



VetAgro Sup

# Self Evaluation Report

EAEVE European Association of  
Establishments for Veterinary Education

# 2015



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## INTRODUCTION

### « Main organisational changes »

VAS\* is an EPCSCP\*\* Grand Establishment, comparable status with a university in France (Annex Intro-1) created in 2010 with the merger of ENVL\*, ENSV\* and ENITAC\*. It is administered by: - a single **Board of governors** (CA\*) in charge of validating the Establishment's administrative, budgetary and financial management, as well as its strategic orientations; - a single **Faculty Assembly** (CE\*) in charge of educational aspects, implementation of standards for both curricula and degrees, and awarding of corresponding ECTS\* credits and a single **Scientific Committee** (CS\*) in charge of scientific policy and monitoring of research units. When this new Establishment was created, it retained all the characteristics of the degrees awarded: veterinarian and agricultural engineer. The added value lies in the synergy of resources, not in the merging of the degrees.

A new governance structure adapted to the Establishment's objectives was implemented (Annex Intro-2 and Chap2 - Organisation) under the authority of the Dean, two Deputy Deans respectively in charge of managing the Veterinary and Agricultural campuses, a Vice-Dean for Education and his assistants, a Vice-Dean for Research, a Director of External Relations and Partnerships, a Director of Quality and Evaluations, and Director of the ENSV\* (see Chap2 – Organisation and Annexes 2-1 to 2-8).

The Establishment is working on a new strategic plan (SP\*) that will define the strategic objectives for 2016-2020, and will be validated by the CA\* in late 2015. It will replace the previous SP\* adopted in 2010. It was developed with the participation of stakeholders (included internal members) at every stage, through task forces, general presentations and workshops open to all. VAS\* is an active member of on-site university groups in Lyon (COMUE\* Lyon-St Etienne Annex Intro-4) and CHELs\* (Annex Intro-5) and Clermont-Ferrand. It also works in a network with other French veterinary and agronomy schools, formalization programmed in the IAVFF\* constitution (Annex Intro-6).

### « New regulations relating to teaching »

The veterinary curriculum was defined by the AM of April 20<sup>th</sup> 2007 (Annex Intro-7). It spans five years inside one of four French veterinary schools, based on a national frame of reference. Since the beginning of the 2013 academic year, the number of students admitted to ENV\* each year was set by the AM at 137 (instead of the previous 117). The admission conditions for the schools are also established annually, with new conditions (ENS\*-ENV\* competition, two places in September 2015: one for Lyon) recently introduced to broaden the diversity of students' origins.

The teaching program is adapted to offer students, mainly from urban backgrounds, the opportunity to embrace a very diverse career choice. The food animal program has been specially expanded in relation with the School of agricultural engineers (since the creation of VAS\*) and the design of special programs around bovine health management.

As a strategic decision, the school is engaged in a very supportive policy to increase specialization among the faculty members so as evaluation of the teaching program was initiated since 2007 now implemented in the whole curriculum (including clinical teaching : see chap 5).

### « New buildings or major items of equipment »

From 2005 to 2014 (Annex Intro-8), more than €5.5 million was spent on the construction of new buildings, €1 million for clinical equipment and nearly €1 million for laboratory equipment.

In addition, the school launched a "call for projects" approach to engage new facilities to improve the quality of teaching and research. €700,000 was included in the 2014 budget for various development projects. 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 finalized. Labs will be reorganized and renewed in the same time. These investments are complemented by annual maintenance on the premises.

### « Main changes to the study programme »

Our school explore and develop new dimensions in teaching methods based on online resources in order to preserve its capacity to develop the practical aspect of teaching, despite limited state funding.

The desire to permanently adapt the education and skills we impart, particularly in relation to the internal and external evaluations of programs, have led to the development of several actions and evolution of the study program:

- Finalization of veterinary training program resulting from the 2007 AM (annex intro-7)
- Development of a career path for Y5\* tutored to practice in a rural setting,
- Identification of new skills required for professional practice and better adaptation to new challenges and "new occupations": research, industry, marketing, establishment of training in professional and animal ethics ... (see Chap 4. Curriculum);



- Increase in the number of residency programs opened on campus and therefore accommodation for more residents, thus increasing student supervision (see Chap10);
- Opportunity for VAS\* students to take modules organized by the CHEL[s]\* (Annex Intro-5) focusing on different topics (ENS\*, Ecole Centrale de Lyon\*, CNSMD\*, Sciences Po Lyon). In 2013-14, four students from other establishments were welcomed on both VAS\* campuses, four VAS\* students are registered at partner schools in 2014-15; eight VAS\* students did CHEL[s] modules. In addition, CHEL[s] organized special training program devoted to "decision-making in a complex environment" that now exists as a MOOC\*.

*« Important decisions made by the management of the faculty... »*

In 2005, the Establishment enters through the AVMA evaluation process leading in 2013, an accreditation for seven years (see the conclusions of this assessment in Annex Intro-9.).

In this context, but more generally to adapt its operations to quality criteria, major steps were taken to assess teaching and skills (outcome assessments), development of quality, adaptation of hygiene measures and biosafety were implemented. A risk management and biosafety officer was recruited specifically to identify risks (areas, activities, etc.) and provide the necessary information and training (Annex 2-5-3). The addition of another 20 veterinary students in September 2013 has entailed investments (equipment, buildings) and additional human resources (an additional PH\* position) detailed in the corresponding chapters (see Chap10) in addition to the investment choices listed above.

*« Major problems encountered by the faculty, resolved or not »*

The various assessments and preparation of the future school project enabled us to identify the strengths and weaknesses of VAS (Annex Intro-3):

- insufficient community ownership of the Establishment's SP\* and its follow-up; the design of the 2016-2020 SP\* attempts to address this deficiency by making extensive use of proposals by VAS\* employees\* and units, and workshops focused on strategic directions;
- insufficient technical and research staff in laboratories and clinics, offset partly by strong support for the creation of UMR\* and recruitment of residents;
- little collaboration between the French ENVs\*; still, the creation of the IAVFF\* should partly meet this objective;
- Incomplete internationalization of the Establishment's mission: it is a strategic direction in the 2016-2020 SP\*.
- difficulty reconciling the specifics of the three curricula (agronomy, veterinary and ENSV\*) and the development of a common culture for the Establishment;
- not enough emphasis on synergies: the new governance should establish a stronger dynamic by creating and supporting projects that combine better consistency between the campuses and between training and research;
- Lack of awareness of the internal activities of the ENSV\*, the public operator for education in agronomic and veterinary public health careers.





# Objectives



## 1. OBJECTIVES

### 1. Facts

*Indicate whether there is an official list of the overall objectives of the Faculty.*

*If this is the case; please indicate these. Who determines the official list of objectives of the Faculty? By what procedure is this list revised? Do you have a permanent system for assessing the achievement of the Faculty's general objectives? If so, please describe it. If there is no official list, please indicate the objectives that guide the Faculty's operation.*

The major goals and objectives of Veterinary campus of VAS\* (Lyon Veterinary School) are to provide a high level of education in the fields and topics directly related to the career of new graduated veterinary surgeons. This will prepare them to meet the different needs of society, especially regarding animal health and its relations with human and public health, biomedical research and environmental protection.

The objectives of the Faculty are partly set by the Ministry responsible for Agriculture (global objectives for a veterinary school at a national level and COP\* at the school level). The School is also responsible for its specific strategic plan, which is adopted by its board of director after being validated by both the CE\* and CS\*. The specific strategic plan is endorsed by the Ministry which is part of the board of governors.

A review of the implementation of the stated actions for the strategic plan from 2010-2015 was carried out: at the end of 2015, 117 actions out of 147 had been implemented (nearly 80%) with regard to 7 issues: training, research, valorisation, international matters, management and functioning, communication and the life of the establishment. This critical review was integrated into the draft of the SP\* for 2016-20 by the external members of the CA\* and the internal working groups (annex 1-1) as well as for the COP\* (annex 1-2) contract established between VAS\* and the DGER\*.

This work will also be complemented by the conclusions of the HCERES\* evaluation (with a provisional report in 07/2015) and the recommendations of the AEEEV\* and the AVMA\* evaluation, which have been taken into account (annex intro-9), as well as the continual improvement of our establishment's tasks and the integration of the 20 supplementary students into all the dimensions (human, social, material, sites, etc.) and responses by technical personnel to deficiencies. The new strategic plan will be adopted by the end of 2015 and will cover 2016-2020.

The objectives defined here are the subject of a continual process of improvement of the establishment's tasks.

- Training (carried out by the CEVE\* and the CSP\*) that integrates the results of teaching evaluations (see chap5) and specific questionnaires addressed to 5Y students ("day-one skills" and 3 years later) as well as to their employers ;
- The clinical activities carried out by the council of the CHEV\* (general functioning, request for investments, maintenance,...), the evaluation of clinical training in rotations ;
- Research under the auspices of the CS\*, with the evaluation of the RU\* (in particular by the HCERES\*) and the use of indicators : publications, numbers of faculty members with HDR\* titles, contracts (see chap.13) ;
- Internationalisation: the number of outgoing VAS\* students and of Erasmus entrants, "summer schools" ;
- Continuing and complementary education: the internships in the 3 clinical tracks, the numbers of on-site days of training (see chap. 11) and the number of residencies (see chap. 10).

### 2. Comments

*In your view, to what extent are the objectives achieved?*

*What, in your view, are the main strengths and weaknesses of the Faculty?*

Our objectives are achieved but the establishment has decided to pursue its efforts by:

- The opening of residencies and the recruitment of residents enabling us to carry out specialist training;
- The recruitment of PH\*s and supervisors, as well as increasing the supervision of the students in the clinics (see chap 10);
- Collaboration with the university and the research agencies for our RU\* with the aim of facilitating creation of the integration into the UMR\* ;
- The investment in technical facilities and equipment, amounting to €700 k allocated in the budget for 2015 with the decision being renewed in the budget for 2016.

From strengths and weaknesses identified and reported in annex intro-9 and annex intro-3, the main are:

- a positive assessment of the Strategic Plan that marks the progress of VetAgro Sup,
- strong involvement of stakeholders in the process of evaluating the Establishment

- strong involvement of departments in harmonising practices :
- Insufficient ownership of the Strategic Plan by the community and delayed formalisation of monitoring.

### 3. Suggestions

*If you are not satisfied with the situation, please list your suggestions for change in order of importance and describe any factors which are limiting the further development of your Faculty.*

The new strategic plan was built on a strong interaction with the community. Its implementation and monitoring will be carefully designed to allow a strict following. This strategic plan must be supported by financial engagement validated by the board of governors. The school has enough financial reserve to allow this implementation but national regulations could block this use and lead to difficulties during the implementation of the SP\*.

Cooperation between Vet Schools is still low. The constitution of the IAVFF\* is official: it must allow for moves toward pooling and educational and scientific innovations in a synergistic spirit (annex intro-6) between the 4 French vet schools and specially the adoption of a new referential for veterinary teaching focusing on competencies.

Likewise, the staff ratio is a major and ongoing preoccupation of the establishment, which needs to mobilise its resources and its finances to achieve the strategic objectives of the future SP\*.





# Organisation



## 2. ORGANISATION

### 1. Facts: administrative information

*Details of the Faculty. Is the Faculty within a university? If so, please give address of the university. Details of the competent authority overseeing the Faculty.*

*Indicate the rules concerning the appointment of the elected officials of the Faculty (Dean, Vice-Dean, Heads of Department, etc.). Provide a diagram of the administrative structures showing the Faculty in relation to the university and ministerial structure of which it is part.*

*Provide a diagram of the internal administrative structure of the Faculty itself (councils, committees, departments, etc.) Describe, briefly the responsibilities, constitution and function of the main administrative bodies (councils, committees etc.) Indicate the involvement of the veterinary profession and general public in the running of the Faculty.*

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VetAgro Sup is a Grand Etablissement (annex intro-1 and annex intro-2) and it is not part of any parent organization as a faculty, but is considered as a University by French law. The dean of VetAgro Sup, nominated by the French Minister responsible for Agriculture, is a veterinarian, as are the deputy dean in charge of the veterinary campus and vice deans in charge of specific disciplines, who are appointed by the dean. The deputy dean for the veterinary campus is in charge of the veterinary teaching hospital, and more specifically, of supervising the professional, ethical and academic affairs of the campus.

Further to the renewal of Dean's mandate (October 2014), an administrative organization that is better suited to the institution's mission and goals is now operational: duties of the Deputy Dean (Annex 2-1), Education (Vice-Dean : Annex 2-2-1 and assistants : Annexes 2-2-2 to 2-2-4), Research (Vice-Dean Annex 2-3-1 ; assistants Annexes 2-3-2, 2-3-3), External Relations and Partnerships (Vice-Dean Annex 2-4-1 ; assistant Annex 2-4-2), Quality and Evaluations (Vice-Dean Annex 2-5-1; assistants Annexes 2-5-2, 2-5-3), the ENSV (Vice-Dean : Annex 2-6-1 assistant: Annex 2-6-2), the Secretary-General (Annex 2-7) and the assistant for international relations (Annex 2 -8).

The VAS structure consists of several councils and bodies:

- VetAgro Sup is administered by a **Board of Governors (CA\*)** (annex 2-9) made up of 32 members: 8 representatives elected by faculties (4 full professors and 4 associates), 4 representatives elected by other staff categories, 4 representatives elected by the students, and 16 members from outside the institution nominated by the MAAF\* after proposal by the Dean, including representatives of the veterinary profession and the Ministry of Agriculture. Based on proposal by the Dean, the budget is discussed then voted every year. The CA\* defines the strategic orientations of the school in all areas (teaching, research and development). It is responsible for all aspects of the school's general technical, educational, administrative and financial operations, and meets at least twice a year.

- **The Executive Committee** is made up of the Dean, Deputy Deans, Vice Deans, Assistant Directors, head of Administrative Affairs and Department and research units Chairs. Its mission is to assist the Dean in administering the institution by proposing and assessing actions and strategic orientations.

- **The Faculty assembly (CE\*)** is made up of 40 elected faculty members. All members of the teaching staff are invited to participate without voting rights. It coordinates teaching activities, determines the composition of examination juries, and establishes examination results and related sanctions. It formulates recommendations regarding programs, organisation of teaching, and creation of teaching staff positions.

- **The Curriculum and Students Affairs committee (CEVE\*)** is made up of members of the Board of Governors (chosen from members outside the institution, with a majority of representatives of the veterinary profession) and representatives elected from within faculties and students. It examines all questions concerning teaching and pedagogical affairs, and makes proposals regarding the institution's educational policies. Different committees are involved in the process of improving program and evaluations which include students: CEVE\* (with professional) and CSP\*.

