# **European Association**of Establishments for Veterinary Education



### VISITATION REPORT

To the Faculty of Veterinary Medicine – VMF, University of Leipzig, Leipzig, Germany

On 15 - 19 October 2018

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## **Contents of the Visitation Report**

## Introduction

- 1. Objectives and Organisation
- 2. Finances
- 3. Curriculum
- 4. Facilities and equipment
- 5. Animal resources and teaching material of animal origin
- 6. Learning resources
- 7. Student admission, progression and welfare
- 8. Student assessment
- 9. Academic and support staff
- 10. Research programmes, continuing and postgraduate education
- 11. Outcome Assessment and Quality Assurance
- 12. ESEVT Indicators
- 13. ESEVT Rubrics

**Executive Summary** 

Glossary

## Introduction

The Faculty of Veterinary Medicine, University of Leipzig (VMF) (called the Establishment in this report) is one of five establishments for veterinary education in Germany.

The University of Leipzig (Alma mater Lipsiensis) was founded in 1409 by scholars from Prague and VMF was established as the Dresden Veterinary Medical School in 1780. The University was renamed Karl Marx Universität in 1953 and renamed University of Leipzig in 1991.

A huge number of distinguished researchers, Nobel Prize winners and notabilities have worked at the University of Leipzig including Albert Johne, Hermann Baum and the present German Chancellor Angela Merkel.<sup>1</sup>

Since 2013, all institutes and clinics of VMF are now located on one campus. The campus area is in close vicinity to further bio-medical research establishments, like BBZ (Bio-City Leipzig), the Fraunhofer-Institute for Cell Therapy and Immunology and the Max-Planck-Institute for Evolutionary Anthropology, which provides a rich and stimulating environment. Additionally, VMF runs its own agricultural teaching and research facility (LVG Oberholz), situated approximately 10 km from the campus. Clinics are easily accessible to animal owners.

The VMF has been EAEVE evaluated and approved since 2008. Suggestions from the 2008 evaluation have been adapted both with respect to curriculum changes, organisation and facilities and equipment. Main issues and changes identified and addressed by VMF:

- Reorganisation of the large animal clinics (Department for Horses, Department for Ruminants and Swine) has been completed.
- Veterinary Teaching Hospital (VTH) with four departments has been established.
- Five research foci for stimulating scientific exchange have been established.
- Residencies of European Colleges are available in different units.
- Developing catalogues summarising learning objectives and examination topics.
- Further developing preclinical and clinical teaching in body-system-centred foci.
- OSCEs in clinical propaedeutics.
- Establishing a 5<sup>th</sup> year elective track system.
- Introducing students to research- and evidence-based work in the 5<sup>th</sup> year clinical rotation and in the form of project work.
- Encouraging independent studies, particularly in the 5<sup>th</sup> year (tracks, project).
- Encouraging student mobility (e.g. ERASMUS).
- State-of-the-art managed integrated skills lab (PAUL) with 40 training modules.
- Core Unit Virtual Microscopy for all students and employees.
- E-learning and the learning platform Moodle are established and continuously developed.
- E-book platform "VetCenter" for all students and employees.

<sup>1</sup> <a href="https://en.wikipedia.org/wiki/Leipzig\_University">https://en.wikipedia.org/wiki/Leipzig\_University</a>
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- Office for the Student Council ("Fachschaftsrat").
- The Veterinary Council of the State of Saxony recognises the diplomate status of European Colleges as equivalent to the national veterinary specialist title.
- The VMF acknowledges the relevance of the diplomate status in European or American Colleges in appointment procedures.
- Introduction of a Ph.D. degree program is under discussion at the VMF.

However, there are also some difficulties and problems mentioned by the VMF:

- The basic financing of the VMF is marginal.
- There is a lack of means for an attractive "research bonus system".
- A significant number of professorship positions will have to be re-staffed within the next five years.
- There are problems with filling open professorship positions in time and with eligible candidates.
- Financial means for maintenance and repair of the modern research infrastructure is scarce.
- The existing building stock is maintenance-intense, with a constant need for maintenance measures and investment.
- The UL still has to approve permanent supply of personnel in order to organise student teaching and examinations.
- Changes to the structure of the curriculum must comply with the Federal Law (TAppV).
- Options for evaluation of the mandatory EPTs are generally restricted in Germany.
- The regulatory link between available teaching capacity (core-funded staff), curriculum hours and number of students (capacity guidelines) reduces the options to recruit additional staff for teaching or to change the number of incoming students.
- The European legislation on working hours in medicine challenges clinical services.
- The German national law on minimum salaries challenges the VMF finances.
- Rigid employment legislation impedes career opportunities of highly qualified academics.

As usual with German Establishments, the rather strict regulations applicable for all Länder (**Verordnung zur Approbation von Tierärztinnen und Tierärzten** (TAppV) <a href="http://www.lexsoft.de/normensammlung/2232944,1">http://www.lexsoft.de/normensammlung/2232944,1</a>) must be taken into consideration. The TAppV lays down the requirements for all aspects of the veterinary curriculum including examination.

The ESEVT SOP 2016 is valid for this Visitation.

# 1. Objectives and Organisation

### 1.1. Findings

### 1.1.1. Brief description of the Strategic Plan

A clear strategic plan (Appendix 1.1.2, p.122-142) based on a detailed SWOT analysis subdivided into 4 areas (Teaching, Research, Services, Transfer of knowledge to the public) highlights a number of strengths including student representation on many commissions and

committees including appointment committees and curriculum committee (Committee of Study Affairs), a strong interdisciplinary research structure in the Leipzig area (e.g. the Max Planck Institute), support of research spin-off businesses, a strong commitment to involve the society in university life through open days for high school classes, kindergarten and school classes and "long night of science".

However, the VMF points out under each headline that shortage of staff and a weak financial situation are factors prohibitive of further development especially in the research area which is additionally impeded by an insufficient external research funding system and research staff having a high teaching load.

The strategy is to be discussed biannually in a new system within the Saxony state. The strategy is discussed broadly at the Faculty level and then brought up to the University level at annual meetings where the strategy may also be adjusted. This, however, is a new initiative at the Leipzig University and the VMF.

The mission statement is clear and concise:

- to teach sustainably
- to create knowledge with enthusiasm
- to practice veterinary medicine competently

### 1.1.2. Brief description of the Operating Plan

A relevant and comprehensive operating plan (appendix p. 122 - 137) is incorporated in the description of the strategic plan including milestones and details for:

- mission statement
- prioritisation
  - o Focusing research activities on the university's research focus areas
  - Internationalisation of teaching and research activities
  - Offering a high-quality curriculum (that is continuously being re-evaluated and improved)
- general issues
  - o Management and further development of high-quality continuing education opportunities
  - Appointment of professorship positions considering the VMF's research foci in order to further develop the research profile and to strengthen the university's research focus areas
  - o Optimisation of the use of resources
  - o Further development of the VMF's centres by increasing the autonomy regarding the centres' resources
  - o Establishment of additional Core Units and a central diagnostic laboratory
- teaching
  - o Continued development of courses offers a paradigm shift with focus on
    - Expansion of the 'Clinical skills lab' (PAUL)
    - Strengthening of patient-side teaching at the teaching and research farm Oberholz
    - Elective option for paraclinical and clinical training focused on food animals
  - o EAEVE Accreditation 2018
  - o Creation of an institute for 'animal welfare and ethology' according to TAppV

- Appointment of a professor for 'molecular genetics' in order to secure the area of 'animal breeding and genetics' according to TAppV
- o Cooperation with the teaching and research farm Köllitsch of the SMUL
- research
  - o Combining resources relevant for research (competence, personnel, instruments)
  - o Developing interdisciplinary associations (further goal: research groups, graduate college)
  - o Increasing overlaps with research networks outside of the Faculty
- services
  - o Research-related services & patient care
  - o Establishment of species-based departments/clinics
  - Continuation of central equipment platforms
  - Establishment of a central laboratory for clinical diagnostics and, in the medium term, infectious disease diagnostics including the establishment of bio banks as platforms for research projects
- staff and organisation
  - Support for centres
  - Targeted content specifications for new appointments with consideration of FSP input
  - o Professorship in animal welfare and ethology
  - o Appointment 'molecular animal breeding', joint appointment BBZ
  - o Research orientation of the LVG Oberholz
  - Development of a Centre of Excellence for clinical laboratory diagnostics and laboratory medicine

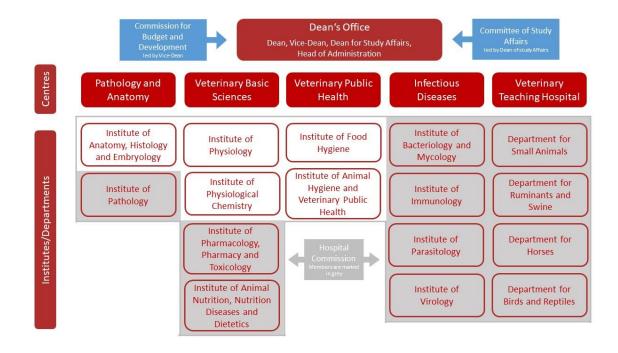
## 1.1.3. Brief description of the organisation of the Establishment

The VMF is organised in a matrix structure with 5 overarching centres:

- Pathology and Anatomy
- Veterinary Basic Sciences
- Veterinary Public Health
- Infectious Diseases
- Veterinary Teaching Hospital

However, the centres do not have financial power or HR-power but function as coordinating centres in a non-prescriptive manner - e.g. coordination of acquiring and maximum use of expensive infrastructure.

The VMF is organised according to the organigram below:



Institutes in grey shadow have an influence on the clinical training.

The Dean refers to the Rector of the Leipzig University and heads the Faculty Council, which also incorporates 3 student members out of 19 members which are all elected. The Dean does have the power to decide on all issues related to running the VMF. In each Faculty Council meeting there is a public section where all staff and students may participate.

The VMF has a rather limited number of commissions including the Faculty Council (FR):

	Professors and academics	Support staff	Students
Faculty Council	13	3	3
Promotion commission	8	-	-
Research commission	13	-	3
Hospital commission	12	-	-
Commission for Budget and Development	10	1	2
Committee of Study Affairs students	6	-	6
Animal Welfare Commission	5	2	-
Commission LVG Oberholz	4	2	-

Stakeholders have a way of putting forward suggestions (mutual meetings and arrangements and also general applications from the overarching German associations which meet annually

with the Deans from the 5 German veterinary schools for e.g. curricular changes) but there is no formal forum where the VMF meets regularly with Saxony stakeholders.

# 1.1.4. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the Strategic Plan and organisation of the Establishment

The Strategic Plan and the organisation have been developed and decided through a process of dialogue, construction of strategic themes, committee work, QA-assessment (illustrated with a Plan-Do-Check-Act cycle), implementation, adjustments and communication involving among others also the Faculty Board and external stakeholders.

### 1.2. Comments

It is commendable to operate with a highly useful and subdivided SWOT analysis.

It is commendable that the Deans of Study Affairs of the five German veterinary faculties have regular meetings to facilitate closer cooperation in curricular matters.

It is commendable that students are represented in committees and commissions at the VMF.

There is no formal forum where the VMF meets regularly with stakeholders, which is not in accordance with Standard 1.5.

There is no professorial coverage due to lack of financial support of the subjects "Animal Welfare and Ethology" and "Animal breeding and Genetics" both of which have an increasing impact on a significant number of research areas.

There is no formal PhD-programme.

### 1.3. Suggestions for improvement

Although a lot of informal consultation with external stakeholders takes place, it is strongly recommended to officialise the relationship with these external stakeholders in, for example, an advisory body to the Dean, and to organise a QA procedure ensuring the input of external stakeholders.

It is suggested that VMF invites a student to participate as full member of the Animal Welfare Commission and the LVG Oberholz Commission.

The efforts to establish a PhD-degree programme should be continued and enforced, e.g. in collaboration with other faculties either in Leipzig or within the VetFive group.

### 1.4. Decision

The Establishment is partially compliant with Substandard 1.5 because of absence of a formal collection of the input from stakeholders.

## 2. Finances

## 2.1. Findings

# 2.1.1. Brief description of the global financial process of the Establishment and its autonomy on it

There are two main sources of income for the VMF: public funds allocated by the Saxon relevant Ministry (SMWK) through the UL (1) and secondly, income derived from areas such as clinical services and research grants (2).

1. The UL receives a budget from the SMWK based on the number of students, cost of staff, as well as adherence to target agreements. The Budget Commission of UL discusses the distribution of the budget and the rectorate assigns the budget devoted to the VMF. The income allocated for running budget (TG51) and salaries (HKM) is based on a calculation model that considers, among others, the teaching load, itself being fixed

- by law (TappV). All other budgets (including investments) are to be discussed among Deans within the UL. The on-call services of the clinics receive a small but specific allocation.
- 2. The income which is derived from own sources remains in the respective institutes and clinics and is used autonomously, except a 5% withholding for the central VMF budget, which is used for transversal investments. The Clinic Commission is annually informed and associated to the faculty's plans for the next year. Additional income is provided by different means including the alumni (FKT). There is no tuition fee, the only fee (206€) being charged to students is for public transportation. Research grants from private origin are cut by a 40% overhead which is considered as a limiting factor for the collaboration with industry.

## 2.1.2. Brief description of the budget (expenditures, revenues, balance) of the last 3 years

The contributions from the State remains stable. Material costs during the last years were constant to slightly declining, while the service revenues were constantly increasing, leading to a slight financial surplus.

The VMF supplied the team with a revised version of table 2.1.1. including the Personnel costs in more details.

Table 2.1.1. Annual expenditures during the last 3 academic years (in Euro) Information based on calendar years. Information based on academic years is not possible.

