the university's network, which provides access to the Internet. The installed applications cover a wide spectrum of tools to accomplish advanced classical learning and e-learning tasks.

#### 4.3.1.4 E-Learning offer on the computer workplaces

All client system have a specific directory with learning software, which grants direct access to 110 coursewares; 16 of them were produced at the VSF Zurich. A second directory contains 89 instructional films; 18 were produced at the VSF. An overview of the E-Learning offer is provided in an Attachment (SEE ATTACHMENT <u>E-Learning Library</u>), which gives the relevant information about the location on the computer client or the possibility to rent the content as a CD-ROM or DVD.

#### 4.3.1.5 The key that connects students and the university

All employees and students benefit from AAI (Authentication and Authorization Infrastructure) that allows access to all e-learning courses (in OLAT, CASUS, SVAP), their webmail, the WLAN of the University, etc.

#### 4.3.1.6 Worldwide access to intranet services

The VSF of UZH provides its members with a sophisticated and powerful computer network infrastructure through which several learning and research activities are supported. These services are offered within the university's intranet or, via virtual private network (VPN) connection, from anywhere in the world. For this purpose the students and the university members are provided with a specific VPN-client software and profiles for various operating systems.

#### 4.3.1.7 Services of the E-Learning Coordination

The E-Learning Coordination of the VSF is part of the dean's office. The E-Learning Coordination offers several services to the students of the VSF. These services are summarized under <a href="http://www.e-Vetsuisse.uzh.ch/dienstleistungen/studierendedl/uebersicht\_en.html">http://www.e-Vetsuisse.uzh.ch/dienstleistungen/studierendedl/uebersicht\_en.html</a>

An important and appreciated offer for students is the e-learning media directory (<a href="http://www.e-Vetsuisse.uzh.ch/elearningmedia\_en.html">http://www.e-Vetsuisse.uzh.ch/elearningmedia\_en.html</a>). This directory contains all the e-learning objects as OLAT courses, Casus cases, web applications, video, and desktop applications that were developed by project managers / authors of the VSF Zurich, and used in teaching. The metadata gives the students a detailed overview of the e-learning offer that is directly integrated in teaching (SEE ALSO ATTACHMENT E-Learning Curriculum).

#### 4.3.1.8 Evaluation of the E-Learning Offer

The entire catalogue of e-learning possibilities was evaluated in 2009/10. The benefits und uses of E-Learning products was evaluated by interviews and surveys of students and lecturers. Furthermore the e-learning infrastructure and an overview of the e-learning offer was collected. The results of this evaluation are provided in detail in an Attachment (SEE ATTACHMENT <u>Bericht E-learning</u>).

#### 4.3.1.9 Neptun

The UZH and ETHZ offer an online shop for computer hardware and software (see <a href="https://www1.ethz.ch/neptun/">https://www1.ethz.ch/neptun/</a>). All employees and students of all Swiss universities are entitled to purchasing state-of-the-art products at very competitive prices. New products are usually offered during two time windows per year.

#### 4.3.1.10 Comments and Suggestions for improvement

#### E-assessment

The section E-Learning Coordination has as a main function to merge existing e-learning products to an integrate faculty offer for students. To assure the acquisition of an up-to-date e-learning offer, a web-based form was developed (<a href="http://www.ictvet.uzh.ch/elmediaform/elmedia.php">http://www.ictvet.uzh.ch/elmediaform/elmedia.php</a>). This form is sent to the e-learning project managers every semester and allows the lecturers to enter on a simply way their new e-learning offer or any modifications in their offer. These data are stored in a database and automatically shown live on <a href="http://www.e-Vetsuisse.uzh.ch/elearningmedia/medverz.html">http://www.e-Vetsuisse.uzh.ch/elearningmedia/medverz.html</a>. The VSF assures with this system a direct access from everywhere to learning opportunities for all students. The VSF should keep on updating its e-learning offer and improve the way to do it by web-based systems.

#### Updating of the e-learning offer

According to the decision of the Executive Board of the University from the 4th October 2007, a project for the introduction of a university-wide e-assessment process was agreed. At the VSF electronic tests are already carried out in the subject General Pathology. By improving the application of e-assessment, the VSF can enlarge the exam didactic opportunities by integrating multimedia elements such as pictures, video, audio and simulation and enhances the number of students passing the exam by constant number of involved professors.

#### Streaming of lectures

In recent years, the need for recording of lectures has increased at the university of Zurich. These streams are used for live transmission of lectures to other classrooms or offered online for time and place independent learning. For the VSF it is important to offer a competent streaming infrastructure to support the transmission of live patient operation for students and to provide an audiovisual opportunity for self-learning. Furthermore, a great benefit for the VSF would be the use of iTunes U for the publication of e-lectures.

#### Discussion forum

With the Bologna reform the trend to replace time for lectures by e-learning based self-learning has increased. In addition to self-learning time, lecturers and students meet in the context of seminars and discussion forms. An important point for the VSF is to support the development of interactive

communication's platform in which students and lecturers can carry out an asynchronous (forum) and synchronous way (chat) to communicate with each other and work out a topic. Such a platform assures the correct supervising of self-learning and ameliorates the promotion of learning process.

#### 4.3.2 E-learning situation at VSF Bern

There is no faculty specific E-learning structure in Bern. The faculty uses a central facility of the university to support E-learning programs <a href="http://www.ilub.unibe.ch/content/">http://www.ilub.unibe.ch/content/</a>. The iLUB provides training, counselling and support to all teachers of the university. It also provides the technical resources such as a learning platform and various tools to create E-learning programs. The students have open access to the E-learning resources on the teaching platform: "ILIAS"

Several institutes/disciplines make extensive use of E-learning for teaching veterinary students e.g.: Anatomy, Anesthesiology, Neurology, Bovine medicine, Virology, Immunology and wild/zoo animal diseases.

#### E-assessment

At the VSF in Bern, 2010, so far the first time, electronic tests are carried out in General Pathology together with Zurich. Furthermore, in 2010 the case management capabilities of the students at the end of the first Master year have been assessed for the first time by an electronic test, using the computer software CASUS. A first informal feedback of the students was very positive.

#### 4.3.3 Teleteaching - one faculty, one curriculum, two locations

Since 2007, teleteaching allows a virtual meeting between the two locations. Whether for courses, lectures, seminars or meetings, "Teleteaching Vetsuisse" enables high quality transmission of audio, video and data signals between Bern and Zurich. Two lecture theatres are equipped with identical transmission equipment, monitors, screens, microphones, etc. Through teleteaching lecturers and students profit from avoiding travel time and costs, location co-operation, and standardization of the curriculum. The number of lectures that are transmitted via teleteaching has increased markedly over recent years and is used to a large extent in years 2 and 3 of the Bachelor course. In 2009, 146 hours of lecturing were transmitted via teleteaching.

The system can also be used for podcasting and streaming.

#### 4.4 Comments

With the introduction of the Vetsuisse curriculum in 2003, the time allocated to teaching has been reduced and the official time designated for self study has been increased. This was done on the understanding that the old curriculum was overloaded with too many lectures and that the students' own initiatives should be promoted. However, some students do not seem to use the self study time efficiently.

#### 4.5 Suggestions for improvement

The VSF teaching committee has discussed this topic numerous times. The opinions, however, are split whether self study time should be more structured by the teachers (e.g. by giving detailed instructions for reading). The committee decided to invite a specialist in this field to discuss potential measures. However, such invitation (and the identification of such specialist) is still pending.

# Assessment of training programme and the award of the title of Veterinary Surgeon



University of Bern | University of Zurich /etsuisse-faculty

# 5 Chapter 5: Assessment of training program and the award of the title of Veterinary Surgeon (AP 7)

#### 5.1 Assessment of training program - Information of students in Bern and Zurich

#### 5.1.1 Information policy

Students are regularly informed about the Vetsuisse curriculum. Now, that three complete 5-year cycles of the Vetsuisse curriculum have been completed, this information is usually given when needed and separately to individual classes of students. Information takes place in particular to announce further developments and modifications of the curriculum. Regular information takes place at the beginning of the respective terms to provide details about examination procedures. On request, student information is organized on an ad hoc basis.

#### 5.1.2 Ways of communication

All information relevant to the curriculum is available online (www.vet.uzh.ch). This includes all factual information about the curriculum in general, specific courses, inscription procedures for courses or similar. Publication includes all information regarding examinations, specific requirements, number of ECTS credit points per module, etc.

Further, specific information is available for each teaching module (e.g. "Blockbuch" for organ-centered modules in the study years 2 and 3; SEE ALSO ATTACHMENT <u>Blockbuch Organ-centered modules</u>). The information is available online, sent by e-mail and available on the OLAT system (www.olat.uzh.ch).

#### 5.1.3 Office for Student affairs

The Office for Student Affairs at the VSF is open to students during normal working hours. Important instruments of assessment and subsequent advising are the regular assessments of clinical rotations, assessment of extramural training, failure rate etc. Students at risk of being expelled are invited for interviews.

Frequent questions of the students refer to choosing the "correct" focus ("track") in the Master course of their studies. Students are often concerned that the tracking system would give them too little insight into fields of the veterinary profession that does not correspond to their track (e.g., track of small animals leads to lack of knowledge in farm animals). Experience over the last few years has shown that this may not be correct. Interestingly, students choosing the track "biomedical research" succeeded best in their final examinations - which are purely based on clinical disciplines and pathology; they performed better than the presumably "more specialized" students of the respective track.

#### 5.2 Award of the Diploma (Federal examination in Veterinary Medicine)

Award of the Diploma as veterinarian is regulated in the Medizinalberufegesetz (MedBG; Law of the Medical Professions; SEE ATTACHMENT <u>Prüfungsverordnung</u>). The MedBG sets the rules for the Federal examination in veterinary medicine. This examination is a requirement for graduates from the VSF to practice veterinary medicine. Graduates from the VSF are entitled to sit the federal

examination once they successfully completed their studies leading to the degree of Master of Veterinary Medicine.

The Federal examination consists of four practical and oral examinations in small animals, farm animals, horses and pathology. The examination was designed and prepared by a task force of the VSF in close collaboration with the Federal Office of Public Health (BAG). The task force also defined a catalogue of requirements and qualifications that should be fulfilled by successful candidates (SEE ALSO ATTACHMENT "Lernzielkatalog und Anhang";

http://www.bag.admin.ch/themen/berufe/00408/00557/index.html?lang=de).

Successful candidates of the Federal examination are entitled to work in all areas of veterinary medicine in Switzerland and Lichtenstein. They have the obligation to pursue continuing education, i.e. life long learning is required by law.

#### 5.3 Comments

The Swiss Veterinary Society (GST/SVS) would like to see even more time allocated to practical education during undergraduate training. However, a good balance between these aspects and a thorough science-based theoretical training has to be kept. The teaching committee believes that the overall quality of the training program of the VSF curriculum that was introduced in 2003 is very good. The introduction of a purely practical fifth year of study is now well established and recognized as a true benefit of the curriculum. The committee believes that the practical tests during the Federal examinations will be proof of the high value of practical skills of our students.

#### 5.4 Suggestions for improvement

The Federal examination will be performed using standardized protocol sheets that will allow an objective evaluation and comparison between students. The protocol sheets are currently in development.

# Assessment of quality assurance systems for clinics, laboratories and farm





## 6 Chapter 6: Assessment of quality assurance systems for clinics, laboratories and farm (AP 8)

Chapter 6 will describe the assessment of quality assurance systems in the clinical departments and diagnostic units. A common Vetsuisse policy in the clinical departments has not yet been established. Hence, and for historical reasons, the assessment procedures depend to a large extent on the traditions established at the two Vetsuisse locations in Bern and Zurich. As a consequence, some assessment procedures differ within the Vetsuisse Faculty. Details will follow below. The SAS accreditation systems in the diagnostic institutes are similar in Bern and Zurich.

Undergraduate teaching aims at providing a good knowledge about quality and quality control in research, clinical and paraclinical services. This includes the idea of evidence based medicine and an early approach to scientific analysis of data. Eventually, all teachers are individually responsible for providing this knowledge and this way of thinking. For obvious reasons, sensitization of the students to quality control and assurance systems is of utmost importance and is part of undergraduate and postgraduate teaching.

#### 6.1 Quality assurance in the clinical departments; VSF Zurich

#### 6.1.1 Department of Small Animals

Quality assurance is part of the daily clinical work and of the assessment at the Veterinary Teaching Hospital. The staff reports unexpected events to the head of the corresponding unit and, in cases requiring administrative or financial measures, to the Hospital Director.

Daily rounds, lead by a senior veterinarian of the corresponding unit of the Hospital, offer an excellent opportunity to ensure the quality of clinical work. At the same time, discussions of these rounds provide a strong educational benefit to those participating in them, in particular 5th year students in clinical rotations, interns and residents. Journal clubs and book clubs, where veterinarians present the latest literature reviews on clinically interesting and important topics, have been integrated as part of the regular meetings of the units of the Hospital.