- **The Scientific committee (CS\*)** is made up of elected professors, researchers and students, and a majority of representatives of national research institutions and partners (INRA, CNRS, ANSES, Universities). It formulates proposals concerning scientific policy. It puts forward recommendations on research policy and allocation of credits dedicated to research, as well as research profiles for new academic and non-academic positions.

- **The Animal ethics committee** is made up of outside members and representatives of the professors,

staff and students. It evaluates animal experimentation activities, as well as research and practical protocols affecting animals.

- Other administrative and representative bodies are made up of elected or designed persons from the faculties, staff and students. These include the **Technical Committee (CT\*)** responsible for questions related to employment, working rules and salaries of employees directly paid by the school, the **Hygiene and Safety Committee and Working Conditions (CHSCT\*)** responsible for hygiene and safety matters, the **Lecturer Grades Commission** responsible for evaluating the promotions of faculty members, and the **Veterinary Teaching Hospital Council** (made up of veterinary teachers) responsible for all technical and organisational matters for the CHEV\*. Lastly, informal task forces are regularly formed combining different categories of staff.

Each course is evaluated by students, and the findings of these evaluations are discussed and adopted after any possible changes by the joint evaluation commission (**Annex 5-4**) and then by the CEVE\* (body with participation by professionals), and the CSP\* for validation by the CE\*. In addition, questionnaires are sent to the 5Y\* 3 years after they leave school and to their employers (see Chap5). This training is provided by more than 90 EC\* and PH\*.

The Vet Campus is divided into nine **training units (TU\*)** in charge of the 4 first years of the core program) and four **departments** (in charge of the last year of the core curriculum and the specialised years), each of which is directed by either a Unit or a Department Chair appointed from among the academic staff by the Dean after proposal by the members of the unit ; a Departmental Council including representatives from the academic staff, students, support staff and the veterinary profession define the department's strategic orientation with regard to both teaching and strategic objectives in application of the VetAgro Sup SP\*.

VetAgro sup has built **research units (RU\*)** that are either composed of faculty and staff from the school or also include researchers from universities and/or national research agencies ("UMR\*", mixed research units"). Nearly all the faculty members belong to a unit. Research units are validated in terms of their scientific program by the research council, and every 5 years undergo a national evaluation (see chap13).

**Teaching and/or research platforms** were created to identify the tools that support teaching and research. These platforms are administered separately from the units in order to ensure good management and development of tools, as well as to ensure that they are open to complementary external activities. The two main platforms are the teaching hospital (CHEV\* see chap7) and the center for preclinical research (ICI-B\*).

The structure of the institution is complemented by regulations and explanatory notices available on the institution's intranet site, for general aspects (statutes, internal regulations, organisational chart, structures, departments, technical facilities, etc.), financial aspects (budget, use of expenditures, etc.), human resources aspects (positions, competitive examinations, promotions, etc.) and quality procedures.

The support functions (finance, HR, maintenance, etc.) have been gradually brought under the Quality Policy in order to improve their effectiveness. The corresponding departments (finance, HR, etc.) are organized in offices located on both sites to better meet staff needs.

A general assembly of the institution and another for the veterinary campus are organized each year with a fixed agenda, certain points of which are regularly reserved for the structuring of the institution.

Representatives of the profession are represented on the CA\*, the CEVE\* and in the departments; various conferences and events regularly bring together representatives of the College of Veterinarians, the Union of veterinarians in private practice and technical professional organizations (veterinarians specializing in small animals, production animals, horses). These are also represented by "Junior-associations" run by students. Lastly, the profession may be associated with the provision of training, including validation of 5Y exams and in connection with student initiation to business, establishing a clientele and industrial trades.

## 2. Comments

*Add any comments on the organisation and functioning of the Faculty that you feel useful for completing the description.*

The creation of a new organization in 2014 took into account the main comments arising from evaluations of the institution, as well as the needs put forward by various stakeholders. Precise definitions of each person's duties, which are posted, have helped clarify decision-making channels. The new organization was introduced at general assemblies at which, in particular, the various responsibilities were set out and illustrated by examples from operations.



An analysis of the operation of functional teaching units (which are renewed by regulation every 2 years) helped to highlight the difficulties, due in particular to the fine demarcation of each one's duties. This joint analysis led to a project begun in late 2014 to transform the functional teaching units by the end of 2015.

Placement under the authority of the Ministry of Agriculture, which is in France in charge of the political aspects of animal and public health, allow us to have positive impact on the strategy to develop our missions. The relation with the Ministry of Higher Education is also important especially for research grades as PhD.

### **3. Suggestions**

*If you are not satisfied with the situation, please list your suggestions for change in order of importance and describe any factors which are limiting the further development of your Faculty.*

Student representatives could be associated in the executive committee to better share information, better express the opinions and needs of their community and thus improve the effectiveness of decisions. Lastly, a meeting of external CA\* members on a given topic is instituted at a frequency of at least once a year to enrich our deliberations and future plans.



# Finances



### 3. FINANCES

#### 3.1. Facts

##### 3.1.1. General information

*“Indicate whether the Faculty’s current financial model (system) meets the Faculty’s mission. In addition please specify. How the allocation of funding (including public funding) to the Faculty is determined, and by what body. If the allocation of funds, or any significant proportion of it, is linked to a particular factor (e.g. student numbers, research output), please describe this. How the basis for funding the Faculty compares with those teaching other courses (e.g. whether veterinary training receives a higher budget weighting compared to other disciplines). How the allocation of funds within the Faculty is decided. What are the mechanisms for funding major equipment and its replacement? The mechanism(s) for funding capital expenditure (e.g. building work, major items of equipment) and how decisions are taken in this matter. The mechanism(s) to provide the necessary support for building maintenance and how decisions are taken in this matter.”*

Education in France is financed almost exclusively by the state. Consequently, the largest portion of VetAgro Sup funding comes from the state: salaries of staff employed by the state and support for the operation of the Establishment's missions. The School has developed other sources of funding from its own activities and also receives annual tuition fees paid by students. Lastly, the establishment also receives research contracts.

The portion from the state is decided annually by the parliament. It is based on a number of staff identified to enable the missions to be carried out in the best conditions. Staffing may be increased depending on the number of students. The general operating staff is independent of the number of students. The state portion is proportionally higher for institutions that train professional for the health sector including veterinarians than funding to other institutions of higher learning in relation owing to the higher average annual cost of training per student. The state support for operation of the VAS's missions is not linked to student number.

The resources from the Establishment's own activities are based on rates that are adopted by the CA\*. Research contracts are obtained through tenders issued regionally, nationally and internationally and in some cases with private structures. An annual budget is voted by the CA\* of the Establishment upon recommendation of the DG\*. The School has the capacity to pool its funding needs and then allocate funding independently.

Within the Establishment financing for operations are distributed among the units as follows:

- Teaching units: each unit receives several types of financing.

The educational credits correspond to the needs expressed by the units to implement their curricula. Applications are collected each year and awards are made after the applications have been studied. Applications are directly related to the number of students. Needs in terms of teaching animals are processed elsewhere.

Operating funds: each unit receives an amount per member of the unit to ensure current operations (consumables, computer equipment, etc.). If a new member arrives a special credit is assigned. In addition, a specific allocation to departments is provided for each resident (to cover the resident's needs and the training needs of supervisors for residents). Staffing is consistent for the entire establishment, validated annually.

Credits linked to assigned revenues: when units implement specific activities (continuing education, host paying trainees, etc.), the net proceeds (after deduction of all costs) generated by these activities are made available to the units. Use of the proceeds is subject to approval by the administration.

- Research units: research units receive two main types of financing: - research credits: each scientific staff member receives an annual grant set by the Ministry. It consists of two parts: a fixed part and a part based on publications and PhD students advised; - credits linked to research agreements, the units are assigned credits from research contracts that their members receive. The school takes a fee 5% on these amounts for general expenses.

- Technical facilities units: each technical facility is subjected to specific financial monitoring that identifies revenue generated as well as costs assigned. Depending on their contribution to the establishment's activities, technical facilities receive additional support from the Establishment. For example, in addition to the resources generated, the CHEV\* receives amounts to cover part of expenses for special personnel, which are in addition to the staff paid by the state.

As regards investments, these can be considered in several different ways:

- Investments or large equipment required for the continued operation of the establishment and completion of its missions (classrooms, computer equipment, physical and technical maintenance): funded the establishment from an annual budget, and possibly for all elements related to security, specific state funding.

- Specific investments for instruction or research (special equipment): financed from funds generated by the units (e.g., research contract or continuous training) supplemented by requests to the establishment (e.g., CHEV\*). Annual arbitration by the Board of Governors.



- Creation of new facilities or new equipment: total or partial financing from the establishment's budget upon a decision of the Board of Governors. There was a request for proposals in 2014 and another is underway for 2016.
- Maintenance of buildings is handled entirely by VAS\* from the Ministry allocation.

### 3.1.2. Information on extra income

« What percentage of income from the following sources does the veterinary teaching Faculty have to give to other bodies (university, etc.)? ☐ Clinical or diagnostic work, research grants, other (please explain). Please indicate whether students: - pay tuition/registration fees, how much these are, how they are decided, how the funds are distributed “.

As the veterinary faculty has its own budget all income either from clinical and diagnostic work or research grants are fully included in the budget. Students are paying annual tuition fees decided every year by the government. The following table gives the details of the annual fees for the last years. It should be noted that scholarship students do not pay registration fees, and the Ministry only makes up half of the money not collected by the Establishment. Tuition fees collected are used in full to cover education costs.

year	Tuition fee €	Number of student with student aid	Total of tuition fee non paid by student €	Compensation by the state for non-paid tuition €	Difference incharge of the school
2008	1200 ou 1260	149	181 620	181 620	0
2009	1 600	157	251 200	251 200	0
2010	2 000	208	416 000	416 000	0
2011	2 000	227	454 000	324 156	129 844
2012 and further	2 074	221	458 354	229 177	229 177

### 3.1.3. Overview income (revenue) and expenditure

**Table 3.1. Income/revenue**

**Details for table 3.1: Veterinary campus resources:**

State salaries correspond to the payroll of support staff and faculty members paid directly by the state.

Grant Corresponds to the grant (operating and research) paid by the Ministry.

Central services includes Administration, the research and valorisation department and Services Administration (information system, administrative and infrastructure services).

Teaching (initial training) includes main resource tuition and some revenue (trainees, external EC courses, apprenticeship tax) from UP and departments.

Research corresponds to all revenues from research contracts.

Income from internal service unit includes Clinics, plate forms (diagnosis and experimental), Continuous education.

year	State (government)		Income generated by the Faculty				Total €
	To university administered outside the Faculty		Central Services €	Teaching €	Research €	Income from internal service unit €	
	State salaries €	Grant €					
2014	19 037 379	2 787 613	2 597 868	1 605 222	1 907 279	8 510 762	36 448 136
2013	19 168 534	2 842 572	2 389 571	1 590 830	2 292 814	8 761 630	37 047 964
2012	18 897 145	3 254 956	2 512 474	1 004 308	1 088 582	9 406 483	36 165 960

**Table 3.2. Expenditure**

Year	Pay Salaries €		Non Pay €					Total €
	State	School	Central services	Teaching support	Research support	Clinical support	Other	
2014	19 037 379	5 464 172	4 576 263	543 033	933 295	2 333 678	2 767 000	35 656 835
2013	19 168 534	5 211 062	4 504 908	484 667	667 160	2 061 842	2 767 000	34 867 186
2012	18 897 145	5 419 613	4 294 239	413 563	473 494	2 170 237	2 858 007	34 528 309

### Details for table 3.2: Veterinary campus expenses:

State salaries correspond to the payroll for support staff and faculty members paid directly by the state.

School Salaries corresponds to the salaries of staff and teachers directly paid by the school for the veterinary campus and 70% of DG staff.

Central services include administration, the research and valorisation department and Services Administration (information system, administrative and infrastructure services).

Teaching includes education expenditures by education office, teaching units and departments.

Research includes all expenditures due to research contracts.

Other services includes expenditures by Clinics, platforms (diagnosis and experimental), continuous education.

### 3.2. Comments

*“Teaching establishments never have enough finance. Please comment on any of the “Guidelines and Requirements” that are particularly difficult to fulfil in the present financial situation. Please make any comments that you feel would help the experts concerning the Faculty’s finances. What is your number one priority for the use of any increased funding?”*

*Comment on the degree of autonomy and flexibility available to the Faculty in financial matters. Comment on the percentage of income from services that the Faculty is allowed to retain for its own use, and in particular on the extent to which loss of this income acts as a disincentive for the services concerned. Please make any other general comments that you feel would help the experts concerning the Faculty’s finances “.*

Trends for State funding during the previous 5 years was to maintain the salaries but to reduce slightly every year the support for global operation. This was not the case last year. It is not anticipate that there will be any growth in state appropriation in the following year, even if the economy improves. In order for the school to move forward its strategic plans to develop its teaching facilities and programs, we are reliant on incomes produce by our efforts to develop new services toward public and industry. We are working to control the expenditures by introducing new rules allowing to maintain our abilities to finance the needs for teaching. Highly increasing the revenues from various resources (teaching hospital, teaching labs) and other equipment allows the school to hire new faculty (mainly on the clinical track) and support staff for teaching. This compensate the lost by state budget costs.

The tuition fee, even when it was increased from 1200€a year to 2000€a year is not too high as the sponsored aid for student regularly increase with no total compensation by the State. The tuition fee, fixed by state rules, is significantly low and far from covering the total annual cost of a student

The French government raised education as one of its major strategic goal which leads to a slight decrease on financial support (far less from what occurred on other national funds) and a stability on governmental employees affected to the school which allow a good support for the teaching program (faculty and support staff). The promotion of governmental staff is also includes in the state appropriation.

The school is supported by the local governments and also by some private companies allowing funding for some projects supporting students like the student job program offered by the Région Rhône Alpes. The state is not able to increase the financial support specially by implementing the support with the number of students

Being directly in charge of all aspect of the budget, the school and its employees developed very efficient rules and follow up on budget trends, monitoring of activity and needs which allow us to financially support what is needed to implement the teaching programs. Moreover, contract with companies located in the campus allowed to increase the revenues but also to offer some materials (CT scan, MRI) that are important for teaching without supporting the related costs.

The very efficient finance control in the school and the high level of activities generated a significate reserve fund. However, financial rules didn’t always allow the school to use it for the support of its strategic plans. For example, supporting the residency programs is very important for quality of teaching and for development of staff competencies. This is not considered by the Ministry as an “investment” and can’t be covered by the use of reserve funds.

### 3.3 Suggestions

*If you are not satisfied with the situation, please list any shortcomings and provide suggestions -in order of importance and describe any factors which are limiting the further development of your Faculty.*

The implementation of the strategic plan needs to be supported by some use of the reserve. Financial rules needs to allow a controlled use of these dedicated finances to offer to the school the opportunity of increasing its capacity for the quality of teaching and research.

