

**European Association
of Establishments for Veterinary Education**

**Association Européenne
des Etablissements d'Enseignement Vétérinaire**



REPORT on the STAGE 1 VISITATION to VetAgroSup in Lyon

21-25/09/2015

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INTRODUCTION

The 'Ecole Nationale Vétérinaire de Lyon' (ENVL) was first established in 1761, i.e. the first veterinary school in the world. In 2010, VetAgroSup (VAS) was created as the merge of 3 institutions, i.e. ENVL (a veterinary school), ENSV (a school for national veterinary services) and ENITAC (an agronomic school) (see the SER for the glossary).

The Establishment has been visited by ESEVT in October 2005 and approved by an ECOVE decision.

Since the previous Visitation, several changes have occurred in order to improve education, research and services, e.g. new organisational chart, new buildings and equipment, new study programme and new learning methodology.

The main peculiarity of VAS is that it currently organises on two campuses three different curricula, i.e. a veterinary degree, an agronomy degree and a postgraduate degree in state veterinary services.

1. OBJECTIVES & STRATEGY

1.1. Findings

The objectives of the Establishment are partly set by the French Ministry of Agriculture, Food-Industry and Forest and by the 2010-2015 strategic plan adopted by the VAS Governing Board.

The main objectives are to provide a high level of education in the fields and topics directly related to the veterinary career, in order to prepare the students to meet the different needs of society, especially regarding animal health and its relations with human and public health, biomedical research and environmental protection. So far about 80% of the actions proposed in the 2010-2015 strategic plan have been fully implemented.

The objectives defined in the current strategic plan are subject to a continuous process of improvement, at the level of education, research, clinical services, post graduate education and internationalisation, based on the recommendations of local, national and international evaluation bodies.

The next strategic plan (SP) (2016-2020) is available as an annex of the SER. It has been prepared by the Establishment, in close collaboration with staff, students, stakeholders and the Ministry. The Visitation team has been informed that the SP will be officially adopted by the Governing Board in Autumn 2015.

1.2. Comment

The Establishment appears to be well aware of its strengths and weaknesses and about the future challenges for the achievement of its mission. A culture of permanent improvement does exist at VetAgroSup.

The new SP demonstrates that high quality and up to date veterinary education remains a priority, both at the under- and post-graduate levels.

In the Visitation team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

1.3. Suggestions

It is suggested to include milestones and indicators of achievements in the new SP.

2. ORGANISATION

2.1. Findings

VAS is an autonomous Establishment under the authority of the French Ministry of Agriculture, Food-Industry and Forest and in particular it's General Directorate of Studies and Research. It has the French legal status of 'Grand Etablissement' and is considered by law as equivalent to a university. It is mainly located in 2 places, i.e. the veterinary campus in Marcy L'Etoile (Lyon) and the agronomy campus in Lempdes (Clermont-Ferrand) (150km away).

Structured collaborations do exist with the University of Lyon and with national research centres (INRA, CNRS, INSERM, ..).

VAS is managed by several councils and bodies, i.e.:

-) a Governing Board made up of 32 members: 8 representatives elected by teachers, 4 representatives elected by other staff categories, 4 representatives elected by the students, and 16 members from outside the institution (stakeholders);
-) an Executive Committee made up of the Dean/Director General, 4 Deputy Deans/Directors (in charge of education, research, quality & evaluation and external relations), 2 Vice Deans/Directors (one for each campus), Assistant Directors, head of Administrative Affairs and Department and research units Chairs;
-) an Establishment Assembly made up of 40 elected staff members;
-) a Curriculum and Students Affairs Committee made up of members of the Governing Board and representatives elected by the teaching staff and students;
-) a Scientific Committee made up of elected teachers, researchers and students, and representatives of national research institutions and partners;
-) an Animal Ethics Committee made up of outside members and representatives of the teachers, researchers, support staff and students.

Other administrative and representative bodies include the Technical Committee responsible for questions related to employment, working rules and salaries of employees directly paid by the Establishment, the Hygiene and Safety Committee responsible for hygiene and safety matters, the Lecturer Grades Commission responsible for evaluating the promotions of staff, and the Veterinary Teaching Hospital Council.

The head of Establishment and the vice-head in charge of the veterinary campus are veterinarians.

The study programme of the first 4 years of the curriculum is organised by 9 Training units. The study programme of the fifth year of the curriculum and of the post graduate clinical training is organised by 4 departments. Each unit/department is supervised by a council headed by an academic staff and with representatives of teaching staff, support staff, students and stakeholders.

The research activities are organised in Research units, which include local staff (nearly all teachers are members of at least 1 research unit) and researchers from other universities and/or national research agencies. Each academic staff is part of both a department and a research unit.

Both teaching and research activities are supported by specific technical platforms, e.g. the Veterinary Teaching Hospital, the IT Unit and the Centre for Preclinical Research.

A complete organisational chart was not provided in the SER but is available on the website of VetAgroSup.

2.2. Comments

The Establishment is organised in an efficient, transparent and democratic way and the procedures are regularly evaluated and amended if necessary.

The Visitation team has been impressed by the efficiency and communication skills of most administrative departments.

Collaboration between units and departments are not obvious. However the new SP would clarify and simplify the structures, which should contribute to improve the collaborations.

The Visitation Team is a bit concerned by the lack of strong collaboration between the previous ENVL (veterinary school) and ENITAC (agronomy school), in terms of teaching, research and services. Although regrouped in VAS, the two campuses appear to behave quite independently. It was told to the Visitation team that the advantages of the merge of these Establishments are numerous, i.e. to develop synergies without losing the specificity of each curriculum, to be more powerful regarding its administrative status and its capacity to participate to the new projects developed by the University of Lyon, to be more autonomous at a national level, and to provide more opportunities for the veterinary curriculum by including some competencies on veterinary public health and One Health, especially regarding animal production and impact of veterinary practice on environment.

Some collaborations currently exist between the 4 French veterinary schools at the level of postgraduate studies, e.g. internships and research projects. However they are rather limited for undergraduate studies. The recent creation of IAVFF (a cooperative national public administrative Establishment) should improve it in term of mutualisation of specialised staff, equipment, facilities and clinical caseload.

In the Visitation team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

2.3. Suggestions

None.

3. FINANCES

3.1. Findings

The basic teaching and research funding and the level of tuition fees are fixed by the State on an annual basis. Additional funding is provided by services, research grants and regional grants. The State funding represented about 60% of the total income during the last academic years.

The budget of the Establishment is adopted by the Governing Board on an annual basis, based on recommendations of the Ministry and requests of the different units/departments. Each teaching unit, research unit and technical platform receives a funding for running costs, based on criteria fixed by the Governing Board and/or the Ministry. Most staff are paid by the State. However, some clinical, research and support staff are funded by the incomes of the Establishment.

During the last three academic years, the income overcame the expenditure, which has allowed the Establishment to create a financial reserve of several millions euros, half of it being blocked for on-going investments and actions and half of it being required for implementing the new SP.

3.2. Comments

The relative low level of the State funding and the fact that the tuition fees are capped by law are hopefully compensated by the significant incomes generated by services, research grants and regional grants, with as a result a well balanced budget.

However the recent increase of the number of undergraduate students without proportional increase in the funding from the State, the recent decrease in the State funding of the running costs and the lack of autonomy to use the current financial reserves are worrying for the financial balance of the Establishment in the future.

In the Visitation team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

3.3. Suggestions

It is suggested that the State funding is increased in proportion to the increase of undergraduate students imposed by the Ministry.

It is also suggested that the Establishment gains sufficient autonomy in the future to use its financial reserves, which is essential for implementing its SP and for being compliant with the ESEVT standards.

4. CURRICULUM

4.1. GENERAL ASPECTS

4.1.1. Findings

The veterinary training is based on a professional framework of reference and diploma, which define the responsibilities, skills, knowledge and tasks of the general veterinary practitioner (annex 4-2). This training meets the criteria of EU Directive 2005/36/EC and complies with the decree applying to the European higher education framework and to the French higher education system. These standards are the outcome of working groups of the 4 ENV's Establishment members, ministry administrators and representatives of the profession. The Ministry of Agriculture takes the final decision. The Establishment relies on the Ministry for the complete curriculum but is free to implement the methods and organisation to achieve the requested competencies.

The curriculum is national but the teaching methods, the chronology of the materials used and assessment methods are at the discretion of the VAS. The suggestions regarding organisation, timetables and clinical rotations are forwarded from the departments to the Establishment Assembly, which, after an analysis of the requests, makes the final decision. The decisions are revised annually following the feedbacks and evaluations.

Since the beginning of 2013 academic year, the number of students admitted to ENV each year was set at 137 (instead of 117).

The curriculum is based on competences requests from the profession and aligned with the Bologna process. One academic year correspond to 60 credits. Each module and externship must be evaluated in ECTS. Extramural works are mandatory at least for a limited amount of time. As it is included in acquisition of competences and as it is evaluated, credits are linked with those mandatory externships. Students are free to take part in more extramural work during holidays but, as these exercises are not part of the curriculum, they are not associated with credits.

The complete study period to obtain the veterinary degree is 5 years. The programme of the veterinary curriculum is organised into:

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(a) Four years for the Core Curriculum (eight semesters. (S5 to S12): (i) Preclinical sciences (S5, S6 and part of S7); (ii) clinical sciences (end of S7, S8, S9 and S10); (iii) clinical rotations in the school's hospital (S10 mornings and S11-S12); professional knowledge (Y2 and Y4).

In order to introduce the students to the clinical sciences through the use of core knowledge in anatomy and physiology, relevant clinical and complementary examinations techniques, detection and interpretation of clinical signs are included in the teaching in S9 e.g. training and interpretation of electrocardiographic techniques and results;

(b) One pre-specialised year (Y5) (Semesters S13-14) in one of the following tracks: veterinary public health, research, and industry. The Lyon Establishment offers three tracks focused on one species: small animal, equine or animal production and three mixed practice tracks: small animal-equine, small animal- animal production and equine-animal production. The completion of this year entitles the student to defend the veterinary professional thesis.

The basic degree is awarded to students who have passed the eight semesters of the core courses. Only holders of basic veterinary degree can access the advanced year, and once this is passed the candidate may defend a veterinary doctoral thesis.

The state of doctor of veterinary medicine degree is awarded to students after defence of a professional thesis under the term of Rural Code.

The balance and coverage of the curriculum seem to be correct considering the subjects in all areas. During each semester, the training is organised in teaching units. Time spent on clinical training represents 47% of the training for the entire first eight semesters.

The ratio values are within the ESEVT recommended ranges.

Before starting the clinical rotations, the student has received propaedeutic theoretical and practical training. The responsibilities of students rise from Y3 to Y5. Likewise, students from different years work together in this progressive method, in pairs with one Y5 and one Y4 student (3-4 students per year per rotation group) and with internal collaborations between the Y5 students.

4.1.2. Comments

In general, teaching appears to be well performed and supported by available on-line materials. Several actions have been implemented or initiated based on the results of the assessment and recommendations of the AVMA, the results of student evaluations of their teaching as well as feedback from the students.