Morbidity and mortality rounds exist in the different sections.

In addition, quality assessment on an international level is carried out by the different special training opportunities which are offered as part of the European and American Veterinary Colleges (e.g. Internal Medicine, Ophthalmology, Cardiology, Surgery, Zoological Medicine, etc.). Residency programs in these Colleges require a visitation and approval by the respective College and regular typically every 6 months - submission of case logs for evaluation by the respective education committee of the College, which is composed of an international team of specialists. The Veterinary Teaching Hospital carried out extensive assessment of its quality assurance in 2007 (EAEVE; entire Faculty) and in 2009 (Picker Institute, assessing the Small Animal Clinic only). In the evaluation carried out in 2009, the Picker Institute, which is specialized in patient-centered care, it carried out online questionnaires in 613 patient owners, 274 referring veterinarians, and all staff members of the small animal clinic. The evaluation revealed positive points such as a high degree of motivation and empathy towards clients from the side of the staff. On the other hand it became obvious that improvements needed to be made regarding the reception of clients and the contact to referring

veterinarians; this could be used as a focus during reorganization linked to the new small animal clinic, which opens August 2010.

There are detailed instructions for students about clinical work and activities at the Veterinary Teaching Hospital. These instructions are updated every year. Additionally, other practical instructions (e.g. regarding hygiene, aseptic principles and performance in operating theatres as well as biosecurity) are available on the intranet and in the learning management system (BSCW) used in the clinical departments.

#### 6.1.2 Equine Department

Quality assurance is part of the daily clinical work of the faculty and staff of the Equine Department. The faculty and staff report unexpected events to the head of the section chair, who in turn reports is to the Director of the Department. In matters concerning the Equine Hospital the reports are directed straight to the administration with a copy to the Head of the Equine Department. Urgent matters are dealt with immediately, whereas matters needing some reflection or planning are discussed at the next of the regular biweekly Departmental Meetings.

During the daily hospital rounds, the management of each clinical case is briefly discussed in the presence of the section head and when available the Department Head; these rounds are an important part of the quality assurance of clinical work. At the same time, discussions of these rounds provide a strong educational benefit to the participating students assistants, interns, residents and faculty members. Once a week, each section organizes a Journal Club session, where veterinarians present the latest literature reviews on clinically relevant and interesting topics. In addition once a week one of the Residents or faculty member present a 20 minute lecture to section members on a specific topic. This is part of a series of lectures dealing with different aspects of an organ system, such as e.g. "Upper Airway Disease". Each presenter assembles a handout that is distributed ahead of time. This allows the participants to prepare themselves and helps the assistants unable to attend to familiarize themselves with the topic.

In 2007 the Equine Department was evaluated by the EAEVE, together with the entire faculty including the other clinical departments and in this evaluation quality assurance was an essential part. There are detailed instructions for students on clinical work and activities at the Equine Department. These instructions are updated every year as needed. Additionally, other practical instructions (e.g. regarding hygiene, aseptic principles and performance in operating theatres as well as biosecurity) are available via the intranet and in the learning management system used in the clinical departments.

#### 6.1.3 Department of Farm Animals

Quality assurance is part of the daily clinical work and its assessment at the Veterinary Teaching Hospital. The staff reports on unexpected events to the head of the corresponding unit and, in cases requiring administrative or financial measures, to the Hospital Director.

Daily rounds, lead by a senior veterinarian of the corresponding unit of the Hospital, offer an excellent opportunity to ensure the quality of clinical work. Once weekly a united round with all clinicians and residents of the large animal hospital ensures input and implementation of new developments. At the same time, discussions of these rounds provide a strong educational benefit to

those participating in them. Journal clubs and seminars, where veterinarians present the latest literature reviews on clinically interesting and important topics, have been integrated as part of the regular meetings of the units of the Hospital.

Similar to the other clinics, detailed instructions for students and technicians about clinical work and activities at the Veterinary Teaching Hospital are available; these instructions are updated every year.

#### 6.2 Quality assurance in the clinical departments; VSF Bern

#### 6.2.1 Clinical service and content of the program

Similar mechanisms apply as in Zurich with daily rounds, supervision of all clinical work by specialists, seminars and journal clubs since the programs are geared to meet the requirements of the respective European specialist colleges. The clinical IT system supports all aspects of the program. Clinical records are kept in an electronic form. Senior faculty supervises and controls the records compiled by the residents. Reports to the referring veterinarians are only released after validation by the specialists.

The organization directives of the department of clinical veterinary medicine at VSF Bern are described in the document <u>"Reglement über die Organisation des Departements für klinische Veterinärmedizin"</u>. This document describes the objectives in teaching, research and service of the clinics of the VSF Bern. It describes the different divisions of the department, the different types of staff positions, their rights and duties, the management structures and the basic functioning of the department.

#### 6.2.2 Operational quality assurance: The following mechanisms/systems are in place

- Praise and critique: In a flyer in the waiting room, clients can write down praise and critique. These are regularly reviewed by the clinic management. On request of the client, an interview with the management or clinicians is possible.
- Internal controlling system: This computerized system is necessary to keep up with the controlling requirements of the university/state. Operational risks should be kept as minimal as possible.
  - http://www.intranet.dkv.unibe.ch/unibe/vetmed/dkv/intranetdkv/content/e7512/e7576/e8794/070913\_IKS\_CA\_30.pdf
- Critical situations: There is a flyer in which all clinical personnel can report critical situations
  to the management of the clinical department. Such critical events include recurring mistakes,
  disturbances in the operational processes of the clinics, weaknesses in the system, insufficient
  assignment of responsibility etc. These reports can be anonymous. The reports are regularly
  reviewed by the clinic management and appropriate actions are taken.
  <a href="http://www.intranet.dkv.unibe.ch/content/departement/kritische\_ereignisse/">http://www.intranet.dkv.unibe.ch/content/departement/kritische\_ereignisse/</a>
- Morbidity and mortality journal: All patient deaths in the clinic are listed in a journal and are regularly reviewed in a meeting with all clinicians, where such cases are presented by the responsible clinician. The purpose is to prevent problems and mistakes in the future.
- Survey to investigate satisfaction of referring veterinarians: The small animal clinic sent a questionnaire to all referring vets to evaluate the degree of satisfaction with the services

offered by the clinic. The first questionnaire was sent in 2010. The results are currently being evaluated. The aim is to define points of improvement and to implement changes accordingly.

#### 6.3 Quality assurance in diagnostic institutes VSF Bern and Zurich

The diagnostic institutes at the VSF locations Bern and Zurich have been accredited by the Swiss Agency for Accreditation (Schweizerische Akkreditierungstelle SAS; <a href="http://www.seco.admin.ch/sas/">http://www.seco.admin.ch/sas/</a>). This was done according to the ISO norm ISO/IEC 17025 (<a href="http://www.seco.admin.ch/sas\_files/STS-255-de.pdf">http://www.seco.admin.ch/sas\_files/STS-255-de.pdf</a>). Keeping up to the accreditation rules is reassessed periodically (yearly, then every 1.5 to 2 years); accreditation needs to be re-approved after 5 years.

#### 6.3.1 Institutes VSF Zurich

#### 6.3.1.1 Institute of Parasitology

The service unit "Diagnostic centre parasitology" (DCP) received its accreditation on June 17, 2002. Accreditation is for parasitological diagnostics in veterinary and human medicine, according to the ISO norm ISO/IEC 17025 (accreditation number: STS 346).

Structural measures:

- access control with specific keys
- separation of laboratory work in critical areas (e.g., DNA analaysis)
- The DCP is acknowledged by the Federal Office for Public Health as reference lab in human parasitology. Renewal is mandatory every 5 years (http://www.bag.admin.ch/themen/medizin/00706/05450/06022/index.html?lang=de).

#### 6.3.1.2 Institute for Food Safety and Hygiene

No specific structural measures have been taken. The responsible quality officer dedicates 10% of his time for quality assurance and surveillance.

#### 6.3.1.3 Institute of Veterinary Pathology

Personal measures:

The responsible quality officer dedicates 20% of his time for quality assurance and surveillance; 10% of secretarial capacities are reserved for quality assurance measures.

Structural measures:

Access to the accredited area is restricted and clearly indicated.

#### 6.3.1.4 Institute of Virology

The diagnostic unit received its first accreditation on October 5, 1998, as "Prüfstelle für die Diagnose von Virusinfektionen bei Tieren". The most recent re-accreditation was accomplished on October 24, 2008 (ISO/IEC 17025; accreditation number: STS 205).

The diagnostic part of the Institute and the room for cleaning laboratory ware (kitchen) are run according to the rules of accreditation.

Structural measures in the diagnostic laboratory:

- air conditioning
- double distilled water
- restricted access
- specific analytical scales
- · biosecurity bench
- autoklave
- laboratory washing machine

#### Personal measures:

• specific education for personnel working in the accredited area (internal continuing education for entire staff; external specific education for senior staff).

#### 6.3.2 Clinical/paraclinical departments and their quality policies at VSF Bern

All paraclinical departments are accredited by the Swiss Accreditation Office ("Schweiz. Akkreditierungsstelle SAS") under the same addrecitation number in order to present one unit to the customer.

In each institute 15% academic and 10% secretarial staff is devoted to the maintenance and promotion of the accreditations system.

The following laboratories have become the "Diagnostic Laboratories Vetsuisse Bern" in 2010:

- Institute of Parasitology (accredited since 2000, Quality Officer: Dr. Carolina Frey)
- Institute of Bacteriology (accredited since 1997, Quality Officer: Dr. G. Overesch)
- Institute of Virology (accredited since 2000, Quality Officer: Prof. Dr. Reto Zanoni)
- Institute of Pathology (accredited since 2001, Quality Officer: Prof. Dr. M. Suter)
- Center for fish and wildlife health (NAFUS; accredited since 2001, Quality Officer: PD Dr. T. Wahli)
- Diagnostic Laboratories Vetsuisse Bern (DLVB) have been accredited in April 2010. Dr. G. Overesch is the presently responsible for QM at this institution.
- DLVB has been accredited by the Swiss Accreditation Agency (Schweizerische Akkreditierungs-Stelle) according to ISO 17025.

#### 6.4 Quality policy at the VSF Bern and Zurich

Undergraduate teaching aims at providing a good knowledge about quality and quality control in research, clinical and paraclinical services. This includes the idea of evidence-based medicine and an early approach to scientific analysis of data (e.g., statistics training in years 1 - 3 of the Bachelor course). Teachers are individually responsible for providing this knowledge. At the Master level, the tracking system and the newly introduced obligation for all students to do a Master thesis allow a more direct approach to the principles of evidence based medicine and the research necessary in this respect.

### **Assessment of continuing education**





#### 7 Chapter 7: Assessment of continuing education (AP 9)

#### 7.1 Life long learning

After graduation, veterinarians have the legal obligation for life long learning (see Medizinalberufegesetz MedBG). However, continuing education is not an official task of the VSF even though a large number of continuing education courses are offered by faculty employees. One of the leading institutions offering continuing education in Switzerland is the Swiss Veterinary Society (Gesellschaft Schweizerischer Tierärztinnen und Tierärzte; Société des Vétérinaires Suisses (GST/SVS); www.gstsvs.ch).

The GST/SVS is the official representing body of veterinarians in Switzerland. One of its officials aims is to ensure the quality of veterinary practice in education in general and in continuing education in particular. Continuing education is required by law for all practicing veterinarians, specific requirements are enforced for specialized veterinarians (Fachtierarzt FVH) and for diplomates of European or American colleges. Subsections for specialized veterinarians (Fachsektionen FVH) and the different European or American colleges typically request a certain number of continuing education points to be obtained in a predefined period. A certain number of scientific presentations may also be required.

The VSF has intense interactions with the GST/SVS. The collaboration has been institutionalized with the development of the new Vetsuisse teaching curriculum in 2003. The direct contacts between the VSF and GST/SVS are via the head of the VSF teaching committee and the study coordinator of the VSF in Bern. Further, the Dean of the VSF is a member of the GST/SVS board.

Both VSF sites are heavily involved in providing continuing education for veterinarians. The staff of the VSF is always involved in the construction of the scientific programs and gives the largest share of the presentations at the annual meetings of the GST/SVS and its subdivisions.

The lectures are evaluated by the participants by means of a questionnaire. The GST/SVS office processes these and forwards the results to the individual lecturers. The Food Animal Clinic at the VSF of Bern offers half day courses on specific subjects of herd health management at least 3 times a year. Nine times a year, the Vetsuisse-Nutztierabend (2.5 hours of continuing education on a prevailing topic) is offered to the food animal practitioners. The program is organized by the VSF of Bern and transmitted via Teleteaching to Zurich. The access for practitioners is free.