There is a shortage of support staff either in clinic or in research. This is covered by people directly employed by the school but the number of those is regulated by the government. There is a need to increase the financial

support for people directly payed by the government, as it was done in 2014, to allow the coverage of the increasing number of student. Increase the establishment's own resources: technical facilities, including clinical specialization, animal experimentation facility could be possible.  
Factors limiting such development are mostly regulatory state rules that reduce the autonomy of the school.





# Curriculum



## 4. CURRICULUM

### 4.1. Factual information

The school has developed a professional knowledge and skills acquisition based program in order to prepare students for the wide range of professional veterinary careers. The next generation of veterinarians will learn throughout their lives and possibly change professional paths during their careers. Training includes theoretical lectures, tutorials, practical workshops, supervised personal study, introduction to research, as well as clinical training and externships. Training enables veterinarians to acquire skills, knowledge, competencies, soft skills and attitudes described in the national degree standard. In recent years, some subjects in particular have been developed, such as education on animal welfare (social context, evaluation and risk factors), professional ethics or other competencies necessary for professional practice (communication, accounting, management, radiation protection, etc.).

*Indicate whether there is a defined national curriculum and (if applicable) how and by what body decisions are taken on this*

Veterinary training is described in the AM of 20/04/07 (annex intro-7, annex 4-1). It is based on a professional frame of reference and diploma set out in annex 4-2, which define the responsibilities, skills, knowledge and tasks of the general veterinary practitioner. This training meets the criteria of EU Directive 2005/36/EC (see annex 4-3) and complies with the decree applying the European higher education framework to the French higher education system (annex 4-4). These standards are the outcome of working groups of the 4 ENV's faculty members, ministry administrators and representatives of the profession. The final decision is taken by the Ministry.

*Describe the degree of freedom that the faculty has to change the curriculum*

The School rely on the Ministry for the global curriculum but is free to implement the methods and organization to achieve the requested competencies.

*Outline how decisions on curriculum matters and course content are taken within the faculty*

Working groups meet to update the curriculum and to set its new objectives (acquisition of skills, etc.) within which the establishment plans the education provided: courses (CM\*), TD\*, TP\* and TC\*.

This organization is based on requests from the TU\* and the departments, regulatory constraints and the needs of the profession but also outcome assessment results. It is then put forward by the BEVE\* to the relevant officials and approved by the CE\*; potential difficulties and evaluation results are discussed in the CEVE\* and CSP\* (see art.5 in annex 4-5), along with proposals validated by the CE\*.

Working groups are being formed under the Director of training and the assistant to the Vice-Dean responsible for educational innovation to define new proposals and take into account the results of evaluations and the assessment outcomes (see § 4.1.3.).

The detailed organization of the initial training of students, which is described in a text (annex 4-5), is updated by the proposals of the CE\* after consultation with the CEVE\* and validated by the CA\*.

*Outline how decisions are taken on the allocation of hours between the various subjects and on the balance between theoretical and practical teaching (tables 4.1, 4.2 and 4.3)*

The time distribution between CM\*, TD\* and TP\* requested by training unit officials is then proposed by the DEVE\*, and amended and adopted by the CE\*.The same applies for clinical rotations between tracks and within each of them. A global overview of the curriculum is made at list once a year during a “pedagogic seminar” between all faculty members. Another seminar includes students, especially for major changes.

*Indicate the presence and disposition of an integrated curriculum. Describe the degree of integration present and the amount of time devoted for EU- and non-EU-listed subjects (table 4.4)*

The curriculum is fully integrated. The organization into multidisciplinary modules allows for better coordination between disciplines, the avoidance of duplication and better detection of deficiencies. Non EU listed subject are mainly English language and the practical thesis.

#### 4.1.1. Power of subjects and types of training

##### 4.1.1.1. Power of subjects

*"Core" subjects taken by every student*

Tables 4.1 and 4.2 indicate the knowledge and skills taught every year, by type of disciplines and according to teaching method for all students.

**The program of the five-year veterinary curriculum** (art.1 in annex 4-5) is organized into:

- **four years for the Core Curriculum** (eight semesters: S5 to S12):

- *preclinical sciences* (S5, S6 and part of S7): biology of healthy domestic animals; livestock farming methods; scientific information collection and treatment; and critical analysis of the data,
- *clinical sciences* (end of S7, S8, S9 and S10) involving clinical diseases of individual animals and populations, food quality and safety,
- *Clinical rotations* in the school's hospitals (CHEV) (S10 mornings: annex 4-6 and S11-S12: annex 4-7). In S11-S12, these rotations are divided equally between herd animals and veterinary public health, on the one hand, and pets and horses, on the other.

- *Professional knowledge*: few courses are given starting in Y2 and two modules in Y4.

A student who has completed the four years receives the master's degree (DEFV\*).

- **Y5**: pre-specialized year (semesters S13-S14 (section 5 in annex 4-5): students have to take one of the following tracks: Veterinary public health (master ENSV), Research (Master II), Industry (professional masters) or one of the clinical tracks. The completion of this year entitles the student to defend the veterinary professional thesis (section 6 in annex 4-5). The Lyon School is the only French school offering six clinical tracks (annex 4-8): three tracks focused on one species : small animal (SA\*), equine (EQ\*), animal production (AP\*) and three mixed practice tracks : SA-EQ, SA-AP and EQ-AP. Professional knowledge modules are held during the Y5 for all the students. Students are also taught radio-protection competencies and « dangerous dog » evaluation and legislation.

#### *Production animal track (AP)*

Training for the exclusive AP pathway (a total of 18 weeks of practical and/or clinical training) is organized as follows:

- 4 workshop modules (about 1 week per module) which must be selected from a list of 14 modules (surgery, ultrasound, milking and milk quality, pig or chicken herd health...),
- 4 weeks of mandatory training at the UCRA\* unit with a focus on population medicine and livestock audits,
- 14 weeks of supervised off-campus externship (see § obligatory extramural work).

Mixed AP tracks only include 2 workshop modules (from the same list mentioned above) and a 10-week off-campus supervised externship. The remaining program is dedicated to the complementary species (SA, EQ).

The validation of the year is based on: attendance of modules; validation of clinical cases or livestock reviews; analysis of the skills portfolio (see chap 5, annex 5-2) student's review of the use of antibiotics in animal husbandry that has been audited; feedback-of the tutor; interview with the jury (faculty members or PH\* and external practitioners) in which the student demonstrates his skills and motivation in the context of a recruitment request with a pure or mixed rural clientele. An analysis of the documents produced by students trained in this way is currently being carried out to detect deficiencies or imperfections and integrate modifications in the curriculum for 2015-2016, such as offering other modules and other courses, etc. Skills that were not acquired or not mastered may be addressed in additional training sessions;

#### *Companion animals track (AC including NAC)*

For the exclusive AC track in order to allow training in small groups (8 groups of 3-4) the students are divided into two subgroups (AC1 and AC2) with a total of about 30 students each (2014-15).

Their clinical rotations (annex 4-9) are modeled along those of the Y4 students, with a total number of 24 weeks, all of them on the campus (AC1) or 16 weeks on campus and 8 weeks outside (AC2). Bi-weekly lectures and courses (about 40 hours) different from those given in the core curriculum: nutrition and gastroenterology, syndromes (fever, immunological anaemias...) are provided by external professionals or faculty members.

Training is validated through: attendance and skills acquisition (see progression portfolio: see chap 5 in annex 5-3), case management including hospitalisation, attitude towards clients; oral presentation of a clinical case to a jury that must consist of the department head and an outside professional and may also contain school faculty members from other disciplines depending on the nature of the case and the discipline involved.

Mixed AC tracks also offer clinical training by rotation between disciplines (2 times less than that of the pure track) and similar external externships. The validation of the year is based on the same rules including a written presentation of a clinical case.

#### *Equine track (EQ)*

Each student has a mentoring supervisor in charge of monitoring his training.

A "general" module (S13) organised for the pure Eq and mixed Eq students is devoted to orthopedics - farriery (including lameness exam films), reporting and identification, dentistry, anesthesia, radiographic and

ultrasonographic semiology and medicine (preventive medicine, nutrition, ethology, ...), half of it theoretical, the other half practical.

For pure Eq track:

- The general module is followed by a week of practical teaching: TD in the morning in English ('clinical problems', with a topic assigned to a student and presented by him to his fellow students followed by a discussion: for example nasal discharge, fever, edema, cough, etc. ), in the course of which the logic of the diagnostic process is evaluated (key points of the examination, diagnostic hypotheses, additional examinations); TP on pedagogic animal in the afternoon in a 2hr session for 3 students with 2 supervisors;

- A two-week specialised module (S13) (surgery, medicine, imaging, anesthesia etc.) devoted to specific features that have not previously been addressed (eg pathological features of the donkey, further development, ethical aspects, equestrian sport, etc.);

- A module (S14) facilitated by external practitioners: purchase visit, expertise, insurance, etc., combining oral and practical interventions; practical reproduction (TP and TD); virtual TD based on interactive CDs (ophthalmology, neurology, etc.).

- 12-week clinical rotations at the school.

For the mixed Eq track (AC-EQ or AP-EQ) participation in the week of presentations by external professionals and 5 weeks of externship at the school. The externships are presented in § 4.1.1. obligatory extramural work.

The validation of the year is based on: a written exam; validation of clinical cases by a jury involving the supervisors of the school and external practitioners, assessment of presentations of "clinical problems" and clinical cases that have been written up; evaluation of the externship file created by the student and the skills portfolio (see chap5 and annex 5-4).

#### *"Elective" which each student must select from a list of permissible subjects*

Optional elective courses are offered to students on beekeeping, wild fauna (participation in GEEFSM: ecopathology wild mountain fauna including 40h of lectures, externship and practical cases); practical lessons and lectures which are organised, for example, by junior associations with the help and supervision of faculty members and/or practitioners (GTV\* for ruminants: more than 350 students enrolled, AVEF\* for equine) are also optional.

Depending on the academic year they are in, the students may also attend and participate in conferences and events included in the list of events approved by the CE\*, as long as they are given leave to go and the event does not detract from the needs of inpatient animals or from emergencies: national or regional congresses for the GTV\*, AFVAC\*, AVEF\*, YABOUMBA\*, Equita Lyon, the livestock fair in Clermont-Ferrand, the agricultural fair in Paris (assistance with keeping watch), Veterinarian Club, companies, etc.

#### *"Obligatory extramural work"*

Externships are found through recommendations and their nature and duration are specified by the establishment in order to give the student the opportunity to discover different professional settings (for instance, the majority of our students come from an urban setting and are unfamiliar with rural settings). These courses are subject to an agreement between a practitioner outside the establishment and the school. Externships are mandatory and a successful validation is required to access in the following year (see §4.1.4 and table 4.5; art 26 Regulation in [annexe 4-5](#)).

#### **4.1.1.2. Power of subjects:**

##### **4.1.1.2.1.: Theoretical teaching (CM, TD, e-learning)**

The lectures are given for the entire class and are delivered in a lecture hall; teaching materials (mainly slideshows) are available to students via the platform Vetotice. These lectures are for transmitting basic knowledge; they can be given in modules which group together several disciplines (e.g. by body system part in a same module the relevant anatomy, histology, physiology and pathology). For each course or module, the educational objectives are presented in a hierarchy according to the headings "knowledge", "performance", "behaviour", the latter two categories falling primarily under directed work (TD\*) and practical work (TP\*).

These lectures are complemented by TD\*: student of a same class are split in 4 equal groups and teaching is based on exercises, clinical cases, analysis of articles or practical situations requiring preparation or prior consultation of documents from students.

Examples: - during the week following lectures, exercises are provided to students for self-assessment required before the start of TD or TP (e.g. immune system in S5); - TD in antibiotics, English, statistics, etc. ; - reviews of previous farm visits (S7) ; - TD with instruction on lesions using specific software in quality and food safety QSA (S9).

The e-learning is based on the resources provided by the school (see chap 8. Library and e-learning) and time slots are blocked off in the timetable to provide available time for these exercises : - video consultation: horse behaviour (2h S6) after 2h of CM\*; - visit to the museum after CM\* in anatomy (anatomy of limbs S8) ..... 8 time slots of 1 hour each blocked off in the timetable for the S6 1/8 of the course; - time slots blocked off in the timetable (e.g. 23h in S7) for the student to utilise the self-assessment exercises (progress quizzes, assimilation exercises, "blank" QCM, etc. (e.g. anatomy pathology S8), etc.

#### 4.1.1.2.2.: Practical training

Examples of TP\* which are generally 2 hours long and with 1/8 of the students of a year : - TP on the diagnosis of major parasite species: macroscopic and microscopic parts, exercise on reasoned diagnosis with documents (S5); the recognition method is validated by a specific examination; - TP on histology and microbiology.

The non-clinical work on animals involves:

- Learning how to restrain the animals in the teaching herd: basic knowledge, safety rules with animals, collect of blood samples or manipulation requested by specific diagnostic activities. This done on a special herd belonging to the school and includes laboratory animals from and new companion animals (S5);

- Technical inspection of animals at slaughterhouse (S9).

The clinical learning concerns all animal species,

- First, the *a priori* healthy or healthy subject:

- Y1: visits pig or poultry farms for half a day and in groups of 7-8 students; this also occurs in Y4;

- individual examination and group medicine, farm visits, medical visits; for Y4, tours in groups of 8 students: tracking breeding, population medicine (1 week per year: the first two days are devoted to the preparation of the visit and analysis of operating documents, then the visit itself and interview with the farm management on major pathological issues, collecting samples of faeces, hay, silage, examination of the location and interpretation of results). A comprehensive report is presented by the students on the last day;

- Preventive medicine consultation which is also an opportunity for a broader approach to the animal and its health: food and behavioural counselling, prevention of parasites, reproductive physiology, etc. This consultation is also evaluated by the supervisors with regard to the student's "skills", i.e. his competence in conducting a clear and educational discussion with the owner (attitude, choice of words, relevant answers to questions, preparation of a prescription, justification for the prescription, etc.);

- identification of the horse and its vaccination status before a sporting event;

- *Ante-mortem* inspection of animals for slaughter.

- After this, the student examines sick subject in the CHEV\* on campus, but also at the UCRA\*, in outpatient medicine, handling emergencies, in the necropsy room... Students are divided into "clinical groups" between the 3 tracks and the disciplines in a balanced and planned rotation (medicine and specialties, surgery, hospital, emergencies, etc.). The rotation is reviewed annually, and, where necessary, adapted and validated by the CE\* (see annexes 4-6, 4-7).

Y5 students are assigned according to their choice of career plans, and for clinical activities, depending on whether they are in pure tracks (SA, EQ and PA) or mixed ones (SA-EQ, SA-PA, PA-EQ): see annex 4-8 and 4-9.