It is very positive that the teaching programme is adapted to offer students, mainly from urban backgrounds, the opportunity to have knowledge on and consider a very diverse career choice.

The curriculum is fully integrated. The organisation into multidisciplinary modules allows for better coordination between disciplines avoiding duplication in anatomy, physiology, histology, embryology, biology of reproduction etc., and better detection of deficiencies. Non-EU listed subject are mainly in English language. All curriculum activities are compulsory.

The calculation of the ratios faces several major challenges because the organisation of Y5 courses is oriented towards the professional careers of students. This allows for education to be adapted to the student's needs, to the need for acquiring the relevant skills and the needs of the profession. Therefore, despite of some heterogeneity, the curriculum is still within the requirements of the SOP.

The students have time dedicate to individual studies since the curriculum timetable also includes time for individual studies, associated with new teaching methods based on numeric resources. They also have time devoted to the preparation of their professional thesis and also to

extracurricular activities, e.g. sport (4h every weeks).

Currently the curriculum is basically the same as in 2008 though small changes have been implemented. At present, the Establishment is working on the new curriculum taking into account not only the point of view of the teachers but also of the students. A positive finding is that teachers are implementing new teaching methods. However they do not have sufficient economical support for innovative teaching projects.

In the Visitation team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

4.1.3. Suggestions

None.

4.2 BASIC SUBJECTS & BASIC SCIENCES

4.2.1. Findings

The level of students admitted to the school is generally good in terms of scientific and biological basic knowledge required to follow the veterinary curriculum.

All subjects considered Basic Sciences in the EU- listing are taught in S5, S6 and part of S7. The topics taught in these semesters are relevant to later courses. The courses are well coordinated to avoid overlapping or gaps in their contents with focus on covering Veterinary Medicine fundamentals. Basic Subject 39 hours and Basic Sciences 884 hours account for about 25% of the EU listed subjects (3358 hours) (table 4-2, p 18-19). Although Basic Subject is not part of the core of curriculum, the course, including the teaching material, is considered a valuable contribution. Thus, 39 hours of biomathematics are included in S5.

Regarding waste management, VAS uses a refrigerated unit placed in the necropsy building where they stock cadavers and carcasses of all species. The material is and removed weekly. Cadavers of small animals for individual incineration are not included in this pick-up but treated directly by a dedicated company.

Various waste products are selectively stored:

- (a) Hospital waste (including any biological, contaminated or suspected soiled materials) or collected in the waste bins or specific yellow containers, are stored in covered, closed and locked areas, before they are picked up by a specialised company;
- (b) Ordinary waste (paper, cardboard, etc.);
- (c) Chemical waste (solvents, laboratory products) is stored until collected by a special service at least twice a year.

Effluents contaminated by biological waste or (suspected) pathogens, originating from a specific location (hospital, necropsy, isolation building, area for the excreta of small animals receiving chemotherapy, area for excreta of hospitalised small animals) are transported to a treatment area before being eliminated via the sewer system. VAS has been authorised to release it into the sewer system (inspected annually), as well as using the storm drain. Highly pathogenic microorganism and toxins are subject to by specific regulations (premises, authorisations, safety, and training) and regular inspection by the ANSM.

The Establishment has a truck authorised for transport of up to two cadavers to necropsy.

Biosafety and biosecurity procedures are correctly implemented from the beginning and throughout the whole curriculum, both in theory as well as through practical training.

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The balance between practical and theoretical work is good. Some of the basic sciences link their subject with clinical subjects in order to teach the students the importance of basic sciences as a preliminary step to the clinical sciences. The practicals in physiology, toxicology and microbiology are sufficient to get sufficient and appropriate training. Preclinical training laboratories (physiology, biochemistry, microbiology and anatomy) are well equipped.

4.2.2. Comments

The curriculum includes the major basic sciences required to offer adequate preparation for students.

The lectures are given in modules, which group together several disciplines (e.g. by body system part in the same module; for anatomy, histology, physiology and pathology).

Teaching material (mainly slide shows) are available to students via the platform VetoTice.

It is worth noting that the module of toxicology is lectured in S8 as a preparation to clinical sciences. Toxic plants, venomous animals and clinical toxicology are included in the teaching.

It is also noted that twenty-five teachers involved in teaching basic sciences are veterinarians, which helps to facilitate professional orientation of these subjects.

In the Visitation Team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

4.2.3. Suggestions

None.

4.3. ANIMAL PRODUCTION

4.3.1. Findings

During the first year of the curriculum students have to visit pig and poultry farms for half a day in groups of 7-8 students; this also occurs in in 4th year.

Students receive information regarding animal production during the preclinical sciences in 5th, 6th and part of 7th semester and through teaching in livestock farming methods.

Two weeks of mandatory extramural work have to be undertaken in ruminant farms and one week in pigs, poultry or rabbits farms during the first year (6th semester).

Students that choose animal productions tracks, or mixed practice tracks in Y5: small animals and animal production and equine and animal production, are trained at the Practice Rural Clinics of L'Arbresle (UCRA unit). Here students work with the clients of the clinic, carrying out visits, emergencies, surgeries, feeding plans, management of reproduction. During these visits, students have the ability to examine farmyard animals (poultry, rabbits) in a "traditional farming" setting.

Training at UCRA is focused only on ruminant, and does not include training in monogastrics unless students express interest in these species. Then the Establishment can sign agreements with veterinary clinics and/or farms where the students can be trained.

All the topics regarding animal production, including animal nutrition, agronomy, rural economics, animal husbandry, veterinary hygiene and animal ethology and protection, are taught.

Teaching of forensic and state veterinary medicine are included in preventive medicine, pharmacology and ethic courses.

Animal welfare is taught at different levels during the curriculum, starting from the first year with lectures and practical work. During the second year teach in in practical aspects of animal welfare on farm are given. Animal welfare is one of the topics analysed by students during the week on heard management.

The Establishment does not provide any specific teaching module for biosecurity and biosafety, but information regarding these topics is integrated in the clinical teaching, as well as though periclinal teaching in specific rooms like the one dedicated to bacteriology. All information regarding biosecurity and biosafety procedures is gathered in a unique document, which is also available on the intranet site. Information posters with illustrations are posted in all rooms where this is considered necessary.

Students have to follow a compulsory course of three hours in beekeeping during the 1st year.

No teaching in aquaculture is offered; students that are interested in this topic can follow courses at ONIRIS in Nantes.

4.3.2. Comments

Animal production teaching is well organised, and the hours of teaching are sufficient with a good balance between theory and practice. Moreover, students have to deal with topics regarding animal production early during the first year when they have to undertake extra mural work in ruminant, pigs, poultry or rabbits farms for a total duration of three weeks.

The Establishment does not have a teaching farm, but students are well trained in animal production of ruminants, through the training at Practice Rural Clinics of L'Arbresle (UCRA unit). Poultry and swine production is not as relevant as dairy and beef ruminants in Rhône-Alpes Region; however, it is considered positive that the Establishment seeks t to sign agreements with farms and veterinary clinics in other sites of the country for students of the animal production tracks interested in monogastrics. In addition, all the students receive an adequate teaching on poultry and swine production in the first year.

There is a good connection between the different animal production disciplines and clinics; this allows students to have a global approach to management of food producing animals. The connections, for instance the exchange of teachers, between the agronomy campus (ENITA) in Clermont-Ferrand and the Establishment in Lyon is increasing, and this will have positive effects on the teaching of animal production topics in the future.

In the Visitation Team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

4.3.3. Suggestions

Basic knowledge in aquaculture has to be taught to all students.

Taking into account that in the future training of students to swine and poultry farms will become difficult due to biosafety constraints, the Establishments should consider possible strategies to ensure an adequate training of students on management of monogastrics, such as agreements with public experimental farms of other campus or research institutions.

4.4. CLINICAL SCIENCES

4.4.1. Findings

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The core curriculum covers eight semesters (S5 to S12). All the students follow the same programme for the first 4 years, from Y1 through to Y4. Y5 students enter different professional tracks according to their choice. Teaching in clinical sciences involves clinical diseases of individual animals and populations, food quality and safety.

All teaching, including lectures, demonstrations and clinical services, is compulsory. Presence at courses and clinical work is controlled by the responsible clinician, presence at lectures being subject to random controls. Presence at lectures is reported to be > 50% and is not considered compulsory by the students. Basic training in clinical sciences, all species included, must represent at least 30% of the training in the core curriculum, and accounts for at least 40 % of the total curriculum. In addition, additional knowledge can be acquired in selected areas of special interest to the student, like for instance in the research animal unit in the Claude Bourgelat Institute. Training follows the demands as listed in the Directive 2005/36/EC, preparing the student for acquiring the Day-1-Skills as defined. The required goals are written down in a detailed overview available to the students through the intranet and as written material.

The teaching is traditional. Teaching material, both produced at the Establishment as well as material from other learning sources are available via the Establishment's web platform VetoTice. Not all teachers upload teaching material on the platform, though. For all clinical topics, and for all species included, a detailed list of competences has been worked out. To make sure that the requirements are met, the student is provided with protocols, where relevant learning skills are ticked off by the student. The protocols are controlled and signed by one of the teachers belonging to the scientific staff.

Teaching in clinical sciences is divided into lectures, propaedeutics, clinical demonstrations and clinical training. There is relatively little time allocated to self-directed studies during the first four years of the curriculum, while the last (5th) year includes writing the final thesis based on a small research project or on literature studies.

Students get their first introduction to live animals in Y1 through lectures in behaviour, where both production and companion animals, as well as some exotic animals species are presented. Clinical sciences are also to some extent integrated in the anatomy and physiology lectures in Y1, when relevant. Lectures in clinical sciences take place from Y2 and are given for the entire year class. In Y2, the students will spend some time in the preventive medicine clinic as observers.

The propaedeutic clinical and practical trainings in Y2 and Y3 are devoted to bovines, as well as companion animals and horses. The Y3 the students will enter into clinical rotations in the mornings of the second half of the year. However, they will mainly act as observers and assist in handling of the animals together with a Y4 student and are not active in the practical work-up of the patients at this stage. However, the older student will act as an instructor for the younger one.

The clinical rotations take place in Y4 in the teaching hospital for companion animals, equines and a smaller number of cattle and small ruminants. The cattle arriving at the clinic are worked up by the students and eventually necropsied. The service of receiving sick cattle for teaching purposes is also offered to veterinary practitioners in the area. Production animal practice is trained to a larger extent in the practice rural clinic of L'Arbresle (UCRA). In all the clinical rotations, the students are divided into smaller groups of 3-4 and they often work together in pairs.

At the end of Y4 the student will have been trained in clinical activities for most of the relevant animal species. Clinical rotations in the Establishment's hospitals are included in the mornings of the 10th semester, and full day in the 11th and 12th semester (Y4). These □rotations are also divided

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equally between animal species. In addition, students rotate through the preventive medicine small animal clinic that handles mainly dogs and cats, but also ferrets and rabbits. This clinic gives the students a good basic training in both preventive medicine as well as in advising owners on nutrition and behaviour.