Most senior staff members are active in continuing education in veterinary meetings in other countries. For example many Swiss European diplomates are lecturers for the European School of Advanced Veterinary Studies (ESAVS) in different locations in Europe. This involves intensive training of veterinarians over one to two weeks at the time. The ESAVS teachers are extensively evaluated by the participants in a standardized questionnaire. The results are fed back to the teachers and are also relevant to their further recruitment.

Joint efforts comprise e.g. teaching on professional affairs and building a new basis for extramural training of 5th year students. Further, specific courses that may be required by law (e.g. FTVP-Kurs; fachtechnisch verantwortliche Person; certificate about the application of pharmacotherapy via food stuff in farm animals;

http://www.bvet.admin.ch/themen/veterinaerdienst\_ch/01842/01845/02823/index.html?lang=de)

are organized together. Training in business and financial aspects and practice management for undergraduate students was not included in the curriculum (in contrast to the ideas of the GST/SVS) because a survey of veterinarians within the first 5 years after graduation indicated that interest during the undergraduate studies is minimal.

#### 7.2 Interaction with European Colleges

It has been a long tradition that examinations for the European Colleges are held at the VSF. The secretariat of the European College of Veterinary Surgeons (ECVS) is based at the VSF Zurich. Please see chapter 2.6.

#### 7.3 Interaction with Swiss Veterinary Society GST/SVS (see also chapter 10)

The GST/SVS organizes annual scientific meetings. Most continuing education courses are given by members of the VSF. Further, the editor of the Swiss Veterinary Journal (Schweizer Archiv für Tierheilkunde) is an emeritus member of VSF Zurich.

#### 7.4 Involvement of the home universities in continuing education

The UZH recently published its new strategic goals that sees continuing education as one of the primary duties of the University (SEE ATTACHMENT Weiterbildungsstrategie UZH).

A list of all continuing education courses offered by the VSF in Zurich for the years 2009 und 2010 can be found in the attachment (SEE ATTACHMENT <u>externe Veranstaltungen UZH</u>). The courses are organized and typically given by VSF staff.

#### 7.5 Comments

Life long learning is of utmost importance to all graduating students. Teachers of the VSF make the students aware of continuing education programs and scientific meetings from the very beginning of the curriculum.

#### 7.6 Suggestions for improvement

The coming years will have to show how the VSF can adopt the new strategic goal of the University to get more involved in continuing education duties.

### **Assessment of research**



University of Bern | University of Zurich
Vetsuisse-faculty

#### 8 Chapter 8: Assessment of research (AP 10)

#### 8.1 Assessment of research and quality control at the VSF Bern

#### 8.1.1 Background and recent developments

Teaching and Research are the most important activities of the VSF Bern. Where applicable, clinical and diagnostic Services are also offered. These are directly linked and closely interwoven with either teaching or research programs at the Faculty.

Aiming to create the critical mass required to remain competitive at the international level, the VSF Bern is in the process of refocussing its research activities to a limited number of research priority programs. These include:

- Center of Host Pathogen interactions
- Center of Dermatology
- Center of Neurological Sciences Vetsuisse Bern Hannover
- Center of Veterinary Public Health / Herd Health Management

To stimulate interactions between more basic research and clinically relevant topics, a new Department of Clinical Research was created in 2007.

The research activities of the different institutes/clinics are summarised and included in annual reports.

#### 8.1.2 Research Evaluation at the Vetsuisse Faculty Bern

The research performance of the different Institutes/Departments is documented continuously and summarised and communicated on a yearly basis. This involves the generation of extramural funding for the different research projects as well as research publication output.

#### 8.1.3 Extramural funding

A tool to monitor the generation of extramural funding has been established within the frame of the VSF Bern finance committee. Extramural funding obtained from highly competitive funding agencies is listed separately, providing insight on the competitiveness of the different research groups.

#### 8.1.4 Research publication output

Several tools to monitor publication output have been established within the frame of the QSE committee of the University of Bern (Qualitätssicherung und Entwicklung; Quality Control and Development). These tools involve large-scale analyses at the University level and also the use of the FactScience software that was established to monitor research output at the level of the different University Units/Faculties. A member of the Research Committee of VSF Bern represents the VSF Bern in the QSE committee. A member of the Teaching Committee represents our Faculty for quality control on the topic of teaching.

#### 8.1.5 Large-scale Research Evaluation

To monitor publication output and international citation impact of the different faculties (including VSF Bern) the University of Bern relies on professional bibliometric analyses, carried out by the Center for Science and Technology Studies (CWTS) of Leiden University. These bibliometric assessments involve extensive data sets gathered for longer periods of time (last analysis: 1997 – 2007). Indicators are computed at the following levels of aggregation of University of Bern scientists: the total collection of articles published by scientist of the University of Bern,

- the Faculties
- Departments, clinics and institutes within the faculties.

Results are presented according to

- aggregated publication output and impact,
- trend analysis,
- cognitive orientation and
- knowledge users.

This analysis allows the research output of the VSF Bern faculty to be positioned, and which fall particularly in the general fields of Veterinary Sciences, Agriculture, Dairy & Animal Sciences. In these fields, the VSF Bern is cited nearly 10% above the average.

#### 8.1.6 Gathering publication output using FactScience

Within the frame of QSE, information on all research publication output of all scientific staff is gathered centrally and processed on yearly basis by the Center of Research of the University of Bern using the FactScience software. In the VSF Bern, these activities are coordinated within the frame of the local Research Committee.

This FactScience software allows publication output and trends to be monitored at Faculty level, but also offers the possibility to gather publication records at Departmental, Unit or individual level. These data sets can be used for more short-term orientation and are helpful in issues related to restructuring processes, establishment of new priorities, promotions or appointments.

As bibliometric analyses are only a poor substitute for a thorough peer review of the different disciplines, the VSF Bern is in the process of initiating a site visit in order to have its research activities evaluated covering the period since the foundation of Vetsuisse, and to obtain advice for future developments. For logistic reasons, this could not be coordinated with the 2009 site visit of the VSF Zurich. The evaluation will be carried out by an international team following the routine site visit procedures and will focus on

- the quality of the academic activities,
- the quantity of the academic output,
- the academic and the societal relevance,
- the academic perspective.

Special emphasis will be placed on the established research priority programs (Centers)

#### 8.2 Assessment of research and quality control at the VSF Zurich

#### 8.2.1 Research focus of VSF Zurich

The three official research foci of VSF in Zurich are a) oncology, b) preventive veterinary medicine, and c) tissue regeneration and diseases of the locomotor system.

These objectives are reviewed on a yearly basis. However, to encourage long term collaborations and development of state-of-the-art research programs, the objectives are usually maintained over a number of years. Of course, all other types of research are highly encouraged. Please see Research evaluation of the VSF Zurich in 2009 (Chapter 8.2.4).

#### 8.2.2 Academic reporting

All institutes and clinics have to submit a yearly annual report on ongoing activites and achievements in the respective unit. This includes an assessment of the current situation in research, teaching and (if applicable) service work.

Factual information (e.g., number and quality of publications; third party funding through granting bodies; etc.) is included as well as suggested measures for improvement. In addition to the institutes' and clinics' individual reporting, a summary report also has to be submitted to the University by the faculty. The latter report is prepared annually by the dean.

The academic report 2009 explicitly mentions the following points that are relevant in the context of this self evaluation report SER 2:

- intensive collaboration between the two VSF locations, in particular in undergraduate teaching
- use of teleteaching between the two VSF locations
- Project AGROVET which affects the collaboration in farm animal medicine, including a more intensive collaboration in student training.
- Use of synergies in research and teaching through collaborations with ETHZ, the Centre for Agricultural Training (Strickhof Lindau) and VSF Bern.
- "clinomics" as an initiative of the VSF Zurich to improve collaborations between basic science and clinical disciplines within the VSF
- Opening of the new Small Animal Clinic in Zurich in August 2010 which will provide more space for clinical work and teaching
- Alumni of VSF Zurich offers an award for excellent performance in the federal examination
- Initiatives for gender issues of equal opportunities, including mentoring programs for junior staff

SEE ATTACHMENT Akademischer Bericht UZH 2009; Akademischer Bericht UZH 2008

#### 8.2.3 The UZH is member of LERU

The UZH is a member of the League of European Research Universities (LERU; <a href="www.leru.org">www.leru.org</a>). As such, it is committed to excellence in research and research-based teaching. In particular, members of

LERU are dedicated to (1) education through an awareness of the frontiers of human understanding; (2) creation of new knowledge through basic research, which is the ultimate source of innovation in society; (3) promotion of research across a broad front, which creates a unique capacity to reconfigure activities in response to new opportunities and problems.

#### 8.2.4 Research evaluation

The policy of the UZH requires regular evaluation of research activities. All faculties are evaluated by a fixed rotation schedule. The VSF in Zurich was evaluated in 2009. An extensive self evaluation report had to be submitted beforehand. Each institute or clinic had to submit individual reports. The major focus of the evaluation is on the quantity and quality of research, research infrastructure, collaborations, etc. A further important point is on the recruitment and promotion of young scientists. For that reason, junior group leaders had to submit separate reports. The site visit of the faculty took place in October 2009. Experts from Europe and the USA visited the faculty for 4 days; during their visit, numerous interviews took place between the visiting experts and members of the faculty (all professors and group leaders; junior group leaders; technical and administrative staff; doctoral students). The experts then submitted three detailed reports (preclinical, paraclinical and clinical departments) on their impressions (experts' reports can be provided on request)

#### 8.2.5 Quality assurance in animal experiments

The office of the Animal Welfare Officer of UZH and ETHZ is located at the VSF Zurich and his salary is covered (in part) by VSF Zurich. He is in regular contact with all researchers involved in animal experimentation and with the animal welfare authorities (Cantonal Veterinary Office Zurich). Apart from supervising the ethical use of experimental animals, he is the advisor for planning and executing animals experiments at the VSF Zurich. Animal protocols are reviewed by him.

#### 8.3 Comments

Research at the VSF is of high quality and impact. This has been repeatedly recognized in respective evaluations.

#### 8.4 Suggestions for improvement

The VSF considers the development of overall and research funding which declined markedly in recent years very critical. It is of high importance that further budget cuts are avoided and that the research budgets increase again. Further, time needed for administration at all levels must be reduced.

## Assessment of internationalisation of education and research





## 9 Chapter 9: Assessment of internationalisation of education and research (AP 11)

#### 9.1 Internationalisation

The VSF considers its numerous national and international collaborations very important and necessary for state-of-the art research. The list of individual collaborations between the faculty's institutes and clinics and their partners would be too long to be printed in full here. We refer to the individual yearly academic records of all units; further, collaborations are listed in the UZH's data base on cooperation (<a href="http://www.int.uzh.ch/cooperation\_en.html">http://www.int.uzh.ch/cooperation\_en.html</a>)

Most collaborations involve individual partners rather than the entire faculty. However, there are important exceptions to this. As mentioned before, the VSF Zurich as one of the seven faculities of UZH is a member of the prestigious group of the League of European Research Universities LERU (www.leru.org/). Just recently, a declaration of intent (Memorandum of Understanding TiHo) was signed between the VSF (Bern and Zurich) and the Veterinary Faculty in Hannover (Tierärztliche Hochschule Hannover), that aims at an intensification of collaborations in research, teaching, recruitment of new staff and infrastructure.

#### 9.2 Specific aspects of VSF Zurich

At present and in the recent past, six research projects of the faculty have been funded by the European Union Frame Programs. One project ended in 2009, three projects will be terminated in 2010 and two in 2011. On average, these six projects were funded by approximately Euro 320'000 for the VSF Zurich partners.

At the level of doctoral training programs, many faculty members are closely connected to the Life Science Zurich Graduate School and the Graduate School for Cellular and Biomedical Research in Bern. Even though both graduate schools are situated and organized locally, both recruit doctoral students from all over the world; approximately half of the students come from abroad. Approximately 100 PhD veterinary students are enrolled at the VSF Zurich; most of them are linked to a program from one of the graduate schools.

#### 9.3 Specific aspects of VSF Bern

Internationalization is one of the aspects of the performance agreement in Bern with specific objectives to be met. As explained above this is evaluated annually.

Doctoral training programs involve the same programs as mentioned above for Zurich.

#### 9.4 International contacts via the ERASMUS program

For undergraduate teaching, the most intensive international collaboration is based on the Sokrates/ERASMUS program. Currently, the faculty has 20 partner universities in a large number of European countries

(see: <a href="http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte.html">http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte.html</a>). For many years, we have had more incoming students (about 20 in Zurich/year) than outgoing (2-4 in Zurich/year) students.