#### 4.1.2. Undergraduate curriculum followed by all students

##### 4.1.2.1. Curriculum hours

All the students follow the same programme for the first 4 years, from Y1 through to Y4 and Y5 students are distributed between different professional tracks according to their choice. The distribution between theory/practice and clinical study is different depending on the chosen sector, as shown in the tables 4.1.b and 4.1.c.



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

Year	Hours of training							Total
	Theoretical training			Supervised practical training			Other (G)	
	Lectures (A)	Seminars (B)	Self- directed learning(C)	Laboratory and desk based (D)	Non-clinical animal work (E)	Clinical work (F)		
1Y	411	174	123	74	19 + 105	0	8	<b>914</b>
2Y	399	224	86	8	18 + 70	3 + 70		<b>878</b>
3Y	427	105	44	0	24+ 70	286 + 70	3	<b>1029</b>
4Y	47	80	-	87	16 + 70	692 + 210		<b>1202</b>
5Y	Cf. tables 4.1.b and 4.1.c							
Total 1	<b>1284</b>	<b>583</b>	<b>253</b>	<b>169</b>	<b>392</b>	<b>1331</b>	<b>11</b>	<b>4023</b>
Total 2	<b>Total theory Y1 to Y4 = 2120</b>			<b>Total practical and/or clinical Y1 to Y4 = 1892</b>			<b>11</b>	<b>4023</b>

Figures 3 and 8 (G) correspond to "team work" and visits to the I-Cl.B\* and the CNITV\*

**Table 4.1.b. Teaching in Y5 for the vocational track**

Year	Hours of training							Total
	Theoretical training			Supervised practical training			Other (G)	
	Lectures (A)	Seminars (B)	Self-directed learning (C)	Laboratory and desk based work (D)	Non-clinical animal work (E)	Clinical work (F)		
5Y SPV	280 ( 8 weeks)			840 (24 weeks)				1380
5Y master	210 (6 weeks)			910 (26 weeks)				1380
5Y AC	40			1085 (31 weeks)				1380
5Y AP	70			1050 (30 weeks)				1380
5Y EQ	40			1085 (31 weeks)				1380

Table 4.1b defines the distribution between theory/practice + clinical according to the track. Theoretical teaching is defined by a certain number of hours of lectures and TD, and everything else involves practice, externships and / or clinical activities.

**Table 4. 1.c.Total teaching for Y1 to Y4 + teaching for Y5 by track**

Year	Hours of training							Total
	Theoretical training			Supervised practical training			Other (G)	
	Lectures (A)	Seminars (B)	Self- directed learning(C)	Laboratory and desk based work(D)	Non-clinical animal work (E)	Clinical work (F)		
1Y-4Y + 5Y SPV	2120 + 280 = 2400			1892 + 840 = 2732			8	5140
1Y-4Y + 5Y master	2120 + 210 = 2330			1892 + 910 = 2802				5132
1Y-4Y + 5Y AC	2120 + 40 = 2160			1892 + 1085 = 2977			3	5140
1Y-4Y +5Y AP	2120 + 70 = 2190			1892 + 1050 = 2942				5132
1Y-4Y +5Y EQ	2120 + 40 = 2160			1892 + 1085 = 2977				5137
average	2248			2886				5136

**Table 4.2: Curriculum hours in EU-listed subjects taken by each student**

Subject	Theoretical training			Supervised practical training			Other	Total
	Lectures	Seminars	Self directed learning	Laboratory and desk based work	Non-clinical animal work	Clinical training		
	A	B	C	D	E	F	G	
<b>1. Basic Subjects</b>								
a) Physics	0	0	0	0	0	0	0	0
b) Chemistry	0	0	0	0	0	0	0	0
c) Animal biology	0	0	0	0	0	0	0	0
d) Plant biology	0	0	0	0	0	0	0	0
e) Biomathematics	7	0	10	22	0	0	0	39
<i>1- Total number of hours</i>	<b>7</b>	<b>0</b>	<b>10</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>39</b>
<b>2. Basic Sciences</b>								
a) Anatomy (incl. histology and embryology)	99	41	31	2	28	0	0	201
b) Physiology	63	20	12	0	0	0	0	95
c) Biochemistry, cellular and molecular biology	49	22	4	0	0	0	0	75
d) Genetics (including molecular genetics)	48	28	16	0	0	0	0	92
e) Pharmacology and pharmacy	59	26	9	0	0	0	0	94
f) Toxicology (including environmental pollution)	27	34	20	2	0	0	1	84
g) Microbiology (including virology, bacteriology and mycology)	63	22	12	2	0	0	0	99
h) Immunology	34	12	4	0	0	0	0	50
i) Epidemiology (including scientific and technical information and documentation methods)	14	22	17	22	0	0	0	75
j) Professional ethics	9	6	4	0	0	0	0	19
<i>2- Total number of hours</i>	<b>465</b>	<b>233</b>	<b>129</b>	<b>28</b>	<b>28</b>	<b>0</b>	<b>1</b>	<b>884</b>
<b>3. Clinical Sciences</b>								
a) obstetrics	10	2	0	0	0	0	0	12
b) pathology (including pathological anatomy, necropsy)	26	22	16	20	0	62	0	146
c) parasitology and dermatology	84	16	4	14	0	3	0	121
d) clinical medicine and a surgery (including anaesthetics)	212	25	10	12	0	683		942
e) clinical lectures on various domestic animal : poultry and pig	6	0	0	0	0			6
f) Field veterinary medicine (ambulatory clinics)	0	25	10	6	0	33		74
g) preventive Medicine	0	13	2	0	0	19	0	34
h) Diagnostic imaging (including radiology)	22	12	0	2	0	20	0	56
i) Reproduction and reproductive disorders	49	16	4	0	0	109	0	178
j) Veterinary state medicine and public health	48	12	0	7	0	0	0	67
k) Veterinary legislation and forensic medicine	6	0	0	0	0	0	0	6
l) Therapeutics	48	24	3	0	0	52	0	127
m) Propaedeutics (including laboratory diagnostic methods and semiology)	67	40	4	28	19	0	0	158
<i>3- Total number of hours</i>	<b>578</b>	<b>207</b>	<b>53</b>	<b>89</b>	<b>19</b>	<b>981</b>	<b>0</b>	<b>1927</b>

Subject	Theoretical training			Supervised practical training			Other	Total
	Lectures	Seminars	Self directed learning	Laboratory and desk based work	Non-clinical animal work	Clinical training		
	A	B	C	D	E	F	G	
<b>4. Animal Production</b>								
a) Animal production	43	28	0	20	2	0	4	97
b) Animal nutrition	38	28	4	0	0	0	0	70
c) Agronomy	1	0	0	0	0	0	0	1
d) Rural economics	15	0	0	0	0	0	0	15
e) Animal husbandry	10	10	0	10	0	0	0	30
f) Veterinary hygiene	0	2	0	0	0	0	0	2
g) Animal ethology and protection	27	10	4	0	0	0	2	43
4- Total number of hours	134	78	8	30	2	0	6	258
<b>5. Food Hygiene/ Public Health</b>								
a) Inspection, and control of animal foodstuffs or foodstuffs of animal origin and the respective feedstuff production unit	14	18	8	0	0	0	0	40
b) Food hygiene and technology	15	23	18	0	0	0	0	56
c) Food science including legislation	18	24	15	0	0	0	0	57
d) Practical work (including practical work in places where slaughtering and processing of foodstuffs takes place)	0	0	0	0	28	0	0	28
5- Total number of hours	47	65	41	0	28	0	0	181
<b>6. Professional Knowledge</b>								
a) Practice management	32	0	0	0	0	0	4	36
b) Veterinary certification and report writing	12	0	12	0	0	0	0	24
c) Career planning and opportunities	9	0	0	0	0	0	0	9
6- Total number of hours	53	0	12	0	0	0	4	69
	1284	583	253	169	77	981	11	3358

The total of table 4.2 is thus 3358 hours, to which externship hours are added (665h), giving the figure of 4023, which is the total of table 4.1.a.

This is in addition to the hours of English (see table 4.4), the time devoted to knowledge and skills assessment tests and the work of preparing and drafting the practical thesis (about 400h), **giving a total of 5136 average (see table 4.1.c) + 400 + 26 = 5562 hours for the course.**

**Table 4.3. Curriculum hours in EU-listed subjects offered and to be taken as electives**

Subject	Theoretical training		Supervised practical training			other	Hours to be taken by each student par subject
	Seminars A	Self directed B	Lab and desk work C	Non clinical work D	Clinical work E	F	
Basic subjects							
Basic sciences							
Clinical sciences	AFVAC junior			Equita Lyon	Agricultuer congress		
Animal productions	GTV junior		beekeeping	GTV	Junior GTV Livestock Fair		
Food hygiene / public health				Wildlife			
Prof. knowledge	CVE						

**Table 4.4. Curriculum hours in subjects not listed in table 4.2 to be taken by each student, including diploma work (final graduation thesis or final graduation work).**

year	subject	Theoretical training			Supervised practical training			Other	Total
		Lectures A	Seminars B	Self directed Learning C	Labo and desk based work D	Non-clinical animal work E	Clinical Work F	G	
1Y-4Y	English		56h	20h				2x4h*	76
	Practical Thesis							400h	400

\* veterinary leadership experience (Y1 and Y3): team work

#### 4.1.3. Further information on curriculum

*"Provide the visiting team with highlights and any unusual or innovative aspects of the teaching programme, e.g. tracking and orientation programmes"*

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 our teaching as well as feedback from the students:

- the need for a transition from the transmission of knowledge (required minimum basis) to the acquisition of skills
  - The analysis of the basic skills taught by discipline and between disciplines will identify new modules for the acquisition of new skills: professional skills (awareness of the business world, the economic reality of working with clients, etc.), receptiveness to the major societal challenges ("global health" food challenges, the role of animals in global health, translational research, etc.);
  - The identification of clear and flexible career paths for the students. For example: Tutored externship program in Y5 for rural practice (see chap 5. §5.2 comments);

Educational innovations have already been implemented in response to these requests:

- the organization of the toxicology module (S8) is concentrated into two weeks, alternating between CM and interactive TD, post-CM virtual TD, and learning exercises by means of Multiple Choice Questions (MCQ) (300 questions) with a total implication of the faculty member during this period.; the students' evaluations are very positive with high participation (100% of students answered the MCQ).
- Modular teaching of preventive medicine based on
  - the evaluation of the student's skills throughout the consultation ("knowledge, expertise, skills") by means of a logbook defining the structured and progressive educational goals for each semester: containment - hygiene - security ( S7), animal health (S9), infectious and parasitic risks - zoonosis - communication with the client (S10), reproduction - behaviour - nutrition (S11), communities – NCA (new companion animals) - specific parasitic risks (S12);
  - the organisation of consultations by appointment followed by an in-depth TD; a customer satisfaction survey to assess how well their needs have been met.

For Y5, training is organized according to the vocational track chosen by the student in Y4:

- Research MA (see chap. 12 and 13) with university enrolment and the completion of a research work that can be the basis of the practical thesis; these students can then continue onto a PhD thesis;
- one year of veterinary public health training year with the teaching provided by the ENSV\* including 4 months of practical externships;
- a pure clinical track (companion animals (AC) , equine (EQ); production animals (AP) or mixed according to all the combinations (AC-EQ, AC-AP; EQ-AP)
  - for the AC track, off-campus externships of varying lengths are validated by agreement between the partner and the school;
  - For AP courses (or mixed AP), 14 weeks (or 10) of externships must be completed in 3 (or 2) different types of establishments (with the mandatory inclusion of a lactating livestock establishment and a dairy farming one) with a minimum of 3 weeks per establishment. An interview with a teacher is held before these externships to confirm the overall arrangement. At the end of the externship, the student must complete a full description of the hosting establishment, a passport of prioritised skills acquired (seen / carried out under control / performed independently: [annexe 5-2](#) confirmed by the teacher supervising the externship. Finally, the student writes a report on the externship in which he outlines his skills, his progress and what was missing.

○ For the *pure equine track*: 6 weeks off-campus Externship; for the mixed equine track (AC-EQ or AP-EQ): 4 weeks off-campus Externship. Externship reports and the skills portfolio are included in the assessment of the year (annex 5-4).

*State the parts of the programme that must be attended as obligatory by the students and how the attendance is verified"*

Student attendance is obligatory for all the classes taught. Due to the class numbers, assessments are carried out during group teaching (TD, TP and TC). More than two absences that are unexcused, or with an unacceptable reason given, during a semester results in exclusion from the normal examination session (see chap2 section 3 in annex 4-5).

Students are required to work in emergency and with hospitalised animals, including at weekends. Nevertheless, if they are absent, acceptable reasons must be given to the DEVE\* so that the absence in question is not recorded as unexcused.

The presence of students in examinations is also regulated (see chap2 section 3 annex 4-5).

*"Please provide specific information on the practical clinical training; if clinical training is be provided through obligatory clinical rotations in different areas, please give an outline description of how this is structured, in terms of:*

*- are such rotations a structure part of the training given to all undergraduate students?"*

Several classes are present in the different CHEV rotations; each class is divided into "clinical groups," each of which is assigned to a track (carnivores/equids/production animals) and to a specific clinical activity within it (first opinion or specialty consultation, hospitals, imaging, central laboratory, surgery, emergency medicine, autopsy, etc.) for a given period (at least one week), and then assigned to another clinical activity. As a result, at the end of three semesters (S10 to S12 inclusive) the student will have been trained on all clinical activities for all animal species, and gain an understanding of the scientific and clinical methods.

**In S11 and S12** (Y4, 3-4 students per group), students gradually become active players, in particular with responsibility for pre- consultations: gathering background, case history and comprehensive examination of the animal. This first stage draws on clinical reasoning to formulate several supported, hierarchical diagnostic hypotheses justifying one or more additional examinations, some of which can be carried out by students (blood samples, urinary catheterization, etc.). During the pre-consultation, students often work in pairs (Y4-Y3 or Y5-Y4) with the help of interns.

The animal is then presented by the student to a faculty member (EC), a hospital doctor (PH) or resident in the presence of the owner: the diagnostic procedure given is then evaluated, criticized, confirmed or rejected before further exploration, taking of samples and possible hospitalization are ordered. Students are thus systematically involved in monitoring clinical cases, from receiving the owner to the animal's discharge.

**In S13 and S14** (Y5), students have validated the DEFV\* and are legally allowed to make some practice under direct supervision of a vet. With the help of interns and residents, they are then in position of responsibility: monitoring several cases supporting and supervising 4th year students, management and monitoring of hospitalized cases, performing in-depth examinations, interpretation of test results, etc., always under the responsibility of the clinician. They write prescriptions for care and treatment, checked and signed by the clinician, accompany the client to the pharmacy for dispensing of medications; close the file in the secretariat and accompany the owner to the cashier for payment.