For most of the clinical tracks, the student is evaluated at the end of the period by a Establishment member with the portfolio documents: number of acts, acts observed; in which the student participates / does independently, as well as presentation of clinical cases.

The Establishment runs a 24h clinical service 11 months a year (12 months for the equine emergencies), both in the teaching hospital as well as in the clinic for production animals in L'Arbresle (UCRA). Students are systematically included in monitoring their clinical cases from admittance to discharge, including walking dogs and feeding their patients. Thus, in Y4, students are required to work in the emergency services and with ICU hospitalised animals, both workdays and at weekends.

Students participate in the mobile clinics in the production animal and equine tracks. The equine mobile clinic includes preventive medicine as well as service during competition and veterinary service on the racetrack. Twice a week, the students travel in minibuses to private practices in the school's vicinity to examine field production animal cases. The school has acquired a bovine private practice located near the campus to allow students to visit cases on farm. Four cars each adapted to carry 4 students and a vet are used. Y4 students have a mandatory week at the UCRA, with 4 weeks for the Y5 students registered in the "production animals" track.

Professional knowledge modules are lectured during Y5 for all the students. Students are also taught other relevant topics, including radioprotection competencies and «dangerous dog» evaluation and legislation. The completion of Y5 entitles the student to defend the veterinary professional thesis. Proper use of antibiotics is implemented in the teaching through the whole curriculum.

Extramural work is obligatory, with the external supervisor linked to the Establishment by a contract. The majority of the clinical externship weeks are taken in the summer holidays. The length of the extramural activity is minimum 3 weeks in Y1, 4 weeks in Y2, 4 weeks in Y3 and 8 weeks in Y4. These mandatory practical training sessions from Y1 to Y4 thus represent a minimum of 19 weeks of practical and/or clinical teaching (35 hours/week). The students are granted 4 ECTS for 3-4 weeks' extramural work, 8 ECTS for eight weeks.

During the extramural practical training periods the students are not allowed to work alone, the work should always be under the supervision of a practitioner or a scientific or administrative senior. Students are covered by insurance for their extramural work if it is done under the responsibility of the school and subject to a signed contract between the school, the student and the external unit. However, if an error occurs, the responsibility is discussed and may eventually be shared between the partner and the Establishment.

A part of the outbound motility plan, the training for a part of the full 5-year study takes place in a foreign country, either as an "internship", or in an institution of veterinary education, for a maximum of 2 semesters. The minimum international external period is 2 weeks. The student is free to decide where and when this foreign mandatory period is taken, in relation with his/her professional project. The period could be under Erasmus agreement, but more often under other agreements with international school or structures/practices.

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For Y5 the length of extramural work varies according to the in-depth stream chosen. The extramural work is subject to a mutual agreement between the Establishment and the site where the activity is taking place. Related to the stream elected, the Establishment provides the student with a “passport log” listing the competences necessary to know. These include the basic competences the student should be able to perform him/herself, as well as for which it is sufficient to have seen or to know the procedure(s) in theory. The results are controlled and signed. A detailed case log is available for the production animal practice, differentiating between procedures that should either be performed by the student, seen by the student or the student should have knowledge on the procedure. No similarly detailed case log is presented for companion animals and equines.

To broaden the students’ experience in preventive medicine and herd practice, agreements have been established with several equine and production animal commercial organisations and farms. Students also get additional training in prophylactic treatment of companion animals through different Establishments, including a welfare clinic for owners in a financially difficult situation. Up to 15 students per year may also volunteer for a telephone answering service at the Pharmacovigilance Centre. This service that includes initial weekly training lectures is highly popular for the students. A similar service is in progress for the reproduction centre, using Y3 students to act as contacts between clinic and owners.

Practical training in necropsies is delivered in the second semester of Y3 and in Y4. Caseload is sufficient to ensure the required level of experience. The practical training takes place in the mornings and in addition to necropsies includes risk assessments and handling of potential contagious material. In the afternoon the students write up descriptive reports and go through histology slides of lesions.

Elective courses, of which some are related to clinical training, are available to the students. In addition, the students can enrol for research training in some of the research units, parallel to the regular curriculum. There is neither exam nor ECTS points given for the electives.

Biosafety procedures are developed for all clinics and laboratories and well integrated. The students are informed about biosafety measures and hazards every year and at the beginning of each clinical rotation.

The calculated ratios for the theoretical, laboratory and clinical training are satisfactory. Caseload is sufficient to ensure that the students have developed day-one skills at graduation. Teaching in so-called “new” companion animal species is not fully developed. Aquaculture and fish diseases are not included in the curriculum. However, if interested, the students can obtain knowledge through extramural activities.

A questionnaire regarding Day-One Skills has been presented three consecutive years to the graduate students one year after graduation. Response rate is rather low, about 1/3 of the graduates responding. A substantial number considers that they have insufficient knowledge on topics related to the veterinary profession, like conflict handling, marketing and management issues. After graduation, more than 50 % of the respondents have insufficient or little knowledge on performing a basic ophthalmic examination, ¼ to ⅓ responds similar regarding neurologic examination.

4.4.2. Comments

According to the answers to the questionnaires filled in one year after graduation, a percentage of the veterinarians asked do not consider themselves confident in the handling of clinical cases primarily in ophthalmology, but also in neurology.

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In the Visitation team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

4.4.3. Suggestions

The postgraduate students feeling of incompetence in performing a basic ophthalmic examination should be addressed by the Establishment and measurements taken in the curriculum.

The development of a lab with phantoms for self-directed practice on basic clinical skills (sutures, catheter insertion...) is in progress. This should be given priority and expanded.

The Establishment should provide an adequate number of pigs and poultry to teach students propaedeutic clinics in these species.

4.5. FOOD SAFETY & QUALITY AND VETERINARY PUBLIC HEALTH

4.5.1. Findings

Food safety and food technology teaching and training are coordinated by the Department of Industry and Research, integrated into the course unit of Veterinary Public Health, which includes the discipline of Food Safety and Food Technology. The education in these matters is organised in four modules, distributed between S9 and S12 and totalising 11 ECTS. Up to the end of the 4th year (12th semester) all students have a theoretical component of 178 hours (47h lectures, 70h seminars and 41h self-directed learning) and a practical training of 20 hours.

There is no slaughterhouse or food technology unit in the Establishment. Meat inspection and food safety practical training is provided for in a commercial slaughterhouse (CIBEVIAL, Corbas), 20Km away from the main campus, and in a nearby national institute of slaughterhouse staff training (INFOMA).

Each student has to fulfil 20 hours of practical activity on ante and post-mortem inspection of cattle, sheep and swine. Four hours visiting the industrial slaughterhouse and 16 hours, at INFOMA, handling condemned carcasses and offal originated from five different slaughterhouses of Lyon region to observe and identify lesions. These practical activities, supervised by a staff member, are distributed by semesters 9th, 11th and 12th, and performed in four groups of 3 students each rotating for 2 weeks, in quality and safety matters.

A software application (ASADIA) in use by official meat inspectors is also made available to the self-directed learning of 4th year Lyon students addressing and complementing the instruction on lesions and parasites found in carcass and meat.

There are theoretical teaching and tutorials addressed to fish and fish products, to milk and dairy products and to poultry and eggs. Also, due to difficulties in accessing food-processing units, students are taught only theoretically on risk assessment, good hygienic practices and food safety assurance methodologies (HACCP) of food processing units.

Knowledge and skills evaluation of food safety and food technology matters are adequately performed both through final module exams and continuous student's evaluation.

Food hygiene matters are well linked with other related areas as animal production, animal welfare, pathology, infectious diseases, parasitology, pharmacology and toxicology.

Four staff members are dedicated to the teaching and training of food hygiene and food technology matters.

During their 5th year, students who might choose veterinary public health as a vocational track have an additional 280 hours of theoretical training and 840 hours of supervised practical training, for a total of 1380 hours. Students enrolled in this track are trained at ENSV.

A total of 178 hours, corresponding to 4.4% of total curriculum (4023hrs), is dedicated to Food Safety/VPH teaching and training for all students. In the case of students choosing VPH track this proportion increases to 25.3% (1301/5140).

The FS/VPH ratios R9 and R10 are 22.6 (the total number of hours of the curriculum should not consider 5th year) and 0.11, respectively, are within the accepted targets of SOP recommendations.

4.5.2. Comments

The teaching and training of food safety and food technology matters is well organised and fulfil the SOP recommendations. The other veterinary public health issues are also well addressed and adequately linked with other related areas as animal production and welfare, pathology, infectious diseases, parasitology, pharmacology and toxicology.

Being public health a scientific field considered one of the two domains of the veterinary profession (Annex 4.2) and often referred in SER as a priority to be highlighted by the strategy of the Establishment, it would be anticipated a more adequate credit allocation to the FS/VPH component in the core curriculum.

In the Visitation team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

4.5.3. Suggestions

The small number of candidates following the VPH track in the final year should be addressed as the Establishment offers an excellent environment (ENSV) for students choosing this pre-specialisation.

4.6. ELECTIVES, OPTIONAL DISCIPLINES & OTHER SUBJECTS

4.6.1. Findings

The SOP contains little information on optional elective courses, and apart from tracking in year five there are no ECTS awarding electives. There are courses offered on some topics, including wild fauna. However there is no information on these courses in the teaching programme, so the content cannot be evaluated. Students' junior associations with the help and supervision of Establishment members and/or practitioners organise some practical lessons and lectures

Students may also attend and participate in conferences and events included in a list approved by Establishment Assembly.

Elective courses are not compulsory and can be taken outside of the compulsory course distribution. Approximately fifty percent of students choose to attend some elective courses.

4.6.2. Comments

There is no presentation regarding the number of hours in each elective (besides tracking) offered, which makes its evaluation difficult.

It is considered positive that there is work in process on making elective courses (besides tracking) part of the compulsory new curriculum.

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In the Visitation team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

4.6.3. Suggestions

The new curriculum should include at least one elective course related to the subject of "One Health" and more English electives should be provided.

5. TEACHING QUALITY & EVALUATION

5.1. TEACHING METHODOLOGY

5.1.1. Findings

The five years (4+1) curriculum integrates four first years of a common core curriculum followed by a final year of tracking pre-specialisation. The full curriculum is organised in 10 semesters (Semesters 5 to 14). Students need to pass two previous years (Semesters 1 to 4) dedicated to basic subjects (Annex 9.1.) to be accepted in the veterinary course. The referred basic subjects are: Mathematics, Biology, Chemistry, Physics and Earth Sciences (BCPST) delivered on a week time allocation of 31.5 hours.

According to SER (Annex 4.2), the basic component of curriculum teaching and training is the course unit (CU) or module of the delivered subjects. To each course unit is attributed a certain number of credits (ECTS) and there is an academic coordinator appointed. Course units and academic coordinators have to be approved by the Establishment Assembly (CE) and by the Curriculum and Students Affairs Committee (CEVE).

Extramural externships in core subjects are also compulsory components of teaching and training of students and the corresponding ECTS allocation added up to the total (60 ECTS) of each academic year. The overall time spent in extramural activities is at least 19 weeks (a minimum of 665 hours) distributed between years 1st to 4th.