Area of expenditure	2017	2016	2015	Mean
Personnel costs	22,658,427	21,782,352	20,094,633	21,511,804
Operating costs	2,099,034	2,165,682	2,185,640	2,150,119
Maintenance costs	754,539	508,984	634,269	632,598
Equipment	6,048,934	5,178,708	5,556,787	5,594,810
Total expenditure	31,560,936	29,635,726	28,471,330	29,889,330

Table 2.1.2. Annual revenues during the last 3 academic years (in Euro)

Information based on calendar years. Information based on academic years is not possible.

Revenue source	2017	2016	2015	Mean
Public authorities	21,157,801	20,693,964	19,280,406	20,377,390
Tuition fee (standard students)	n.a.	n.a.	n.a.	n.a.
Tuition fee (full fee students)	n.a.	n.a.	n.a.	n.a.
Clinical Service	5,008,863	4,715,408	4,027,466	4,583,912
Diagnostic Service	832,979	803,963	463,076	700,006
Other Services (Core Units, VetiData)	355,775	407,903	398,205	387,294

Research Grants	4,081,146	3,629,946	4,457,508	4,056,200
Continuing				
Education	196,646	196,646	171,410	188,234
Donations	27,970	43,500	50,755	40,742
Other sources (FKT)	48,810	55,888	28,329	44,342
<b>Total revenues</b>	31,709,990	30,547,218	28,877,156	30,378,121

**Table 2.1.3. Annual balance between expenditures and revenues (in Euros)** 

Information based on calendar years. Information based on academic years is not possible.

Calender year	Total expenditures	Total revenues	Balance***
2015	28,471,330	28,877,156	405,826
2016	29,635,726	30,547,218	911,492
2017	31,560,936	31,709,990	149,054

# 2.1.3. Brief description of the projected budget (expenditures, revenues, balance) of the next 3 years

The contributions from the State, based on calculations, is not expected to change in the future. The service revenues are expected to increase, maintaining a slight financial surplus. These overall financial resources are considered as insufficient by the Faculty, considering that the budget coming from the state does not even cover the costs of the training.

### 2.1.4. Brief description of the planned or on-going investments

Further investments are planned and clearly charted by the VMF, with strong support from the UL and from the Saxonian State. For the next years, the highest amount of money is deserved to a planned rebuilding of the Institutes of Pathology and Parasitology (27 M€).

# 2.1.5. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the budget of the Establishment

As soon as investments are planned to be expensive, they are discussed in the FR. Building investments that are higher than €1.5M have to be ratified by the German parliament and the corresponding funds are reserved for the relevant construction.

### 2.2. Comments

It is commendable that the clinics constantly increase their income and contribute to transversal investments in a growing and participative manner. However, the UL has to take into account that the teaching hospitals must function as instructional resources. This includes awareness of the students of the necessary financial balance of a veterinary clinic, but it should not to be considered as a substitute for public funding. In other words, instructional integrity of these resources must take priority over financial self-sufficiency of clinical services operations, including 24/7 emergency activity, which is a clear requirement in the SOP.

Moreover, the resources allocated by the UL are available late in the year, leading to some difficulties in strategically planning expenses.

### 2.3. Suggestions for improvement

None.

### 2.4. Decision

The Establishment is compliant with Standard 2.

### 3. Curriculum

### 3.1. General curriculum

### **3.1.1. Findings**

# 3.1.1.1. Brief description of the educational aims and strategy in order to propose a cohesive framework and to achieve the learning outcome

The federal Ordinance TAppV from 2006 concerning the Certification of Veterinary Surgeons orders in an integral way the training of all German veterinarians, defining a very closed curriculum with a structure that regulates the total hours for subjects but not the teaching distribution. This law which is common to all states includes the

- objectives of delivering an academically and practically trained veterinary surgeon capable of a responsible and independent practice committed to the well-being of humans, animals and the environment, with an attitude of life-long learning;
- a standard duration of five years and six months for the entire training (structured in11 semesters), divided into pre-clinical and clinical studies;
- the contents that shall be imparted in an interdisciplinary, problem-oriented manner in line with the object of teaching, rather than being oriented to the individual disciplines;
- an examination system that is supplemented with the Study Regulations and Examination Regulations of the study programme Veterinary Medicine at the University of Leipzig.

Constitutes a cohesive framework that aims at the preparation of students for the common examinations "Preliminary Veterinary Examination" and "Veterinary Examination" that ensures the responsible veterinary practice, with special regard to QA.

# 3.1.1.2. Brief statement if all EU-listed subjects are taught in the core curriculum to each student (independently of the tracking system)

The TAppV states that in the Veterinary Curriculum the requirements of Article 38 of Directive 36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications (OJ EC L 178 p.7) must be satisfied.

In this sense, the required information should be extracted from Table 3.1.2. that was found not to be correctly completed. Upon request, a new 3.1.2 table was provided as specified in the SOP. According to it, the programme of studies almost entirely complies with the EU-listed subjects as updated in the ESEVT SOP 2016, except for not differentiating between Basic Subjects and Basic Sciences. Minor variations can be seen when some subjects are part of others or are located in a different group: such is the case of diagnostic pathology together with Pathology, or Animal Production together with General and molecular genetics and Animal breeding; both considered in Basic subjects. As for Professional Communication listed as a Basic Science, it is included in different parts of clinical education.

Despite this new table and the explanations within concerning some subjects' considerations, Herd Health Management cannot be traced, nor can be Economics as this one is not required by TAppV.

# 3.1.1.3. Brief description of how curricular overlaps, redundancies, omissions and lack of consistency, transversality and/or integration of the curriculum are identified and corrected. Different faculty bodies guard the course of the study.

The Dean of Study Affairs initiates plans and timetables for teaching, which are subsequently discussed and agreed on first by the Committee of Study Affairs and thereafter by the FR before being published on Moodle and the website. The Committee of Study Affairs is involved in evaluating the lectures. The results are fed back to the Dean of Study Affairs and the foci representatives.

Within the foci of the 2<sup>nd</sup> to 4<sup>th</sup> semesters, the different subjects of basic (pre-clinical) veterinary sciences are taught in an integrated and timely coordinated manner considering aspects of anatomy, histology, embryology, physiology and biochemistry. Teaching focuses on an organ system or a functional system within the body, integrated with some clinical teaching done by clinicians to provide examples, for the relevance and application of basic sciences. The coordination and synchronisation of the different disciplines within the focus enhances learning, consistency and transversality, and a significant integration of the curriculum.

Coordination exists between representatives of the integrated education foci and the relevant subject lecturers, students and the Dean of Study Affairs, by means of meetings at the end of the foci to collect all inputs that may contribute to the common improvement of the course contents and to minimise the possibilities of overlaps and redundancies.

The newly designed subject specific learning objective catalogue developed and coordinated by the Office and Dean of Study Affairs is accessible for students and lecturers. This constitutes a tool to check potential omissions and enhance consistency, being used as an instrument for revision suggestions or identifying curricular deficiencies (PDCA-cycle).

# 3.1.1.4. Description of the selection procedures of the Electives by the students and the degree of freedom in their choice (e.g. what happens when too many students select one specific track)

There are "obligatory electives" defined by TAppV, section 2 (3) which establishes a minimum of 308 hours of optional courses for all students to participate between 1<sup>st</sup> and 9<sup>th</sup> semesters, that the university must offer and in the subject areas defined in Annex 1 of the same law; in FVL this is organised as:

- 84 hours that must be in the Anatomical-Physiological Stage (preclinical) of the Preliminary Veterinary Examination, with 4 different tracks designed to give the students the opportunity to choose the preferred one to make 56 hours of the total 84 hours required. These are "obligatory electives" and in consequence the offer guarantees enough space for all students. Nevertheless, for the assignment of this obligatory track, students have to list a first, second and third choice. The remaining 28 hours can be selected freely out of a wide range of additional elective courses (approximately 20 per semester) with no enrolment restriction and enough posts available.
- A total of 224 hours reserved for electives in the intramural clinical veterinary training (5<sup>th</sup>-11<sup>th</sup> semesters), with at least 126 hours to perform selecting three tracks -out of a total of 6- in the subjects of the Veterinary Examination; some tracks are more popular and demanded by students and the posts available limited by the resources of the

different institutes. When applications exceed the posts available, random selection is put into practice. The remaining 98 hours are dedicated to "project work".

# 3.1.1.5. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the curriculum

The veterinary curriculum is defined by federal law by the German Ordinance concerning the Certification of Veterinary Surgeons (TAppV) which sets a rigid framework. Only the Federal Ministry of Food and Agriculture (BMEL) can make adjustments.

The biggest stakeholder is the Assembly of the German Veterinary Medical Education Institutions, which in turn represents all stakeholders of the veterinary profession. Based on the input of the Assembly, the Ministry compiles a draft legislation that has to be approved by the German Federal Council.

Development and delivery of teaching are under the responsibility of the professors representing the disciplines. The Dean of Study Affairs and the Committee of Study Affairs are responsible for the proper implementation of the curriculum within the framework provided by the TAppV, as well as for monitoring it and identification of potential curricular deficiencies.

Students are the internal stakeholders involved in the development, implementation, assessment and revision of the curriculum providing their input through formal evaluation, direct communication with the Dean of Study Affairs and through their elected representatives with voting right in the Committee of Study Affairs.

### 3.1.2. Comments

The TAppV is a federal law that rules every aspect of the curriculum and sets its framework in a very rigid way. Its section 1, establishes the objectives and structure of veterinary training that shall comprise:

- An academic-theoretical component of studies during no more than 4.5 years with 3,850 hours of both compulsory and optional courses, at a university (intramural).
- A <u>practical component of studies</u> of 1,170 hours in different aspects of the profession, sometimes under veterinary supervision, but <u>not at the or under the supervision of the university</u>, although some under veterinary supervision: depends on destination. (Appendix F, p.70-71).

As a general finding, adding the hours dedicated to the activities disaggregated in annex B for each semester does not coincide with the global figures in table 3.1.1 (some partial and all the totals). Explanation given is the existence of the interdisciplinary course/subject. However, it is still difficult to understand the mismatch because no matter where those 196 hours can be allocated, they are part of the total 3,850 hours of the theoretical-scientific training fixed in TAppV.

Ordinance TAppV section 2 establishes 308 hours of optional courses and most of them are obligatory electives, something that is far away from the concept of elective subject as a free offer/free choice type of subject, that usually differs between universities and responds to a certain track or orientation of the Establishment, or the specific expertise of the academic staff. No external stakeholders are involved in the processes of development, implementation,

assessment and revision of the curriculum.

The existence of the learning objectives catalogue is a very new learning tool and a valuable example of good practices.

### 3.1.3. Suggestions for improvement

Training in economics - other than the part that is embedded in the small animal clinical practice training - should be introduced in the curriculum to fully comply with ESEVT standards by including all the EU-listed subjects as required in the SOP.

### 3.2. Basic sciences

## **3.2.1. Findings**

### 3.2.1.1. Brief description of the theoretical and practical education in basic sciences

The basic subjects in the VMF curriculum are located essentially in semesters 2 to 5 (a few also in 6 - 8, and pathology: necropsy in 9). Some of the EU-list can't be found separately while a couple are merged with clinical sciences (special pathological anatomy and histology) or animal production subjects (animal breeding and genetics); professional communication is offered as elective while epidemiology (included in the subject "control of animal epidemics, epidemiology" (TAppV-listed subject) and professional ethics (as a part of the clinical sciences lectures) doesn't appear as such, but are taught with others.

Other than this, in the general aspect there is a higher proportion of lectures and seminars (537.8 h) regarding practical activities (356 h) meaning roughly a rate of 66:33. This responds to the academic-theoretical type of education specified in the TAppV ordinance for the first 4.5 years.

There are 40 hours of "small clinical rotation" to be held during the 3<sup>rd</sup> and 4<sup>th</sup> semesters in all clinics of the VTH. The number of cadavers and animal materials for anatomy is enough, though whole large animals are rarely used. Fresh and plastinated specimens are preferred to preserved ones, though these are also used as well. For pathology, cadavers are sufficient as well, with a clear predominance of pigs and cats. Poultry, birds and exotics necropsies are numerous and performed in the department of birds and reptiles as part of the follow up of the cases handled there.

As for anatomy and pathology, premises are well equipped but there are biosafety issues especially concerning the access to the necropsy room (see 4.1.5). The histopathology laboratory has been totally renewed.

### 3.2.2. Comments

Within the foci of the 2<sup>nd</sup> to 4<sup>th</sup> semesters, the different subjects of basic veterinary sciences are taught in an integrated and timely coordinated manner considering aspects of anatomy, histology, embryology, physiology and biochemistry. Teaching focuses on an organ system or a functional system within the body, integrated with some clinical teaching done by clinicians to provide examples, for the relevance and application of basic sciences. The coordination and synchronisation of the different disciplines within the focus should enhance learning, consistency and transversality, avoiding repetitions though this is not always achieved and highly depends on the focus coordinator.

Despite this integrative design that favours coordination and transversality, there is a great proportion of lectures vs practical activities considering that foci design is basically of the lecture type.

The "small clinical rotation" is a full immersion in the clinical activities for the  $2^{nd}$  year students that have had no previous contact with the clinical subjects. This surely is very motivating for students; clinical staff is satisfied with this early contact.

### 3.2.3. Suggestions for improvement

Consider introducing more practical activities in general as there is an obvious imbalance with lectures (see 3.2.1.1)

# 3.3. Clinical Sciences in companion animals (including equine and exotic pets)

## **3.3.1. Findings**

# 3.3.1.1. Brief description of the theoretical, practical and clinical education in Clinical Sciences in companion animals

Theoretical, practical and clinical education in the field of companion animals starts in first and second semesters, where clinical cases are explained during theoretical lessons on basic subjects. In third and fourth semester students start to participate in clinical routines totalling 40 hours, although the species are not specified.