In particular the request for incoming students to attend the clinical rotation program in our 5th year of study is increasing. Due to the limited capacity in our clinics, we usually can only adopt part of the students who request clinical training. No restrictions are generally necessary for students who follow the normal curriculum. See also chapter 2.3

#### 9.5 Comments

Switzerland offers an attractive environment to international researchers. This situation needs to be maintained. However, our own researchers should also be encouraged to benefit from training periods abroad. The wide range of possibilities offered by the UZH and UniBE is not used sufficiently.

#### 9.6 Suggestions for improvement

It may be necessary for each individual supervisor of junior staff to encourage more activity in this regard.

# Assessment of cooperation with stakeholders and society



## 10 Chapter 10: Assessment of cooperation with stakeholders and society (AP 12)

#### 10.1 Performance agreement of VSF with the University of Bern and Zurich

The situation is more or less similar in both sites.

#### 10.1.1 Bern - Statement about performance agreement

The University management formulates together with the faculty a so called performance agreement (Leistungsvereinbarung; SEE ATTACHMENTS <u>Leistungsvereinbarung</u> <u>Brief</u>, <u>Leistungsvereinbarung</u>, <u>Leistungsvereinbarung</u> <u>Brief</u>, <u>Leistungsvereinbarung</u>, <u>Leistungsvereinbarung</u> <u>Brief</u>, <u>Leistungsvereinbarung</u>, <u>Leistungsvereinbarung</u> <u>Brief</u>, <u>Leistungsvereinbarung</u>, <u>Leistungsvereinbarung</u>, <u>France of the latter describes the position of the VSF at UniBE</u>, the Swiss University scene and the main activities of the faculty in teaching, research and service. The third part of the document describes the strategic goals of the VSF Bern in the following areas: basic duties in teaching, research and service; internationalty of teaching and research; interdisciplinarity and networking within the university; the position of the faculty in Switzerland; strategic alliances (e.g. Vetsuisse); technical/scientific cooperations with other partners; Bologna declaration; financial resource management within the faculty.

The fourth part of the document describes the resources (personnel, budget consumables in teaching, research and teaching) allocated to the faculty for the period covered by the performance agreement. The remaining parts of the document lay down the rules for reporting, controlling and taking measures in case the goals are not met. The agreement is signed by the University rector and the dean of the VSF Bern.

Each year the dean reports to the university management to which extent the objectives for the past year have been met using a standardized form (Umsetzungsbericht Strategie 2008,2009; SEE ATTACHMENT <u>Umsetzungsbericht Strategie 2008</u>; <u>Umsetzungsbericht Strategie 2009</u>) with brief comments to the different points.

The faculty management is then invited to a discussion of the report with the university management. If necessary measures are taken to amend problems in meeting the objectives. The results of the discussion are recorded in a standardized form (Protokoll Strategie gespräch 2008/2009; SEE ATTACHMENT Protokoll Strategiegespräch 2008; Protokoll Strategiegespräch 2009)

#### Strategic planning of VSF Bern

The faculty develops a strategic plan for a period of approximately 10 years. In such a plan the foreseeable developments for that period in each discipline are described. The creation of new disciplines and termination of existing ones is envisaged. The resources for each discipline are also laid down. The process takes a long time since it requires many discussions and sessions before decisions can be taken. The document "Strategische Planung 2009-2019" summarizes the objectives and results of the previous planning period (1996-2008) and describes the current stage of planning for the coming period such as the creation of interdisciplinary research platforms (SEE ATTACHEMENTS Planung Professuren, Planung Entwurf).

The planning also keeps track of the professorial positions in particular the ones who have to be replaced in the coming planning period and the new positions which should be created.

Geschäftsbericht BE 2007/8
Geschäftsbericht BE 2008/9

#### 10.1.2 Strategic planning at the VSF Zurich

Strategic planning is based on a 25 to 30 page document termed 'Development and Finance Planning' that spans a period of five years and that is updated annually. The plan covers every aspect of academic life, from research, teaching, to services, international relationships, strategic partnerships, to detailed financial planning including third party funding. The plan is amended with a list of professorships that come up for renewal or the faculty would like to create de novo. The plan is undergoing scrutiny by the University board, and after approval of the budget and professorships, the faculty can start with the implementation of the plan.

#### Performance control at VSF Zurich

The faculty and every clinic/institute has to produce an annual progress report that includes 14 precisely defined items:

- 1. Management summary
- 2. Current report of unit, goals and measures taken to reach them
- 3. Research activities (with reference to a project database)
- 4. Teaching
- 5. Continuing Education
- 6. Promotion of young talents
- 7. Gender policies
- 8. Service activies
- 9. Foreign relations and cooperations
- 10. Science and technology transfer
- 11. Academic administration
- 12. Publications (database)
- 13. Third party funding (database)
- 14. Organigram

The dean approves these reports, completing them with a faculty synopsis (SEE ATTACHMENT AKADEM. BERICHT 2008; AKADEM. BERICHT 2009) and then submits them to the university board for approval. In an annual meeting of the university vice president with the dean, all reports are evaluated. The discussion focuses on top performances but also measures that should be taken to improve performances in less successful units. The most important discussion points are the publication output in quantity and quality, level of third party funding and infrastructural needs.

At the beginning of every new budget period, the dean invites all unit leaders for an evaluative meeting where the past performance is discussed and where successes and problems are reviewed. In this meeting, additional points are discussed, such as clinical services, academic management, personnel problems and future outlook. The dean also solicits suggestions for improvement of working conditions that the faculty should achieve. Following this, the unit leaders receive a tentative budget allocation for the coming business year. They are requested to submit a more detailed budget plan that is bundled into a faculty budget which is submitted to the university administration for final approval. The dean has the final authority to allocate finances within the limits of a global budget issued by the University Board.

#### 10.1.3 Cooperation with stake holders (University of Zurich; Canton of Zurich)

The VSF Zurich is in close contact with its major stake holders. The dean and vice-deans have regular meetings with the president and vice-presidents of the UZH. All administrative and financial aspects are discussed on a regular and frequent basis. The faculty (through the dean's office or other members of the faculty) is involved in all inter-faculty committees. As such, a regular and intensive flow of information in both directions is guaranteed.

In addition to these regular contacts, the faculty provides up to date information about the present state and future developments in the yearly academic reports which are available to the president of the UZH and the Canton of Zurich, the owner of the UZH.

#### 10.2 Cooperation with and information of the public (VSF Bern and Zurich)

The Faculty keeps close contact to the people of Zurich and Bern. This contact is necessary because we feel the urgent need to inform the people of Zurich and Bern about new developments in veterinary medicine; further, we depend on a regular and constant influx of patients from animals owners for teaching and research purposes.

Contact with the public includes open door days that the faculty organizes every few years. A major upcoming event in Zurich is the official inauguration of the new small animal clinic in September 2010. The open day on September 25 will allow the people to visit our new facilities.

Another major event in Zurich was the presentation of the faculty to the public at the main train station in Zurich (Zurich HB). This 2-day event was part of the festivities for the 175th anniversary of the UZH in 2008. The event was a big success and showed various facets of veterinary medicine to a broad public. The event included presentations with animals but also scientific presentations given to the general audience. On a more regular basis, the clinics offer frequent seminars for pet owners (e.g., vaccination strategies for pets travelling abroad).

Finally, information about the faculty, including the teaching program, major research areas and service work are publicly available via electronic media (e.g., the faculty's webpage).

#### 10.3 Cooperation with veterinarians in practice (VSF Bern and Zurich)

The VSF is in close contact with the Swiss Veterinary Society (GST/SVS; <a href="www.gstsvs.ch">www.gstsvs.ch</a>). The Vetsuisse dean is a member of the executive board of the GST/SVS. Further, members of our faculty participate very frequently in continuing education courses organized by the GST/SVS or by our faculty. The practitioning veterinarians are also integrated in our curriculum, e.g. via two compulsory 4-week training periods of 5th year students in private practice.

Several clinical divisions organize CPD events for their referring veterinarians. In Bern, e.g., there is an annual meeting on certain aspects of emergency medicine ("KISS" meeting) for small animal practitioners, the food animal clinic regularly offers "food animal colloquia", which are after hour events for large animal practitioners in the area.

#### 10.4 Alumni organizations

The VSF Zurich has an active Alumni association (<a href="www.vet.uzh.ch/fakultaet/alumniwebsite.html">www.vet.uzh.ch/fakultaet/alumniwebsite.html</a>). Currently, the association counts approximately 250 members.

A similar Alumni organization also exists for Bern graduates.

#### 10.5 The year of Veterinary Medicine 2011 (planned activities of VSF Zurich and Bern)

The faculty takes the opportunity to celebrate 250 years of veterinary medicine by sensitizing the public to the social and scientific importance of this field. Towards this goal, we plan a national event in fall 2011 that will bring together all major stakeholders of veterinary medicine in Switzerland. The event will be planned to attract maximal media attention. A national committee chaired by Dean Althaus as well as an organizing committee under the leadership of Prof. Wanner has been established.

#### 10.6 Comments

The two local deans are good and active representatives of the VSF. The collaboration with the VSF Dean has been very good in recent years. However, the VSF Dean will retire at the end of 2010.

#### 10.7 Suggestions for improvement

The two locations of the VSF and the political bodies have to decide how the VSF will be managed after the retirement of the VSF Dean.

# Additional information required by the Swiss accreditation authorties (OAQ)



University of Bern | University of Zurich

## 11 Chapter 11: Additional information required by the Swiss accreditation authorities (OAQ)

Chapter 11 contains specific information required for the Swiss Accreditation procedure. It is listed according to the Guidelines of the Federal Office of Public Health (BAG):

Accreditation of Study Programs in Veterinary Medical Education (quality standards).

"EAEVE SER 2007" (SEE ATTACHMENT <u>SER</u>) and "EAEVE evaluation" (SEE ATTACHMENT <u>EAEVE EVALUATION REPORT</u>) refer to the reports written on the occasion of the first stage of the evaluation of the VSF by the EAEVE in 2007 and 2008.

"EAEVE SER" refers to the actual self evaluation report, SER 2, written on the occasion of this stagetwo accreditation procedure, i.e. chapters 1-10 of the present report.

#### 11.1 Area 1: Mission and Objectives

#### 11.1.1 Mission and Objectives

For mission statement, please see Chapter 1 of EAEVE SER.

#### 11.1.2 Participation in Formulation of Mission and Objectives

Please see Chapters 1 and 10 of the EAEVE SER.

The Vetsuisse teaching committee defines and supervises the undergraduate teaching objectives. All guidelines were approved by the Vetsuisse Faculty Assembly and the Vetsuisse Council.

Regular meetings of the teaching committee (in general at least monthly) and frequent feedback to all stakeholders guarantees an up-to-date flux of information.

#### 11.1.3 System to assess the achievement of the establishment's general objectives

There is no legally fixed procedure for assessing achievement of objectives. In the Vetsuisse system objectives are formulated by the Vetsuisse council and the Vetsuisse dean, assisted by the advisory board. The advisory board is asked to review achievements and it may comment on them and submit suggestions, but its advice has no compulsory effect.

See Chapters 3, 5 and 6 of the EAEVE SER.

#### 11.1.4 Academic Autonomy

In respect to the legal frame (Medizinalberufegesetz, implemented in Sept. 2007), the goal to meet the requirements of Directive 2005/36/EU, and the funds made available to the faculties in Zurich and Bern, Vetsuisse follows a policy permitting the freedom to design the study program and to allocate the necessary resources for its implementation.

Despite a clearly structured Vetsuisse curriculum, it is an important goal of the VSF to assure freedom to teach to the academic personnel. This degree of freedom is necessary to assure a truly research based education of our students, which is one of our primary goals in education.

The Vetsuisse teaching committee has the overall control of the curriculum, taking into account this freedom to teach.

#### **VSF Bern**

The allocation of funding has been determined by historic developments. The body that is responsible for the final allocations is the faculty council, but financial matters are prepared by the faculty board. A specific segment of the budget (about 6% of the global funds) has been reserved to be invested into promotion of clinical research and veterinary public health.

#### **VSF Zurich**

University funding has seen drastic cut-backs over recent years; unfortunately, this development may still continue for the near future. The faculty has to decide if it has to give up certain activities that are not fundamental for VSF per se, e.g. the Institute of Laboratory Animals which could perhaps function as an independent unit under the direct supervision of the vice-president of UZH.

Funding is coordinated by the dean of VSF Zurich. This includes the coordination of the request and applications for funding at the university council.

#### 11.1.5 Educational Outcome

Educational outcome has been described in detail during the EAEVE evaluation process. Please refer to the respective attachments for details (chapter 4).