For hospitalized animals, students follow cases assigned to them right through to discharge, to their owners. Each day they participate in a round led by a senior and during the day discuss regularly with their supervisors: instructors, residents, technicians. They dispense care, days and nights and on weekends, as needed, and manage patient records. They provide daily reports to owners. For equids, communication with owners is handled by interns; for production animals, by faculty members, hospital practitioners and interns.

For companion animal emergencies, a team of EC\*s, PH\*s and technicians is assigned specifically to this mission, which operates 11 months of the year in a special appropriately equipped facility. Students are always supervised and never in an isolated situation with the owner and animal. Decisions on therapy, surgical intervention or hospitalization are made by the team and proposed to the owner.

The same holds for horses, for which emergencies referred by colleagues are cared for 24 hours a day, all year round. The UCRA\* team also provides this service for production animals (24/365).

Contagious or suspected contagious animals are subject to an isolation procedure (annex 5-11): a separate room isolated from the carnivore hospitals or a specific isolation building for large animals. The procedures and instructions in such cases are posted: entering the building, required clothing, sampling and therapeutic protocols, discharge of the animal, etc.

In population medicine, students perform a full herd "audit": collection and analysis of breeding records, visit to



the breeder, access to the entire herd, as well as all facilities at the farm, taking of samples and monitoring of laboratory analysis and drafting of an audit report for the breeder. They are accompanied on this exercise by a practitioner and a faculty member.

*"The total number of days or weeks of such rotations, the year(s) in which they occur, the different areas covered and the time spent in each area, whether attendance is full-time, for part of the day, and/or other (e.g. based on case needs) the activities and case responsibilities that students are expected to undertake, the group sizes in the clinical rotations"*

The typical week starts on Monday and ends on Friday evening for the consultations, complementary exams and surgeries on campus for the 3 tracks, and off campus for production animals. The hospital care (medicine / surgery - reproduction) and emergencies, including the weekend, forms part of the rotations. The Y3 students have classes (CM\*, TD\* or TP\*) in the afternoon, the Y4 and Y5 students are in clinics on campus all day (except for externship weeks, the radioprotection and other specific modules—for fifth year students, and the sanitary certification week for the Y4 students). For the year of 2014-15,

- Y3 (only 2nd semester: S10): 16 weeks clinical rotations + 2 weeks of clinical externship (free choice) + 2 weeks of externship (industry, research, QSA) see annex 4-6 ;
- Y4: 30 weeks (including 2 mandatory ones in a rural clinic externship) + 1 week sanitary certification + 2 weeks clinical externship (rural or otherwise), see annex 4-7
- Y5: variable number of weeks depending on the type of track with the addition of external courses (see 4.1.1.1. § obligatory extramural work) and clinical training at the school (annex 4-10); two weeks early in the year are devoted to acupuncture, osteopathy and physiotherapy and customer practice; 1 joint week for all students in June is devoted to PCR (Person Competent in Radioprotection) and "dangerous dogs") see. 4.1.

*"Describe clinical exercises in which students are involved prior to the commencement of clinical rotations"*

Before clinical immersion, the student has received theoretical and practical training (introduction to animals - ethics and animal protection; introduction to clinical consultation). In S10 (2nd semester of Y3), students assume the role of observers and nurses: they attend consultations and interventions, assimilate the rules of hygiene and restraint and learn about the general functioning of the CHEV.

The responsibilities of students increase from Y3 to Y5, as they move from an observational or nursing role in the analysis of a clinical case (hypotheses, exams, etc.) to one where they make a reasoned diagnosis which is confirmed by the supervisors. Furthermore, students from different years work together in this progressive manner, 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.

*"Outline the student involvement in the emergency and hospitalisation activities of the clinics"*

Students implicated in emergencies are increasingly involved in the management of clinical cases, depending on which year they are in: - the reason for the consultation, recording recollections, assisting with care ; - case analysis: clinical examination, basic steps ; - diagnostic hypotheses and interventions, always under the supervision and with the assistance of interns, residents and supervisors (hospital doctors and faculty members). These emergency activities take place on campus (small animals, new companion animals, horses), and at the UCRA\* for production animals. Hospitalised animals are cared for by the students, including during the weekend, under the control of senior supervisors in the early morning, late afternoon and on call for the rest of the day or night. An intern is on duty all day long. Each case is then reviewed in a presentation by the student concerned in the "round room" or in front of the stall, and in this way, the whole group learns from them.

*"Specify student participation in the activities of the mobile clinic and indicate whether or not the hours spent in the mobile (ambulatory) clinic are included in those in Table 4.2."*

Students participate in the mobile clinic in the production animal and equine tracks; these courses are described in chap 5 pp3 and chap 7 §7.1.3 and 7.1.8.1. The relevant timetables are displayed in Table 4.2. 4Y students have a mandatory week at the UCRA, with 4 weeks for the Y5 students registered in the "production animals" track.

### **3.1.4. "Obligatory extramural work"**

*"There are training periods that are an integral part of the curriculum, but which are taken outside the Faculty. Please make a distinction in respect to the nature of the work, for instance work on farms, training in a veterinary practice or in food hygiene / public health with a commercial or government organisation. Please indicate the guidelines pertaining this activity and the manner by which it is assessed."*

Mandatory externships are organized during the year to educate students for diverse activities they have little or no knowledge of (see annex 4-10).

The organization of externships is explained in art. 8 pp 3 of the study rules and guidelines (annex 4-5), validation pp5 in article 15 of the same Annex. The purpose of these is to put the student in a professional

situation to practically apply knowledge already acquired or to grasp a trade, an economic activity, new skills or initially unfamiliar production.

They systematically take place outside the establishment, with the supervisor linked to the institution by a contract. The externship project must be validated by a referring teacher who checks that the training is consistent with the theme of the training year, and who receives the report of the course by the student as well as the evaluation of the supervisor for validation. If the externship is not validated, the student is not accepted to the next year. Additional externships at the student's initiative can be accepted on the condition of a binding agreement. At list one period need to be done in a foreign country. These mandatory practical training sessions from Y1 to Y4 therefore represent a minimum of 19 weeks or about 665h of practical and/or clinical teaching (see table 4.5).

**Table 4. 5. Obligatory extramural work that students must undertake as part of their course (and annex 4-10).**

Year	Minimum period		Maximum period		Year in which work is carried out	Nature of the externship
	ECTS	% of total study time	hours	% of total study time		
Y1	4	2 weeks out of 20 in S6		2 weeks	Y1	Ruminant farm
		1 week out of 20 in S6		1 week		Pigs, poultry or rabbits farm
Y2	4	2 weeks out of 21 S8		-	Y2	Any theme *
		2 weeks out of 21 S8		2 weeks		Rural or mixed Practice
Y3	4	2 weeks out of 19 S10		-	Y3	HSA * and **
		2 weeks out of 19 S10		2 weeks		Any type of clinical practice
Y4	8	Two weeks out of 42 S11-S12			Y4	Any theme **
		2 weeks out of 42 S11-S12		2 weeks		LA practice
		2 weeks out of 42 S11-S12				Any type of clinical practice
		Two weeks out of 42 S11-S12				Practice or prof. project. or thesis

HSA = "non-patient care of animals", a non-clinical externship or one whose theme is not reliable with "animal care": laboratory, industry, public office for animal health, research, etc.

\* Externship that must, according to the proposed definition of the table, be performed in Y1 the holiday period between Y1 and Y2

\*\* Externship that must, be performed in Y2 during the holiday period between Y1 and Y2

\*\*\* Externship that must, be performed in Y3 during the holiday period between Y3 and Y4

*Describe the degree of freedom that the faculty has to change the curriculum and § 4.1.1.1. obligatory extramural work and annex 4-10.*

Under the general frame of the national description of the curriculum (duration, main topics and competencies to be covered, tracking...) the school is totally able to organize the curriculum according to the good practice, the feedbacks of evaluations and outcomes assessments.

### 3.1.5. "practical training in food hygiene / public health"

The food hygiene teaching, with regard to both theoretical (CM) and practical aspects, is described in 7.1.4. of chap7:

- in addition to practical teaching courses provided in the slaughterhouse on the ante-mortem inspection of animals (2 sessions of 4 hours at the slaughterhouse, and 1 session of 4h at industrial slaughterhouse in S10 (Y3): giving a total of 12 hours), and the diagnosis of offal and carcasses and confiscated products (2 x2 sessions of 4 hours at the slaughterhouse out of fifteen or 8 giving a total of 16h in S11 and S12 : Y4), the student receives instruction via interactive TD:

- in S11 (Y4): TD: 7 sessions of 3 hours devoted to food law, food bacteriology (2 4h TD), HACCP tools and methods (3 TD), introduction to predictive microbiology in food, milk production and its nutritional quality, for a total of 31h TD;

- in S12 (Y4): TD of 3 hours devoted to the manufacture of dairy products on farm, inspection of fishery products, the poultry industry (meat and egg) and its technology, introduction to risk assessment, catering, investigations of food poisoning. These TDs are accompanied by practical case analysis that students

must carry out in groups: plans of farms, interpretation of the results of microbiological checks, breeding audit following a poisoning, for a total of 26h TD.

#### 4.1.6. Ratios

##### 4.1.6.1. "General indicators types of training"

The ratios are calculated from Tables 4.1 and 4.2. They are calculated on the basis of the 2014-15 academic year.

**R6** = supervised practical training / theoretical training

$$= D + E + F / A + B + C = 2,886 \text{ (average of 5 numbers)} / 2,248 \text{ (id)} = 1.28$$

**R7** = laboratory and desk based work + non-clinical animal work / clinical work

The total obtained in table 4.1 for years Y1 to Y4 is  $169 + 392 = 561/1,331$  or 0.42. This figure is even lower for the Y5 clinical pathways with an even bigger F

**R8** = teaching load / self-directed learning =  $A + B + C + D + E + F + G / C$

This depends on the value of C per Y5 track; we can extend the average value of C calculated in the theoretical part (i.e.  $273/4 = 68h$ ) and add 3 hours per week for an average of 25 weeks of training, or 143h for Y1 to Y5.

The numerator is obtained by averaging the total displayed by track in Table 4.1.c., i.e. 5,13

$$= 5,136/143 = 35.9$$

##### 4.1.6.2. "Indicators of special training in food hygiene / public health"

**R9** = hours obligatory extramural work in veterinary inspection / total n0 curriculum – hours food hygiene / public health =  $5,136/181 = 28.3$

**R10** = hours of obligatory extramural work in veterinary inspection / N0 total curriculum - hours food hygiene / public health =  $20/181 = 0.11$

#### 4.2 Comments

*"Please comment on: the way in which the veterinary curriculum prepares the graduate for the various parts of the veterinary profession, especially under the specific conditions prevailing in your country / region"*

The major objective of the curriculum is to comply with the European directive and to train students for veterinary professions, which is why: - it respects the theoretical / practical / clinical balance ; - it is equally divided between teaching on companion animals vs. production animals and public health ; - it requires students to participate in externships to increase their awareness of trades other than clinical ones (industry, research, public health, etc.) and in the clinic in the rural sector and mixed sectors.

However, it is necessary to ensure that the Y5 "day-one" student has acquired the skills needed for professional practice, and this is done by means of appropriate surveys (see chap 5). For the economic sectors that are underrepresented in the Rhône-Alpes region, Y5 students have the opportunity to enrol in another ENV.

Several educational seminars (Sept14 to March15) involving the staff were organized to modernise our education in order to make it more efficient and better suited to the needs of the profession and society. Working groups were formed to reflect on the current situation and make proposals.

##### *The way the curriculum is structured and reviewed*

The curriculum is national but the teaching methods, the chronology, the materials used and assessment methods are at the discretion of the faculty members of each school.

The decisions regarding organization, timetabling and clinical rotations are made within departments and then at the CE\* after an analysis of the requests. The renew is made every year following the feedbacks and evaluations. There is a work in progress to introduce important evolution on the curriculum for the next academic year.

##### *The major developments in the curriculum, now and in the near future.*

The continuous process of improvement is implemented through evaluation of our teaching systems and questionnaires for Y4 and Y5 students and employers. The objective of acquiring skills is a major criterion in the modernisation of the curriculum. New modules are under construction and will be implemented beginning of the 2015/2016 academic year: a module dedicated to the different opportunities for career, elective modules to allow student to access to new veterinary jobs.

##### *The local conditions or circumstances that might influence the ratios in 4.1.6.*

The calculation of ratios faces several major challenges:

- The organization of Y5 courses (3 clinics, public health sector and research and industry sector via the MAs) is oriented towards the professional careers of students. This design is very important because it allows for the education to be adapted to the student's needs, to the need for acquiring the relevant skills and the needs of the profession, but this results in a certain heterogeneity of curricula;

- Regional particularities that influence the greater or lesser development of certain practice. This is the case for pig and poultry as well as bee and fish. Students receive basic competencies but can make their Y5 in one of the three other French vet schools where those specialties are developed.
- The organization of tutored externships for Y5 student under direct supervision of both a faculty member and a rural / mixed practitioner: 4 students in 2014-15, 3 applications received for 2015-16; evaluation is based on a presentation of clinical cases during the year and a final restitution before a jury from the industry (Externship report, case with follow-up, skills portfolio).

#### **4.3 Suggestions**

Intensify teaching, which is evaluated with regard to the following areas:

- Soft skills like communication competencies are currently evaluated in the preventive medicine rounds. They need to be more clearly evaluated in all steps of the clinical practice, by practical exercises and self-assessment, critical analysis of the language used (choice of words, clear description of the risks to human health etc.). The school is engaged in the development of a serious game to offer to student the opportunity of developing their skills;
- Biosecurity is now a confirmed teaching subject: the radiocompetency week in Y5, special measures taught and applied in clinics for anesthetics, opiates, barbiturates, programmed purchase of a monitoring software programme and self-assessment of good drug management practices; this will be extend in the near future.
- The development of a lab with phantoms for self-directed practice on basic clinical skills (sutures, catheter insertion...) in on progress.
- The development of medical and surgical activities (with the possibility of hospitalization) for new companion animals;
- Better coordination between technical units for training students outside the clinic (I.CI-B\* CNITV\*, CPVL\*, LVD\*, CERREC\*).