Clinical education is mostly organised between fifth and eight semester totalling more than 600 hours (according to SER 672 hours). Additional to the compulsory programme there are also elective courses of clinical education in total amount of 426 hours. All those hours are according to SER and do not specify animal species.

Additionally, to classical lessons the skills lab PAUL where a variety of essential skills such as suturing, intubating, different examination techniques can be practiced has been established. This self-directed learning is accompanied by protocols and videos supervised by more experienced students as tutors. The aim of PAUL is to give the students an opportunity to develop and strengthen their practical and Day One Competences with standard operating procedures.

Prerequisite for participation in clinical rotations during 5<sup>th</sup> year of study is regular and successful participation in the required courses.

# 3.3.1.2. Description of the core clinical exercises/practicals/seminars in companion animals prior to the start of the clinical rotations

Students start to participate in clinical rotations and work in the first to fourth preclinical semesters, where lectures on basic subjects are combined with clinicians' participation to provide an outlook on why preclinical basic knowledge is so important for their studies and practical implementation.

In fifth year of study (9<sup>th</sup> and 10<sup>th</sup> semester) clinical rotations are organised as follows; 1 week in department of birds and reptiles, 3 weeks in department for horses and 5 weeks in department for small animals. Additionally, to obligatory subjects in clinical work there are some electives in clinical work with horses, rabbits, rodents, exotic pets and zoo animals and for small animals for 42 hours also scheduled in 5<sup>th</sup> year.

In 5<sup>th</sup> year there are obligatory clinical rotations for 9 weeks participating in regular clinical duties, including night and weekend services where they are actively involved in every day clinical work, attend seminars and exercises on practice relevant topics and they are encouraged to write case reports (not obligatory).

# 3.3.1.3. Description of the core clinical rotations and emergency services in companion animals and the direct involvement of undergraduate students in it

Each student is required to accompany patients during their diagnosis and treatment in stationary or ambulatory clinics to learn and practice their rolls as primary responsible veterinarians including communication with owners, billing procedures and discharging the patient.

During a five-week clinical rotation in the Department for small animals, students accompany two services on weekdays from 15.30 to 08.00 next day and once during the weekend for 24 hours.

### 3.3.2. Comments

Students have sufficient possibilities to learn all practical knowledge for every day work. However, it would be commendable to introduce generally that students use logbooks.

According to the SER the study load is high and it would beneficial if the curriculum committee within the limits of TAppV could adjust the curriculum.

## 3.3.3. Suggestions for improvement

None.

# 3.4. Clinical Sciences in food-producing animals (including Animal Production)

## **3.4.1. Findings**

# 3.4.1.1. Brief description of the theoretical, practical and clinical education in Clinical Sciences in food-producing animals

The education in food-producing animals is spread throughout the duration of the course. Agricultural theory and botany are in the first semester with animal breeding and genetics, breeding theory, livestock judging and animal welfare and ethology in the second semester. Further lectures on animal breeding and genetics, and lectures and practicals on animal nutritional science follow in the 3<sup>rd</sup> Semester. Further lectures on animal welfare and ethology are spread between semesters 5 and 6. A strong component studying birds and reptiles commences in semester 4. Exposure to clinical cases in all production species commences in semester 3 or 4 depending on student group. Clinical propaedeutics lectures and practicals are in semester 5 consolidated by exposure to clinics for 44 hours (half of which are in food-producing animal clinics) in semester 6. The systems focus of the 6<sup>th</sup> semester makes the balance of species coverage difficult to identify but Semester 7 then contains animal husbandry, herd management, and food hygiene / science and further exposure to the clinics. A large component of milk science in 7<sup>th</sup> and 8<sup>th</sup> semesters is identified.

Adequate numbers of animals of farm animal species are seen. Compulsory intramural clinical rotations are only 3 weeks for ruminants and swine plus a week of birds and reptiles which included a proportion of exposure to food producing units. However, as outlined above there has already been exposure to clinics for 3 weeks prior to the main clinical rotations. A wide range of elective courses are available in Semesters 2-4. These include animal feed analysis, clinical propaedeutics (ruminants), Composition of feed rations. The bulk of clinical experience is achieved by mandatory ETP. The species split of the EPT for each student or the species selection of elective are decided by the student, other than that 3 tracks of 42 hours are taken in 9<sup>th</sup>/10<sup>th</sup> Semester and one of these is in livestock and herd management. Other tracks may have an element of food animal exposure in VPH and diagnostics. Clinical rotations in Ruminants and Swine are very staff intense, with one member of Clinic for ruminants to not

more than three students. The species selection during these periods will determine the experience of the students in food producing species clinical science to a very great extent.

Poultry coverage is good throughout the programme as part of the Department for birds and reptiles and minor species, such as bees and fish are also covered in Semester 8.

# 3.4.1.2. Description of the core clinical exercises/practicals/seminars in food-producing animals prior to the start of the clinical rotations

A sequence of lectures, exercises and clinical demonstrations on animal disease, ruminants & pigs, reproduction, poultry in semester, 3 to 8 prepare the students for clinical rotations. A small rotation in 3<sup>rd</sup>/4<sup>th</sup> semester and further 44 hour sessions in clinics during semesters 7 and 8 also prepare students. The organ centred "focus" in semester 6 covers all species. "focus" sessions in 7<sup>th</sup> semester then include birds and herd management.

# 3.4.1.3. Description of the core clinical rotations, emergency services and herd health visits in food-producing animals and the direct involvement of undergraduate students in it

Compulsory intramural clinical rotations are 3 weeks for ruminants, one of which is on the ambulatory clinic, plus a week of birds and reptiles, which included a proportion of exposure to food producing units. However, as outlined above there has already been exposure to clinics for 3 weeks prior to the main clinical rotations. A further track of 21 hr. of seminars and 21 hr of practicals in livestock and herd management are available, but not compulsory. All clinics have emergency out of hours services attended by students, including during their preclinical training. The SER states appropriate responsibility in clinical care, documentations of treatment etc.

### 3.4.1.4. Brief description of the theoretical and practical education in Animal Production

The education in animal production commences in the first semester with agricultural theory and botany followed by animal breeding and genetics, breeding theory, livestock judging and animal welfare and ethology in the second semester. Further lectures on animal breeding and genetics, and lectures and practicals on animal nutritional science follow in the 3<sup>rd</sup> Semester. Further lectures on animal welfare and ethology are spread between semesters 5 and 6. A strong component studying birds and reptiles commences in semester 4. The systems focus of the 6<sup>th</sup> semester makes the balance of species coverage difficult to identify but semester 7 then contains animal husbandry, herd management, and food hygiene / science and further exposure to the clinics. A large component of milk science in 7<sup>th</sup> and 8<sup>th</sup> semesters is identified. Mandatory EPT in agriculture is required by law for 2 weeks at an official agricultural training and research station or four weeks if done on a farm that is registered / certified to educate agricultural trainees.

### **3.4.2.** Comments

An opportunity to cooperate with the Saxony State Teaching Farm in Köllitsch and some private farms with which they have special agreement (farms with more than 1000 cattle) and also other private farms which asks for help or consultancy will enable the VMF to offer training in agriculture and applied training in a large scale farm setting. The clinical skills lab (PAUL) is commendable and the sessions are well integrated as preparation for rotations. It is important that there is a planned approach to gaining clinical skills culminating in exposure to live animals.

### **3.4.3.** Suggestions for improvement

Longer clinical rotations focussed on cases or clear guidance of EPT placement could ensure a larger minimum amount of food animal experience for all candidates

Quality control of EPT in VPH is good. This model should be used for EPT in all areas.

## 3.5. Food Safety and Quality (FSQ)

## **3.5.1. Findings**

### 3.5.1.1. Brief description of the theoretical and practical education in FSQ

Teaching in the food sciences is given as lectures and laboratory desk based work (food science, meat science, milk science, meat and poultry hygiene, residues and contaminants in food), and non-clinical animal work (practical training in meat inspection). The students further develop their skills in hygiene control, food monitoring, food examination, ante and post mortem meat inspection with extramural practical training and coaching. The contents of the curricula correspond with the teaching catalogue in Food, Meat and Dairy Hygiene in Germany, Austria and Switzerland and include those indicated in the sections 45-47 of the German Ordinance concerning the Certification of Veterinary Surgeons.

# 3.5.1.2. Description of the teaching in slaughterhouses and in premises for the production, processing, distribution/sale or consumption of food of animal origin

Lectures and laboratory desk based work are given in the 7<sup>th</sup> and 8<sup>th</sup> semester. The practical training can be completed between the 7<sup>th</sup> and the 10<sup>th</sup> semester. The practical course in meat inspection and meat hygiene take place in the slaughter facility at the 8<sup>th</sup> semester, with the students divided in groups of seven to ten students per tutor/carcass. The technology and the hygiene of the slaughtering process is demonstrated in the slaughter facility of the VMF. In addition, visits are organized (small groups) at nearby abattoirs for pigs, cattle and poultry and at a deer farm, where ante and post mortem inspection can be demonstrated.

For the practical courses in food and milk hygiene students must prepare themselves by using interactive learning programme (Moodle). Further, the facility for milk technology is used to demonstrate processing of milk and products thereof and their chemical-physical analysis. Additional practical training and coaching is given at Veterinary Inspection Offices at the 9<sup>th</sup> and 10<sup>th</sup> semesters. The evaluation of external practical training (EPT) is mandatory for each student and is a prerequisite to get the permission to sit further exams. The EPT supervisors evaluate practical and theoretical skills of the students and in parallel the students evaluate the local learning possibilities thus the VMF obtain a feedback of the about the competencies of their students and receive information on the training the students underwent during their EPT.

Students are free to pick additional courses with a track concerning veterinary public health where topics such as food law, food microbiology, sensory evaluation, HACCP and product specific process control are taught as seminars, laboratory desk based work and non-clinical animal work.

### 3.5.2. Comments

None.

### 3.5.3. Suggestions for improvement

None.

## 3.6. Professional knowledge

## **3.6.1. Findings**

## 3.6.1.1. Brief description of the theoretical and practical education in Professional Knowledge

In accordance with the curriculum, students must spend 682 hours on clinical practical training in all common domestic species and 600 hours of lectures and laboratory work in medicine and

surgery (incl. anesthesiology), diagnostic imaging, obstetrics, reproduction and reproductive disorders and propaedeutic.

Students in 5<sup>th</sup> and 6<sup>th</sup> semester must spend 150 hours in private practices or clinics (small and large animals) and students in 9<sup>th</sup> and 10<sup>th</sup> semester 700 hours also in private clinics including small and large animals.

### 3.6.1.2. Brief description of the organisation, selection procedures and supervision of the EPT

The EPTs are organised by the students, with no supervision/coordination from the Establishment. In this sense, the EPT does not meet exactly the SOP Substandard 3.8 with respect to EPT providers' evaluation of student performance.

Elsewhere in this SER (p.3) it is said that options for evaluation of the mandatory EPTs are generally restricted in Germany. The budgets allocated to the veterinary establishments are designated for university-bound intramural education, therefore there are no contractual agreements between the external training facilities and German veterinary faculties and that it is within the responsibility of the veterinary profession to provide their service capacity for extramural training of students. It is also stated that these reasons impede the faculties to directly influence the content and quality of EPTs.

# 3.6.1.3. Description of the procedures used to ascertain the achievement of each core practical/clinical activity and professional knowledge by each student

According to the SER and interviews during the Visitation, logbooks are not generally used.

### 3.6.2. Comments

Clinical rotations outside VMF are initiated based on students' individual proactive work. VMF should organize clinical rotations on EPT in a systematic way.

### 3.6.3. Suggestions for improvement

Introduce logbooks

For QA in clinical EPT the loop has to be closed in order to have a valid PDCA cycle. It is recommended that the clinical EPT's are coordinated by an academic staff member and that the evaluation of trainer and trainee is formalised.

## 3.7. Decision

The Establishment is compliant with Standard 3, except for Substandards 3.8 and 3.10.

The Establishment is partially compliant with Substandards 3.8 and 3.10 because of suboptimal EPT organisation.

## 4. Facilities and equipment

### 4.1. Findings

# 4.1.1. Brief description of the location and organisation of the facilities used for the veterinary curriculum

The VMF is organized in around ten groups of buildings corresponding to either institutes or clinics, the latter being now species-oriented (small animals, horses, ruminants and swine, birds and reptiles). This organization is in agreement with the strategic plan of the VMF.

## 4.1.2. Description of the adequacy for the veterinary training of the premises for:

### -) lecturing, group work and practical work

The number and equipment of lecture rooms (8, each of 90 to 160 seats) and seminar rooms (40 from 2 to 72 places) is adequate. Each hall/room has adequate technical infrastructure. The rooms for practical work also are available and of high standard. (check equipment, microscopes, protection, eye-washers etc.).

The number and equipment of lecture rooms (8, each of 90 to 160 seats) and seminar rooms (40 from 2 to 72 places) is adequate, even if one lecture hall at the moment is not used because of fire safety reasons. Each hall/room has adequate technical infrastructure. The rooms for practical work also are available and of high standard. One practical room in the Institute of Parasitology is old-fashioned but its renovation is already planned and financed. All these rooms are provided with excellent relevant equipment, and security/safety is taken into account in these rooms (first aid kits, eye washers, fire extinguishers etc.).