Veterinary medicine comprises the following key areas:

- promotion of animals' health and well-being
- scientifically based teaching
- scientifically based research
- disease prophylaxis
- protection of people from zoonotic disease
- Development of animal models for human diseases

The Vetsuisse curriculum ensures that the students fulfill key qualifications such as:

- graduates can enter all aspects of the veterinary profession
- graduates know of the necessity and obligations of life-long learning
- graduates know their capabilities and can identify their deficiencies

Because the new Vetsuisse curriculum was only introduced in fall 2003, long-term outcome measures ("Ehemaligen-Befragung") are not available yet.

#### 11.2 Area 2: Study Program

#### 11.2.1 Study Program Models and Instructural Methods

For details, please refer to the EAEVE evaluation in the respective attachment (chapters 4 and 5).

The Vetsuisse curriculum is clearly structured into modules. Nonetheless, we adhere to the principle of freedom of teaching as much as possible.

The high quality of teaching is ensured by regular assessment of the teaching staff (see Chapter 3 of the EAEVE SER).

This includes e.g. the obligation to follow training in didactics (Arbeitsstelle für Hochschuldidaktik; Didactica). The UZH awards an established prize for best teaching (Credit Suisse Award). VSF Zurich plans to establish its own prize for best teacher; this has been established at VSF Bern for many years.

#### 11.2.2 Structure, Composition and Duration of the Study Program

The Vetsuisse curriculum was introduced in 2003. It is clearly structured and aims at providing a scientific approach to all aspects of veterinary medicine. The first year of the curriculum lays the scientific basis in key disciplines. Years 2 and 3 provide extensive clinical approaches, linking basic science concepts to clinical approaches. The two years of the Master curriculum allow the students to choose from one of six compulsory tracks. Details of the curriculum are given in the EAEVE evaluation report.

#### 11.2.3 Study Program Management

The Vetsuisse teaching committee (originally called "Task Force") was involved in the coordination and implementation of the new Vetsuisse curriculum from the very start of the Vetsuisse faculty.

Meetings of the teaching committee are generally held on a monthly basis but the frequency of meetings was much higher in the early days of planning and implementation.

The management and evaluation of the curriculum and students is described in detail in chapters 2, 3 and 4 of the EAEVE SER.

The evaluation of teaching is under the supervision of the local offices for student affairs which is under the direction supervision of the local deans.

#### 11.2.4 Scientific Methods

The teaching program is clearly based on the idea of scientific and research-based teaching. Students are actively involved in project work. Starting in fall 2010, all students (not only those following the track "biomedical research") will have to submit a Master's thesis at the end of their 2nd year of Master course (i.e., 5th year of their studies). While a wide range of Master thesis' formats is possible, all thesis must conform with scientific principles ("Die Masterarbeit ist eine wissenschaftlich

ausgerichtete Arbeit, die von den Studierenden individuell und selbständig während des Masterstudiums verfasst wird.").

To guarantee a high level of research based teaching, it is a requirement for all teachers to document regular scientific output, e.g. by indicating their publication activity over the previous year. Fulfillment of the requirements allows them to teach specific courses and an official recognitium ("Lehrauftrag") is awarded.

#### 11.2.5 Basic Biomedical Sciences

All basic sciences are fully integrated into the curriculum. Please refer to the EAEVE evaluation in 2007.

#### 11.2.6 Behavioral and Social Sciences, Medical Ethics

We believe that Medical Ethics are also a very important aspect in Veterinary Medicine. Professional ethics are addressed in different lectures. Ethics and animal welfare are closely linked. Important aspects are already included in the first year of studies (Special Ethology and Animal Ethics; " [...] Im Teil Tierethik werden die wichtigsten ethischen Ansätze dargestellt und an Fallbeispielen Kriterien der stets notwendigen Güterabwägung zwischen Interessen von Mensch und Tier erarbeitet.")

Ethical behavior of the practicing veterinarian is also an important aspect during the extramural training periods and during the clinical rotations in 2nd year of the Master course. Please refer to chapter 8.2.5. of the this SER for animal welfare officer.

#### 11.2.7 Clinical Knowledge and Skills

For details about the clinical training in our faculty, please refer to the EAEVE evaluation report.

#### 11.2.8 Linkage to Veterinary Practice and Veterinary Public Health

Two four-week extramural training periods are required (see also EAEVE evaluation report). The first training period in the core curriculum must be done in a veterinary practice in Switzerland. This obligation is based on the idea that all students of veterinary medicine, irrespective of their future professional direction, should get some insight into the veterinary practice of our country.

There is no obligation to do the second training period in Switzerland, nor is there an obligation that it must be done in veterinary practice. The obligation is that second training period must conform with the track chosen by the student.

For feedback about the extramural training, please refer to the EAEVE SER, chapter 2.

Training in VPH is a compulsory part of the curriculum. Please refer to the EAEVE evaluation report.

#### 11.3 Area 3: Students

#### 11.3.1 Admission Policy and Selection Process

The rules for student admission and the selection process conform with the CRUS guidelines. Students have to register with the CRUS for the aptitude test. See chapter 2 of the EAEVE SER (admission).

#### 11.3.2 Number of Students

See also EAEVE evaluation report. The number of students enrolled is compatible with our teaching capacities. In fact, the capacity for clinical training of students (60 in Zurich, 50 in Bern) is the main denominator for the number of students admitted to enter the Vetsuisse curriculum (80 per year in Zurich, 70 in Bern).

#### 11.3.3 Student Support and Counselling

#### **VSF** in Zurich

The VSF Zurich office for student affairs is open to students during normal working hours. The team has three employees. An important part of the office's duties is student counselling in all university-related issues. See also Chapter 2 of the EAEVE SER.

Because the same team is also responsible to conduct the evaluation of the teaching program and the teachers, an intensive interaction is guaranteed.

All students of VSF Zurich have the possibility to get advice from the office of gender issues (Gleichstellung; see also http://www.gleichstellung.uzh.ch/index.html).

One member of our faculty (Prof. Dr. R. Hofmann-Lehmann) is member of the gender issue committee of UZH.

#### 11.3.4 Student Representation

Two students (one from Bern, one from Zurich) are active and full-voting members of the Vetsuisse teaching committee. The other committee members are (per location) four professors, two teachers (Privatdozierende), one assistant, one member of the office for study affairs (curriculum coordinators). Hence, the students are involved in all processes related to the development and implication of the curriculum. Two students are also full-voting members of the two local faculty assemblies in Bern and Zurich; four students are represented at the Vetsuisse faculty assembly as full voting members.

See also Chapter 1 of the EAEVE SER.

In contrast to the former situation (before Vetsuisse), students are no longer members of the recruitment committees for the recruitment of new professors or for promotion.

#### 11.4 Area 4:Assessment of Students

#### 11.4.1 Assessment Methods

The Vetsuisse faculty has an open information policy. All relevant assessment methods are published and available to all students. Student information is via e-mail, the OLAT online learning and teaching platform (UZH) and via the webpage. The information is constantly updated. Ad hoc information meetings are organized with the students if necessary. Details of the student assessment are described in the EAEVE evaluation report; see also Chapters 1 and 2 of the EAEVE SER.

All written examinations are governed by the Institute of Medical Education (Institut für Medizinische Lehre, University Bern [IML]).

Effective fall 2010, a common platform for written examinations will be available to both Vetsuisse locations. The IML ensures formal correctness and validity of examination questions.

Oral examinations are not supervised by the IML. They are organized locally by the offices of student affairs. To ensure high quality and fairness of oral examinations, the VSF Zurich created a local examiniation committee; the head of the committee is a veterinary practitioner (Dr. Roger Weiss, Männedorf ZH).

All details of the assessment system and quality control can be found in the EAEVE SER Chapter 2.

#### 11.4.2 Relationship between Assessment and Learning.

We believe that these requirements are met. Please refer to the EAEVE evaluation report from 2007 and the EAEVE SER Chapter 2.

All written examinations are supervised and evaluated by the IML (University of Bern). This ensures a quality control for the format of questions. Further, the evaluation of the students' performance is based on approved models of evaluation (Rasch model). The Rasch model allows evaluation of the students taking the degree of difficulty into account ("Längs- und Querverankerung") and defines the examinations' selectivity. This evaluation system has been approved by the Swiss authorities and is also used in faculties of human medicine.

Oral examinations allow to test different qualities than written examinations. We believe that the mix of examinations' formats is useful.

The examination system complies with the rules of the Bologna declaration. Admittedly, the Bologna has recently been questioned (see students' protests in late 2009). However, t he acceptance of the Bologna examination rules is high in our faculty.

It may be important to note that student appeals occur only very rarely.

#### 11.5 Area 5: Academic Staff/Faculty

#### 11.5.1 Recruitment Policy

Vetsuisse has a central Recruitment and Promotion Committee. This Committee prepares recruitments of employees at the professorial level and promotions to tenure for the decision by faculty. All positions without tenure and of non-academic staff are at the responsibility of the Institutes and Clinics. However, a general procedure is that all open positions (doctoral students, assistants, senior assistants and above) are published nationally and internationally (often electronically). For the recruitment of professors the Committee for Recruitment and Promotion follows the rules laid down in the Faculty Regulations

(SEE ATTACHEMENT: "Fakultätsreglement";

http://www.Vetsuisse.ch/assets/20071212\_Vetsuisse-Fakultaetsreglement\_Original.pdf).

The Vetsuisse Recruitment and Promotion Comittee and ad hoc comittees (for ad personam promotions of professors) prepare the recruitment process of new professors. The VSF tries to coordinate recruitments between the two VSF locations but this often proves difficult.

Further actions to promote the recruitment of excellent staff in all three main areas of the VSF (research; education; service work) are laid down in the Guidelines for Recruitment and Promotion at the VSF

(SEE ATTACHEMENT "Beförderungsrichtlinien";

 $\underline{http://www.Vetsuisse.ch/assets/VS-Befoerderungsrichtl\_090610.pdf}) \ \ and \ \ the \ \ guidelines \ \ for \ \ the \ \ educator \ track \ \underline{(http://www.Vetsuisse.ch/assets/EducatorTrack\_091209.pdf)}$ 

SEE ATTACHMENT educator track).

The former rules provide guidelines for the requirements at each individual level of an academic career. These guidelines help candidates to position themselves in the academic system and they help the Committee for Recruitment and Promotion to clearly define the requirements for a given position. Meeting the requirements, however, does not create the right for promotion (see also chapter 3.4.2 of the EAEVE SER)

The educator track was created in late 2009 to promote the recruitment and promotion of faculty members with a high level of teaching and service commitment. The educator track aims at offering attractive scholarly active positions with a clear career options for faculty whose primary aim is teaching. A sound mix between faculty following the educator track and those following a research based, tenure-track career is essential.

The recruitment policy of the VSF assures equal opportunities irrespective of gender and ethnicity. The VSF Bern has a Committee for Equal Opportunity. It prepares goals and strategies for the faculty to foster equal changes for men and women in recruitment and promotion. In 2009 funding has successfully been obtained at federal and university offices for funding of projects to promote equal opportunity of men and women.

VSF Zurich has no such specific committee at the faculty level. Prof. Regina Hofmann is the faculty's representative at the UZH committee for equal opportunity. The goals are as described above.

Regarding language skills, at least the clinical disciplines and other disciplines with frequent contact to the public requires knowledge of the local language (German and French in Bern; German in Zurich). In most research-based units, knowledge of the local language is not required and English is used as "lingua franca".

#### 11.5.2 Personal Policy and Development

As already outlined in 11.5.1, VSF has taken appropriate measures to promote the recruitment of excellent staff in all three main areas of the VSF (research; education; service work). Rules are laid down in the Guidelines for Recruitment and Promotion of staff at the VSF ("Beförderungsrichtlinien"; SEE ATTACHMENT <u>Beförderungsrichtlinien</u>) and the guidelines for the educator track (SEE ATTACHMENT <u>educator track</u>).

The former guidelines help candidates to position themselves in the academic system and they help the Committee of Recruitment and Promotion to clearly define the requirements for a given position. The educator track aims at promoting the recruitment of clinicians and employees in units with a high percentage of teaching and service work.

Promotion of young academics and clinicians is one of VSF's most important aims. A detailed job description is usually part of the work contract. The job description clearly defines the amount of time that the candidate is expected so spend in research, teaching and service work.

Because of the lack of a central recruitment office at the VSF, the individual institutes or clinics are responsible for their staff. In general, all units highly encourage their staff to follow further training. This also includes training of teaching capabilities. For specific steps of the academic career, clear rules are laid out that define the amount and specifics of training (see e.g. Guidelines for the Habilitation; "Habilitationsreglement"; SEE ATTACHMENT <a href="Habilitationsreglement">Habilitationsreglement</a>) Clinical training programs of interns and residents follow predefined rules by the respective Colleges.

The academic staff (assistant level, Privatdozent level, and above) is represented in all committees, in particular in the committees that are involved in defining the future direction of VSF and the recruitment of professors.

All staff has access to the gender equality commission.

Please also refer to the EAEVE SER, chapters 2, 6 and 7.