# Teaching :Quality & Evaluation

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## 5. TEACHING AND LEARNING: QUALITY AND EVALUATION

### 5.1. Factual information

#### 5.1.1. The teaching programme

*« Describe the measures taken to ensure coordination of teaching between different departments, sections, institutes and services »*

Coordination is achieved via several measures and working arrangements:

- the existence of a common equivalency table shared by all faculty members (Annex 4-2);
- organisation of teaching into modules, each module being coordinate by one faculty member; for examples, the "study of urogenital and endocrine system" (S6) includes instructors from preclinical disciplines (anatomy, histology, embryology, physiology) and a clinical discipline (reproductive biology) ; the "study of the limbs of domestic mammals" (S8) includes anatomy instructors and companion animal and equine clinical surgeons. They help show students that there is no separation between disciplines and that veterinarian must use different types of knowledge in his professional practice. They also help to avoid redundancies and provide better coordination between related disciplines;
- the teaching evaluation process based on the same method for all modules: the results of these evaluations are discussed in the joint teachers/students committee, and possibly the CSP\* if major changes are needed and then validated by the CE\* (cf. § 5.1.4);
- observance of time periods allocated by regulation equally to clinical instruction on sports and leisure animals / production animals and public health (art2. annex intro-7);
- the current deliberations over modernization of the degree equivalency table based on three criteria: knowledge, skills and attitudes, identification of priority skills by disciplinary field and development of "individual student tracks" (research, entrepreneurship track); all this work, led by the Vice-Dean of Education and his assistant in charge of educational innovation, is carried out by groups of instructors and supervisors according to a precise timetable and minutes of meetings placed on the Institution's intranet site: VetoTice\* platform - tuition - instructors' area - educational seminars;
- Each year (March-April), the DEVE organizes work sessions with all instructors to better coordinate the content of different course units.

*« Describe the pedagogical approach of the institution. In particular, describe the use of newer approaches, such as problem-based learning, interactive computer-assisted learning »*

Training students in small groups takes priority (TP and TD): the number of hours of lectures must not exceed the hours of practical, clinical and directed instruction. Time spent on clinical training must represent at least thirty percent of the training for the entire first eight semesters (art3. annex intro-7).

Many exercises are completed via the TD\* in interactive form and on the VetoTice platform:

- presentation of the main parasites by species or group of parasitized animal species and by apparatus: the exercise is carried out by students from handouts and documents describing parasites according to taxonomy(S6);
- verification of the necessary acquisition of pre-requisite knowledge (e.g., in medical immunology S8) or by prerequisite "quizzes",
- Validation of clinical cases commented to the group under the supervision of an instructor (preventive medicine, "clinical rounds", hospital visits, presentation of clinical cases in all types of medicine, etc.),
- Development of clinical diagnosis leading to a prescription (e.g., of equine antiparasite therapy: S10), etc.

Some instructors concentrate their instruction in a few weeks in progressive, chronological order (pathological anatomy, toxicology, etc. modules).

Time slots are also set aside for self-training of students, i.e., hours blocked in the schedules during which the student may:

- Conduct self-evaluations (e.g., histology slideshow with questions on diagnosis of structures and cells followed by a slideshow of responses: S5)
- Consult the correct answers to questions from a multiple choice exam with the value of an examination (equine parasitology: S9)
- Consult websites (e.g., Online Veterinary Anatomy Museum site for the teaching of anatomy by body area, by apparatus and by animal species: very useful for integrated instruction modules e.g., special pathological anatomy: S8) , videos (e.g., support TPs with videos illustrating the movement of the hindquarters in cattle: S5)
- Prepare TDs and present clinical cases for evaluation by a group of students.

Lastly, preparation of the practical thesis manuscript by the student requires a literature search; very often some experimental work, clear and scientific writing, and lastly, after validation by the thesis supervisor, a public defense of the thesis in front of a jury chaired by a professor from the medical faculty.

*« Indicate the extent to which course notes are used to supplement or substitute for the use of standard veterinary textbooks »*

The teaching material used or proposed by instructors is available to students via the Vetotice platform in open access:

- Slides used in lectures (over 80% of slide presentations for courses are on the VetoTice platform, some in English); all these presentations are accessible to all teachers, so it is possible to find out what is being shown by different colleagues on themes common to several disciplines. These slide presentations remain also available to students as they advance through the curriculum;
- Internet sites for complementary information: in carnivore clinics Vet'care Consult software is now being installed (an interactive tool to communicate with the owner, and convince him of the importance of following the course of treatment, etc.). This tool is also a self-trainer for students;
- A reference bibliography ("scoop it" in infectious diseases, handouts prepared by the ENV 4 instructors on zoonosis and regulated diseases available in open access and updated annually: S10). The documents made available, the course notes and supplementary information, are subject to verification through the student evaluation questionnaires.

The library makes its holdings and e-books (over 200) available, including remotely from the campus (see chap8).

*« describe (if applicable) any established or contractual arrangements that support undergraduate teaching between the faculty and outside bodies, e.g. farms, breeding centres, practitioners, state veterinary services, factories /processing plants, outsides laboratories,... briefly describe how these arrangements work out in practice in terms of the contact this provide for all students or for selected students »*

Much collaboration has been established between various structures and the Institution to benefit student training. All of them are ruled by a dedicated agreement including the teaching purpose and methods, responsibilities, and the faculty member responsible for the program.

- *For the equine industry:*
  - annual collaboration with the "equitalyon" horse show (the biggest in France): during 5 days students are responsible for explaining with wet- and dry-labs equine medicine to the public under the supervision of senior staff ;
  - national competitions: French sport horses riders championship in Lamotte Beuvron(every year, in July, participation by interns and residents supervised by a senior), several endurance races, control visits and emergencies at Parilly Racetrack in collaboration with outside practitioners as well as students, interns and residents;
  - international competitions: Vichy International show jumping;
  - interventions upon request on horses at the campus Equestrian Centre;
  - support from the AVEF\* via the AVEF junior students association: monthly lectures with participation or different types of professional under the pedagogic supervision of a faculty member;
  - Vetgate activities : student chapter of the National Association of endurance veterinarians (AFVEE): students from year 1 to year 5 and interns who receive a special teaching and have passed their endurance practicals with school clinicians validate this optional teaching via several days of tutoring other younger students and being tutored by practitioners during national endurance competition ;
  - Foal Team (« Team Poulain ») activities in partnership with one chosen pharmaceutical company per year: monthly conferences and practicals for Y1 to Y4 students on various topics of neonatal medicine given by faculty members. One evening session of clinical cases is presented by students to an audience of students and practitioners. Some volunteer students see practice and help out within breeding farms (all years, and most specifically Y5 students) ;
  - Specific partnership with a dedicated equine feed company (LAMBEY SA) aimed at encouraging specific nutritional skills of veterinary students (prescribing diets, critically analyzing diets within the Equine clinic), aimed at Y3 and Y5 students. This activity is given every 2 weeks to all rotating students ( critical ration analysis, using a dedicated software), and an optional visit of the feed company is organised once a year, as well as 2 full days on nutrition are given to Y5 students in collaboration with clinicians and the feed company.

- *For the production animal industry:*
  - Mobile clinic in St Symphorien / Coise with Y4 students: with a practitioner and a faculty member a group of student is joining the farm visits.
  - A visit to a pig farm and a poultry operation every two weeks in the Drôme Ain: with a practitioner and a clinician.
  - mobile clinic and "activity discovery" in Charolais (beef cattle practice) with Y5 through specialized practitioners- VetAgro Sup partnership with financial support of Merial;
  - collaboration with GTV\*: student participation in annual national and regional conference; with junior GTV\* for processing of milk products in farm in Haute-Savoie and Franche-Comté;
  - workshop in a slaughterhouse to develop rectal palpation skills; topical lectures at the school devoted to certain conditions or diseases;
  - collaboration with GDS\* and students for the training of farmers
  - the monitoring of the flock of sheep at the ENS\*;
  - collaboration with the school of Cibeins the herd of 80 dairy cows: 3 annual "population medicine" visits, weekly dedicated visit for milking problems and other pathology;
  - training with the local public health department and the local official LVD\* 69;
  - externship at Poisy experimental farm for practical aspects of reproduction and milking;
  - partnership agreement with the INFOMA\* responsible for training of advanced technicians for the Ministry responsible for agriculture: providing students with a TP room (one morning a week) with parts harvested from different slaughterhouses in the region to improve training for post-mortem inspection.

- *For the companion animal sector:*
  - The CERREC\* completes students training on various afflictions, techniques and surgical operations relating to reproduction or reproductive organs and functions in dogs and cats. This makes it possible to pay attention to specific elements of canine breeding and the use of assisted reproductive techniques as well as provide a better understanding of the small animal breeding world. It assists in training students in addition to consultations and surgical interventions in pathology of reproduction:
    - monitoring of oestrus cycle and gestation, artificial insemination, dog semen collection for refrigeration or freezing: approximately 2300 cases a year on dogs to accommodate 1-2 Y5 students, interns and residents;
    - telephone responses to breeders, owners and private vets (approximately 3000 per year) very useful for continuous training and the development of services and clinical studies;
    - collaboration with industrial and institutional partners: epidemiological studies, development of diagnostic tools, clinical trials.
  - The presence on the veterinary campus of an organization (Handi-Chiens) that breeds and trains dogs for disabled people exposes students to monitoring of pups.
  - Regular consultations for animals belonging to poor conditions persons have been set up in conjunction with social services. Students do the consultations (30 cases each time) under the supervision of a faculty member or clinician and provide general advisory regarding the general health of the animals.

- *For all animal species:*
  - The CNITV\* and CPVL\* together provide a tool and reference for students and the veterinary profession in the area of adverse and toxic effects of drugs and poisoning of domestic and wild animals. For the CNITV\*, private association in contract with the school, 15-20 students are selected at random from a pool of volunteers enrolled in Y2. They receive additional training on answering the phone and may contact the permanent CNITV or CPVL staff member at any time. In 2013, 17,600 calls, of which 46% (more than 8,000) were handled by students. Some of them write their practical thesis on toxicology topics and/or participate in various projects (articles, poster, and literature search). Students are compensated for answering the telephone at night, and on weekends and holidays; they organize their presence and on-call duty by themselves. The CPVL\* relies on the CNITV, and students who are on-call to answer calls (representing 35% of the total): the cases are recorded on paper and then transferred the following business day to a CPVL staff member. The students involved receive training starting in Y1; they are not compensated and are volunteers bound to confidentiality.
  - The I.CI-B\* enables some students to be initiated and trained in research and clinical studies. In addition, students have the opportunity to be salaried employees within these structures, allowing them to improve their personal financial situation while enjoying additional training that is useful for their future professional practice.
  - The **Merial Veterinary Scholars Program**: Biomedical Research Opportunities for Veterinary Students: raises awareness of Y1 or Y2 students about biomedical research and careers in research (see chap13. §.13.1.)

*« Describe the general learning objectives underlying the veterinary curriculum and how this is ensured »*

The national framework (Annex 4.1) lists educational objectives in terms of knowledge, technical skills and relational skills by discipline or group of disciplines. These discipline-specific objectives are written, sometimes prioritized, justified and presented to students at the start of the module, supplemented with documents made available on VetoTice:

- Example handouts updated annually and downloadable from VetoTice on regulated diseases and zoonosis: cf. infectious pathology module Y2-Y3-Y4 and link to the Legifrance web page, interactive map tracking the latest disease outbreaks, etc.

- e.g., public internet sites associated with self-learning quizzes: general and medical immunology (Y1 and Y2).

The overall evaluation process is described in the 1st paragraph of 5.1.4.

*« Describe how the faculty collects the data required to ensure students are equipped with these Day-one skills (evidence of learning) »*

In order to develop an inclusive answer to this section we will use the following tools:

A complete description of the objectives of all courses and clinical rotations as well as the competencies and skills required for entry level veterinarian can be found in the national professional standards (Référentiel national de diplôme). Annex 5.1 summarises the curriculum content of each teaching activities associated with the 9 competencies in semesters S9-S10 (Y3) and S11-S12 (Y4). The teaching standard is used by all schools but adapted to each school characteristics. An approval document by each institution constitutes the official curriculum. The content is changed regularly and monitoring acquired skills.

During their fourth year, students are evaluated on a weekly basis in each clinical rotation on specific points: general conduct, attendance, progress in understanding clinical cases, skill at different semiotic or surgical acts or in carrying out treatments are evaluated in particular in order to assess skills 2, 3, 4, 5 and 8.

In some clinical disciplines, at the end of this rotation, each student presents a clinical case (medical pathology of companion animals, equine pathology, and pathology of cattle) or a paper (pathological anatomy) to assess skills 1, 2 and 9. Presentations and case studies are done by students during rotations in food safety and infectious diseases and preventive medicine in order to assess skills 7 and 8. An evaluation at the end of each SIAMU\* clinical rotation is used to assess skills 3 and 6. All evaluations of different externships in Y4 are combined in a grade. In addition, off-campus clinical placements, including externships abroad are also systematically evaluated by a referent teacher, leading to a pass. In each track for the entire clinical year for the Y4, results of evaluations are goods to very goods.

The final semesters S11 and S12 (Y4) are more specific (see chap4. Curriculum and annex 5-8) with regard to the skills and competencies required from the graduating senior. Surveys submitted to students at the end of the Y5 are analyzed in order to verify acquisition of certain skills.

A portfolio of skills and activity logs are also required from Y4 and Y5 in companion animals and equine (annexes 5-2 and 5.3) which are consulted by the clinicians in charge. Analysis of these data for companion animal medical pathology is part of the evaluation of the entire externship for Y4 and Y5.

Results for the past two years give a sense of the time spent by students in clinics and its implications. The plan, which has already been given ample consideration, is to computerize it in the medical records management program in order to better assess the educational exposure of each student as well as an entire year, so as to identify serious gaps in exposure to certain pathological situations.

In addition, the school prepares an evaluation report:

- by asking students to do self-evaluation exercises during their training (see previous §), allowing them to assess their own progress;

- by asking Y5 to fill out a skills portfolio, a document presented and discussed during the validation examination by the jury;

- in AP industry: this portfolio is discussed during the year-end examination and student's motivation for a applying for a job with a practitioner; "what I have seen", "what I participated in," "what I can do independently," all of which are validated by the supervising practitioner during the externship; these technical skills include restraint, complementary examinations, clinical examination ... invalidated skills can lead to suggestions for additional training or targeted complementary externships (Annex 5-2);

- in SA clinic: the student manages this portfolio himself by confirming the skills acquired during clinical rotations in consultations and hospitals: acts observed, acts in which the student participated, acts he has performed and managed himself on recorded clinical cases (Annex 5-3) the portfolio is then validated by the faculty members;

- In EQ industry: portfolio drafted along the same lines (Annex 5-4).

The evaluation of the students' skills in the preventive medicine rotation is done by the logbook which defines the progression for each student and the curriculum: containment- hygiene – security (S7), animal health (S9), parasitic and infectious diseases, communication with the owner (S10), and reproduction – behaviour –nutrition (S11), NCA and specific parasitic risks (S12).