Coordination and evaluation of teaching and training activities are mainly performed by CEVE. If major changes are needed, the CSP has to be consulted and the Establishment Assembly required for proposal's validation.

The curriculum is organised in multidisciplinary modules and is fully integrated. Preclinical matters are performed in the first three semesters (S5 to S7) of the core curriculum. Clinical subjects (individual and population medicine and food quality and safety) are distributed from S7 to S10. Clinical rotations start at S10 and are followed at S11 and S12 being dedicated to small animals, horses, herd health and veterinary public health areas. In the final year (S13 and S14) students have to choose one of the nine offered vocational tracks. Compulsory matters of professional knowledge and electives are being offered at 2nd, 4th and 5th years.

Opportunities for extramural activities have to be looked for by the student. The externship project has to be approved by the assigned academic advisor and the work agreed and performed under the supervision of a veterinarian. The academic advisor has to accept the externship evaluation form and/or the work report validated by the student's supervisor. Then, the student has to submit it in due time to be approved by DEVE before ECTS credits are earned.

General learning objectives are described in detail in SER for a number of specific areas of the core curriculum and the final vocational year, namely: morphological sciences; bio-molecular sciences and genetics; physiology; ethology, welfare and protection of animals; introduction to animal experimentation; biostatistics; epidemiology; animal husbandry, livestock farming and

environment; animal nutrition and diet; scientific and technical information; anatomical pathology; veterinary infectiology and immunology; pharmacy, pharmacology and toxicology; economics; introduction to the clinical sciences; medical imaging; clinical sciences – pets; clinical sciences – equidae; clinical sciences – pigs, poultry, rabbits and wildlife species; clinical sciences – ruminants; veterinary public health; veterinary law, legislation and jurisprudence; professional knowledge; English (Annex 4.2.). Students have access to the description of the learning objectives and related learning outcomes in various documents presented in both formats, written and electronic (Annexes 4.1. and 5.1.). Most of these documents are available to students at the VetoTice e-platform.

Teaching and training assume a number of forms including lectures, tutorials, seminars, self-directed learning, laboratory and desk-based exercises, non-clinical animal work, clinical work, visits and externships. Many supervised practical activities of students at the 4th and 5th years are monitored and evaluated through the use of a portfolio of skills and activity log-books.

The Establishment has a significant number of collaboration agreements with public and private entities covering the various science and professional fields as described in SER 5.1.1. All the collaborative agreements have to state the teaching purpose and methods, the mutual responsibilities and the Establishment member responsible for the programme.

In the annual timetable organisation, time slots are to be set aside allowing for self-training of students (ex. self-evaluations, multiple choice exams, access websites and videos, prepare clinical cases for presentation and discussion). Students also have easy access to teaching materials made available by academic staff at the VetoTice platform, such as PowerPoint presentations used in lectures, Internet sites for complementary information, discipline reference bibliography or access to e-books from the library.

Attendance to lectures and practical activities are mandatory by law. Student's absence must be justified and, if not accepted, can result in exclusion from normal examination sessions, after two unjustified absences in a semester. The mandatory attendance in lectures is not always followed in practice, and the decision is left up to the individual teacher. Tutorial and practical sessions are held in smaller groups, such as: groups with a quarter of the number of students in the class, groups of 8 students, when at clinical activities or non-clinical animal groups of 3 to 4 students, and in pairs at clinical rotations of 4th and 5th years.

There is a considerable and continuous process of assessment of student's outcomes such as skills and SOP day-one competencies. During the 4th and 5th years, at clinical rotations, students are evaluated weekly, they have to present and discuss a clinical case or paper and have to do presentations and case studies in some course units as food safety and preventive medicine. In the case of clinical activities, students' skills seem to be further assessed for the defined nine competencies according to AVMA recommendations.

According to SER (Annex Intro-7, Art.7), the curriculum is periodically subjected to a national evaluation by the Agency for Evaluation of Research and Higher Education applying the defined national and European standards. The degree officially awarded is that of a master degree.

The curriculum fulfilment and the teaching performance of staff members are assessed through various processes. There is a student – teacher joint commission (Joint Commission on the Evaluation of Instruction) with the constitution and functions described in Annex 5.5. The main task is the preparation, distribution, processing and analysis of a questionnaire for 2nd to 4th year students. Furthermore, the Establishment promotes other questionnaires for 4th year students (addressing curricular matters and supervisors' attitudes), to 5th year students (assessing day-one

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skills) and to graduates (after three years of graduation) and their employers. The main bodies involved are the CSP and the CEVE as promoters of corrections. These corrections are subsequently validated by the Establishment Assembly (CE) and the Board of Governors (CA).

There is no formal teacher evaluation system. New staff members might follow a national programme on teaching methods. Staff members can also follow supplementary courses to improve teaching skills, to update scientific research fields and to upgrade English performance. Staff members have to submit an activity report every four years and when asking for a promotion. This report is evaluated by a national commission (CNECA) after the Dean has added some comments related to the teaching quality of the staff member in question.

5.1.2. Comments

The curriculum coordination is adequate regarding the mechanisms and the tools used to assure a reliable level of teaching and training performance.

The process of assessment of student outcomes in terms of acquired know-how and skills is adequate.

The size of student's groups dedicated to tutorials and supervised practical activities is adequate.

Although imposed by law, the mandatory externship abroad of all students should be highly noted.

There are two on-going quality evaluation systems, which seem complimentary. One is being promoted by a joint student-teacher commission and the other specific to the Establishment.

The system of tutoring of younger students by more advanced (higher year) students in the clinics is viewed as beneficial for the students.

In the Visitation team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

5.1.3. Suggestions

None.

5.2. EXAMINATIONS

5.2.1. Findings

All course units have examinations at a specific exam period set by DEVE at the beginning of each semester, even when continuous evaluation is used for a specific CU. Students obtain the credit allowance attributed to each course unit by attaining at least 10/20 grades. Retakes are performed in September, before the start of the next academic year, for students that have not obtained the necessary annual 60 credits. Students can only retake an examination once for a CU or an externship in the same academic year. Students are only allowed to present and discuss the final thesis if they have passed all 5th year examinations.

There is a significant degree of retakes in years 1st to 3rd, but there are no retakes in 4th year. If students, at the end of the retake session, do not obtain the required 60 ECTS by failing in more than one course unit, they can be required by the Establishment Assembly to repeat that year. They can only repeat once, as stated in Annex 4.5, Art.22. Students failing in one course unit can register in courses and externships for the following year (bridge year). The degree of repeating is very low.

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According to SER, there are different types of examinations – written, oral and clinical presentations – to assess the performance of course units. Most exams are written examinations, but retake exams are usually oral.

Examinations of core curriculum are performed by juries integrating an instructor of each discipline of a course unit. In the case of retake exams, the panel also includes an instructor who does not teach any given course unit. However, in the case of the examinations of 5th year, the exam period is earlier (May) and the jury of clinical tracks includes, besides the academic instructors, also the practitioner supervisor. In the case of the non-clinical tracks, the evaluation procedure of the hosting institution is accepted. There are no external examiners to integrate examination juries previewed in the present regulations.

5.2.2. Comments

The examination system is strictly controlled by national legislation and specific Establishment regulations. Student's feelings in relation to its focus and fairness are positive.

It is of notice that the existing collaboration between the four French veterinary courses does not include exchange of external examiners as an interesting and sensible way of promoting the quality of teaching and training.

In the Visitation team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

5.2.3. Suggestions

None.

5.3. STUDENT WELFARE

5.3.1. Findings

Students receive general information on safety matters when they register and in the orientation week. They also have to update their free of charge vaccination calendar, including a mandatory rabies vaccination. This can be done by the school doctor who is available to the students once a week, without any costs for the student.

The Establishment has a council dedicated to bio-security and health protection (CHSCT) and a risk and bio-safety manager to help students and staff to follow the correct procedures when working in different teaching and training environments (anatomy theatres, necropsy room, clinics, laboratories, slaughterhouses, farms, etc..).

The Establishment has a comprehensive health insurance plan to cover student's accident, health risks and liability at school, during extra-mural activities and abroad.

There are a number of facilities at student's disposal to improve the general welfare of the student population: The DEVE office and a "Student area" website help students to perform all the administrative and the academic procedures; Students are also helped when looking for accommodation (both in university residencies or in private apartments); In addition, scholarships and financial aid are provided to students. Scholarships are granted according to criteria determined at national level. The Establishment has a mobility scholarship commission, which informs students of opportunities to apply for public and private grants and prizes. There is also a specific financial assistance providing jobs to students on the veterinary campus.

Students with personal or academic problems are assisted by the specific academic advisor and by a tutor assigned to students repeating a year.

There are a number of student's organisations. The main of them is the "Cercle Bourgelat" which runs a canteen and a supply store. It also acts as an umbrella structure coordinating sport and cultural activity groups. Other organisations present are junior branches of professional groups within different fields of veterinary medicine.

There is also a set of interesting initiatives to prepare students to choose and plan for their future professional careers. From their 1st year onwards there are open sessions to present career profiles of different veterinary fields, including research; seminars with veterinarians from different professional areas describing their career paths and on-going activities; during the 4th year students are informed about the different vocational tracks for the 5th year at the Establishment and other French veterinary schools, and existing opportunities of clinical externships abroad at foreign partner universities are announced.

5.3.2. Comments

A comprehensive health insurance plan to cover student's accident, health risks and liability at school and at extramural activities is part of the attention given to students by the Establishment.

The student organisation "Cercle Bourgelat" is strong, and is well supported by the administration. Besides the "Cercle Bourgelat" there are a number of student's organisations, which are junior branches of existing professional groups (e.g. SNVEL junior).

There is generally inadequate amount of working places for groups and individuals at the campus, especially in the evenings and weekends.

In the Visitation team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

5.3.3. Suggestions

None.

6. PHYSICAL FACILITIES & EQUIPMENT

6.1. GENERAL ASPECTS

6.1.1. Findings

The veterinary campus of VetAgroSup is divided into two main locations; the main campus in Marcy l'Etoile and the Practice rural clinics of L'Arbresle (UCRA). The main campus is spacious, covering 44 hectares and comprising 41,000 m² of facilities. These comprise the teaching buildings, including the Teaching hospital (CHEV), administrative offices, diagnostic and research laboratories, offices and labs for all academic departments, plus the student accommodation and sports facilities.

The main building contains five wings. In the central part, the administrative units, students' cafeteria, library and lecturing halls are located. There are five lecturing halls; one of 350 seats, one of 200 and three of 120 seats. The largest contains video equipment for transfer of lectures between the Establishment and the ENITAC (national school of agricultural engineers). The five wings house the different basic sciences teaching, diagnostic and research laboratories, plus the reproduction and husbandry unit and the Pharmacovigilance Centre of Lyon. Most of the units have

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smaller seminar rooms. The collaboration centre for training national public health officers (ENSV) is located to the left of the main building.

Teaching classrooms for desk-based practical learning include 7 amphitheatres that can accommodate more than 50 students, 10 rooms that can accommodate up to 50 students, and 11 teaching laboratories that can accommodate up to 50 students, the latter being provided with specific technical equipment for each discipline. Most are equipped with video projectors and computer workstations. Most have Internet connections. All of them are adapted to receive handicapped persons. The library is spacious and equipped with computer workstations.