#### 11.5.3 Teaching staff evaluation

(see chapter 2.6 of the EAEVE SER)

As outlined in the EAEVE SER (chapter 3), the local deans' offices are in charge of the evaluation of the teaching. The sections for faculty development of the universities of Bern and Zurich support teacher evaluation, especially by means of attending lessons and giving feedback.

During the introduction of the Vetsuisse curriculum in 2003, the major focus of evaluation was laid on the evaluation of entire teaching modules rather than individual teachers. The modules were evaluated by the students at the end of each module. Evaluation included educational objectives, topics chosen, amount and relevance of content, integration of the various subjects, adequacy of difficulty, link to prior knowledge and redundancies. On request, the individual teachers are also evaluated. All new teachers ("Lehrbeauftragte") must undergo an evaluation process.

Data is collected with paper questionnaires, online forms and forming student focus groups.

The results of the individual lecturers' evaluations are treated confidentially and are conveyed only to the evaluated lecturer. However, evaluation results are required as a criterion for promotion (see Habilitationsreglement; SEE ATTACHMENT Habilitationsreglement).

#### 11.6 Area 6: Educational Resources

#### 11.6.1 Infrastructure

The infrastructure of the VSF has been described in detail in the EAEVE evaluation report. Please also refer to the EAEVE SER chapter 4 for a description of the specific situation in the VSF's libraries and access to electronic media.

One shortcoming is that the faculty has no specific working areas with computer access (and access to other electronic media) for master students during their master thesis. Working areas have to be provided by the supervising institutes or clinics but space is scarce.

#### 11.6.2 Practical Clinical Training Resources

All clinical training resources have been described in detail in the EAEVE evaluation report. The new clinical facilities at the VSF Bern allow for excellent student- patient/client contact. With the opening of the new small animal clinic in Zurich in August 2010, the training possibilities for both undergraduate students and interns and residents, respectively, will improve markedly. The clinic will officially be opened during the site visit of the experts in September 2010.

## 11.6.3 Information Technology

The VSF considers information technology an important means of modern teaching. All details are clearly laid out in the EAEVE SER chapter 4. The VSF Zurich has one E-learning officer (Dr. Céline Manera) and one IT technician (Alexander Maldonado). E-learning at the VSF Bern is coordinated by Dr. Peter Stucki.

Recently, the VSF in Zurich evaluated its entire E-learning program. This included the assessment of all available E-learning media and the evaluation of their use and added value compared to traditional teaching methods. The results of this evaluation can be found in an Attachment (SEE ATTACHMENT Endbericht E-Learning; see also chapter 4 of the EAEVE SER chapter 4). The VSF in Bern is currently considering a similar analysis of its E-learning programs. The E-learning officers of VSF Zurich will assist in this analysis, if necessary.

# 11.6.3.1 Information technology at the Institute of Pathology at VSF Zurich - Scan Scope

ScanScope provides access to an electronic database of histopathological tissue sections (Scanscope: http://idscanscope1.uzh.ch:1270/). Students can access the sections via the internet; two electronic OLAT programs provide the necessary explanations and thus allow efficient use of ScanScope during the students' self-study time. Additional podcasts were produced that describe the sections and allow

to explain pathological changes by use of a smart board. Hence, the complete system allows students to study histopathological sections independently. This possibility was valued very high in a recent student evaluation. See also:

http://www.aperio.com/pathology-services/scanscope-XT-system-slides.asp

#### 11.6.3.2 Mobile Classroom at VSF Zurich

Teaching facilities for microscopy work includes a lecture / laboratory room (90 seats) equipped with 1 microscope and 1 low magnification binocular per seat, 70 laptop computers including a mobile classroom software (WLAN). This enables the students to access digital microscopy histopathology slides and all other e-learning modules and is used for e-assessment.

# 11.6.3.3 Clinical record system at VSF Zurich and Bern

The VSF Zurich has established the clinic system oblon (Amacker & Partner, <a href="http://www.oblon.ch">http://www.oblon.ch</a>) since 2004, the VSF Bern uses the polypoint system(Erneconsulting <a href="http://www.erneconsulting.ch">http://www.erneconsulting.ch</a>). Radiology uses the system eFilm (<a href="http://www.merge.com">http://www.merge.com</a>) and the Central Clinical Laboratory uses the MCS Vianova system (<a href="http://www.parametrix.ch">http://www.parametrix.ch</a>).

## 11.6.3.4 Record system in pathology at VSF Zurich

The patient record system of the Institute of Pathology is based on an APPX database. It is only used for diagnostic purposes. The interaction with the clinical departments for biopsies and cytology takes places via the OBLON system (clinical departments – patient database – Institute of Veterinary Pathology – diagnosis – clinical departments).

# 11.6.4 Research

Both the VSF Bern and VSF Zurich value scientific research as their primary goal, next to excellence in teaching. VSF is part of the research-based universities of Bern and Zurich, and both strive for research-based teaching.

As a new feature of our curriculum which is believed to improve the students' access to research, all undergraduate veterinary students in the Master course of their study (years 4 and 5 of the Vetsuisse curriculum) have to write a Master thesis. This is required by the Bologna declaration and will first be introduced in the fall semester of 2010. So far, only students following the track "Biomedical research" in their 4th and 5th year of study had to write a thesis which was equivalent to a Master's thesis in other faculties. The guidelines for the Master thesis are laid out in the Studies Regulations ("Studienreglement"; http://www.Vetsuisse.ch/assets/VetsuisseStudienreglement.pdf; ATTACHMENT) and in internal rules for the master thesis ("Merkblatt für Masterarbeiten"; SEE ATTACHMENT Merkblatt für Masterarbeiten). Due to the different requirements for students of the six tracks (three clinical tracks; three non-clinical tracks), a wide range of formats of Master theses is offered (e.g., experimental research; case report; case log; E-learning program; etc.). However, irrespective of the format of the thesis, all Master theses have to be based on a scientific approach of students to the topic of their thesis. Based on a faculty decision in 2009, a Master thesis does not necessarily have to be written in the track chosen by the respective student. Experience over the coming years will show whether this decision was realistic and can be followed through.

Specific information on the research evaluation of the VSF Zurich can be found in an Attachment (SEE ATTACHMENT <u>report research evaluation</u>). VSF Zurich has been evaluated as part of the evaluation rotation schedule set up by the University of Zurich. As can be seen in the report, research at VSF is generally of high quality.

## 11.6.5 Educational Expertise

Expert advice has been obtained in particular during the early phases of curriculum planning. The first steps for the development of the Vetsuisse curriculum were taken in 2002 (Vetsuisse Task Force; now Teaching Committee). The VSF Bern had successfully implemented a substantial curricular reform in 1999 based on similar concepts as those of the current curriculum (i.e. interdigitation and integration of clinical and basic science/paraclinical content, teaching multidisciplinary organ system-centered modules, focus on self study and introducing the concept of life long learning). This allowed the Teaching Committee to draw from the experience made during the five years prior to the implementation of the Vetsuisse curriculum. Furthermore, the study of other veterinary curricula was of great value for the design of the new veterinary curriculum. An important aspect were regular contacts in particular with the veterinary school in Utrecht (NL) which is one of the most highly regarded veterinary schools in Europe. The veterinary faculty in Utrecht has a large office of student affairs with great expertise in curriculum planning. These contacts were very helpful and gave us confidence that the Vetsuisse curriculum would allow us to offer veterinary education of high quality.

The curriculum coordinators in Bern and Zurich regularly attend meetings for veterinary and medical education to get insight into new aspects of veterinary education. In Zurich, the "Fachstelle Studienreform" <a href="http://www.studienreform.uzh.ch/index.html">http://www.studienreform.uzh.ch/index.html</a> of UZH supports the development of new curriculums.

VSF Zurich and the E-learning coordinator are part of an E-learning coordinating group that includes the veterinary schools in Zurich, Hannover and other German speaking faculties. These contacts have been very fruitful to guarantee a high scientific standard of our E-learning efforts.

Education expertise for student assessment is guaranteed by the evaluation offices of the Universities of Bern and Zurich. Teaching evaluation is coordinated with these central offices.

As outlined in detail in the EAEVE SER chapter 2, the quality of written examinations is supervised by the Institute of Medical Education (Institut für Medizinische Lehre; IML) of the University of Bern. Experts for all aspects of student assessment help us to design reliable assessment methods.

Finally, didactic courses are compulsory for all new teachers as e.g. laid out in the Habilitationsreglement (<a href="http://www.Vetsuisse.ch/assets/VS-Habilitationsreglement\_20091209.pdf">http://www.Vetsuisse.ch/assets/VS-Habilitationsreglement\_20091209.pdf</a>).

No specific input from psychologists or sociologists has been seeked during the development or implication of the Vetsuisse curriculum.

## 11.6.6 Cooperation

As outlined in the EAEVE evaluation report and the EAEVE SER, the Vetsuisse curriculum conforms fully with the guidelines of the Bologna declaration. This includes the use of the ECTS system for student evaluation. Hence, the structure of the curriculum allows easy transfer of credit points (see also below, ERASMUS). It needs to be considered, however, that the definition of teaching modules varies to a large extent between veterinary faculties. Because the structure of modules also influences the structure of examinations (including the number of credit points), full recognition of ECTS credit points earned abroad is sometimes difficult. Organ-centered modules, e.g., which we consider an important part of the bachelor course of our curriculum, are not established in most of our partner faculties. As such, the Bologna declaration laid out the theoretical basis for better mobility of students and recognition of students' work, but the application is often difficult. One further important factor in this context is that only few countries introduced the Bologna teaching system in veterinary medicine. In particular the direct neighbors of Switzerland have not yet adopted the system.

All institutes and clinics of the VSF have a large number of international collaborations, but there is no official specific teaching-based international cooperation with Veterinary faculties abroad (but see below for ERASMUS). However, the VSF recently signed a declaration of intent with the Veterinary Faculty in Hannover (Tierärztliche Hochschule Hannover) (SEE ATTACHMENT Memorandum of Understanding TiHo). This declaration defines as one of its aims of future collaboration to improve the collaboration in teaching.

# 11.6.6.1 Mobility within VSF

Despite the uniform curriculum in Bern and Zurich, mobility of students between the two Vetsuisse locations takes place at a relatively low level. Only few students change permanently from one location to the other even though this would theoretically be possible after each semester. At the Master level, more contacts between students from Bern and Zurich are institutionalized. This refers e.g. to teaching modules in the various tracks, which are thought for both cohorts of students.

# 11.6.6.2 Mobility by ERASMUS

The VSF has numerous ERASMUS agreements with European partner universities (see http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte.html#3).

Most of these agreements also allow the exchange of teaching staff. Unfortunately, this possibility is used only very rarely despite efforts of the ERASMUS coordinators of the VSF to encourage such exchange. The resources provided by the University would cover a major part of the cost involved in such exchange programs; nonetheless, these possibilities are largely neglected by the faculty.

# 11.6.6.3 Mobility for non-veterinarians and admission to the VSF curriculum

The university rules allow that under some conditions, Bachelors from faculties of related subjects may enter the Master course of the curriculum. However, specific requirements must be fulfilled before students who do not hold a Bachelor degree in veterinary medicine (or equivalent) are fully recognized. Each case is treated and evaluated individually.

The "Studienreglement" of VSF defines the following rules:

# "§ 22 Zulassung zu den Master-Studiengängen

Die Zulassung zum Masterstudiengang setzt ein abgeschlossenes Bachelorstudium der Vetsuisse-Fakultät in der Veterinärmedizin oder eine äquivalente universitäre Vorbildung voraus.

(...)

Die jeweilige Fakultätsversammlung der Standorte bestimmt eine definierte Anzahl Studienplätze, welche für ausländische Studierende reserviert werden. Diese Studienplätze werden nach Leistung vergeben. Studierende mit einem Bachelorabschluss oder einem äquivalenten Abschluss aus Ausbildungsstätten, die gemäss den Richtlinien der European Association of Establishments for Veterinary Education (EAEVE) oder American Veterinary Medical Association (AVMA) positiv evaluiert bzw. akkreditiert wurden, werden bevorzugt."

Despite the Vetsuisse structure, the students studying in Bern or Zurich are still enrolled under the local rules defined by the respective universities. As such, the ordinances defining the process of students' admission are currently under evaluation by the Universities of Bern and Zurich (SEE ATTACHMENTS Verordnung Zulassung UZH). These will clearly define the procedure that needs to be followed by students who try to enter the Vetsuisse curriculum but don't have the background from previous veterinary studies.

#### 11.7 Area 7: Program Evaluation

## 11.7.1 Study Program Evaluation

Details about the evaluation of the study program can be found in the EAEVE SER chapters 2, 3, 4 and 5. VSF strives for providing a high quality of teaching and therefore considers progress in this respect of high importance.