### -) housing healthy, hospitalised and isolated animals

There is four species-oriented clinics. The bird, reptiles and exotics clinic is totally separated from the small animal clinics, so that these animals are not stressed by a possible encounter with a carnivore. All clinics have their own diagnostic laboratory and, at request, samples can be sent to the relevant institute for specific diagnostic tests. The horse clinic for internal medicine has an accredited sterilization facility for surgical material and endoscopes. The other clinics can make use of this facility. The horse surgery room is not closed to the induction/recovery room and there is no hoist between them, so that the sleeping horse has to be put on a specific rolling cart. Isolation facilities are present in the small animal, but positioned in a less than ideal place in the cellar where there is no proper division between clean and dirty ways and animals must leave the building on the same way it entered, . Both equine and small animal clinics run a 24/7 emergency service, which was the major source of increased income in recent years. Students share with staff social rooms for cooking and leisure and have access to reserved sleeping quarters.

## -) clinical activities, diagnostic services and necropsy

The dissection and necropsy facilities are well equipped, ventilated and lit. The access to these rooms is organized in a way that students have enough space to change before and after the sessions, and enough lockers to leave their boots for all the week. There is a colour code for the boots, so that the students do not use the same boots for working on the farm, attending to necropsy sessions or to food hygiene training (but they have to buy at least three pairs of boots). A large footbath is available at the entrance of the necropsy hall, but it is possible to walk on its border and to escape from disinfecting the boots. Moreover, the space organization in the entrance and the locker room doesn't allow a real separation of the clean and dirty circuits.

### -) FSQ & VPH

The VMF runs two very well equipped small slaughterhouses, one of them being on-site in the Institute for Food Hygiene and the other one in the Oberholz farm. The halls offer great opportunities to teach students without taking risk to disturb the activity of a commercial slaughterhouse, in addition to the weeks the students spend in outside slaughterhouses. There is also an integrated meat technology, and meat processing unit and a milk processing unit. In the Institute for Food Hygiene, two boot rinses are available but due to the evolution of the building, there is currently no changing room available to the students and staff at the entrance of the room, so that it is necessary to change in the other entrance of the building, go out and walk around it before entering in the hall. The situation is the same in the Oberholz farm.

The Faculty's teaching and research Farm (LVG Oberholz), not far from VMF where students can stay 24/7, offers well-adapted facilities for cattle, sheep, swine and horses. The cattle stables and horses have been renewed after the last visit in 2008. Accommodation for students is modern.

-) study and self-learning, catering, locker rooms, accommodation for on call students and leisure In addition to the central library, most of the libraries and rooms in the institutes/clinics are available for students, which creates an easy contact with teaching and support staff.

# 4.1.3. Description of the adequacy for the veterinary training of the vehicles used for students transportation, ambulatory clinic, live animals and cadavers transportation

All vehicles (7 for students, 3 for student ambulatory services and 3 for animal transportation) are in good condition, equipped with disinfection material and air conditioning even in the animal compartment. Two of these vehicles are funded by third-party sponsors. They can be equipped with trailers, for example for claw care services.

# **4.1.4.** Description of the adequacy for the veterinary training of the equipment used for teaching purposes and clinical services

All clinics are in good condition and very well-equipped, including diagnostic imaging: ultrasound Doppler and/or portable machines, digital radiography (stationary/portable), flexible and rigid endoscopy, scintigraphy, two CT-scans (one for small animals but also one in the equine clinic) and two MRI machines (one 3 Tesla in the small animal clinic and one standing-horse MRI for limb examination), haematology, blood chemistry, serology, hormones, quick tests, coagulation testing, blood gas analysis, cytology, fluid and lavage diagnostics, synovia tests, urine analysis, spermatology, molecular biology, bacteriology, parasitology and virology.

### 4.1.5. Description of the adequacy of the biosecurity rules in the Establishment

Locker rooms for students and staff are present. All safety measures concerning bio-security are defined and displayed in the Establishment at the relevant places. However, in some places, these measures are not systematically observed or controlled. A better clean/dirty circuit separation should be better organized at the entrance/exit in some areas, especially at the entrance of the necropsy hall and of the slaughterhouse hall and at the small animal isolation facility.

Waste is treated according to legal regulations. Microbiological waste is decontaminated by heat treatment in autoclaves or disposed via the Institute of Pathology. Liquid waste effluents are treated according to legal regulations on pollution control (grills, fat traps and preliminary treatments).

# 4.1.6. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of facilities, equipment and biosecurity rules of the Establishment

The VMF strategic plan ("Zukunftskonzept") includes general procedures for building maintenance, renovation or rehabilitation. They are discussed and prepared in commissions before the faculty council examines and approves them. Applications for renewal or purchase of equipment below  $\[ \in \] 200,000$  are annually discussed, prioritised and presented to UL. Purchases of larger-scale equipment ( $\[ \in \] 200,000$ ) are made using a specific commission of

UL. Depending on the field of application, the Federal State of Saxony or the DFG finances the equipment.

### 4.2. Comments

The central teaching building (Herbert Gürtler Haus) provides excellent learning conditions for the students, including a brand new library, a large lecture hall, several seminar rooms and the main canteen. The building symbolizes the transition from the historical "institute-centered" organization towards a better shared and optimized use of the teaching rooms.

Each institute has to assign an Occupational Safety Officer and an Institute Hygiene Officer. These people have to implement and control work safety and specific biosafety measures in their institution. They are also responsible for instructing staff members and students at regular intervals, and particularly, when they start course work or teaching.

Biosecurity and biosafety is deficient at the mixed entrance and exit area from the necropsy hall which constitutes a partial compliance of Substandard 4.7 and at the entry for the small animal isolation facility which constitutes a partial compliance of Substandard 4.13.

### **4.3 Suggestions for improvement**

Biosafety and biosecurity measures must be checked generally with special emphasis on entrance and exit from the necropsy room, the on-campus slaughterhouse and the small animal isolation facility

## 4.4. Decision

The Establishment is compliant with Standard 4 except for Substandards 4.7 and 4.13.

The Establishment is partially compliant with Substandards 4.7 and 4.13 because of sub-optimal biosecurity measures in some areas.

## 5. Animal resources and teaching material of animal origin

### 5.1. Findings

# 5.1.1. Brief description of the global strategy of the Establishment about the use of animals and material of animal origin for the acquisition by each student of Day One Competences

The Faculty has a multifaceted approach to providing animal-based teaching material. This includes: multiple use of clinic-based animals in demonstrations and hands-on teaching, the use of faculty, state and privately owned farms, the development of a cadaver donation programme for small and large animals and post-mortem material derived from practitioners and abattoirs. Access to live animals is supplemented by manikins in the clinical skills lab (PAUL). Access to agriculture training is via in-house lectures and EPT. A partnership with Saxon State Teaching Farm in Köllitsch is being explored to ensure continued access to caseload.

### 5.1.2. Description of the adequacy for the veterinary training of the enrolled students of:

# -) the number and diversity of cadavers and material of animal origin used in anatomy, necropsy and $\boldsymbol{FSQ}$

A broad range of materials is provided for teaching purposes. The ESEVT indicator values for material of animal origin and clinical case exposure are above minimal values for all indicators, but number of students working on one cadaver or body part was reported to be too large on some occasions.

### -) the number and diversity of healthy live animals used for pre-clinical training

A range of healthy animals is available and their use is well integrated into the programme.

### -) the number of visits in herds/flocks/units of food-producing animals

The visit numbers are sufficient and there are good links with private farms. The faculty farm Oberholz provides a safe environment for students to gain initial animal handling and clinical skills. Further external partnerships with Saxon State Teaching Farm in Köllitsch would secure these numbers.

### -) the number and diversity of patients examined/treated by each student

The definitions used for intramural and extramural cases and visits are not clear but overall case exposure for students is sufficient. The quality of the practice observed during EPT is regulated by the state rather than the Establishment but the Establishment is more proactive in assessing some areas, such as VPH than other areas.

# -) the balance between species, between clinical disciplines, between first opinion and referral cases, between acute and chronic cases, between consultations and hospitalisations, between individual medicine and population medicine

Considering the overall numbers of examinations undertaken and cases there is a good balance between species. Coverage of birds and exotic animals is good. There is no control of the species spread of the EPT.

### 5.1.3. Description of the organisation and management of the VTH and ambulatory clinics

The organisation of the large animal clinics has recently changed to species: equine and ruminant/swine. This has been successful and staff is enthusiastic regarding the opportunities to develop their species teaching. The small animal hospital has been in a new building for 20 years and is well managed. The small animal clinic and the equine clinic do not provide ambulatory services but all clinics provide out of hours referral services and expose students to emergency clinical work.

# **5.1.4.** Description of the group size for the different types of clinical training and of the hands-on involvement of students in clinical procedures in the different species

For introduction to clinical instruction, four groups of 30 students is large and stress in animals and students has been mentioned during the Visitation. The group size for clinical rotations of 3-5 is very good. For clinical track up to 25 is reported, but these may be split to work with individual staff.

# 5.1.5. Description of the patient record system and how it is used to efficiently support the teaching, research, and service programmes of the Establishment

A common electronic system is used on small animal and some aspects of equine clinics for patient records. The ruminant and swine records are kept on paper and herd records stored in a programme that is typically used by the industry in Germany. The faculties are involved in discussions with the manufacturers to allow integration between these programmes. Integration would be ideal but students are currently exposed to appropriate record keeping systems for the species concerned. Students could have more responsibility for inputting information with checking by clinicians.

# 5.1.6. Description of the procedures developed to ensure the welfare of animals used for educational and research activities

A robust legal and organisational framework is in place to ensure animal welfare. Some live animals are purchased for use in physiology teaching but other experiments are computer

simulations. A focus on alternatives to meet the same learning outcomes including use of "PAUL" has been adopted.

# 5.1.7. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the number and variety of animals and material of animal origin for pre-clinical and clinical training, and the clinical services provided by the Establishment

Decision-making is the responsibility of the respective unit, and decisions are communicated and defined by the institute or the department. The ruminant and swine departments are actively expanding the access to commercial farms, particularly improving the teaching and animal handling facilities on these farms is commendable. The expertise and willingness to accept cases out of normal working hours attracts cases in the hospital clinics and the small animal hospital maintains relatively high prices to balance the workload.

### 5.2. Comments

The ESEVT Indicators for animal numbers are acceptable. An appropriate balance of species is available, which is commendable.

Main rotation group sizes are small, but group sizes for early rotation clinical training and tracks may be large. These may be split during the track but some formal control over numbers accepted should be considered.

If teaching is transferred from Oberholz the increased distance to the Saxon State Teaching Farm in Köllitsch needs to be considered and a plan produced to ensure that it does not reduce the time and relevance of the animal exposure in the programme.

## 5.3. Suggestions for improvement

Students should add information to the clinical records system as part of their clinical experience. Staff should then check and approve the input

Smaller groups for initial clinical training (Klinikstunde) and the possibility of peer-teaching by more senior students should be considered

The number of cases seen in each species should be reviewed centrally and resources allocation adapted to ensure that the ESEVT minimal values are reached also in the future

### 5.4. Decision

The Establishment is compliant with Standard 5.

## 6. Learning resources

### **6.1 Findings**

# **6.1.1.** Brief description of the main library (facilities, equipment, staff, (e)books and (e)periodicals, software for databases)

The VMF maintains its own library, which is in close vicinity to all faculty premises and is accessible to students and staff.

There are three full time positions (1 qualified librarian and two qualified media employees) assisted by one part-time field librarian from the library of Medicine, and during lecture periods by 4 associated students hired 15 hours/week. The staff is considered sufficient. There are 84 workplaces and two rooms for group work, print media and computers though students use their own devices.

The printed collection of the library consists of 21,200 books in German and English, and 535 magazines: all periodicals are kept at the library, while some 2,718 monographies are held in

small libraries at the institutes and clinics.

PubMed, Web of Science, CABI Compendia Collection are used for literature search through the online catalogue. The Thieme VetCenter currently offers 108 e-books, 4 e-journals and several other databases.

# 6.1.2. Description of the available electronic information and e-learning courses, and their role in supporting student learning and teaching in the core curriculum

Moodle version 2.0. is the e-learning platform providing different learning materials for lectures. It is also used for communicating with students of every course.

The Thieme online portal VetCenter for specialized small animal medicine information is accessible for students and teachers online. PAUL offers electronic options for imaging, anatomy, physiology and virtual microscopy support.

# **6.1.3.** Description of the accessibility for staff and students to electronic learning resources both on and off campus

The UL offers VPN to students and staff to facilitate online access from home. At the VMF the Wi-Fi network covers most areas of the campus.

# 6.1.4. Description of how the procedures for access to and use of learning resources are taught to students

The Student Service centre of the UL gives support for learning systems and e-learning advice, and so does the University Computer centre (URZ), the library, the Office of Students Affairs and other student colleagues. Online tutorials are available on Moodle.

# 6.1.5. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of learning resources

Records on the library usage together with wishes and suggestions of students and employees are implemented and used to decide the acquisitions for the library, which are made by the librarian. As for the purchase and provision of e-media, this is done by the University Library and listed in the online catalogue. The UL offers the possibility of user-driven acquisitions as well.

News about the library is communicated by e-mail (staff) or advertisement screen at the canteen for students.

### **6.2.** Comments

Maintenance of the on-site library is perceived as an advantage. Electronic resources are highly appreciated by students, specially the clinic oriented VetCenter, as well as the practical training at PAUL, though it is not always easy to find the time to attend to this premise.

The IT system covers the needs of staff and students. Wi-Fi network could be improved to cover the full VMF campus.

Moodle as e-learning resource to support veterinary training is not used to its full potential in all areas, considering the huge possibilities of the latest version implemented by the University.

### **6.3.** Suggestions for improvement

It is recommended that a permanent position is associated to further develop PAUL.

### 6.4. Decision

The Establishment is compliant with Standard 6.

### 7. Student admission, progression and welfare

### 7.1. Findings

7.1.1. Brief description of the admission procedures for standard and for full-fee students Governmental, university and faculty initiatives inform the public about the veterinary programme.