### 5.1.2. The teaching environment

*« Describe the available staff development facilities, particularly in relation to teaching skills ».*

A national program is offered to new faculty on teaching methods. The relationship of many of the faculty members with external research units allows considerable latitude for external scientific seminars. Participation in international conferences with presentations is encouraged, especially for college graduates. A large number of faculty members are experts with national commissions, private companies or professional associations. Instructors who have the opportunity to organize trips abroad and ensure replacements for themselves are allowed to do so subject to administration approval.

Supplementary courses are offered to instructors to enable them to acquire or improve skills in teaching (with universities), scientific research (molecular biology, animal experimentation) or in the English language. Heads of department receive one day of training in administration.

*« Describe the available systems for reward of teaching excellence (e.g. accelerated promotions, prizes, etc...) »*

Faculty members must submit a comprehensive activity report every 4 years stating all their duties and work either teaching or research; this report is transmitted to the national commission for faculty member evaluation which is made of faculty members elected nationally (CNECA\*). Whenever a promotion is asked, faculty member have to submit the same report for the valuation of the same commission. The commission is ranking the files based on multiple criterias including teaching activities and innovation in education. The dean makes some comments for the commission on the accuracy and implication of the faculty member and stress the special engagement in teaching quality.

*« Describe other measures taken to improve the quality of teaching and learning opportunities »*

All structural changes and educational innovations are presented in a discussion forum (the CEVE\* with professional representatives, the CSP\*: instructors and students) and validated by the plenary CE\*. Groups of faculty members are working on new teaching methods with the help of experienced teacher from partners' institutions. For example a MOOC\* was initiated by the Chels (association between 5 higher education schools) which include the continuous education for the VetAgro Sup teachers engaged in this initiative.

### 5.1.3. The examination system

*« Describe the examination system of the faculty, in particular: is there a central examination policy for the faculty as a whole? If yes, by whom is it decided? »*

A compulsory examination session (1st session) is organized each semester for each CU (course unit) taught during the semester.

A remedial session (2nd session) is held before the next academic year for students who have not obtained all the 60 annual credits.

Depending on the CU, students undergo an examination that may be completed by continuous evaluation during the semester. Examinations and evaluations may consist of:

- theory tests (written and/or oral) if possible with a strong focus on reasoning,
- practical or clinical tests with a focus on competency evaluation,
- Drafting and presentation of papers or reports in front of groups of student, focusing on case analysis.

The review panels are made up of from each of disciplines involved in the CU. Each examination and each evaluation results in the assignment of a numerical grade.

The grade scale is zero "0" to twenty "20".

Credits corresponding to a CU are assigned: if the grade for the CU is greater than or equal to 10/20.

A semester average is calculated by assigning the coefficient corresponding to the number of credits of the CU to each CU.

At each CE\* a comparative evolution of the results of different cohorts is presented:

- CE after the first semester: special attention is paid to students' results in Y1. Students who have failed at least 4 CU are called in by the DEVE to discuss the reasons for the poor results.
- CE after the second semester: analysis of annual results, particularly the number of CUs failed for each class and analysis of changes in the percentage of students admitted to the remedial session.



Students who have acquired 60 credits are admitted to the advanced year. Students in 4Y also receive a Diploma of Fundamental Veterinarian Studies (DEFV) which gives them the right to work as an assistant in a private veterinary clinic (under supervision).

#### Remedial session

Students with a grade of less than 10/20 for one or more CUs need to take the corresponding remedial session exams. Students who have not passed their externship do a new externship during the summer vacation, before the start of the next academic year. The number of students in the remedial session is especially high during the first 3 years: a little over 50% in Y1 and Y2, and just under 50% in Y3. However a large number pass their exams in the remedial session and the number of repeaters is low : about 4 to 5% in Y1 and Y2 and less than 1% in Y3.

Since the 4Y is mainly clinical, very few students attend the second remedial session. If a student does not pass a clinical rotation, he must repeat it during the month of July. No student repeats the Y4.

A student can take only one remedial session per CU and per externship for a single academic year. At the end of the remedial session, the results are examined by the College Board (CE).

Students, who, at the end of the remedial session, have not obtained the 60 credits and are authorized by the CE to repeat, retain the credits earned.

An education agreement is drawn up by the DEVE with agreement by the student and the course advisor (instructor chosen by the student to guide him during the repeated year). The contract, signed by the student and the course advisor, mentions:

- the CU (or CUs) failed that the student must take and pass
- Externships to be completed,
- a few CUs and/or Externships for the higher year to be taken and passed in advance, taking into account the course sequence.

Each year can be repeated only once (Art9. in annex intro-7). 3 repeats of a same year are not permitted: in this case the exclusion of the student is decided by the Executive Director, after proposal by the CE. An exception may be granted by the Council of Instructors, for medical reasons, for example.

#### Special case of 5Y

For Industry, Research and Veterinary Public Health tracks, passing Y5 is achieved by passing the year in the corresponding academic institution.

For each pure or mixed clinical track, an examination session is held in May. The procedure is determined by the head of each track at the beginning of the academic year.

The jury of each track (pets, equine and animals production) is made up of instructors from the pure track (instructors from two tracks for a mixed track) and a professional practitioner.

Every year in June, the list of students who have not passed Y5 and who are authorized to attend the remedial session and the list of students who have passed Y5 and are authorized to defend their veterinary doctoral thesis is validated by the CE.

In Y5, it is very rare for a student not to pass the first session. If a student does not pass a clinical rotation, he repeats it during July; if he does not pass an extramural externship, he repeats an externship during the summer. If he does not pass the examination of theoretical knowledge, he takes the remedial session examination.

No students repeat Y5. Only students who have passed the Y5 examinations are authorized to defend their practical thesis for the State degree of Doctor of Veterinary Medicine. This degree is awarded to a student after defence of a practical thesis at the Faculty of Medicine of Lyon University. The jury includes a professor from the Faculty of Medicine (president of the jury), the thesis advisor from the veterinary school (1st examiner) and another instructor from the veterinary school (2nd examiner).

Particularly remarkable theses that have earned special mention will be presented to the thesis prize commission to receive an award.

The list of the five best theses is sent to organizations and associations wishing to reward excellence (Veterinary Academy of France, College of Veterinarians, Alumni Association, etc.). A very small number of Y5 students do not defend their theses at the end of Y5.

#### *Are there special periods (without teaching) during the year for examinations?*

There are exam periods every semester, set by the DEVE\* and validated by the CE\* at the beginning of each academic year. There is no teaching during that period apart from regulatory and ethical obligations (hospital care, on-call and emergencies). Some examinations may be moved forward in the academic calendar because the corresponding teaching has been completed; this is done by agreement with the teachers concerned and the DEVE\* and validated by the CE\*. Periods free of teaching are included in the schedules.

*What form(s) of examination are used (written papers, multiple-choice questions, oral, practical, clinical examination, continuous assessment, etc.)? Is use made of external examiners?*

The vast majority of examinations are in writing: open-ended question, case discussion, critical analysis of articles, treatment proposal, "fill-in-the-blanks", multiple-choice questions, summary questions on various subjects taught in the same module.

September remedial exams are most often in oral form, with a jury made up of instructors of the subject and another faculty member from a related discipline.

The Y4 are evaluated by clinical presentations (carnivores, horses), Y5 by writing of a clinical observation; the theoretical examination varies depending on the clinical pathway with the participation of external private practitioners in the three clinical branches.

*How many retakes of an examination are allowed?*

In case of non-acceptable results during the semester exams, student is allowed to take a remedial exam in September.

*Do students have to pass the examination within a certain time?*

For students who have not obtained the required 60 ECTS credits at the end of the second session, the CE\* authorizes the student

- Either to repeat his year if he has not passed more than one exam,
- Or to register in a higher "bridge year" if a single exam has not been passed (see Art21. in annex 4-5). The student is then considered as repeating for an examination not passed in year n, and registered for courses and Externships for year n+1. There are bridge years for Y1, Y2 and Y3.
- Students who have completed year n and all their examinations of year n+1 then acquire the 120 ECTS\* needed to pass to year n+2.

*Do students have to pass an examination before they can start other courses?*

A student who has earned 60 ECTS\* is authorized to move to the next year (except for the special procedure for a bridge year). The completion of Y4 results in the issuance of DEFV\* allowing the student to work only as an assistant to a veterinarian.

The completion of Y5 authorizes the student to defend his doctoral thesis, conferring on him, after validation, the degree of Doctor of Veterinary Medicine (section 6 in Annex 4-5).

#### **5.1.4. Evaluation of teaching and learning**

*Describe the method(s) used to assess the quality of teaching and learning in the Faculty.*

*Indicate whether the evaluation is a Faculty procedure or one set up by individual departments, by students or by individuals.*

A joint evaluation commission has been set up (Annex 5.5) consisting of 4 student members (Y1 to Y4) and 4 alternates and 4 faculty members and 4 alternates, chaired by the Vice-Dean of Quality and Evaluations. The manager in charge of quality of teaching and the DEVE also participate.

This committee has the following missions:

- propose an evaluation method: "model" questionnaire with 25 questions at most (Annex 5.6), sent in electronic form to students for a period of about 15 days after the exams; students respond anonymous and individually; a mail reminder can be sent if the percentage of answers seems too small;
- collect and centralize the results,
- interpret and discuss (provided the percentage of responses is greater than 30%, that attendance at lectures is greater than 50% of the class)
- propose requests for changes or improvement of lessons and their delivery to the teachers concerned and module supervisors,
- Publish the global results for graduation of students concerned upon validation and agreement of instructors.

A module receiving substantive criticisms is reviewed at faculty-student meetings; changes proposed by consensus are then validated by the CSP\*. The modified module is then evaluated again the following year. The commission excludes the evaluation of faculty members from its missions.

The commission proposed that the entire curriculum be evaluated: both theoretical and practical training completed to date (Annex 5-7) and clinical training (underway). The results of these evaluations from different sources are analyzed in the CSP\* and CEVE\* and then integrated into the overall process of continuous improvement of our teaching.

*Describe the role of students in the evaluation of teaching and teachers.*

*Describe the follow-up given to the evaluation.*

In addition to this evaluation at the initiative of the VAS\*, other questionnaires are issued:

- Questionnaire to Y4 at the end of the academic year: how the student evaluates the training he received, the attitude of supervisors, his own expertise and the general atmosphere of work and the quality of social life (Annex 5-8)?
- Questionnaire to Y5 at the end of the academic year ("day-one skills"): evaluation of knowledge, scientific and technical skills, aptitudes (Annex 5-9);
- Questionnaire 3 years after graduation: how does the new graduate evaluate the training received in his curriculum the knowledge and skills acquired, his technical and scientific aptitudes (Annex 5-10)?
- Identical questionnaire send to the employer about the training received by the employee?

The general evaluation process is based on a continuous improvement approach: - identification and analysis of shortcomings and imperfections; - validation by the authorities (CE\*, CA\*) corrections proposed by the CEVE\*-CSP\*; - analysis of changes made via a questionnaire.

### 5.1.5. Student welfare

*Describe any measures taken to protect students from zoonosis (e.g. rabies) and physical hazards*

Animals that are infectious or suspected of contagion are isolated in separated and well identified facilities (for small animals (including an emergency part) and for large animals), with posted regulations and procedures for care (special garment and rules of hygiene (Annexes 5-11 and 5-12)).

Students are informed when they register and in the orientation week about preventive measures to be followed, especially updating their vaccinations during the medical visit by the school doctor, including mandatory rabies vaccination.

Then, when they enter into clinical training (start S10) and again during the academic year, they are informed of the protection, hygiene and biosecurity measures to follow in practical activities and clinics: - posters in rooms, hand hygiene, proper garments, wearing gloves based on the FECAVA\* documents; - Identification of specific rooms (hospital, contagious animals room, imaging room, necropsy room, etc.); - reminder of measures by a lecture in the amphitheatre followed by questions and answers. Design of a biosecurity manual is underway with an abbreviated electronic form, gathering all the existing procure and made it easily reachable by everyone.

Lastly, the school doctor is present on campus one morning a week to receive any student upon request, and by appointment.

The school have a dedicated council in charge of biosecurity and health protection (CHSCT). This council examine all procedures implemented in every unit of the school, is responsible for analyzing risks and propose measures to prevent those risks. Each time an accident is registered, it produces an analysis with action to be taken. Additionally, the school appoint a risk and biosafety manager who monitor the procedure and teach the student about their application (beginning next academic year).

*Describe the facilities (not related to the teaching programme) which the establishment provides for students.*

*Describe the guidance offered by the Faculty (or its parent institution) for students with problems (social problems, study problems) as well as for future career development or job selection*

The DEVE\* office (<http://www.vetagro-sup.fr/node/77>): this service manages enrolment of students for the five years and interns, administrative follow-up, international exchanges, thesis files, preventive medicine, and records student absences. It assigns an academic advisor to each student designed amongst the faculty members who supervises and validates externships but can also help the student on request.

It organizes instruction, clinical rotations and examinations. It manages externship agreements. It enters and processes grades, records externship approvals, ensures the classification of students in each class. It prepares all tables of results submitted for approval to the Council of Instructors and then sends transcripts to students.

This service is located close to the central administration and nearby the main classrooms. In the office lobby, students can find documents free for pick-up (externship agreements, requests for leave of absence, etc.) and a "suggestion box" for their anonymous comments, complaints and questions. The staff keeps students informed by mail and postings (an "education" bulletin board for each class, a bulletin board for foreign students, and near the student cafeteria two "Student Life" bulletin boards).

The "Student Area" website <http://www.vetagro-sup.fr/node/80>: students have access to this site with a password. It provides full information about the academic calendar, program regulations, registration, payment of tuition and medical assistance, educational programs, schedules, lists and groups of students, exam schedules, and room schedules for each course. It also provides access to the Orientation Handbook (which is a guide for

new students), and the platform where the online courses can be found. The site also provides all the forms students have to fill out and everything they have to do for their Externships, thesis, in case of absence, and travel.

**Housing aid:** A studio is reserved for each new student (Y1, domestic and foreign) at the CROUS University Residence (independent service responsible for student housing) located on the Veterinary Campus (325 studios with free High Speed Internet, [crous@vetagro-sup.fr](mailto:crous@vetagro-sup.fr)). A description of the studios can be found in the orientation handbook. The residence also houses some of the students (Y2 to Y5) with need-based scholarships. The student residence can accommodate most of the students. Notices are also sent to the School for apartments outside the residence; the DEVE office transmits them to students.

**Financial Aid and Scholarships:** the DEVE office manages scholarships related to financial conditions (in 2012-2013, 37.5% of students) and mobility scholarships for study abroad. Granting of scholarships related to financial conditions is based on criteria determined at a national level for higher education. Students receive information by mail and can consult the web portal. There is a mobility scholarship commission that includes students. The office sends students applications for grants and prizes from public and private organizations and helps fill out paperwork. Financial assistance is provided through "Student Jobs" on the veterinary campus (ICI-B, library, etc.). Scholarship students and interns do not pay tuition fees.