Outcome measures of the new Vetsuisse curriculum will be provided in coming years. However, because the first students in the Vetsuisse curriculum finished in 2008, long term assessment of outcome measures is not yet possible.

#### 11.7.2 Teacher and Student Feedback

The structure of the faculty allows direct feedback from teachers to the office of student affairs and the VSF teaching committee. The teaching committee regularly informs all teaching staff about upcoming changes and seeks approval by the faculty and all teachers involved.

Student feedback is collected via the evaluation process (see EAEVE SER chapters 2 and 3), but also by direct contact with the students. VSF has an open information policy and the students frequently use the direct contact to the office of study affairs or the head of the teaching committee. Typically, student feedbacks is collected by the speakers of the students (each class nominates a speaker and direct contact person).

For each of the two VSF locations, the teaching committee is composed by seven members of the academic staff (four professors; two senior staff; one assistant), one student and the curriculum

coordinator. Hence, full representation of all stakeholders involved is guaranteed. All members of the teaching committee are full members and have the right to vote.

#### 11.7.3 Student Performance

See also EAEVE SER chapter 2. The student evaluation and feedback is coordinated by the local deans' offices. Direct feedback to the teaching committee is guaranteed because both curriculum coordinators from Bern and Zurich are full members of the VSF teaching committee.

Teachers involved in written examinations usually meet after examination sessions ("Notenkonferenz" once in spring, once in fall). At these sessions, members from the IML are present, and examination outcome is discussed. The IML presents an evaluation of students based on comparisons with peers and performance of previous years ("Rasch model"). This allows teachers to directly evaluate students' performances. Measures to improve examination quality are discussed regularly.

In the first years of the implementation of the new Vetsuisse curriculum, student peer groups were formed who gave feedback of their experience with the new teaching and examination system.

#### 11.7.4 Involvement of Stakeholders

Details about the involvement of stakeholders (practicing veterinarians; local Universities; local authorities) is given in chapter 10 of the EAEVE SER. Specific feedback from practicing veterinarians during the students' extramural training periods is given in chapter 2 of the EAEVE SER.

# 11.8 Area 8: Governance and Administration

#### 11.8.1 Governance Structures and Functions

Vetsuisse has officially been founded on September 1, 2006. The basis was laid in the years prior to that date. One of the first achievements of the VSF was the implementation of the new Vetsuisse curriculum starting in fall 2003. The legal basis of the VSF is laid out in the Concordat ("Konkordat der Vetsuisse-Fakultät"; SEE ATTACHMENT Konkordat) and the regulations of the faculty ("Vetsuisse-Fakultätsreglement"; see also http://www.Vetsuisse.ch/de/rechtssammlung.php; SEE ATTACHMENT Fakultätsreglement). These documents also describe the relationship of the VSF and its two locations Bern and Zurich and their respective home universities, the University of Bern and the University of Zurich. The direct link of VSF into the home universities is personalized by the Vetsuisse council being presided by the rector of the University of Bern or his/her counterpart of Zurich. Presidency alternates between Bern and Zurich.

The all publicly available stakeholders processes are to (see http://www.Vetsuisse.ch/de/rechtssammlung.php). For schematic diagram, a also: http://www.Vetsuisse.ch/assets/VL-VS-Kompetenz\_Funktionendiagramm\_090916.pdf (SEE ATTACHMENT Kompetenz Funktionendiagramm).

# 11.8.2 Academic Leadership

The VSF takes clear leadership for all aspects of the study program. This is clearly laid down in the Vetsuisse mission statement (<a href="http://www.Vetsuisse.ch/en/leitbild.php">http://www.Vetsuisse.ch/en/leitbild.php</a>; SEE ATTACHMENT Code of Conduct). See also EAEVE SER chapter 1. The three standing committees of the VSF are key players in this respect (teaching committee; committee for recruitment and promotion; research committee).

#### 11.8.3 Administrative Staff

The VSF has a sufficient number of administrative and technical staff to guarantee proper functioning of the faculty. According to the ECOVE which is a joint committee of the European Association of Establishments for Veterinary Education (EAEVE) and the Federation of Veterinarians of Europe (FVE), both locations of the VSF have a high number of administrative and technical staff.

Unfortunately, the available databases of the VSF do not allow us to estimate the overall ratio of administrative and technical staff (in % of total staff).

## 11.8.4 Educational Budget and Resource Management

The resource management has been described in detail in the EAEVE evaluation report. The VSF has a high degree of autonomy for the use and distribution of its budget. The gross budget is allocated by the respective home university. The local deans' offices are then responsible for further budget allocation. According to the Vetsuisse concordat (SEE ATTACHMENT Konkordat), no transfer of budgets from Bern to Zurich or vice versa is possible.

Funding by the home universities decreased markedly over recent years. The VSF could not function with a high level of third party funding. In part, this funding has also to be used for educational purposes.

# 11.8.5 Interactions with the Health and Veterinary Sector

# 11.8.5.1 Interaction with government agencies

The VSF interacts closely with the Federal Office of Public Healthy (BAG) and the Federal Veterinary Office (BVet). The BAG and members of the VSF formed a specific task force to develop the outline and structure of the upcoming new Federal examination (eidgenössische Prüfung in Veterinärmedizin).

Contact with the BVet is e.g. institutionalized via the Veterinary Public Health (VPH) Institute of the VSF Bern.

#### 11.8.5.2 Interaction with the veterinary sector

The Vetsuisse dean is member of the board of directors of the Swiss Veterinary Society (GST/SVS). In addition, VSF established an official contact with the GST/SVS to coordinate the collaboration in

teaching. Contact persons are the curriculum coordinator of VSF Bern and the president of the teaching committee. See also EAEVE SER chapter 10.

# 11.9 Area 9: Continuous Renewal/Quality Assurance

Details can be found in the EAEVE SER. See specifically chapter 10 of the EAEVE SER. This chapter describes the cooperation with stakeholders. The most important in this respect are the two local universities and regular (yearly) academic reporting on achievements and deficiencies.

In terms of specific quality assurance of teaching, the VSF teaching committee submitted a report to the VSF dean with the specific recommendations that resulted of the EAEVE evaluation in 2007. Measures have been taken to account for all recommendations given by the experts. One of the main tasks of the Vetsuisse teaching committee is to constantly evaluate the curriculum for deficiencies and proposes measures to improve the situation. The structure of the VSF allows direct feedback of teachers. The VSF teaching committee strives for implementation of improvements as soon as possible.

Further, the local universities have an established and regular review process that is coordinated by the respective evaluation offices. Details on these procedures are laid out in the EAEVE SER.

# **ANNEX**



vetsuisse-faculty

# 12 ANNEX

General	١.
Caenerai	1.

http://www.vetsuisse.ch

http://www.vet.uzh.ch

http://www.vetmed.unibe.ch

# 12.1 Chapter 1

|--|

- 1.2.2. Fakultätsreglement VSF Regulations
- 1.2.3. Organisationsreglement der Vetsuisse-Fakultät <u>Organization Rules</u> students' union <a href="http://www.fachschaft-vetmed.ch/">http://www.fachschaft-vetmed.ch/</a>
- 1.3 studies regulations <u>Studienreglement</u>
- 1.3.2.1 Bachelor course, first year **Study Guides**;

http://www.vet.uzh.ch/Studium/studiengang/jk1.html

http://www.Vetsuisse.unibe.ch/content/studium/studiengang/1\_studienjahr\_bachelor/index\_ger.html

1.3.2.2 <u>"Blockbücher Organblöcke"</u>

Details for 2nd year students can be found in the following Study Guides

http://www.vet.uzh.ch/Studium/studiengang/jk2.html

http://www.Vetsuisse.unibe.ch/content/studium/studiengang/2\_studienjahr\_bachelor/index\_ger.html

Details for 3rd year students can be found in the following Study Guides

http://www.vet.uzh.ch/Studium/studiengang/jk3.html

http://www.Vetsuisse.unibe.ch/content/studium/studiengang/3\_studienjahr\_bachelor/index\_ger.html

1.3.3 Blockbücher klinische Schwerpunkte

Details for 4th year students can be found in the following Study Guides

http://www.vet.uzh.ch/Studium/studiengang/jk4.html

http://www.Vetsuisse.unibe.ch/content/studium/studiengang/4\_studienjahr/index\_ger.html

1.3.3.2 Details for the 5th year students <u>Blockbuch Rotationen</u>

http://www.vet.uzh.ch/Studium/studiengang/jk5.html

http://www.Vetsuisse.unibe.ch/content/studium/studiengang/5\_studienjahr/index\_ger.html

Details to the Masterthesis can be found in the Studies Regulations

internal guidelines "Merkblatt Masterarbeit Merkblatt Masterarbeit

1.4 <u>Studienreglement</u>

Medizinalberufegesetz, MedBG http://www.bag.admin.ch/themen/berufe/00993/index.html?lang=de

Targets "Lernzielkatalog und Anhanghttp://www.bag.admin.ch/themen/berufe/00408/00557/index.html?lang=de Examination Rules Prüfungsverordnung und Erläuterungen)

## 12.2 Chapter 2

2.1.1 information days (http://www.maturandeninfo.uzh.ch/index.html (Zurich)

http://www.infotage.unibe.ch/content/index\_ger.html (Bern)

Programm Studieninfotage UZH and Flyer

program for the "Erstsemestrigentag 2010" Programm Erstsemestrigentag UZH

http://www.generalsekretariat.unibe.ch/content/tag des studienbeginns/index ger.html

- 2.1.2 Students reference: http://www.uzh.ch/news/articles/2009/25000ste-studentin.html
- 2.2.1 Regulations for admittance

for the Canton of Bern <a href="http://www.sta.be.ch/belex/d/4/436\_711.html">http://www.sta.be.ch/belex/d/4/436\_711.html</a>
Admission of foreign students to Swiss Universities <a href="https://www.crus.ch/information-programme/anerkennung-swiss-enic/zulassung/zulassung-in-der-type-th-tag-align-ter-type-th-tag-align-

schweiz/einzelne-laender.html?L=0

Bericht Eignungstest 2008

2.3 Erasmus exchange program

 $\underline{\text{http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte/ERASMUSInfo2010.pdf}}$ 

http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte.html

www.Vetsuisse.unibe.ch/content/studium/information\_und\_beratung/erasmus/index\_ger.html

2.3.1 <a href="http://www.sprachenzentrum.uzh.ch">http://www.sprachenzentrum.uzh.ch</a>

University Bern <a href="http://www.int.unibe.ch/content/incoming/erasmus/index\_eng.html">http://www.int.unibe.ch/content/incoming/erasmus/index\_eng.html</a>

University of Zurich <a href="http://www.int.uzh.ch/index.html">http://www.int.uzh.ch/index.html</a>

http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte.html

http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte/ECTS\_Information\_Package\_06\_07\_e.pdf

- 2.3.4. ECTS (http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte/ECTS\_Information\_Package\_06\_07\_e.pdf)
- 2.4 Studies regulations Studienreglement

**Study Guides** 

Day-1-skills

Catalogue with overall aims of the curriculum Lernzielkatalog

- 2.4.1 Quality assessment and assurance <a href="http://www.iml.unibe.ch/en/services/">http://www.iml.unibe.ch/en/services/</a>
- 2.4.2 Bachelor/Master system; Studies regulations; Studienreglement
- 2.5.1 Promotion regulations; Promotionsreglement

Graduate School in Bern www.gcb.unibe.ch

Life Science Zurich graduate school www.lszgs.ch

2.5.2 For the course programs available to students

http://www.weiterbildung.uzh.ch/programme.html

http://www.vorlesungen.uzh.ch/FS10/lehrangebot/fak-50000006.html;

http://www.vorlesungen.uzh.ch/FS10/lehrangebot/fak-50000006/sc-50017944.html http://www.vorlesungen.uzh.ch/FS10/lehrangebot/fak-50000006/sc-50017945.html

2.6 EBVS. Information: <u>www.ebvs.org</u>

Spezko Reglement Spezko Reglement

National postgraduate clinical training programs www.gstsvs.ch

2.7.1 Student Counselling Systems

UZH: http://www.lehre.uzh.ch/studienfachberatung.html

UniBE: <a href="http://www.erz.be.ch/erz/de/index.html">http://www.erz.be.ch/erz/de/index.html</a>).