Admission requirements are centrally regulated by the 'Stiftung für Hochschulzulassung', through their service platform Hochschulstart.de. On behalf of the federal states, the places of study in medicine, veterinary medicine, dentistry and pharmacy are awarded centrally (Central numerus clausus).

The approval for the nationwide admission-restricted degree courses, including Veterinary Medicine, takes place via three admission rates. 20% of the places are admitted to the best students, 20% are admitted after the accumulation of a certain waiting time and 60% of the places are admitted directly by the universities, after the result of a college-own selection procedure.

The selection procedure at FMV-UL includes students with best average school grades, supplemented with extra credits by weighing their last four school terms and the final high school grades in biology, chemistry, physics and mathematics. Further, professional qualifications (e.g. veterinary assistant) are rewarded as 'bonus points'.

A policy for the application of disabled and students of special needs is in place. Procedures on applicants with disabilities or illnesses and their accommodation in the programme are regulated by the University in accordance with the Convention on the Rights of Persons with Disabilities (CRPD) and national and EU legislation. Once admitted, personal and individual counselling is available through the 'Central Office for Students with special needs' of the UL.

An individual plan for inclusion and accommodation is developed in close collaboration with the 'officer for students with disabilities or chronic illness' of the UL in order to accommodate the student in the program and at the same time guarantee that this student would be capable of meeting all Day One Competences by the time of graduation. Students can appeal their denial to the programme to the administrative court of Leipzig. There are no tuition fees at German public universities.

Final graduation is obtained by state examination. This means that the exams are ruled by federal law (TAppV) and supervised by the respective state authority (for Leipzig: Saxon State Ministry for Social Affairs und Consumer Protection (SMS). The State Ministry appoints each examiner (in the faculty) for the respective subjects and it may send officers to observe single oral exams. The exam questions are designed by the appointed examiners and are not identical between the five veterinary schools in Germany.

# 7.1.2. Description of how the Establishment adapts the number of admitted students to the available educational resources and the biosecurity and welfare requirements

The number of students admitted each year is annually recalculated by the UL administration on the basis of the Capacity Regulation (Kapazitätsverordnung, <a href="www.revosax.sachsen.de">www.revosax.sachsen.de</a>). Teaching hours in the curriculum, student-teacher ratio in the various courses and number of core funded academic staff influence the number of students to be admitted each year.

This number is limited to approximately 135 (varying from 132-140) students. Due to the central 'Kapazitätsverordnung', the student/teacher ratio is relatively constant in all five veterinary education establishments in Germany.

The number of students in the seminars, at the clinical demonstrations and the exercises is tailored to the teaching task by the government.

VMF has no influence on the numbers of admitted students.

# 7.1.3. Description of the progression criteria and procedures, the available remediation and supports, the rate and main causes of attrition

The monitoring of students is regulated by the governments' TAppV and the VMF-UL's Study regulations (StO) & Examination regulations (PO).

There are strict rules of progression from one part of study to another according to TAppV. In order to take part in the examinations, students have to prove regular attendance at seminars and exercises.

Liaison lecturers/ombudsman and the Student Service Centre (SSZ) offer students general academic advise and psychosocial counselling. A staff member is appointed as 'confidential adviser' to whom students can go with personal problems or conflicts with teachers of any kind. Initial psychological counselling is offered by the Student Advisory Centre and the Centre for Teacher Training & School Research (ZLS).

Advice concerning the veterinary curriculum is available from the Office of Study Affairs and the chairpersons of the Examination Committee.

Students not sufficiently progressing are invited to counselling led by the chairperson of the respective Examination Committee.

More than 93% of students beginning to study in a cohort in the first semester are still studying in the 5<sup>th</sup> semester. Most of the de-registration of students (74%) is due to transfers to other universities. Vacancies are filled with students from other universities. Other reasons for attrition are not specified.

Students who do not pass the second repeat examination (third attempt) in an individual subject are excluded from further veterinary studies in Germany. Students can appeal to the administrative court of Leipzig.

## 7.1.4. Brief description of the services available for students

Liaison lecturers/ombudsman and the Student Service Centre (SSZ) offer students general academic advise and psychosocial counselling. Initial psychological counselling is offered by the Student Advisory Centre and the Centre for Teacher Training & School Research (ZLS). Student support at university level is embodied in the project 'Plan A - Forum Studienerfolg'. It consists of three sections. In the section 'Orientation', prospective students are provided with information on a suitable study subject through an online workshop supplemented with short web clips. In the 'Early Detection' section, risks of drop-out and study-time-delay are detected through a study data monitoring system. Subsequently students can be provided with an early, targeted counselling and support offer. In the 'Counselling' section, students with doubts on their studies or even thoughts of aborting their studies, are offered counselling.

Advice concerning the veterinary curriculum is available at the Office of Study Affairs and the chairpersons of the Examination Committee. General social counselling and/or financial assistance (housing subsidies, study financing, health insurance, etc.) is available for certain target groups (foreign students during exam periods, single parents during final exams, students with children).

In introductory courses, students are made familiar with biosecurity measurements in laboratories and clinics. They have to sign a form confirming knowledge of the biosecurity standards prior to participating in lab or clinical work. A variety of student associations are available.

Special attention is given to pregnant students and young mothers (individual study plans, flexibility for supervision of their children, specific course modules for pregnant or breast-feeding students to continue their studies without being exposed to infectious or toxic material or dangerous cutting tools). A baby changing room is available in the lecture hall building. A lactation room is not yet present. Childcare facilities are available but the available places are limited.

# 7.1.5. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the admission procedures, the admission criteria, the number of admitted students and the services to students

Student admission and admission criteria are centrally managed through the online platform 'www.Hochschulstart.de'. On this platform all relevant information is publicly available. The platform is free accessible and linked form the Faculties and Universities homepages as well as from a large number of other pertinent homepages. Intended or expected changes in the number of incoming students, changes in the number of students progressing through the study stages, reasons for attrition etc. are identified through meetings, surveys and feedback between UL administration, the Office of Study Affairs, the State Examination Office and the chairpersons of the Examination Committees, the Deans' Office, the Committee of Study Affairs and the respective teaching staff.

### 7.2. Comments

A lot of information, not readily present in the SER or annexes, was supplied through answers to questions asked to the Establishment.

The low rate of attrition (7%) and the high rate of students graduating in time (89%) demonstrate the appropriateness of the selection processes in place. Although the number of students admitted each year is at the moment not a critical problem, VMF expresses the wish to have more possibility to voice their opinions about numbers of students admitted or resources. In the opinion of VMF, the calculated numbers are too high with respect to structural, personnel and financial resources provided by the state government. In particular in the clinical-practical part of the curriculum it would be desirable to either have more resources at hand or reduce the number of students to be able to deliver more hands-on small group teaching and enhanced students learning, in particular as far as the development of practical skills is concerned.

The governments' TAppV and the VMF-UL's Study regulations (StO) & Examination regulations (PO) form the basis for decisions on progression. They are explicit and readily available to students.

Various monitoring and advisory bodies at Faculty and University level can identify and offer remediation and support for students who do not perform adequately. Due to the limited personnel capacity in the Office of Study Affairs, deviations from and changes in the general course of studies are only announced via the electronic learning platform 'Moodle, and communicated to the students by an email through the Moodle system. There is no written official communication to the students by the Dean of Study Affairs.

## 7.3. Suggestions for improvement

None.

### 7.4. Decision

The Establishment is compliant with Standard 7.

### 8. Student assessment

### 8.1. Findings

### 8.1.1. Brief description of the student's assessment strategy of the Establishment

In Germany, subjects and topics of the examinations are regulated by federal law in the German Ordinance concerning the Certification of Veterinary Surgeons (TAppV) and are thus identical for each of the five German establishments for veterinary education. The State Ministry appoints each examiner for the respective subjects and it may send officers to observe single oral exams. The exam questions are designed by the appointed examiners and are not identical between the five veterinary schools in Germany. They are based on the learning outcome catalogue and are reviewed by a review committee.

A well-balanced variety of types of assessment formats are used in the assessment procedures. Oral examinations are mostly used during preclinical studies while during clinical studies, examinations may be written, MC or oral often including a practical/OSCE/clinical part and a final report written, in which the student is provided with a special case and asked to conduct and record a clinical examination or etiological investigation (e.g. in microbiology or parasitology).

The chairpersons of the two examination boards (pre-clinical and clinical) are responsible for the examination timetable. They are supported by the Office of Study Affairs. The time periods for the individual subjects are appointed in meetings of the whole examination board. Planning and organisation of the exams could be improved to ensure every student has an equal chance to prepare for and pass the exams successfully.

# 8.1.2. Description of the assessment methodology to ensure that every graduate has achieved the minimum level of competence, as prescribed in the ESEVT Day One Competences

The TAppV states that it has been ensured that the requirements of Article 38 of Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications (CM EC L 178 p.7) have been satisfied.

A catalogue of learning outcomes covers all subjects prescribed by TAppV and serves as the basis for all written and oral examinations and consequently for any decisions on grades and progress within the curriculum. It includes the Day One Competences and identifies where in the curriculum, in which disciplines, foci and semesters, they are integrated.

During practical clinical examinations, the students conduct a conversation with the simulated owner of the patient, examine the patient, interpret various findings such as radiography and haematology and develop a treatment plan. Clinical skills and competences are assessed in objective structured clinical examinations (OSCE) conducted in the assessments of propaedeutic, internal medicine and surgery. In the practical assessments of para-clinical subjects students carry out and record investigations, e.g. to identify cultured bacteria and fungi (microbiology) or parasites (parasitology) and gross pathologies as well as pathohistological lesions (pathology). In veterinary public health subjects practical examinations are designed to determine the student's competence to evaluate the quality of meat and other food of animal origin.

# 8.1.3. Description of the processes for providing to students a feedback post-assessment and a guidance for requested improvement

Requirements for passing examinations are clearly laid out in the TAppV and the PO. To give students direct feedback on their performance, MC questions are discussed with the students and the various examiners in a feedback meeting conducted after the examination. Each examiner explains the correct answers to the respective MC questions and is available for questions. After oral, and some practical, examinations the examiner provides feedback to the examinee. The examiner is obliged to explain which learning objectives are reached. Every student has the right to see the graded written examination in the Office of Study Affairs.

Initial and continuous training of the examiners is established in cooperation with the e-learning centre of the UL and the local UCAN-admin, in which attitudes, knowledge and resources are acquired. Meetings with all examiners present are held one to two times per semester to improve professionalism, to promote a culture of discussion and scientific approach.

A unique way of feedback post-assessment and a guidance for requested improvement is offered in the form of the PTT (Progress test in Veterinary Medicine) in which the VMF-UL participates, like all veterinary establishments for Veterinary education in Germany. PTT's main objective is to provide feedback to the students about their individual study progress once

every year. PTT questions are designed by examiners for the respective subjects from the 5 German veterinary schools plus the veterinary school in Vienna. PTT is offered annually during the winter semester. Participation is optional. An appeal procedure against assessment outcomes is in place and regulated by §7 of the PO.

# 8.1.4. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the student's assessment strategy

The state examinations are performed under the supervision of the Saxon State Ministry for Social Affairs (SMS) and executed by the two Examination Committees (one for the preclinical part and one for the clinical part). Members of the Examination Committees are appointed by the SMS. Current affairs are handled by the chairpersons of the committees, supported by the Office of Study Affairs.

### 8.2. Comments

A lot of information, not readily present in the SER or annexes, was supplied through answers to questions asked to the establishment prior to the visit.

The TAppV provides the Establishment with a rigid structure on student assessment and a progressive build-up towards entry-level competence. Requirements to pass are explicit. Appeal mechanisms against assessment outcomes are in place.

By the review by committees and feedback by students on examination questions, a process is in place not so much to review assessment outcomes but rather to change assessment strategies when required.

The 'Learning Outcome Catalogue', available to all teachers and students on the learning platform Moodle, is the basis of the programme learning outcomes, covering the full range of professional knowledge, skills, competences and attributes, and therefore forms the basis for assessment design and decisions on progression in as far as the TAppV permits. Timely feedback to the students on their assessment is in place.

Through the assessment strategies in place, the VMF-UL is able to certify the achievement of learning objectives by the student.

Summative assessment is well established. Direct assessment of clinical skills and Day One competences forms a significant component of the overall process of assessment. In order to improve student assessment permanently, further development of formative examinations could be established.

### **8.3.** Suggestions for improvement

The implementation of a system to keep track of the student's progression of clinical skills (logbook or other) could help to make the most efficient use of all the learning resources (e.g. clinics, faculty farm) available.

### 8.4. Decision

The Establishment is compliant with Standard 8.

## 9. Academic and support staff

## 9.1. Findings

9.1.1. Brief description of the global strategy in order to ensure that all requested competences for the veterinary programme are covered for both academic and support and that they are properly qualified and prepared for their roles

In 2017, there was 104 FTE academic staff for the veterinary programme. The ESEVT Indicator I1 (see table below) is 0.13, which is among the 20th lowest values in approved European faculties.

Among these 104 FTE teachers, 92 are veterinarians (86.5%), making ESEVT Indicator I2 reaching the value of 0.7, which is under the median European value but can be considered as good. However, it has to be noted that among these 92 FTE vets, only 42 are permanent.

ESEVT indicator	Leipzig VMF
I1 : n° of FTE academic staff involved in veterinary training / n° of undergraduate students	0.13
I2 : n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	0.70
I3 : n° of FTE support staff involved in veterinary training / n° of students graduating annually	0.89

In 2016, a global planning for development called *Zukunftskonzept* was adopted, in which VMF described the new policy and profile for the next years. Forward planning of employment and skills is part of this project. According to this analysis, up to 15 professor positions will have to be filled by 2026. This will allow implementation and strategy in order to reinforce organization of the four "centres" (groups of institutes) and of the VTH (group of departments) for a better resource allocation and mutualisation.