For the preclinical laboratory training, there are rooms with specific equipment required for the topic in question. The anatomy dissection room takes group of up to 20 students, however, the room does not have AV-equipment for demonstrations. In the histology lab, the AV equipment is dimensioned for a smaller room, making it very difficult for the students in the back of the room to see details demonstrated on the screen.

The Victor Galtier building is located in the outskirts of the campus and includes teaching laboratories for bacteriology and virology, an analytical laboratory, a diagnostic and research laboratory for *E. coli* and a level 3 unit for research. Protection routines are in place for the students entering the teaching laboratories.

The Claude Bourgelat Institute, an isolated experimental building, houses experimental facilities for small animals (rodents, dogs, cats), pigs, sheep and monkeys: laboratories, surgery room, research animal facility up to protection level 2. The overall activities are accredited according to good laboratory practices. A small number of students will participate in research activities.

The Teaching hospital (CHEV) can hospitalise companion animals, horses and production animals. It is located close to the main building and with parking areas in front of the buildings. There are plans to extend the parking area for vans transporting horses. The teaching farm in L'Arbresle (UCRA), located 14 km from the main site, houses the ambulatory practice for production animals, mainly ruminants. The imaging section on campus, containing radiology and ultrasound is shared between the clinical units. The MRI service for companion animals is contracted, however, the images are read by the CHEV radiologists. The equine clinic runs its own MRI service. CT service is also contracted and is located in another building. There are no imaging facilities in the UCRA, except a mobile device.

Isolation facilities for companion animals are within the CHEV, while for large animals they are in a separate building. Written procedures, including disinfection routines, are in place for staff and students handling the isolated animals. The large animal isolation unit does not contain radiography equipment, when radiology is indicated, the animal is taken to the main unit at the end of the day with subsequent disinfection of the radiology room.

The preventive medicine clinical building where students are trained in preventive procedures is in a building separated from the CHEV, in order to keep apart healthy and diseased animals. The same applies to The Centre of Study on Reproduction and Husbandry of Dog (CERREC) in one of the wings of the main building. In CERREC students are trained in artificial insemination, semen collection and breeder information.

Live production animals from farms can be brought by one of the Establishment's vans into the CHEV in order to increase the caseload. Another van is used for collecting dead production animals to the necropsy unit. Pigs and poultry are only seen on field visits.

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The Establishment has pastures on campus with shelters for stabling bovines and horses that are used for demonstration activities, herd teaching and propaedeutic training. Additional herds that can be used for practical exercises are located in La Brochetière, 5 km away from the main campus. Horses located in the site the old experimental farm of the Establishment (LERC) are used to train students. A kennel houses the dogs used for teaching purposes.

The necropsy room and the dissection room for anatomy are adjacent, and are specially equipped and designed for biosecurity. Written routines are in place. There is sufficient space for necropsies of both large and small animals. Storage of cadavers and carcasses is centralised in the refrigerated unit in the necropsy building, and removed weekly by licensed company authorised to treat those waste. Cadavers of small animals for individual incineration are not included in this pick-up, but are handled by a dedicated company. The number of necropsies is sufficient to ensure training of the students.

Students have access to the CIBEVAIL slaughterhouses in Corbas, 20 km away from Marcy l'Etoile, to where they are transported in a minibus. The Establishment has a collaborative agreement with the National Institute for staff of the Minister in charge of Agriculture (INFOMA), whose technicians work in slaughterhouses, to provide a half-day per week demonstrations for students on lesions on parts collected in the region's slaughterhouses.

All clinics and labs are equipped with first-aid equipment. A heart starter is placed outside the doctor's office in the main building. Training in biohazard handling and safety procedures for staff, Establishment members and students is re-enforced on a yearly basis. There are written routines for biosafety procedures in all facilities where this is necessary. Written procedures for handling waste products, including biohazardous material, are in place. The routines are implemented in the teaching, and the students are reminded of the procedures at the beginning of each course module.

Overall, changing facilities and lockers for students are insufficient. There are few areas for the students to rest and eat during their clinical service. Students' dorms include 325 individual well-equipped rooms, all with Internet connection. Students' facilities include cafeteria and restaurant, fitness room, an equestrian centre, sports and cultural facilities, and a kennel for students' dogs. There is sufficient parking space outside the dorms.

6.1.2. Comments

The Establishment reports that by the end of 2015, an operating room for ruminants, an equine emergency and neonatal building, a central laboratory within the CHEV and renovation of the pharmacy will be finalised. Labs will be reorganised and renewed at the same time. This timetable may not be possible to keep, but it is expected that the plans will be fulfilled.

In the Visitation team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

6.1.3. Suggestions

The AV equipment in the histology lab should be upgraded, AV equipment should be installed in the anatomy dissection room and changing room and lockers should be available.

6.2. CLINICAL FACILITIES & ORGANISATION

6.2.1. Findings

The clinical training is species oriented, the major part of the practical training in clinical sciences being carried out in the teaching hospital (CHEV). The Veterinary Teaching Hospital Council,

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consisting of the clinical veterinary teachers, is responsible for all hospital technical and organisational matters. The Hospitals on the main campus can hospitalise 50 dogs, 30 cats, 19 horses, 12 cattle, 3 small ruminants and, if needed, 3 pigs. The hospitalisation facilities in the small animal clinic are divided into four independent zones, of which one is reserved for cats and one for exotic animals (“new animal species”). At present, this room only contains cages, of which none are suitable for reptiles or birds.

The isolation units can hospitalise 11 companion animals, and 4 production animals/horses in the large animal isolation. The major part of the clinical training in production animals takes place outside the main campus; on the teaching farm in L’Arbresle, and in the rural ambulatory practice in the L’Arbresle area. The ambulatory practice includes mainly production animals, however, the horse clinic also offers ambulatory service.

The CHEV is divided into several sections according to clinical fields. The hospital waiting area for companion animals is for all patients, with facilities for separating species (e.g. dogs and cats). Preventive medicine (antiparasitic treatment, vaccinations etc.) takes place in a separate facility beside the CHEV, the clinic being equipped as a basic clinic.

The small animal section includes consultation and examination rooms with basic equipment. Specific rooms are used for oncology with an open-air protected area for the animals to be placed after treatment with cytostatic medicines. A new section, with so far basic equipment, has been established for exotic species. Specific rooms are also allocated to specialist practices, which take place in mornings of weekdays. Most of these rooms are of good standard, except the facilities for ophthalmology, where most ophthalmic examinations take place in rooms that cannot be darkened.

In total there are 8 larger and smaller consulting rooms in the main clinic and 2 in the ICU (SIAMU). There are in total 9 surgical theatres, of which one is in the ICU. The surgical theatres contain basic equipment as well as arthroscopy equipment, equipment for endoscopic surgeries and an operating microscope. Dentistry is performed in a specific room. Anaesthetic preparation is carried out in a separate room, the staff in anaesthesia serving all sections where this procedure is needed.

There is no specific area for euthanasia; however, these are preferably performed at the end of the day when there is less traffic in the clinics. The Establishment does not have facilities for physiotherapy and rehabilitation, nor does it offer these services.

The CHEV runs a 24h emergency service 11 months a year for the small animal clinic. The equine clinic operates all-year. There is qualified staff on site, the students never being alone on duty. Night and weekend service is obligatory for the students in the clinical rotations. The ICU for companion animals is very well equipped. It also has an operating theatre where both clean and less clean procedures are performed outside working hours. However, this is not a sterile operating room, and there are no procedures in place for restriction of entrance.

The imaging section is somewhat small, shared between the clinical units, and offers radiography, ultrasound and MRI. An MRI for standing horses has been acquired in the equine clinic, and a contract with a private company for MRIs for small animals is in place. The images are read by the radiologists. The CT scan is located in another area of the campus. Students receive a personal dosimeter and instructions in radiological protection prior to coming to the CHEV, including information on X-ray regulation procedures.

The equine section is well maintained with both outdoor and indoor examination facilities. Outside

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there are examinations areas with sandy or grassy grounds and a hill where horses can be walked for neurologic examination. The clinic contains two examination rooms, one that can be darkened and with a “squeeze cage”, an orthopaedic examination area and two surgery rooms. The surgery rooms can be observed from outside through glass windows, and both rooms contain AV equipment for teaching purposes. One surgery room is equipped with an image transmission system (“C-bow”). Each surgery room has an adjacent adapted box for anaesthesia and recovery. A separate area with a few boxes is reserved for natural matings and reproduction examinations. Some of the boxes can be closed for tranquillity and darkness for horses in need of this (i.e. tetanus). The section is equipped as can be expected in a teaching clinic. In addition, the acquisition of state-of-art surgical equipment (vertebral stabilisation) has helped in case recruitment. Endoscopic equipment for horses during activity is in place. A new ICU equine block adjacent to the existing equine clinic is under construction and will be an asset to the clinic.

In addition to the clinical facilities, the CHEV houses seminar rooms, as well as basically equipped rest rooms for staff and students on night and weekend shifts, and in the ICU. A small central laboratory is located in the small animal area of the CHEV and handles basic examinations, while specific examinations, including biochemistry, bacteriology and virology, are referred to labs on or outside campus. The clinic laboratory has microscopes for students’ use; however, there were no multi-observation microscopes for teacher and students together. The hospital’s pharmacy is located in the CHEV and is directed by a pharmacist. The pharmacy does not control medicines in use in the clinics; this is the responsibility of the head technician.

The production animal clinics are in a building adjacent to the CHEV and comprise an examination area, a demonstration room, surgery for small production animals and a standing surgery suite. A room with an amphitheatre is equipped for demonstration of large bovines. There is a restraint cage in the middle of the room; however, there is no protection for the students in the amphitheatre if an animal gets out of control. For propaedeutic training, the clinic is equipped with eight cattle cages. A training pharmacy has been set up for the students to familiarise themselves with the range of drugs available.

Isolation facilities for companion animals are within the CHEV, while for large animals they are in a separate building. Written procedures, including disinfection routines, are in place for staff and students handling the isolated animals.

Students receive dedicated biosafety information when they first enter the teaching hospital. They also receive regular update on specific safety procedures, as well as procedures for handling potential zoonotic diseases. Detailed procedures have been established and are implemented in the ICU and the isolation facilities.

The CLOVIS computer recording system allows recording of clinical data. The students work on paper records that are controlled by the teacher and afterwards transferred by the student into the computer. The paper records are stored. The electronic records are accessible from all parts of the clinical facilities, including the CERREC reproduction unit and the preventive medicine unit. In addition, the relevant laboratories can access the CLOVIS for information on actual clinical cases from which samples have been received for analysis, and the results of these analyses can be entered into the electronic records. Evaluation of images are transferred through the system, however, the images are transferred through another intranet system (PACS). Relevant drawings and photos cannot be attached to the records. The CLOVIS system cannot be accessed outside campus.

The caseload for all animal species is good, and sufficient to ensure good clinical training.