Zurich:

Student Counselling: <a href="http://www.studienberatung.uzh.ch/index.html">http://www.studienberatung.uzh.ch/index.html</a>

Psychological advice: <a href="http://www.pbs.uzh.ch/index.html">http://www.pbs.uzh.ch/index.html</a>

Career Services: https://www.uzh.ch/cmsssl/careerservices/index.html

Service for disabled students: <a href="http://www.disabilityoffice.uzh.ch/index.html">http://www.disabilityoffice.uzh.ch/index.html</a>

Information about the stipend system: <a href="http://www.uzh.ch/studies/studentlife/advice/finance.html">http://www.uzh.ch/studies/studentlife/advice/finance.html</a>

Bern:

Student counselling for personal problems <a href="http://www.beratungsstelle.bernerhochschulen.ch/index.html">http://www.beratungsstelle.bernerhochschulen.ch/index.html</a>

Career Services: http://www.infostelle.unibe.ch/content/index\_ger.html

University's Students' Association: http://www.sub.unibe.ch/portale/studierende/index\_ger.html

Service for disabled students: http://www.infostelle.unibe.ch/

2.7.1.1 Offices for student affiars UZH http://www.students.uzh.ch/registration.html

- University of Bern: http://www.infostelle.unibe.ch/content/studierende/index\_ger.html
- 2.7.2 Child care <a href="http://www.kihz.ethz.ch/kihz\_tagesstaetten/kihz\_tierspital">http://www.kihz.ethz.ch/kihz\_tagesstaetten/kihz\_tierspital</a>
- 2.7.2.1 Pregnancy suggestions <a href="http://www.sidi.uzh.ch/activities/arbeitsmedizin/doku.html">http://www.sidi.uzh.ch/activities/arbeitsmedizin/doku.html</a>
- 2.7.3 Students sport association UZH: <a href="http://portal.asvz.ethz.ch/news/Seiten/default.aspx">http://portal.asvz.ethz.ch/news/Seiten/default.aspx</a> unisport in Bern: <a href="http://www.sport.unibe.ch/">http://www.sport.unibe.ch/</a>
- 2.7.5.1 Health initiatives of the VSF http://www.sidi.uzh.ch/activities/arbeitssicherheit/influenza.html

# 12.3 Chapter 3

- 3.1.1 official lecture list <a href="http://www.vorlesungen.uzh.ch/HS10/lehrangebot.html">http://www.vorlesungen.uzh.ch/HS10/lehrangebot.html</a> example of the evaluation forms <a href="Fragebogen">Fragebogen</a>
- 3.1.3 online evaluation form after each rotation Rotationsumfragen
- 3.1.4 Questionnaire for lectures held at Vetsuisse Faculty Fragebogen
- 3.2.1 Didactic courses <a href="http://www.zuw.unibe.ch/content/index\_ger.html">http://www.zuw.unibe.ch/content/index\_ger.html</a>
- 3.2.2 Rules and procedures of the evaluation committee Beförderungsrichtlinien der VSF
- 3.2.3 didactic courses (http://www.zuw.unibe.ch/content/wbzuw/hd/index\_ger.html
- 3.4 Guidelines for the Habilitation; <u>Habilitationreglement</u>
  <a href="http://www.Vetsuisse.ch/assets/VS-Habilitationsreglement\_20091209.pdf">http://www.Vetsuisse.ch/assets/VS-Habilitationsreglement\_20091209.pdf</a>
- 3.4.1 Specifics about Centers for Teaching & Learning <a href="http://www.fwb.uzh.ch/">http://www.fwb.uzh.ch/</a>
  <a href="http://www.afh.uzh.ch/index.html">http://www.afh.uzh.ch/index.html</a>
  <a href="http://www.zuw.unibe.ch/content/wbzuw/hd/index\_ger.html">http://www.zuw.unibe.ch/content/wbzuw/hd/index\_ger.html</a>
  <a href="http://www.didactica.uzh.ch">www.didactica.uzh.ch</a>
  <a href="http://www.didactica.ethz.ch">www.didactica.ethz.ch</a>
- 3.4.2 guidelines for promotion of its staff <u>Beförderungsrichtlinien</u>
  <a href="http://www.Vetsuisse.ch/assets/VL-VS-Befoerderungsrichtl\_090610.pdf">http://www.Vetsuisse.ch/assets/VL-VS-Befoerderungsrichtl\_090610.pdf</a>
  Promotion <u>Promotionsreglement</u>, <u>Beförderungsrichlinien</u>
  Educator track at the VSF Educator Track
- 3.4.2.1 & 3.4.2.2 http://www.vet.uzh.ch/events/Vortraege/WissenschaflichkeitinderMedizin.htm

# 12.4 Chapter 4

- 4.1.1 Library Zurich www.vetbiblio.uzh.ch
- 4.1.2 Library Bern <a href="http://www.vetbibl.unibe.ch/content">http://www.vetbibl.unibe.ch/content</a>
- 4.3.1.1 <u>E-Learning Curriculum</u> database <a href="http://www.e-Vetsuisse.uzh.ch/elearningmedia/medverz.html">http://www.e-Vetsuisse.uzh.ch/elearningmedia/medverz.html</a>.
- 4.3.1.4 E-Learning Library
- 4.3.1.7 Services E-learning <a href="http://www.e-Vetsuisse.uzh.ch/dienstleistungen/studierendedl/uebersicht\_en.html">http://www.e-Vetsuisse.uzh.ch/dienstleistungen/studierendedl/uebersicht\_en.html</a> e-learning media directory (<a href="http://www.e-Vetsuisse.uzh.ch/elearningmedia\_en.html">http://www.e-Vetsuisse.uzh.ch/elearningmedia\_en.html</a> E-Learning Curriculum).
- 4.3.1.8 Evaluation E-learning Bericht E-learning
- 4.3.1.9 Hardware & Software <a href="https://www1.ethz.ch/neptun/">https://www1.ethz.ch/neptun/</a>
- 4.3.1.10 web-based form (<a href="http://www.ictvet.uzh.ch/elmediaform/elmedia.php">http://www.ictvet.uzh.ch/elmediaform/elmedia.php</a> database <a href="http://www.e-Vetsuisse.uzh.ch/elearningmedia/medverz.html">http://www.e-Vetsuisse.uzh.ch/elearningmedia/medverz.html</a>
- 4.3.2 support E-learning programs <a href="http://www.ilub.unibe.ch/content/">http://www.ilub.unibe.ch/content/</a>

# **12.5** Chapter 5

- 5.1.2 teaching module <u>Blockbuch Organ-centered modules</u> OLAT system (www.olat.uzh.ch).
- 5.2 Law of the Medical Professions <u>Prüfungsverordnung</u> catalogue of requirements <u>Lernzielkatalog</u> und <u>Anhang</u> http://www.bag.admin.ch/themen/berufe/00408/00557/index.html?lang=de

# 12.6 Chapter 6

6.2 Document <u>"Reglement über die Organisation des Departements für klinische Veterinärmedizin"</u>

Internal controlling system

http://www.intranet.dkv.unibe.ch/unibe/vetmed/dkv/intranetdkv/content/e7512/e7576/e8794/070913 IKS CA 30.pdf

reports reviewed <a href="http://www.intranet.dkv.unibe.ch/content/departement/kritische\_ereignisse/">http://www.intranet.dkv.unibe.ch/content/departement/kritische\_ereignisse/</a>

- 6.2 Swiss Agency for Accreditation <a href="http://www.seco.admin.ch/sas/">http://www.seco.admin.ch/sas/</a> ISO/IEC 17025 <a href="http://www.seco.admin.ch/sas\_files/STS-255-de.pdf">http://www.seco.admin.ch/sas\_files/STS-255-de.pdf</a>
- 6.3.1 DCP Federal Office for Public Health <a href="http://www.bag.admin.ch/themen/medizin/00706/05450/06022/index.html?lang=de">http://www.bag.admin.ch/themen/medizin/00706/05450/06022/index.html?lang=de</a>

# **12.7** Chapter 7

- 7.1 GST/SVS; <u>www.gstsvs.ch</u>
  - FTVP-Kurs http://www.bvet.admin.ch/themen/veterinaerdienst\_ch/01842/01845/02823/index.html?lang=de
- 7.4 continuing education as one of the primary duties <u>Weiterbildungsstrategie UZH</u> list of all continuing education courses <u>externe Veranstaltungen UZH</u>

#### 12.8 Chapter 8

- 8.2.2 Adacemic Reporting Akademischer Bericht UZH 2009; Akademischer Bericht UZH 2008
- 8.2.3 Leru www.leru.org

# 12.9 Chapter 9

- 9.1 cooperations <a href="http://www.int.uzh.ch/cooperation\_en.html">http://www.int.uzh.ch/cooperation\_en.html</a> declaration with Hannover <a href="Memorandum of Understanding TiHo">Memorandum of Understanding TiHo</a>
- 9.4 Erasmus Contacts <a href="http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte.html">http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte.html</a>

#### 12.10 Chapter 10

10.1.1 Performance Agreement Bern, Leistungsvereinbarung, etc.

Leistungsvereinbarung Brief

Leistungsvereinbarung

Leistungsvereinbarung Berichtsraster

Umsetzungsbericht Strategie 2008

Umsetzungsbericht Strategie 2009

Protokoll Strategiegespräch 2008

Protokoll Strategiegespräch 2009

Planung Professuren, Planung Entwurf

Geschäftsbericht BE 2007/8

Geschäftsbericht BE 2008/9

10.1.2 Stratege planning VSF Zurich

AKADEM. BERICHT 2008

**AKADEM. BERICHT 2009** 

- 10.3. GST/SVS; www.gstsvs.ch
- 10.4 Alumni association www.vet.uzh.ch/fakultaet/alumniwebsite.html

## 12.11 Chapter 11

Self Evaluation Report SER 1 SER

Report of Experts EAEVE EVALUATION REPORT

11.5.1 Faculty Regulations Fakultätsreglement

 $\underline{http://www.Vetsuisse.ch/assets/20071212\_Vetsuisse-Fakultaetsreglement\_Original.pdf}$ 

Guidelines for Recruitment and Promotion at the VSF <u>Beförderungsrichtlinien</u>

http://www.Vetsuisse.ch/assets/VS-Befoerderungsrichtl\_090610.pdf

Guidelines for the educator track http://www.Vetsuisse.ch/assets/EducatorTrack\_091209.pdf, educator track

- 11.5.2 Guidelines Recruitment and Promotion <a href="http://www.Vetsuisse.ch/assets/VS-Befoerderungsrichtl\_090610.pdf">http://www.Vetsuisse.ch/assets/VS-Befoerderungsrichtl\_090610.pdf</a> educator track (<a href="http://www.Vetsuisse.ch/assets/EducatorTrack\_091209.pdf">http://www.Vetsuisse.ch/assets/EducatorTrack\_091209.pdf</a> Guidelines for the Habilitation <a href="http://www.Vetsuisse.ch/assets/VS-Habilitationsreglement\_20091209.pdf">http://www.Vetsuisse.ch/assets/VS-Habilitationsreglement\_20091209.pdf</a>
- 11.5.3 Habilitationsreglement Habilitationsreglement).
- 11.6.3.1 Evaluation Scanscope <a href="http://www.aperio.com/pathology-services/scanscope-XT-system-slides.asp">http://www.aperio.com/pathology-services/scanscope-XT-system-slides.asp</a>
- 11.6.3.3 Clinical record systems

http://www.oblon.ch

http://www.erneconsulting.ch

http://www.merge.com

http://www.parametrix.ch

- 11.6.4 Studies Regulations <a href="http://www.Vetsuisse.ch/assets/VetsuisseStudienreglement.pdf">http://www.Vetsuisse.ch/assets/VetsuisseStudienreglement.pdf</a> internal rules for the master thesis <a href="https://www.Vetsuisse.ch/assets/VetsuisseStudienreglement.pdf">Merkblatt für Masterarbeiten</a> research evaluation of the VSF Zurich <a href="majority:report research evaluation">report research evaluation</a>
- 11.6.5 Fachstelle Studienreform <a href="http://www.studienreform.uzh.ch/index.html">http://www.studienreform.uzh.ch/index.html</a>
  Habilitationsreglement (<a href="http://www.Vetsuisse.ch/assets/VS-Habilitationsreglement\_20091209.pdf">http://www.Vetsuisse.ch/assets/VS-Habilitationsreglement\_20091209.pdf</a>
- 11.6.6 declaration with Hannover Memorandum of Understanding TiHo
- 11.6.6.2 ERASMUS agreement <a href="http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte.html#3">http://www.vet.uzh.ch/Studium/vetmed/austauschprojekte.html#3</a>
- 11.8.1 Concordat VSF Konkordat

regulations of the faculty Fakultätsreglement

http://www.Vetsuisse.ch/de/rechtssammlung.php

schematic diagram <a href="http://www.Vetsuisse.ch/assets/VL-VS-Kompetenz">http://www.Vetsuisse.ch/assets/VL-VS-Kompetenz</a> Funktionendiagramm 090916.pdf

- 11.8.2 Vetsuisse mission statement <a href="http://www.Vetsuisse.ch/en/leitbild.php">http://www.Vetsuisse.ch/en/leitbild.php</a>; <a href="Code of Conduct">Code of Conduct</a>
- 11.8.4 concordat Konkordat