Currently there are many vacant academic positions and some institutes/departments ask to use the corresponding budgets to appoint several part-time veterinarians to ensure the teaching load and to strengthen research activities. Among these unfilled positions, there is currently no professor at the head of the institute of pathology. Currently there is no official professorship on animal welfare and ethology, and teaching is done by external lecturers but the VMF is willing to fill this gap.

In theory, UL and VMF offer "teaching the teachers" courses. Lecturers and examiners (for both preclinical and clinical examination) are expected to attend these courses. Evaluation of teachers by students is mandatory at the UL level and is well organized and followed-up. Results are discussed in the Committee of Study Affairs and solutions to possible problems are sought. Annually one outstanding teacher is awarded with a prize (Ackerknecht Prize).

Support staff, contrary to academic staff, is mostly permanent (114.9 FTE permanent vs 24.1 temporary in 2017). The ESEVT Indicator I3 (0.89, see table above) is near the median European values. Support staff have opportunities for continual professional development, either organized by UL or directly by VMF, including the fields of biosafety, biosecurity, fire safety etc.

Equality and integration of disabled people are strongly supported by the UL. Despite the fact that the buildings do not allow any easy access everywhere for physically disabled persons, the

VMF is managing this on a case-by-case basis as much as possible. The renovated and new buildings have lifts and specific equipment.

# 9.1.2. Description of the adequacy of the number of academic and support staff in the different departments/units with the number of students to be taught

According to the Faculty, the number of academic teaching positions can roughly be considered as sufficient for the present number of students, but there is a risk for the near future. Moreover, the number of support staff, especially nursing and caretaking staff in the clinics, is regarded as insufficient by the Faculty, especially if one takes into account the 24/7 activity with night and weekend duties.

The permanent academic teaching staff mainly works full-time. Their teaching load is fixed by law. Non-academic personnel, including doctoral candidates, also participates in teaching, as do of course veterinarians hired in the clinics. External lecturers can be hired in case of necessity but the process is said to be quite difficult.

# 9.1.3. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the strategy for allocating, recruiting, promoting, supporting and assessing academic and support staff

SER describes mostly wishes and plans for the future rather than the current situation. As stated in the SER, academic and technical staff is at a low level. Also some decisions taken at the UL level are seen as negative developments. As mentioned in the SER, the lack of resources for technical personnel represents a great comparative disadvantage. There are shortages in administration, academic and support staff in clinics all of which are problematic.

### 9.2. Comments

The high number of unfilled professorships, which is expected to increase in the near future due to the age pyramid in the VMF can be considered as a serious concern. The loss of attractiveness of the academic career is said to be a national problem and the relevant rules and regulations are quite rigid and cannot be easily changed. This issue has to be addressed along with the work/life balance expected of the younger generations.

For historical reasons, the permanent positions for veterinarians are mostly reserved for the institutes. However, transversal activities that already exist (for example PAUL) or are planned (central diagnostic laboratory) imply permanent positions to attract/keep engaged and skilled professionals. The Team thus strongly supports that aspect of the *Zukunftskonzept*.

## 9.3. Suggestions for improvement

Any lever to restore the attractiveness of the academic career should be explored.

More permanents positions in some transversal activities should be considered.

It is strongly suggested that the VMF secures funding for professorial coverage of the subjects "Animal Welfare and Ethology" and "Animal breeding and Genetics" not necessarily as sovereign institutes but embedded in other institutes/departments.

### 9.4. Decision

The Establishment is compliant with Standard 9.

# 10. Research programmes, continuing and postgraduate education 10.1. Findings

# 10.1.1. Brief description of how the research activities of the Establishment and the implication of most academic staff in it contribute to research-based undergraduate veterinary education

Undergraduate research projects are offered by all institutes and clinics. These can be part of collaborative work with postgraduates (see below), experimental project works that the students carry out with the aim of developing their thesis under the tutorship of a supervisor. In their fourth year, all students are obliged to do a project work as a 'first scientific work'. In order to motivate the students, public recognition of the students' projects is given once a year as part of the program at the *dies academicus* organised by veterinary students.

Students have access to a variety of scientific techniques during the optional 'compulsory' courses, including flow cytometry and laser scanning microscopy. Lectures on biometrics and laboratory animal medicine and courses that introduce the students to scientific methods and research techniques are given to the students and participation to journal club meetings are mandatory during the clinical rotation in the clinical year. Other possibilities on a non-compulsory basis, allow students to participate in different research programs as student assistants in different clinics and institutes.

# 10.1.2. Description of how the postgraduate clinical trainings of the Establishment contribute positively to undergraduate veterinary education and how potential conflicts in relation to case management between post- and undergraduate students are avoided

Graduates involved in the Veterinary College Residency Programmes, candidates for National Specialist Certification and Doctoral students are involved in the management of the clinical cases at the hospital and play an active role in the training of the veterinary students during their intramural (and extramural) practical training, although it conflict with the obligation to invest in research (i.e. for Doctoral students). Daily case or topic rounds and weekly seminars are part of the clinical rotation. Active participation in journal and book clubs is mandatory. In addition, workshops and wet labs offer the opportunity to develop professional skills. Nevertheless, the high VTH caseload ensures a sufficient amount of primary clinical cases suitable for undergraduate students to avoid such conflicts.

# 10.1.3. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of research, continuing and postgraduate education programmes organised by the Establishment

The majority of research activities are conducted within five interdisciplinary research foci, namely diseases and integrity of the gastrointestinal tract; model systems, orthopaedic research, veterinary science; translational research on neurogenesis, neurodegeneration, and neuro-inflammation; integrated respiratory tract research; lifestyle diseases, infection prevention, public health, nutrition/epidemiology, animal welfare. These research foci were discussed and agreed by the board of the VMF in 2016. These activities contribute to the development of research-based education.

Seven residency programmes have been activated in the period 2015-17 for graduated students that are aiming at becoming Specialist of EU Veterinary Colleges (bovine health management, equine internal medicine, equine surgery, diagnostic imaging, anaesthesia and analgesia, parasitology, zoological medicine), and 28 programmes for national certified specialist

(Fachtierarzt) were active in the same period. Residency training programmes (RTPs) are being developed and continuously assessed by the respective specialty college (European Colleges) which in turn are registered with and monitored by the European Board of Veterinary Specialists (EBVS).

Aspects of postgraduate research programmes (e.g., doctorate degree programme in veterinary medicine/ Dr.med.vet.) at the VMF are being discussed and decided on by the VMF Faculty Council (Fakultätsrat) following suggestions by the respective VMF committee (e.g., the postgraduate degree committee "Promotionskommission" or the research committee "Forschungskommission" of the VMF).

Veterinarians of the Faculty are frequently involved in the continuing education events (courses, seminars, workshops) that are organized in cooperation with the Veterinary Council of Saxony and are required to accumulate at least 20 (40) hours of continuous education per year. The Continuing Education (CE) Committee of the Veterinary Council of the State of Saxony ("Sächsische Landestierärztekammer", SLTK) and the Academy for Veterinary Continuing Education (Akademie für tierärztliche Fortbildung, ATF) are primarily involved in the implementation and assessment of postgraduate education programmes.

## 10.2. Comments

None.

## 10.3. Suggestions for improvement

None.

### 10.4. Decision

The Establishment is compliant with Standard 10.

## 11. Outcome Assessment and Quality Assurance

### 11.1. Findings

11.1.1. Description of the global strategy of the Establishment for outcome assessment and Quality Assurance (QA), in order to demonstrate that the Establishment:

### -) has a culture of QA and continued enhancement of quality

The VMF-UL has a long tradition of QA. For many years the establishment used the evaluation system of the University available at that time until about 10 years ago. Because of low return rate and questionnaires not being adapted to the specific needs, among other things, this type of evaluation was abandoned. It was replaced by a decentralised evaluation initiated and performed by individual professors continuing to use (an adapted form of) the University system or employing their own paper based or online evaluation.

A structured, systematic and centrally managed evaluation system, as part of the QM of the curriculum, was prepared and implemented beginning in the summer semester 2018, driven by the current Dean of Study Affairs, the Committee of Study Affairs and the students (Vetilog).

Since July 2018, the University of Leipzig has been system-accredited. The QM-handbook used, has been approved by the senate and defines standards of good teaching and essential

processes of QM in teaching and learning and is used for the system accreditation of bachelor/master programmes.

The FMV has established a parallel system of QA, with processes for systematic reviews of all written examination questions, regular student evaluations of lectures and QA concepts in many laboratories, based on the QM handbook 'Teaching & Studies'. The shift towards decentralisation allowed for individual faculties to organise and develop their subject-specific quality culture with great autonomy.

# -) operates ad hoc, cyclical, sustainable and transparent outcome assessment, QA and quality enhancement mechanisms

The exam questions, designed by the appointed examiners and the MC-questions, are reviewed by a committee to ensure quality and reliability. MC questions are collected on the faculty server and move through a folder system according to the review process until they are ready to be used. Beginning in summer semester 2018, a digital exam platform (UCAN) is being used to digitalise this process and deliver several other question formats than MC.

Students can give feedback to identify and exclude inadequate MC questions in a meeting with the examiners in individual focus subjects, scheduled directly after a MC examination. The examination advisory student group may be involved at this stage.

At university level a quality control task force for teaching and training has been established, with representatives of each faculty, for the adaptation of the QM Guide in regards to demands posed by the authority and in the context of the system accreditation.

# -) collect, analyse and use relevant information from internal and external sources for the effective management of their programmes and activities (teaching, research, services) Teaching:

Initiatives of the effective management of teaching programmes and activities are:

- three-yearly report to the Prorector for Education that covers all aspects of studying at the VMF. It is drawn up by the Dean of Study Affairs supplemented by student comments, discussed in the Committee of Study Affairs and approved by the FR. This is followed by a 2 3 h campus visit of the Vice-Rector for Education and International Affairs and meeting with the Dean, Vice- Dean, Dean of Student affairs, the head of the office of study affairs and student representatives.
- three days of studies where professors, lecturers and students are able to enter in an active discourse on currently relevant topics This has been organised twice, in the 2016 & 2017 and has been further developed to the format 'VetiLog' which will recur twice a year.
- students' evaluation of lectures, lecturers & focus classes
- evaluation of examination questions by the review committee
- evaluation of EPT on a voluntary basis, online by the students and by anonymised surveys by established veterinarians (veterinarian with their own practice/clinic, 5 years of work experience in their own practice and of good professional standing).
- evaluation of EPT in VPH by students and placement sites (see chapter 3)
- surveys on different topics by the Student Council. The results are forwarded to the Dean of Study Affairs in a meeting that takes place every 4 to 6 weeks or on a need-to basis.

• monthly meetings of the FR

Constructive continuous communication between administration, students and lecturers is maintained. An example is Vetilog were students are informed of the most important and relevant topics per semester in immediate consultation with the professors/lecturers and the administration.

Each of the commissions have student representatives with rights to speak and vote. The Faculty Council evaluates periodically the draft proposals developed by the commissions that are responsible for the subjects after these are discussed by the Committee of Study Affairs. Recommendations are implemented in the Faculty Council Meetings.

### **Research:**

Research results for the VMF are collected annually and published as a research report, which is centrally entered into the research information system of UL (see chapter 10).

### **Services:**

All different laboratories of the FMV-UL (diagnostic, BSL, microbiology & food chemistry) operate in compliance with their respective QA procedures in order to maintain recognition.

- -) informs regularly staff, students and stakeholders and involves them in the QA processes
  The VMF-UL considers good communication with all levels to be of paramount importance.
  Initiatives to support this are:
  - Regular meetings of representatives of the Student Council with the Dean of Study Affairs every 4 to 6 weeks during the semester and on a need-to basis
  - Vetilog, a platform for a dialogue, exchange and discussion of current relevant topics related to the curriculum, which has been initiated by the student council in close collaboration with the Dean of Study Affairs
  - Monthly meetings of the FR

In all committees with students' representation, students have voting rights. At university level, meetings between the Deans of Study Affairs and the Pro-rector take place 2 to 3 times every semester or on a need-to basis.

Once a year an Assembly of German Veterinary Establishments takes place at which QA-topics are put on the agenda. External stakeholders such as representatives of the veterinary profession, the veterinary chambers as well as the Federal Ministry are invited as guests.

Information events for the general public are organised to offer information on the veterinary education and other education programmes.

### -) closes the loop of the QA Plan-Do-Check-Act (PDCA) cycle

Clear PDCA-cycles are implemented for different areas of faculty working:

- implementation, assessment and review of the strategic plan and organisational processes of the VMF
- administration of the centralised part of service revenues and of UL funded resources

- Process for identifying curricular deficiencies
- Process for revising of StO and PO
- QA process of written examinations (MC) at the VMF

### -) is compliant with ESG Standards

A policy for quality assurance, although recently installed and for some aspects partly in the stage of implementation, is present.

Although the content of the veterinary curriculum is determined by the government according to a strict framework, several committees, in which the committee of Study Affairs plays a key role, are responsible for the improvements of the course of the study. The objectives meet the intended learning outcomes. The qualification of a 'Approbierter Tierarzt/Tierärztin' is clearly specified and communicated and refers to the correct level of the national qualifications framework for higher education.

The students, with their representatives in all policy making bodies, take an active role in all aspects of the learning process. The governmental 'German Veterinary Medical Licensure Law' (TAppV) and the VMF-UL 'Study Regulations' (StO) and Examination Regulations' (PO) ensure the regulations covering all phases of the students' 'life cycle'.

The VMF-UL applies a fair and transparent processes for the recruitment and development of the staff. The applicants are required to prove habilitation or equivalent, skills as veterinary specialist and/or Diplomate of the respective European/American College, proof of teaching experience, didactic evaluation and relevant continuing education. The selection process includes, along with the evaluation of scientific skills and individual interviews, trial lectures with involvement of students.