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The ratios students/teaching staff in clinical sciences is satisfactory, however in the lower end for support staff. The Establishment cannot employ additional clinical teachers based on income from the clinics. This may prevent training of future specialists and Establishment of new activities relevant in a modern veterinary practice (i.e. physiotherapy and rehabilitation).

There are at present 30 1-year Interns and 18 Residents for EBVS Colleges. The total number of EBVS Diplomates in the Establishment is 36, of which the majority is working with clinical sciences.

6.2.2. Comments

The students' ophthalmology examining area is not suited for ophthalmic examinations, including ERG's, as it cannot be darkened.

The physical protection for the staff in the radiology room could be improved, as it is divided into two parts with an opening between them.

In the Visitation team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

6.2.3. Suggestions

The ophthalmology facilities should be restructured to ensure that state-of-the-art ophthalmic examinations can be performed.

The ICU (SIAMU) surgery room should be a sterile room with appropriate routines in place. If this is not possible, surgical procedures performed in the ICU should be restricted to the basic ones, and other surgeries transferred to the sterile operating theatres in the CHEV.

7. ANIMALS & TEACHING MATERIALS OF ANIMAL ORIGIN

7.1. Findings

Anatomy

Animal cadavers used for teaching anatomy are rabbits and rats coming from laboratories that supply laboratory animals, euthanased dogs provided by a local shelter SPA ('Société Protectrice des Animaux') and goats. Cadavers are used to study the trunk wall (S5): 2 goats and two dogs; training for ¼ of the year (2 hours of directed works per student); - study of the digestive system ("intestines" module S6): 75 rats; training for ¼ of the year (2 students per animal 2h of practical works for each student); - study of the urogenital tract and endocrinology (S6): 80 rabbits; training for ¼ of the year (3 students per animal 2h of practical works per student) ; - dissection of the trunk (walls and viscera; "medical examination basics" module S9): 16 dogs and 20 goats training for ¼ of the year (4 students per animal; 8hr practical works per student);

Fresh anatomical parts are used for the studies of thoracic limbs ("study of limbs" module S8): 40 goats limbs, 8 horses limbs; training for ¼ of the year (2 students per member per student 8am practical works); - study of pelvic limbs ("study of limbs" module S8): 32 dog limbs, 40 goat limbs, 8 horse limbs; - study of horse forequarters S8: 2 thoracic limbs prepared by the teacher; ¼ of the year's training , 2h directed works per student; - study of the joints, S8: 2 equine pelvic limbs and 2 canine pelvic limbs; ¼ of the year's training.

Dog and goat limbs are collected during the preparation sessions for the study of the trunk and are then frozen. Equine limbs come from autopsied animals without confirmed or suspected infectious disease.

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Dried anatomical specimens are used to study osteology of the trunk and head ("study of the trunk and imaging basics" module S5); thoracic and pelvic limb ("study of limbs" module S8); the heart ("respiratory and cardiovascular system" module S5);

Palpatory anatomy of the limbs and of the trunk are performed with the teaching animals (dogs and horses); these manipulations and the maintenance of teaching herds are subject to the approval of the ethics committee.

The school museum has a large collection of anatomical specimens. It is permanently open, and the Y1 students receive a general overview of the museum during a 2h tutorial session.

Necropsies

Any animal that dies on campus, regardless of the species, is autopsied in the necropsy room. Farm animals (chickens, ducks, rabbits) are brought to campus from farm visits via the Practice Rural Clinics of L'Arbresle (UCRA unit); moreover necropsies are done on some wild animals, mainly wild rabbits.

Animal production

The Establishment has a teaching herd of 17 cattle, 14 of which are leased from cattle dealers and returned at the end of the series of practical exercises. These cattle are used for introductory teaching, in preparation for clinical teaching including reproduction, and all the activities are supervised by the ethics committee. The animals are used by student groups Y2, Y3 and Y4. The leased cattle undergo a clinical examination before they arrive into the Establishment and when they go back to the farms, to check the health status and the absence of contagious diseases. Those cows are not used for teaching herd management. The 14 leased cows are kept at the Establishment from September to June in order to limit the workload of herd management in the Establishment during summer.

Large and small ruminants from outside farms, mainly under the Practice Rural Clinics of L'Arbresle (UCRA unit) are also admitted to the hospital for consultations and supervised rounds.

Off campus, students from Y4 and Y5 have access to customers in the rural area around the UCRA, the school owned practice at the L'Arbresle site, which was purchased in 2001, 178 cattle farms (about 8000 heads), 44 goat farms (approximately 2000 heads) and 87 sheep farms (over 3300). Y4 and Y5 students work with these clients, carrying out visits, emergencies, surgeries, health and annual farm visits under the supervision of teachers and clinicians and are also trained in population medicine (Y4). During these visits, students can examine farmyard animals (poultry, rabbits) in a "traditional farming" setting.

Food hygiene / public health

The Establishment has a contract with a commercial slaughterhouse (CIBEVIAL, Corbas), which provide access to bovine and sheep carcasses for meat hygiene inspection. There is also a collaboration agreement with INFOMA (National Institute training of staff of the technicians work in slaughterhouses) for providing a half-day per week in a TP room enabling students to view lesions on samples collected in five slaughterhouses in the Lyon region.

Consultations and patient flow services

Consultation

For domestic carnivores and the new companion animals, the clinic is operating 45 weeks, 5 days a week. Hospitals are operational 7 days a week, 24 hours a day: the students work there until 11pm at the latest and return at 8am the next morning; animals requiring intensive care or permanent

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monitoring are hospitalised at SIAMU. The emergency department (SIAMU) runs for 46 weeks 7 days a week, 24 hours a day.

For horses, the services operate 24 hours a day all year, including emergencies. Elective surgeries are scheduled on Tuesday and Thursday and consultations are organised by appointment every day of the week.

For production animals, on the campus site hospitals operate 40 weeks a year, 7 days a week with the involvement of the students from 8am to 5pm. The hospitalised animals are mostly referrals or are allocated to the school for free, as they have no economic value but are of educational interest.

Patient flow

The major part of animals received for consultation and hospitalised is companion animals, mainly dogs, while the number of food producing animals is quite small.

Vehicles for animal transport

The Establishment has two separate livestock trucks: - one to pick up live ruminants and bring them to the clinic on the campus; - the other one is used only to carry corpses for necropsy. Trucks can transport two animals at a time.

On-call emergency service

For domestic carnivores and non-conventional animals, the Emergency and Critical Care Unit operates 7 days a week, 24 hours a day, 11 months out of 12. The premises are cleaned during August. For horses, the Establishment operates 7 days a week, 24 hours a day, throughout the year. All the skills can be mobilised: medicine, anaesthesiology, surgery and imaging.

With regard to production animals, the UCRA is open all year round, every day 24 hours a day. Outside office hours, telephone calls are switched to the mobile phone of the clinician on duty, who has an equipped vehicle at his disposal.

In the last years emergency consultations for equines have increased, as professionals refer emergency patients to the equine clinic.

Students can train on horse management at LERC that is located in the old farm of the Establishment.

On farm teaching and outside patient care

Ambulatory (mobile) clinic

With regard to horses, the Establishment has developed an outpatient service allowing to take 4 Y5 students (and residents) on each trip to farms, equestrian centres or private homes, one half day per week.

The Establishment is also involved in several equestrian events, such as horse shows in the Rhône-Alpes and Auvergne Regions and the French championships in July. Finally, an agreement with the horse racing society in Lyon (over 60 events per year) allows students to become familiar with the routine veterinary procedures of horse identification, as well as preventive medicine; immunisation checkups, and minor medical care.

For production animals, students have access to a classical mixed practice at the L'Arbresle site, where the students have the opportunity to deal with first opinion cases. A minibus and a mobile clinic vehicle are used to take students to the nearby facilities and farms.

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The vehicle used for the equine ambulatory clinic allows for the transport of 4 students. The same goes for the vehicle assigned to the UCRA, not to mention the minibuses used for the mobile clinic (9 seats). Other vehicles are rented when needed.

There are no farms or production units for swine, poultry or rabbits nearby, but students have the opportunity to visit monogastrics' units in Y1 and Y5 (animal production tracks).

In animal production, students have regular access to farms through livestock and health visits (150 bovine inspections of more than 5 animals each in 2014, 180 in 2015 regardless of the number of farm animals), via the mobile clinic, or through conventional customer visits.

For horses, outpatient consultations are unevenly distributed, from infrequent to very numerous and may take up a lot of time depending on time of year.

The students participate as volunteers in a consultation clinic for dog owners in a difficult economic situation: first aid, prevention advice, vaccinations, and parasite treatments. These consultations are free, with the owners first being selected by the Mayor of Lyon, who financially supports this free service.

7.2. Comments

Overall, animals and teaching materials of animal origin are sufficient to ensure an adequate training of the students, except for swine and poultry propaedeutic clinics.

All the ratios regarding animals/students are within the suggested values.

In the Visitation Team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

7.3. Suggestions

None.

8. LIBRARY & EDUCATIONAL RESOURCES

8.1. Findings

The main library is housed in a 700-square-metre facility that includes a 90-seat study hall, 10 computer stations, Wifi access and all the requested technical facilities. It is open from 8H30 to 19H and is closed for one week at Christmas and three weeks in August. Other computers rooms are available on the campus.

The budget of the library for the purchase of books and subscriptions to journals and databases is about 110000€ per year.

The head librarian holds a master's degree in library and information studies and is supported by two people qualified in documentation (3 FTE). Two student assistants are hired when Establishment is in session to keep the library open in the evening and ensure the continuity of the reference and circulation services. The library staff keeps its knowledge up to date through regular training.

The Library staff provides first year students with an official training in bibliographic research and document management (i.e. four sessions to introduce them to these resources and four training sessions on bibliographic reference management software).

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Staff and students also have access to the veterinary toxicology and pharmacology collection of the 'Centre National d'informations Toxicologiques Vétérinaires' and the 'Centre de Pharmacovigilance Vétérinaire de Lyon', and to the documentation units of the VAS departments/laboratories.

The library's collections cover the fields of veterinary science, animal science and life sciences. About 90 e-journals and 200 e-books are also available for staff and students in the field of veterinary medicine.

A new portal has been implemented since 2012 and provides an e-access to several scientific databases (e.g. Web of Science, Science direct, Wiley Online Library, Elsevier, Sagaweb, ..) (3000 e-journals in various disciplines) and to a user guide.

About 16 FTE (6 engineers and 9 technicians) work in the IT unit of VAS, 11 being on the veterinary campus.

E-learning is being developed within a Moodle platform and is more and more used by the teachers (currently 50% of the teachers use it). It is supported by 1 engineer and 1 technician who are also involved in hands-on training for both teachers and students.

The software Shibboleth (which is equivalent to VPN) allows access for staff and students to intranet databases and e-documents from abroad.

Access to the clinical databases (via CLOVIS) is available for students under academic staff control.

Wifi is available in the main and central buildings, in libraries, in rooms for continuing education and teaching for small groups, in clinical areas (hospital, emergency unit, preventive medicine, ...), in building Galtier, in Institute Cl. Bourgelat and in some laboratories.