Library infrastructure, the skills lab PAUL and the material of animal origin are adequate for the purpose. Student support at different levels is present. Some maintenance and repair of some of the teaching infrastructure must be carried out.

Several initiatives demonstrate the effective management of the programme (see above). Public information and information events are present, up-to-date and ready available.

Monitoring and periodic review of the programme is more complicated because of the rigid government directed veterinary curriculum. Requests for changes are communicated to the Ministry through stakeholders, of which the Assembly of the German Veterinary Medical Education Institutions is the most important.

External quality assurance is demonstrated by the EAEVE approval of the faculty in 2008, the System accreditation of the university in 2018 and the Visitation of 2018 of which this report will be the result.

# **11.1.2.** Brief description of the specific QA processes for each ESEVT Standards In most of the standards, QA cycles are in place.

11.1.3. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the QA strategy of the

### **Establishment**

QA is present in most of the committees and commissions of the faculty.

### 11.2. Comments

Although QA strategies derived from the recently implemented QM handbook on Teaching & Studies, are relatively new at VMF-UL, a lot of attention has been paid to it in recent years. Much attention is paid to the implementation of QA-cycles in all areas of the functioning of the faculty. An ambitious plan for quality control of the veterinary course including lectures and examinations has been drawn up. Several evaluation processes have only very recently been implemented, others will be implemented in the near future.

The VMF should aim at having an overall QA unit that makes an inventory of all the QA-processes in place in order to easily coordinate and follow-up these processes.

### 11.3. Suggestions for improvement

For QA in clinical EPT the loop has to be closed in order to have a valid PDCA cycle. It is recommended that the clinical EPT's are coordinated by an academic staff member and that the evaluation of trainer and trainee is formalised.

Although a lot of informal consultation with external stakeholders takes place, it is strongly recommended to officialise the relationship with these external stakeholders in, for example, an advisory body to the Dean.

Some biosecurity aspects could be optimized in anatomy and necropsy rooms and in the small animal isolation unit.

### 11.4. Decision

The Establishment is compliant with Standard 11.

## 12. ESEVT Indicators

	of the Establishment:			in the second second					
Date o	f the form filling:	01 October 2	2018						
Calcu	lated Indicators from	n raw data				Establishment	Median	Minimal	Balance
						values	values1	values <sup>2</sup>	
I1	n° of FTE academic staff inv	volved in veterina	ry training / 1	n° of undergradu	ate students	0.13	0.16	0.13	0.00
12	n° of FTE veterinarians invo	lved in veterinary	training / n°	of students grad	uating annually	0.70	0.87	0.59	0.11
13	n° of FTE support staff invo	lved in veterinary	training / n°	of students grad	uating annually	0.89	0.94	0.57	0.33
<b>I4</b>	n° of hours of practical (non	-clinical) training				680.00	905.67	595.00	85.00
15	n° of hours of clinical training	g				857.00	932.92	670.00	187.00
<b>I6</b>	n° of hours of FSQ & VPH	training				440.00	287.00	174.40	265.60
I7	n° of hours of extra-mural p	ractical training in	FSQ & VF	H		250.00	68.00	28.80	221.20
<b>I8</b>	n° of companion animal pati	ients seen intra-m	urally / n° of	students gradua	ting annually	95.19	70.48	42.01	53.18
<b>I9</b>	n° of ruminant and pig patier	nts seen intra-mu	rally / n° of s	tudents graduatii	ng annually	15.48	2.69	0.46	15.02
I10	n° of equine patients seen in					6.83	5.05	1.30	5.53
I11	n° of rabbit, rodent, bird and	d exotic seen intra	a-murally / n	of students gra	duating annually	19.15	3.35	1.55	17.60
I12	n° of companion animal pati	ents seen extra-n	nurally / n° o	f students gradua	nting annually	0.38	6.80	0.22	0.15
I13	n° of individual ruminants an	nd pig patients see	n extra-mur	ally / n° of stude	nts graduating annually	1.51	15.95	6.29	-4.78
I14	n° of equine patients seen ex	xtra-murally / n° o	of students g	raduating annuall	у	0.76	2.11	0.60	0.16
I15	n° of visits to ruminant and p	oig herds / n° of s	tudents grad	uating annually		1.22	1.33	0.55	0.67
I16	n° of visits of poultry and far	rmed rabbit units	/ n° of stude	nts graduating ar	nually	0.36	0.12	0.04	0.31
I17	n° of companion animal nec					2.18	2.07	1.40	0.78
I18	n° of ruminant and pig necro	•				2.91	2.32	0.97	1.94
I19	$n^{\circ}$ of equine necropsies / $n^{\circ}$	of students gradu	ating annual	ly		0.48	0.30	0.09	0.39
I20	n° of rabbit, rodent, bird and	-	•			9.70	2.05	0.69	9.01
I21*	n° of FTE specialised veteri				udents graduating annually		0.20	0.06	0.67
I22*	n° of PhD graduating annual	,	<u> </u>			0.40	0.15	0.09	0.31
1	Median values defined by da								
2	Recommended minimal valu	es calculated as t	he 20th perc	entile of data fro	om Establishments with Ap	proval status in Ap	oril 2016		
3	A negative balance indicates	s that the Indicato	r is below th	ne recommended	minimal value				
*	Indicators used only for stat	istical purpose							

**13. ESEVT Rubrics** (summary of the decision on the compliance of the Establishment for each ESEVT Standard, i.e. compliance (C), partial compliance (PC) (Minor Deficiency) or non-compliance (NC) (Major Deficiency))

Standard 1: Objectives and Organisation	С	PC	NC
1.1. The Establishment must have as its main objective to provide, in agreement with the EU Directives and ESG	_		
recommendations, adequate, ethical, research-based, evidence-based veterinary training that enables the new	X		
graduate to perform as a veterinarian capable of entering all commonly recognised branches of the veterinary			
profession and to be aware of the importance of lifelong learning.			
1.2. The Establishment must develop and follow its mission statement, which must embrace all the ESEVT standards.	X		
1.3. The Establishment must be part of a university or a higher education institution providing training recognised as	X		
being of an equivalent level and formally recognised as such in the respective country.			
1.4. The person responsible for the veterinary curriculum and the person(s) responsible for the professional, ethical, and	X		
academic affairs of the Veterinary Teaching Hospital (VTH) must hold a veterinary degree.		77	
1.5. The organisational structure must allow input not only from staff and students but also from external stakeholders.	37	X	
1.6. The Establishment must have a strategic plan, which includes a SWOT analysis of its current activities, a list of objectives, and an operating plan with timeframe and indicators for its implementation.	X		
Standard 2: Finances			
2.1. Finances must be demonstrably adequate to sustain the requirements for the Establishment to meet its mission and to	X		
achieve its objectives for education, research and services.	71		
2.2. The finance report must include both expenditures and revenues and must separate personnel costs, operating costs,	X		
maintenance costs and equipment.	- 11		
2.3. Resources allocation must be regularly reviewed to ensure that available resources meet the requirements.	X		
2.4. Clinical and field services must function as instructional resources. Instructional integrity of these resources must	X		
take priority over financial self-sufficiency of clinical services operations. Clinics must be run as efficiently as			
possible.			
2.5. The Establishment must have sufficient autonomy in order to use the resources to implement its strategic plan and to	X		
meet the ESEVT Standards.			
Standard 3: Curriculum  2.1. The avariantum must be designed recovered and managed to answer all avaduates have achieved the avaduate.	v		
3.1. The curriculum must be designed, resourced and managed to ensure all graduates have achieved the graduate attributes expected to be fully compliant with the EU Directive 2005/36/EC as amended by directive 2013/55/EU	X		
and its Annex V.4.1.			
3.2. The learning outcomes for the programme must be explicitly articulated to form a cohesive framework.	X		
3.3. Programme learning outcomes must be communicated to staff and students and:	X		
-) underpin and ensure the effective alignment of all content, teaching, learning and assessment activities of the	21		
degree programme;			
-) form the basis for explicit statements of the objectives and learning outcomes of individual units of study;			
-) be regularly reviewed, managed and updated to ensure they remain relevant, adequate and are effectively achieved.			
3.4. The Establishment must have a formally constituted committee structure (which includes effective student	X		
representation), with clear and empowered reporting lines, to oversee and manage the curriculum and its delivery.			
The committee(s) must:			
-) determine the pedagogical basis, design, delivery methods and assessment methods of the curriculum,			
-) oversee QA of the curriculum, particularly gathering, evaluating, making change and responding to feedback from			
stakeholders, peer reviewers and external assessors, and data from examination/assessment outcomes,  -) review the curriculum at least every seven years by involving staff, students and stakeholders,			
-) identify and meet training needs for all types of staff, maintaining and enhancing their competence for the on-			
going curriculum development.			
3.5. The curriculum must include the subjects (input) listed in Annex V of EU Directive 2005/36/EC and must allow the	X		
acquisition of the Day One Competences (output) (see Annex 2).			
This must concern all groups of subjects, i.e. Basic Sciences, Clinical Sciences, Animal Production, Food Safety and			
Quality, and Professional Knowledge.			
3.6. External Practical Training (EPT) are training activities organised outside the Establishment, the student being under	X		
the direct supervision of a non academic person (e.g. a practitioner). EPT cannot replace the core intramural training			
nor the extramural training under the close supervision of academic staff (e.g. ambulatory clinics, herds visits,			
practical training in FSQ).	7.		
3.7. Since the veterinary degree is a professional qualification with Day One Competences, EPT must complement and	X		
strengthen the academic education by enhancing for the student the handling of all common domestic animals, the			
understanding of the economics and management of animal units and veterinary practices, the communication skills for all aspects of veterinary work, the hands-on practical and clinical training, the real-life experience, and the			
employability of the prospective graduate.			
3.8. The EPT providers must have an agreement with the Establishment and the student (in order to fix their respective		X	
rights and duties, including insurance matters), provide a standardised evaluation of the performance of the student		1	
during their EPT and be allowed to provide feedback to the Establishment on the EPT programme.			
3.9. There must be a member of the academic staff responsible for the overall supervision of the EPT, including liaison	X		
with EPT providers.			
3.10. Students must take responsibility for their own learning during EPT. This includes preparing properly before each		X	
placement, keeping a proper record of their experience during EPT by using a logbook provided by the Establishment			
and evaluating the EPT. Students must be allowed to complain officially or anonymously about issues occurring			
during EPT.			
Standard 4: Facilities and equipment			
4.1. All aspects of the physical facilities must provide an environment conducive to learning.	X		

4.2. The veterinary Establishment must have a clear strategy and programme for maintaining and upgrading its buildings	X		
and equipment.			
4.3. Lecture theatres, teaching laboratories, tutorial rooms, clinical facilities and other teaching spaces must be adequate	X		
in number, size and equipped for the instructional purposes and must be well maintained. The facilities must be			
adapted for the number of students enrolled.			
4.4. Students must have ready access to adequate and sufficient study, self-learning, recreation, locker, sanitary and food	X		
services facilities.			
4.5. Offices, teaching preparation and research laboratories must be sufficient for the needs of the academic and support	X		
staff.			
4.6. Facilities must comply with all relevant legislation including health, safety, biosecurity and EU animal welfare and	X		
care standards.			
4.7. The Establishment's livestock facilities, animal housing, core clinical teaching facilities and equipment must:		X	
-) be sufficient in capacity and adapted for the number of students enrolled in order to allow hands-on training for all			
students			
-) be of a high standard, well maintained and fit for purpose			
-) promote best husbandry, welfare and management practices			
-) ensure relevant biosecurity and bio-containment			
-) be designed to enhance learning.			
4.8. Core clinical teaching facilities must be provided in a VTH with 24/7 emergency services at least for companion	X		
animals and equines, where the Establishment can unequivocally demonstrate that standard of education and clinical	21		
research are compliant with all ESEVT Standards, e.g. research-based and evidence-based clinical training			
supervised by academic staff trained to teach and to assess, availability for staff and students of facilities and patients			
for performing clinical research and relevant QA procedures. For ruminants and pigs, on-call service must be			
available if emergency services do not exist for those species in a VTH. The Establishment must ensure state-of-the-			
art standards of teaching clinics which remain comparable with the best available in the private sector.	37		
4.9. The VTH and any hospitals, practices and facilities (including EPT) which are involved with the curriculum must	X		
meet the relevant national Practice Standards.			
4.10. All core teaching sites must provide dedicated learning spaces including adequate internet access.	X		
4.11. The Establishment must ensure students have access to a broad range of diagnostic and therapeutic facilities,	X		
including but not limited to: pharmacy, diagnostic imaging, anaesthesia, clinical pathology, intensive/critical care,			
surgeries and treatment facilities, ambulatory services and necropsy facilities.			
4.12. Operational policies and procedures (including biosecurity, good laboratory practice and good clinical practice)	X		
must be taught and posted for students, staff and visitors.			
4.13. Appropriate isolation facilities must be provided to meet the need for the isolation and containment of animals with		X	
communicable diseases. Such isolation facilities must be properly constructed, ventilated, maintained and operated			
to provide for animal care in accordance with updated methods for prevention of spread of infectious agents. They			
must be adapted to all animal types commonly handled in the VTH.			
4.14. The Establishment must have an ambulatory clinic for production animals or equivalent facilities so that students	X		
can practise field veterinary medicine and Herd Health Management under academic supervision.			
4.15. The transport of students, live animals, cadavers, materials from animal origin and other teaching materials must be	X		
done in agreement with national and EU standards, to ensure the safety of students and staff and to prevent the spread	21		
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of infectious agents.  Standard 5: A pimal resources and teaching material of animal origin			
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7.1. The selection criteria for admission to the programme must be consistent with the mission of the Establishment. The number of students admitted must be consistent with the resources available at the Establishment for staff, buildings,	X	
equipment, healthy and diseased animals, and materials of animal origin.  7.2. In relation to enrolment, the Establishment must provide accurate information in all advertisements regarding the	X	
educational programme by providing clear and current information for prospective students. Further, printed		
catalogue and electronic information must state the purpose and goals of the programme, provide admission requirements, criteria and procedures, state degree requirements, present Establishment descriptions, clearly state		
information on tuition and fees along with procedures for withdrawal, give necessary information for financial aid		
programmes, and provide an accurate academic calendar.		
7.3. The Establishment's website must mention the ESEVT Establishment's status and its last Self Evaluation Report and Visitation Report must be easily available for the public.	X	
7.4. The selection and progression criteria must be clearly defined, consistent, and defensible, be free of discrimination	X	
or bias, and take account of the fact that students are admitted with a view to their entry to the veterinary profession		
in due course.	v	
7.5. The Establishment must regularly review and reflect on the selection processes to ensure they are appropriate for students to complete the programme successfully, including consideration of their potential to meet all the ESEVT	X	
Day One Competences in all common domestic species (see Annex 2).		
7.6. Adequate training (including periodic refresher training) must be provided for those involved in the selection process	X	
to ensure applicants are evaluated fairly and consistently.  7.7. There must be clear policies and procedures on how applicants with disabilities or illnesses will be considered and,	X	
if appropriate, accommodated in the programme, taking into account the requirement that all students must be capable	A	
of meeting the ESEVT Day One Competences by the time they graduate.		
7.8. The basis for decisions on progression (including academic progression and professional fitness to practise) must be	X	
explicit and readily available to the students. The Establishment must provide evidence that it has mechanisms in place to identify and provide remediation and appropriate support (including termination) for students who are not		
performing adequately.		
7.9. The Establishment must have mechanisms in place to monitor attrition and progression and be able to respond and	X	
amend admission selection criteria (if permitted by national or university law) and student support if required.		
7.10. Mechanisms for the exclusion of students from the programme for any reason must be explicit.	X	
7.11. Establishment policies for managing appeals against decisions, including admissions, academic and progression decisions and exclusion, must be transparent and publicly available.	Λ	
7.12. Provisions must be made by the Establishment to support the physical, emotional and welfare needs of students.	X	
This includes, but is not limited to, learning support and counselling services, careers advice, and fair and transparent		
mechanisms for dealing with student illness, impairment and disability during the programme. This shall include provision of reasonable accommodations/adjustments for disabled students, consistent with all relevant equality		
and/or human rights legislation.		
7.13. There must be effective mechanisms for resolution of student grievances (e.g. interpersonal conflict or harassment).	X	
7.14. Mechanisms must be in place by which students can convey their needs and wants to the Establishment.	X	
7.15. The Establishment must provide students with a mechanism, anonymously if they wish, to offer suggestions, comments and complaints regarding compliance of the Establishment with the ESEVT standards.	X	
Standard 8: Student assessment		
8.1. The Establishment must ensure that there is a clearly identified structure within the Establishment showing lines of	X	
responsibility for the assessment strategy to ensure coherence of the overall assessment regime and to allow the		
demonstration of progressive development across the programme towards entry level competence.  8.2. The assessment tasks and grading criteria for each unit of study in the programme must be clearly identified and	X	
available to students in a timely manner well in advance of the assessment.	21	
8.3. Requirements to pass must be explicit.	X	
8.4. Mechanisms for students to appeal against assessment outcomes must be explicit.	X	
8.5. The Establishment must have a process in place to review assessment outcomes and to change assessment strategies when required.	X	
8.6. Programme learning outcomes covering the full range of professional knowledge, skills, competences and attributes	X	
must form the basis for assessment design and underpin decisions on progression.		
8.7. Students must receive timely feedback on their assessments.	X	
8.8. Assessment strategies must allow the Establishment to certify student achievement of learning objectives at the level of the programme and individual units of study.	X	
8.9. Methods of formative and summative assessment must be valid and reliable and comprise a variety of approaches.	X	
Direct assessment of clinical skills and Day One Competences (some of which may be on simulated patients), must		
form a significant component of the overall process of assessment. It must also include the quality control of the		
students logbooks in order to ensure that all clinical procedures, practical and hands-on training planned in the study programme have been fully completed by each individual student.		
Standard 9: Academic and support staff		
9.1. The Establishment must ensure that all staff are appropriately qualified and prepared for their roles, in agreement	X	
with the national and EU regulations. A formal training (including good teaching and evaluation practices, learning and e-learning resources, biosecurity and QA procedures) must be in place for all staff involved with teaching. Most		
FTE academic staff involved in veterinary training must be veterinarians. It is expected that greater than 2/3 of the		
instruction that the students receive, as determined by student teaching hours, is delivered by qualified veterinarians.		
9.2. The total number, qualifications and skills of all staff involved with the programme, including teaching staff, 'adjunct'	X	
staff, technical, administrative and support staff, must be sufficient and appropriate to deliver the educational programme and fulfil the Establishment's mission.	1	
Diogrammic and furth the Establishment's mission.		
9.3. Staff who participate in teaching must have received the relevant training and qualifications and must display	X	
9.3. Staff who participate in teaching must have received the relevant training and qualifications and must display competence and effective teaching skills in all relevant aspects of the curriculum that they teach, regardless of	X	
9.3. Staff who participate in teaching must have received the relevant training and qualifications and must display	X	

9.4. Academic positions must offer the security and benefits necessary to maintain stability, continuity, and competence of the academic staff. Academic staff should have a balanced workload of teaching, research and service depending	X	
on their role; and should have reasonable opportunity and resources for participation in scholarly activities.		
9.5. The Establishment must provide evidence that it utilises a well-defined, comprehensive and publicised programme	X	
for the professional growth and development of academic and support staff, including formal appraisal and informal	Λ	
mentoring procedures. Staff must have the opportunity to contribute to the Establishment's direction and decision		
making processes.		
9.6. Promotion criteria for academic and support staff must be clear and explicit. Promotions for teaching staff must	X	
recognise excellence in, and (if permitted by the national or university law) place equal emphasis on all aspects of	Λ	
teaching (including clinical teaching), research, service and other scholarly activities.		
Standard 10: Research programmes, continuing and postgraduate education	1	
10.1. The Establishment must demonstrate significant and broad research activities of staff that integrate with and	X	
strengthen the veterinary degree programme through research-based teaching.	Λ	
10.2. All students must be trained in scientific method and research techniques relevant to evidence-based veterinary	X	
medicine.	Λ	
	X	
10.3. All students must have opportunities to participate in research programmes.	X	
10.4. The Establishment must provide advanced postgraduate degree programmes, e.g. PhD, internships, residencies and	X	
continuing education programmes that complement and strengthen the veterinary degree programme and are relevant		
to the needs of the profession and society.	<b>├</b>	
Standard 11: Outcome Assessment and Quality Assurance		
11.1. The Establishment must have a policy for quality assurance that is made public and forms part of their strategic	X	
management. Internal stakeholders must develop and implement this policy through appropriate structures and		
processes, while involving external stakeholders.	37	
11.2. The Establishment must have processes for the design and approval of their programmes. The programmes must be	X	
designed so that they meet the objectives set for them, including the intended learning outcomes. The qualification		
resulting from a programme must be clearly specified and communicated, and refer to the correct level of the		
national qualifications framework for higher education and, consequently, to the Framework for Qualifications of		
the European Higher Education Area.	37	
11.3. The Establishment must ensure that the programmes are delivered in a way that encourages students to take an active	X	
role in creating the learning process, and that the assessment of students reflects this approach.	X	
11.4. The Establishment must consistently apply pre-defined and published regulations covering all phases of the student	X	
"life cycle", e.g. student admission, progression, recognition and certification.	37	
11.5. The Establishment must assure themselves of the competence of their teachers. They must apply fair and transparent	X	
processes for the recruitment and development of staff.	X	
11.6. The Establishment must have appropriate funding for learning and teaching activities and ensure that adequate and	X	
readily accessible learning resources and student support are provided.	37	
11.7. The Establishment must ensure that they collect, analyse and use relevant information for the effective management	X	
of their programmes and other activities.	37	
11.8. The Establishment must publish information about their activities, including programmes, which is clear, accurate,	X	
objective, up-to date and readily accessible.	X	
11.9. The Establishment must monitor and periodically review their programmes to ensure that they achieve the objectives	X	
set for them and respond to the needs of students and society. These reviews must lead to continuous improvement of the programme. Any action planned or taken as a result must be communicated to all those concerned.		
of the programme. Any action planned or taken as a result must be communicated to all those concerned.		
11.10. The Establishment must undergo external quality assurance in line with the ESG on a cyclical basis.	X	

 $C: (total\ or\ substantial)\ compliance;\ PC:\ partial\ compliance\ (Minor\ Deficiency);\ NC:\ non-compliance\ (Major\ Deficiency)$ 

## **Executive Summary**

The Faculty of Veterinary Medicine, University of Leipzig (VMF) is one of five establishments for veterinary education in Germany. The University of Leipzig (Alma mater Lipsiensis) was founded in 1409 by scholars from Prague and VMF was established as the Dresden Veterinary Medical School in 1780. The University was renamed Karl Marx Universität in 1953 and renamed University of Leipzig in 1991.

A huge number of distinguished researchers, Nobel Prize winners and notabilities have worked at the University of Leipzig including Albert Johne, Hermann Baum and the present German Chancellor Angela Merkel.

Since the last EAEVE Visitation in 2008, the VMF has renovated several buildings, as well as new premises are planned, budgeted and decided. German legislation (TAppV<sup>1</sup>) is overarching the general training conditions for all the 5 German veterinary Establishments.

The current ESEVT Visitation was performed in agreement with the SOP 2016.

The SER was well written with relevant references and relevant parts placed in detailed appendices. The Team had a number of pre-site visit questions, which were answered in great detail and thereby added to a thorough understanding of the Leipzig curriculum, the strengths and the weaknesses of the Establishment and many other important details.

Illustrations and tables were sufficient and relevant to understand the Leipzig concept of teaching veterinary medicine integrated with research in a larger university setting. Much material was also brought to the Team's knowledge during the Visitation.

A couple of recalculated tables and an updated organigram has been added to the Team's report.

### **Areas worthy of praise (i.e. Commendations):**

- The highly useful and subdivided SWOT analysis;
- The fact that the Deans of Study Affairs of the five German veterinary faculties have regular meetings to facilitate closer cooperation in curricular matters.
- The fact that students are represented and have voting rights in many committees and commissions at the VMF Leipzig.
- The fact that the clinics constantly increase their income and contribute to transversal investments in a growing and participative manner.
- The clinical skills lab (PAUL);
- Excellent, open relationship between students and staff;
- The availability of large numbers of animals and range of species for clinical training;
- A commendable quality level of infrastructure in the clinics;
- A commendable QA-system at institute level feeding solid information into higher levels.

Additional commendations are given in the Visitation Report.

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<sup>1</sup> https://www.gesetze-im-internet.de/tappy/

## Areas of concern (i.e. Minor Deficiencies):

- partial compliance with Substandard 1.5 because of absence of a formal collection of the input from stakeholders;
- partially compliant with Substandard 3.8 and 3.10 because of sub-optimal EPT organisation;
- partial compliance with Substandard 4.7 and 4.13 because of sub-optimal biosecurity measures in some areas.

Additional suggestions for improvement are given in the Visitation Report.

**Items of non-compliance with the ESEVT Standards (i.e. Major Deficiencies):** None.

## **Glossary**

EAEVE: European Association of Establishments for Veterinary Education

EBVS: European Board of Veterinary Specialisation ECOVE: European Committee on Veterinary Education

**EPT: External Practical Training** 

ESEVT: European System of Evaluation of Veterinary Training

ESG: Standards and Guidelines for Quality Assurance in the European Higher Education Area

FSQ: Food Safety and Quality FTE: Full-Time Equivalent IT: Information Technology QA: Quality Assurance SER: Self Evaluation Report

SOP: Standard Operating Procedure VPH: Veterinary Public Health VTH: Veterinary Teaching Hospital

## Standardised terminology

**Accreditation**: status of an Establishment that is considered by ECOVE as compliant with the ESEVT Standards normally for a 7 years period starting at the date of the last (full) Visitation; **Establishment**: the official and legal unit that organise the veterinary degree as a whole, either a university, faculty, school, department, institute;

Ambulatory clinic: clinical training done extra-murally and fully supervised by academic trained teachers;

**Establishment's Head**: the person who officially chairs the above described Establishment, i.e. Rector, Dean, Director, Head of Department, President, Principal, ..;

External Practical Training: clinical and practical training done extra-murally and fully supervised by non-academic staff (e.g. practitioners);

**Major Deficiency**: a deficiency that significantly affects the quality of education and the Establishment's compliance with the ESEVT Standards;

**Minor Deficiency**: a deficiency that does not significantly affect the quality of education or the Establishment's compliance with the ESEVT Standards;

**Visitation**: a full visitation organised on-site in agreement with the ESEVT SOP in order to evaluate if the veterinary degree provided by the visited Establishment is compliant with all ESEVT Standards; any chronological reference to 'the Visitation' means the first day of the full on-site visitation;

**Visitation Report**: a document prepared by the Visitation Team, corrected for factual errors and finally issued by ECOVE; it contains, for each ESEVT Standard, findings, comments, suggestions and identified deficiencies.

# **Decision of ECOVE**

The Committee concluded that no Major Deficiencies were identified.

The Faculty of Veterinary Medicine, University of Leipzig is therefore classified as holding the status of: **ACCREDITATION**.