8.2. Comments

The services provided by the library and by the other educational resources are appreciated by staff and students, except for the opening hours for the library.

The Establishment has a real strategy to make the best use of modern IT facilities in order to improve the quality and efficiency of teaching and research activities.

In the Visitation team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

8.3. Suggestions

It is suggested to extend the opening hours of the library or other working spaces in the campus.

9. ADMISSION & ENROLMENT

9.1. Findings

Students are enrolled through a common national competitive access examination after two years of study leading to obtaining the Baccalaureate. Assignment to one of the four veterinary schools (Alfort, Lyon, Nantes and Toulouse) depends on rank in the competition and choices made by the candidates. Since 2013 137 students are admitted in the school each year, the number of students is settled by the Ministry of Agriculture. Up to 2012 117 were admitted each year.

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Five competitive exams are set for entering the vet Establishment (ENV), regarding the scholar background of student:

Competition A (www.concours-agro-veto.net) is open to students after two years in BCPST preparatory classes in secondary school (plant, animal and cell biology, chemistry, physics, geology, computer science; a foreign language). Students who pass this competitive examination represent 80% of those admitted to the ENV.

Competition A TB (www.concours-agro-veto.net) is intended for students in preparatory "technology and biology" classes, recruiting graduates with a baccalaureate in technological sciences and laboratory technology series (STL biochemistry or bioengineering specialty) or Science and Agricultural and Life Technology series (STAV). The programme is the same as competition A but with the addition of biochemistry and biology techniques, computer science and geography. Students who pass this competition represent about 2% of those admitted to the ENV.

Competition B (www.concours-agro-veto.net) is accessible to university students enrolled in the 2nd year (after L2 approval) or 3rd year of a scientific bachelor programme in life sciences related fields. The exams cover animal, plant cellular and molecular biology, genetics, chemistry, mathematics and a foreign language. Students who pass this examination represent approximately 9.5% of students admitted to the ENV.

Competition C (www.concours-agro-veto-bordeaux.fr) is designed to recruit students holding the following university degrees: DUT specialty in Biological Engineering/Applied Biology; some BTS and BTSA. Students who pass this examination represent approximately 7.5% of those admitted to the ENV. □

Competition D (www.concours-agro-veto.net) is open to holders of the state doctor of medicine, doctor of pharmacy, doctor of dental surgery degree or a national diploma predominantly in biology conferring the master level. Further to proof of eligibility based on the file and motivation, candidates are selected after an interview.

Selection of students is based on a national competition and the Establishment has no possibilities to select candidates, but the dean is a member of the jury and some Establishment members are regularly included in national working groups to upgrade the programme of the selection exam. Admission procedure relies mainly on direct assessment, but some indirect assessment is used for the selection, for instance capacity of developing high workload, capacity to synthesise a huge amount of data and to produce summary, capacity to present orally an analysis.

The drop out rate is low; on average, in the last five years (2010-2014), 111/117 students graduated per year.

EU and foreign students can be admitted to the national competition without any restriction, but they must hold a baccalaureate or equivalent diploma.

The English knowledge of students is tested in Y1 and students receive English lessons. Some lessons in the curriculum are given in English and the objective of the Establishment is to have 20% of the curriculum given in English. Summer school programs are available in English and students must achieve an externship of minimum two weeks in a foreign country.

Each year more than 35 % of the students receive a scholarship, and granting is based on criteria settled at national level.

9.2. Comments

The number of students assigned each year since 2013 (137) is currently compatible with the budget and facilities of the Establishment, but a further increase could be critical.

In the Visitation team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

9.3. Suggestions

None.

10. ACADEMIC TEACHING & SUPPORT STAFF

10.1. Findings

The ratios (teaching staff versus students or support staff) are within ranges. However, in the opinion of the school, the number of supervisors for scientific research is too low and the number of support staff for clinical teaching could be better. The proportion of veterinarians in teaching staff is high (109 for 8).

The decisions concerning staff appointments and staffing levels depend on the type of staff and the class of appointment (A, B or C). For classes A (teachers) and B, the Ministry of Agriculture is deciding, based on propositions from the school. There is a fixed procedure, starting in the departments (positions available, positions needed) or the dean's office (via DG), passed to the plenary CE, then the CS for faculty members and staff to be employed in research units, and finally the CA. Positions are opened by the Ministry of Agriculture in spring and fall. Non-budgeted positions are decided by the dean's office, via DGA, but only within the limitations set by the Ministry of Finance, regardless of the institution's resources.

Based on the yearly notification by the departments, most positions are filled, as far as the Ministry takes it into account. Therefore, the number of class A budgeted positions (Establishment and supervisors, hospital clinicians, engineers) are maintained. Due to many legal constraints, class C positions are more difficult to maintain.

The Establishment encourages staff to acquire additional training. The school provides a special budget for such activities, and the research unit also contributes to financing of attendance at scientific conferences. The sabbatical year is allowed by regulation. However, the benefits of the enhancement of the competencies and the efforts to support continuing education are in competition with the limited legal opportunities to move staff inside the Establishment or flexibly deploy it for instance for clinical services.

According to the French system, there is an official competition for almost every staffing position, from the MC (maître de conférences) to the Establishment staff. The veterinary doctoral, the internship, PhD and HDR are the most important. The European residencies are increasingly recognised and required for clinical positions. Academic positions are not systematically advertised internationally. Moreover, the language conditions and prerequisites set by the Ministry makes it difficult for non-French teachers to apply on equal terms.

There is virtually no flexibility in the staffing levels and benefits, except in the range set by the Ministry of Agriculture and the Ministry of Finance. Generally speaking, the salaries are low (especially for category C staff, which salary is mostly just above the SMIC) and the hiring rules make it difficult to keep positions higher than 70% FTE. After the ministerial decision to bring the number of students from 117 to 137, one teacher position (A) was provided. Some additional positions are under discussion for the following years.

10.2. Comments

The staff ratios in relation to the SOP are accurate. For the moment, the age pyramid is adequate, and many positions are held by young teachers. In some clinical disciplines however, some difficulties are already faced for the replacement of retiring teachers, due to the competition with private opportunities.

Concerning the selection of the veterinary staff (clinicians), a more direct coordination with the departmental direction could help in taking not only professional competencies into consideration, but also personal aspect that are important for the functioning and development of the Establishment.

Concerning the category C positions (contractual, non budgeted positions), the positions that were previously state positions (operating staff) disappeared in recent years. As employment rules are very strict, they prevent flexibility, good recruitment, motivation and finally the general quality of work due to a lack of continuity. This in turn has a negative influence on the organisation and the development of research, which is necessary for the academic career and promotion.

The current State constraints and lack of flexibility for the recruitment of relevant and necessary co-workers act against the implementation of the SP of VetAgroSup.

In the Visitation team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

10.3. Suggestions

The VAS should use all opportunities to influence the evolution of the system and to reduce the constraints for recruiting ad hoc co-workers, in collaboration with the partner institutions of IAVFF.

11. CONTINUING EDUCATION

11.1. Findings

CPE is an objective of the Establishment, and is well implemented, according to the rules of the national accrediting body for vet CE. A specific training partly on the campus by the ENSV is also provided (more than 2200 students and 16000 hours of training).

The main part of the CPE is designed for practising veterinarians. The average number of trainees is more than 2000, with 16000 – 20000 trainee-hours / year.

A dedicated office (BFPSA) handles the administrative and logistical management. Courses are also organised by the BFPSA for external partners (10 in 2014, for 7 professional organisations).

A digital platform has been in use since 2011 for hosting distant learning courses (VetoTice) and has since 2014 offered a "digital package" for teachers involved in this type of teaching.

There is also a dedicated website using a Mig@1 Web interface for administrative management of short and continuing education activities in a broad range of veterinary specialities and animals (pets, horses, laboratory, production).

A vocational training reform happened in 2014, with a "personal training account", that makes continuing education compulsory for practitioners. This in turn gives good opportunities to develop the CPE potential of the school

11.2. Comments

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The Establishment offers a very well developed and structured CPE. In addition, many teachers participate in external CPE events (national conventions, seminars). The funds generated are mostly used by the teaching or research units to support continuing education of its own staff.

In the Visitation Team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

11.3. Suggestions

The risk of reduction of the reserved part of the funds generated by CPE teaching activities in the departments should be addressed on a higher level and coordinated within IAVFF, keeping in mind that these financial opportunities and flexibility are important for the development of research and postgraduate education.

12. POSTGRADUATE EDUCATION

12.1. Findings

According to the French system, a one-year unpaid clinical internship training leading to a national diploma in a given speciality is offered. Students are selected through a national competitive examination. The rotation through the clinical activities involves all disciplines and activities within a clinical sector (pets, horses, ruminants). The number of interns is set by the Ministry of Agriculture.

The Establishment also participates in the training of graduate vets as part of the national advanced training CEAV (short term training) and DEAV (3 years).

The EBVS disciplines residents receive a salary for the required three-year training period, but not for additional exam preparations.

18, 8 and 4 interns and 10, 7 and 1 residents are currently registered in the companion animals, equine and farm animals sectors respectively. Actually, about 25% of the staff are EBVS Diplomates.

The Establishment participates in training of PhD students enrolled in a doctoral school at a University (interdisciplinary health sciences, life sciences – health – agronomy – Environment, microsystem evolution modelling microbiology. A scholarship is granted for all students enrolled in a university programme (in a teaching or a research institution). 65 Establishment members (60 veterinarians) from the Establishment are members of research units, thus being involved in training PhD students.

The completion of a Master degree is compulsory before starting a PhD programme. Around 27 students are currently registered to a PhD programme.

12.2. Comments

In the opinion of the school, the student awareness of activities and research professions is insufficient. This is confirmed by the growing difficulty mentioned by alumni to compete successfully with other scientists (physicians, biologists, pharmacists) for good positions in the industry.

Material assistance to interns should be addressed and taken into consideration, if not as a direct salary, in an indirect way (housing assistance, etc.). The number of open residencies should continue to increase. However, the financial burden for the Establishment has also to be considered.

In the Visitation Team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

12.3. Suggestions

None.

13. RESEARCH

13.1. Findings

The Scientific Committee in the Establishment comprises elected professors, researchers and students, as well as representatives from national research institutions and partners. The committee prioritises and recommends research policy and allocation of research funding as well as establishing research profiles for new academic and non-academic positions.

The scientific committee is a link between research and teaching and has an autonomous role.

The Establishment's vice dean of research is assisted by the vice dean of education and vice dean in charge of clinical research. The Animal Ethics committee evaluates research that involves the use of animals.

There is a clear research strategy within the Establishment but the implementation is still fragmented. As a consequence, the visibility of the strategy is difficult for the students and junior researchers.

Research at VetAgroSup is organised in three main themes:

a) Emerging pathologies and infection risk. This includes groups for: (i) emerging pathologies: especially cancers, infertility problems, locomotor disabilities, sepsis situations and pathologies associated with the ecotoxicity of certain products; (ii) The study of infectious risks associated with zoonoses or vector –bone diseases.

b) Adaptation of production systems and food quality. This includes groups for system adaptation and husbandry practices: (i) increased system flexibility and resilience; (ii) changing characteristics of products in terms of consumer perception and behaviour, and microbial ecology through the food technology chain.

Both themes involve VetAgroSup members from the veterinary programme.

c) Regional development.

Veterinary students are involved in the field of research in several forms: awareness of careers in research and access routes (open annual lectures); open sessions for PhD students and residents: presentation of on-going work submitted, published or recorded in the archives; research laboratory training in Y3; registration of master programmes available in Y4; defence of professional thesis on an experimental topic; permanent exhibition of posters submitted by members of the Establishment on various topics; participation in research and animal experimentation activities via the Claude Bourgelat Institute.

Students are offered lectures during the normal curriculum in subjects like Ethics, Laws and Handling animals of different species. The students who are interested in research can apply for a position in research unit (ICE) or in the Claude Bourgelat Institute. There are 35 positions available. The objectives of offering these positions are to provide financial support, opportunity to learn about laboratory animal medicine and to provide knowledge on ethical issues. The hours that the students spend working in the CB Institute, about 10 h/month, are equivalent to technician formation courses. . In general, students enrolled in this type of position receive good training in animal handling, sampling, isolation, etc.

The research track comprises 10 students per year (1 stay in ICE and the others are employed by the industry). Researchers involve students from different years in their research projects i.e. in the Biochemistry unit or in the clinics. Sometimes students find, in agreement with the teacher, that part of the results of the project can be used as his/her veterinary thesis. The topic for the veterinary thesis can be chosen by students or offered by teachers. The master programme of a research track is accredited by FELASA.

There are two specific programmes that allow students' participation in research work: (i) Veterinary Scholar Programme funded by Merial, which gives the students, in their first or second year, the opportunity of an introduction into basic biomedical research; (ii) The French German Summer School for the Promotion of Veterinary Science provides an introduction for students into research collaborations between participating French and German institutions.

Students oriented towards a profession in research can choose a research track as their structured training in the final year of the curriculum, and thus can apply for a Master's degree. Partner universities support Masters programs.

The number of student enrolled in double 5Y-master 2 curriculum is 10 in 2014/15. The number of students enrolled in the Establishment's university thesis programs via a research unit involving the Establishment is 27. From one to three publications are required to obtain a PhD degree.

VAS has a close collaboration with all German and German speaking veterinary schools (Berlin, Giessen, Hannover, Leipzig, Munich, Vienna and Zurich).

The collaboration between VAS with business partners, universities and the research agencies (CNRS, INRA, INSERM, etc.) is crucial for introducing students to research professions (public or private). This will provide them with the understanding of professional opportunities and potential partners.

The research funding comes from the Establishment, University and other research bodies.

The involvement of the academic staff in scientific research is confirmed by (i) the numerous publications in national and international journals, (ii) the high number of participation in national and international congresses and (iii) research projects.

13.2. Comments

It is important to introduce veterinary students in the first or second year of VAS to biomedical research career opportunities, and to working with projects in collaboration with the teaching researchers. However, the lack of structured research teaching throughout the curriculum on research opportunities is a weakness that reduces the competences and competitiveness of graduates in the research market.

There are quite few veterinary students registered in doctoral programmes.

In the Visitation Team's opinion, the requirements regarding this chapter as they are laid down in Annex I of the SOP are met.

13.3. Suggestions

In the opinion of the Visitation team, a broader introduction to research should be included in the curriculum from the first to the fifth year, preferably in a multidisciplinary way. This should be considered in order to enhance scientific thinking (complementary to the clinical reasoning), to

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provide research-based and evidence-based education in all disciplines, and to stimulate research careers.

EXECUTIVE SUMMARY

The 'Ecole Nationale Vétérinaire de Lyon' (ENVL) was first established in 1761. In 2010, VetAgroSup (VAS) was created as the merge of 3 institutions, i.e. ENVL (a veterinary school), ENSV (a school for national veterinary services) and ENITAC (an agronomic school).

The Establishment has been visited by ESEVT in October 2005 and approved by an ECOVE decision.

The SER was well written, complete and provided on time to the Visitation team. A reply to most questions and/or requests for clarification from the experts was provided before the start of the Visitation.

The Visitation was very well prepared, well organised and carried out in a cordial and professional atmosphere. The liaison officer was easily and efficiently available when requested. The programme of the Visitation was easily adapted when requested by the Visitation team who had full access to the information, facilities and individuals they asked for.

The Visitation team has identified areas worthy of praise, e.g.:

-) efficiency and communication skills of most administrative departments
-) well integrated and modern teaching strategy
-) phantoms' lab for self-directed clinical training
-) clinical services, and specially ICU, emergencies services and equine clinic
-) high number and diversity of EBVS diplomates and EBVS-approved residents
-) interconnection between animals production, clinical education on farm animals and food safety and quality ('from farm to fork')
-) preventive medicine clinic
-) culture of permanent improvement.

The Visitation team has also identified several potential deficiencies, e.g.:

-) lack of autonomy to use the incomes and financial reserves for implementing the strategic plan and unnecessary constraints for recruiting co-workers
-) insufficient number of pig and poultry for propaedeutic and clinical training
-) inadequate training and facilities in ophthalmology
-) lack of basic education to aquaculture and fish diseases for all undergraduate students

The Visitation team has not identified any Major Deficiency.

Therefore the Visitation team recommends to ECOVE the status of Approval for VetAgroSup (Lyon).

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Annex 1 Indicators (ratios)

| | | | | | |
|-------------|--|---|------------------------|---|--------------------------|
| | | | | | GUIDELINES |
| R1: | $\frac{\text{n}^\circ \text{ of undergraduate veterinary students}}{\text{n}^\circ \text{ of total FTE academic staff in veterinary training}}$ | = | $\frac{630}{112.3}$ | = | 5.6 <8.381 |
| | | | | | GUIDELINES |
| R2: | $\frac{\text{n}^\circ \text{ of undergraduate students}}{\text{n}^\circ \text{ of total FTE academic staff}}$ | = | $\frac{630}{117}$ | = | 5.38 <9.377 |
| | | | | | GUIDELINES |
| R3: | $\frac{\text{n}^\circ \text{ of undergraduate veterinary students}}{\text{n}^\circ \text{ of FTE veterinarians in veterinary training}}$ | = | $\frac{630}{109}$ | = | 5.77 <11.057 |
| | | | | | GUIDELINES |
| R4: | $\frac{\text{n}^\circ \text{ of students graduating annually}}{\text{n}^\circ \text{ of FTE veterinarians in veterinary training}}$ | = | $\frac{109}{109}$ | = | 1.0 <2.070 |
| | | | | | GUIDELINES |
| R5: | $\frac{\text{n}^\circ \text{ of total FTE support staff in veterinary training}}{\text{n}^\circ \text{ of total FTE academic staff in veterinary training}}$ | = | $\frac{208.18}{112.3}$ | = | 1.85 0.505-1.907 |
| | | | | | GUIDELINES |
| R6: | $\frac{\text{supervised practical training}}{\text{Theoretical training}}$ | = | $\frac{2886}{2248}$ | = | 1.28 >0.602 |
| | | | | | GUIDELINES |
| R7: | $\frac{\text{Laboratory \& non clinical animal work}}{\text{Clinical work}}$ | = | $\frac{561}{1331}$ | = | 0.42 <1.809 |
| | | | | | GUIDELINES |
| R8: | $\frac{\text{teaching load}}{\text{Self-directed learning}}$ | = | $\frac{5136}{138}$ | = | 37.21 2.59-46.60 |
| | | | | | GUIDELINES |
| R9: | $\frac{\text{total n}^\circ \text{ hours in the vet curriculum}}{\text{n}^\circ \text{ hours in FH/VPH}}$ | = | $\frac{5136}{178}$ | = | 28.85 8.86-31.77 |
| | | | | | GUIDELINES |
| R10: | $\frac{\text{n}^\circ \text{ of hours obligatory extramural work in veterinary inspection}}{\text{n}^\circ \text{ hours in FH/VPH}}$ | = | $\frac{20}{178}$ | = | 0.112 0.074-0.556 |

FINAL REPORT AS ISSUED BY ECOVE ON 19 NOVEMBER 2015

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|-------------|--|---|---------------------|---|---------------------|
| | | | | | GUIDELINES |
| R11: | $\frac{\text{n}^\circ \text{ of food-producing animals seen at the Establishment}}{\text{n}^\circ \text{ of students graduating annually}}$ | = | $\frac{99}{109}$ | = | 0.91 >0.758 |
| | | | | | GUIDELINES |
| R12: | $\frac{\text{n}^\circ \text{ of individual food-animals consultations outside the Faculty}}{\text{n}^\circ \text{ of students graduating annually}}$ | = | $\frac{1743}{109}$ | = | 16.0 >8.325 |
| | | | | | GUIDELINES |
| R13: | $\frac{\text{n}^\circ \text{ of herd health visits}}{\text{n}^\circ \text{ of students graduating annually}}$ | = | $\frac{180}{109}$ | = | 1.65 >0.326 |
| | | | | | GUIDELINES |
| R14: | $\frac{\text{n}^\circ \text{ of equine cases}}{\text{n}^\circ \text{ of students graduating annually}}$ | = | $\frac{1276}{109}$ | = | 11.7 >2.700 |
| | | | | | GUIDELINES |
| R15: | $\frac{\text{n}^\circ \text{ of poultry/rabbit cases}}{\text{n}^\circ \text{ of students graduating annually}}$ | = | $\frac{116}{109}$ | = | 1.06 >0.407 |
| | | | | | GUIDELINES |
| R16: | $\frac{\text{n}^\circ \text{ of companion animals seen at the Establishment}}{\text{n}^\circ \text{ of students graduating annually}}$ | = | $\frac{13945}{109}$ | = | 128 >48.06 |
| | | | | | GUIDELINES |
| R17: | $\frac{\text{n}^\circ \text{ of poultry flocks/rabbits production units visits}}{\text{n}^\circ \text{ of students graduating annually}}$ | = | $\frac{18}{109}$ | = | 0.165 >0.035 |
| | | | | | GUIDELINES |
| R18: | $\frac{\text{n}^\circ \text{ of necropsies of food producing animals + equines}}{\text{n}^\circ \text{ of students graduating annually}}$ | = | $\frac{202}{109}$ | = | 1.85 >1.036 |
| | | | | | GUIDELINES |
| R19: | $\frac{\text{n}^\circ \text{ of necropsies of poultry/rabbits}}{\text{n}^\circ \text{ of students graduating annually}}$ | = | $\frac{78}{109}$ | = | 0.70 >0.601 |
| | | | | | GUIDELINES |
| R20: | $\frac{\text{n}^\circ \text{ of necropsies of companion animals}}{\text{n}^\circ \text{ of students graduating annually}}$ | = | $\frac{223}{109}$ | = | 2.05 >1.589 |

Annex 2 Decision of ECOVE

No Major Deficiencies had been found.

The Lyon Veterinary School, VetAgro Sup is classified after Stage 1 Evaluation as holding the status of: **APPROVAL**.