Y1 students arriving at the school may receive grants but the first payment arrives late in October. An endowment (C. Fleury Endowment named for a professor of pathological anatomy who died in 2010) may give some students loans or grants to provide immediate material assistance. A special commission meets to select students eligible for such assistance.

**Student Advising:** An academic advisor is assigned by the BEVE\* for each student. A tutor is also assigned to each student who is repeating a year. Students who encounter difficulties or who seek advice on their careers can consult their academic advisor or the DEVE. The DEVE builds a personalized program of study for every student who is repeating. Postponement of examinations or courses is possible for students who encounter health problems or serious personal problems. The DEVE is always available to receive and advise students regarding any school or personal problem. A number of instructors and the DEVE\* have taken special training to deal with students experiencing psychological problems.

**Special events:** each year a Graduation Ceremony is attended by instructors, outside personalities, students who have completed the 4th year, interns and their families. During the ceremony, DEFV\*s, internship diplomas, and thesis prizes are awarded.

**Student Clubs and Organizations:** The main student organization is called the "Bourgelat Circle". It offers a variety of services to lighten student life on campus. Other more Specific Groups exist, such as student branches of professional organizations (AFVAC junior\*, AVEF Junior\*, GTV junior\*, SNVEL junior\*) and groups that organize sports (COB\*) or cultural activities: music, theatre, etc.).

There are currently no placement services for new graduates, who rely on advertising in the trade press or the network of relationships they have built with the profession during their degree course. Given the constant demand for new graduates, students completing their studies do not currently encounter placement problems. Incoming job offers are sent to the student Circle, Y5 and interns.

For student job placement, lectures on various veterinary professions are organized each year: in the evening for all students, a half-day for each class (1Y, 2Y and 3Y), and two half-days for Y4.

- Y1: definition and construction of career; presentation of master and PhD program; opportunities in veterinary public health, food industry, pharmaceutical industry, animal testing, etc.

- Y2 and Y3: testimonials from veterinarians relating their academic and career paths and describing their activities.

- Y4: description of the different Y5 tracks (Clinics, Industry, Research, and Veterinary Public Health) in French ENVs and at foreign partner universities and description of clinical internships.

The courses have different themes so the student can discover various veterinary professions. We educate students from their Y1 about Research, encouraging them to take two units (master1) at the University of Lyon (courses and research externships). An instructor advises them in their choice.

## 5.2. Comments

*« Please give general comments about the quality of the teaching programme under the above headings ».*

The semestrialization of the training program, the ECTS\* reference and the development of integrated modules with adaptation of the corresponding examinations have resulted in better knowledge acquisition by students, who validate these innovations via questionnaires.

The complete evaluation of theoretical and practical training makes it possible to effectively apply the rule of continuous improvement for the students' benefit. Students are really active in the committee for curriculum and help building the evolutions and monitoring their improvement. Representative of faculty members are also very active in the same committee which help to share solutions.

Skills evaluation (assessment of nine clinical competencies), clinical in particular, has already been done under the AVMA\* rules.

Outcomes assessment process is useful to complete the overview of quality of the new graduate.

Representative of professional member of the council on education (CEVE\*) and of the board of governors (CA) allow a regular update of the curriculum based on professional needs.

Evaluation of faculty members by student and peer is not implemented yet due to national rules. Nevertheless, open questions included in the evaluation questionnaire of the teaching program by students make it possible to address some concerns about some teachers regarding teaching methods. Those are directly managed by the vice dean in charge of quality and evaluation with the concerned faculty member and if problem is not corrected by the dean.

Opening toward diversity of future jobs has shown promising results (cf. % increase of Y4 students opting for mixed sectors, including rural), and in the industry and research sectors.

Everything is in place to allow good quality of teaching for student even if some private difficulties appear during their study. Jobs offered inside the school really help to avoid student to be overloaded by outside jobs with no respect for the needs of dedicated period to study.

## 5.3. Suggestions

Evaluation of faculty members needs to be developed in relation with the evolution of national law and in accordance with the four vet schools.

Other methods in addition to the existing ones need to be developed:

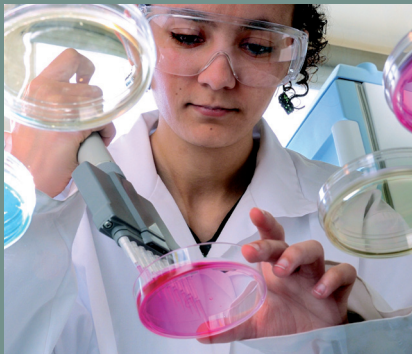
- Greater use of self-learning exercises in electronic form, self-evaluations, work in small groups, critical analyses of practical or clinical situations,
- Development of continuous assessment of knowledge and skills by using an evaluation of the student's know-how and relational skills in practical situations:
  - Attitude and explanations to the owner about the animal's clinical condition and changes, critical analysis of the student's attitude and speech by the entire group (in progress in preventive medicine);
  - Greater consideration of human and environmental contamination prevention measures;
  - Monitoring of proper management and delivery of medications (including outpatient) planned acquisition of software "Guide to Good Practices in Veterinary Drug Management" to detect management shortcomings and reinforce student training;
  - Continuation of the evaluation process for acquisition of clinical competencies.





# Facilities & Equipment

Facilities &  
Equipment



## 6. FACILITIES AND EQUIPMENT

### 6.1. Factual information

#### 6.1.1. Premises in general

*« Please give a general description of the site(s) and buildings occupied by the faculty and include a map »*

**The Veterinary Campus of Vet Agro Sup** is located 14 km West of Lyon (annex 6-1). There are two main locations: the main campus in Marcy l'Etoile and another facility located 14km from the campus at L'Arbresle (UCRA\*). See map in annex 6-2, a legend specifies the usage of each building or sector. The site occupies 44 hectares (108 acres) and comprises 41,000 m<sup>2</sup> of facilities. The campus includes the instructional facilities for the DVM program, administrative offices, diagnostic and research laboratories, offices and labs for all academic departments, clinical teaching rooms and hospitals. The student housing complex is located on the campus, separated from the research and teaching areas.

**Main building.** This three-storey structure houses the administration (dean's office, finance, human resources, research office, teaching and student affairs office), the audiovisual unit, computer system, library, five amphitheatres (one 350-seat, one 200-seat and three 120-seat), lecture rooms, rooms for practical work, the cafeteria and the student co-op. Five wings are attached to the main building, which house the different teaching, diagnostic and research units and laboratories (biochemistry and endocrinology, toxicology, parasitology, histology...), the CERREC\*, the CNITV\* and the CPVL\*. Most educational units have small classrooms for small group sessions. There are also teaching laboratories, a library and learning center (more than 700 m<sup>2</sup>, 110-seat room and 10 computers with Wi-Fi). Near the main building a new building was built for the ENSV\*, an OIE collaborating center for training of public health veterinary officers, including a small amphitheater (50 seats), some lecture rooms and offices.

**The Victor Galtier building** is completely separated from the other facilities. It includes teaching laboratories for bacteriology and virology, an analytical laboratory (LVD\*), a new specific diagnostic and research laboratory for *E. coli* (LNR\* including a level 3 unit) and a level 3 unit for research.

**The service buildings** are scattered around the campus, including an intake building at the campus entrance equipped with a centralized anomaly night surveillance system and technical buildings.

**Student residence and campus restaurant:** students have access to housing (325 individual rooms varying from 18 to 21m<sup>2</sup> with toilet, kitchen and refrigerator and network broadband connection) and a university restaurant on campus. A fitness room as well as an equestrian center completes the infrastructure: several sports, such as basketball, football, rugby and tennis, can be practiced on dedicated fields either on the campus or nearby. Students have their own facilities on the campus for cultural and leisure activities: music, theatre, photography, library, Erasmus club, etc. a cafeteria (about 170 m<sup>2</sup>, located in the School's main building, only open on week days), the Students' association office (about 50 m<sup>2</sup>), a co-op and storage area (about 45 m<sup>2</sup>), restaurant service also open to the School's staff, which is provided only for mid-day meals, a kennel for their dogs and an equestrian Centre open to students. The students have access to common services, including the library and Internet. Some sports facilities are located on site, but most activities must be practiced outside the School through agreements with neighboring communities.

#### 6.1.2. Premises used for clinics and hospitalization

*The information to be entered in table 6.1. is the number of animals that can be accommodated, not the number of animals used. Certain premises may be used to accommodate different species of animal. If so, the same premises should be entered only once.*

**The CHEV** is located close to the central building in the main campus (except the UCRA\*).

The section reserved for *Small animals* (3095m<sup>2</sup>) includes, in addition to the medical secretariat: four dedicated areas for preliminary examinations with several individual boxes, five consultation rooms (each with accommodation for 10 to 15 students) and three clinical case discussion rooms (accommodating about twenty students), surgery rooms (from light surgery to heavy surgery procedures including one equipped with an image transmission system), hospitalization (include separate areas for dogs (4) vs. cats (4) and isolated areas for contagious small animals), medical imaging suite (radiography, ultrasound and MRI\*) and a sterilization unit (shared by the entire hospital), a special separate clinic for emergencies and intensive care (SIAMU\*), a central pharmacy and a laboratory area.

A separate facility is dedicated to small animal preventive medicine (vaccinations, training for parasiticide treatments, advice for nutrition and education of pets). A CT Scan for pets is located in another area of the campus (annex 6-3).

**Table 6.1. Places available for hospitalization and animals to be accommodated**

	species	No. places
Regular hospitalisation	Cattle	12
	Horses	19
	Small ruminants	3
	Pigs	3
	Dogs	50
	Cats	30
	Other	
Isolation facilities	Farm animals and horses	4
	Small animals	11
	Other	

*The equine area* (1620m<sup>2</sup>) includes, in addition to a medical secretariat: two surgery rooms (both connected to a teaching gallery and one with image transmission system), 2 examination rooms and an imaging suite, a hospitalization zone (19 boxes and 2 boxes for day- hospitalization), equipment storage, pharmacy, as well as teaching rooms for clinical rounds. An orthopedic examination area and paddocks complete the facilities.

A room located near the examination area is dedicated to standing MRI\*. A new building was erected four years ago for the isolation of contagious (or suspected contagious) large animals (equine, bovine and other ruminants). An equine breeding facility, located on another part of the campus, includes facilities for examinations, collecting and preparing semen, and boxes (annex 6-3).

*The production animals section* (798m<sup>2</sup>) comprises an examination area, a demonstration room, hospitalization facilities (12 boxes for cattle and a specific building for sheep, goats and pigs), a standing surgery suite, as well as medicine and equipment storage. The specific building for the isolation of contagious large animals is also used for cattle and other ruminants. The UCRA\*, located about ten kilometers from the main site, houses the CHEV\* ambulatory practice for production animals. (annex 6-4).

A 100-seat amphitheater in this part of the campus is equipped to accommodate large animals (horses or bovine) for educational demonstrations. A rest area has been set up in the CHEV\* for students doing on-call duty nights and weekends.

**The Claude Bourgelat Institute (ICI-B\*)**, an isolated experimental building (2,000 m<sup>2</sup>) houses the animal experimentation facilities for small animals (rodents, dogs, cats), pigs, sheep and monkeys: laboratories, surgery room, research animal facility up to protection level 2 (A2). The overall activities are accredited in accordance with the good laboratory practices and AAALAC\* accreditation is in progress.

The ICI-B\* is a support structure for the research units (on campus as well as at the Lyon facility for 20% of the CA\* in 2012, 30% in 2013 and 45% in 2014) and other technical support centres, in particular, preclinical research studies (examples: work on leptospira and leptospirosis, sepsis, treatment of dystrophic epidermolysis bullosa) but receives also students.

Le **CERREC** (unit for teaching and research on SA has specific premises and equipment adapted to artificial insemination, semen collection and providing answers to the breeders concerned. It participates in training students in addition to consultations and surgical procedures for the pathology of reproduction (see Chap 5. 5.1.1. “Contractual arrangements between the Faculty and outside bodies”).

### 6.1.3. Premises used for animals

*« Give a description of the facilities for rearing and maintaining normal animals for teaching purposes. If the Faculty has no farm of its own, please explain in the SER the practical arrangements made for teaching such subjects as animal husbandry, herd health and the techniques of handling production animals »*

**Animal stables.** The college has several pastures with shelters for stabling bovines and equine (including “La Brochetière”, 29 hectares newly attribute to the school and equines to be used in demonstration activities and preclinical exercises).

A specific area located near the ICI-B\* houses the dogs used for teaching purposes maintained by the Institute’s staff. The dedicated areas are used for horses and bovines (rented to a farmer: 12 head), which serve for teaching purposes; they are housed and maintained under conditions that comply with national accreditation systems and recommendations by the Establishment’s ethics committee, which are regularly verified by officials from the DDPP\*. Students Y3 and Y4 regularly visit the farms of the Arbresle’s clientele. The purpose of these visits is to have them first develop general skills in breeding livestock, taking into consideration all the elements needed to improve animal health and welfare (behaviour, nutrition, reproduction, etc.). The visits are done in small groups (eight students) so they can have direct contact with the animals and their breeders.

Complementing these animal teaching resources are animals and animal products located off campus used for

student training (see chap7).

**Isolation units.** For large animals, a totally separate unit is dedicated to contagious or suspect animals with several boxes, a room for care and a lab. For small animals, the facility is located in the same building but in a separate area.

**The necropsy room** is separated from others buildings, it has equipment to perform euthanasia and autopsies on all species, and storage for cadavers. Near this room a specific building is designed for teaching on anatomic wet parts (Wet lab).

#### 6.1.4. Premises used for theoretical, practical and supervised teaching

*« The same room should not be entered under two or more headings, even if it is used, for example, for both practical and supervised work ».*

**Table 6.2. Premises for clinical work and student training**

Small animals	N°. Consulting rooms	8 + 2 SIAMU
	N°. Surgical suits	8 + 1 SIAMU
Equine and food animals	N°. Examination areas	3
	N°. Surgical suites	3
Other		

**Teaching classrooms:** rooms are classified according to capacity and organization. There are large classrooms (7 amphitheatres that can accommodate more than 50 students), small classrooms (10 rooms that can accommodate up to 50 students), and teaching laboratories (11 rooms that can accommodate up to 50 students with specific technical equipment for each discipline). All are equipped with video projectors and computer workstations. Most have Internet connections. All of them are adapted to receive all types of handicapped persons.

**Preclinical laboratory training** (physiology - parasitology, histology, bacteriology, anatomy, and alimentation) takes place in different dedicated rooms with specific equipment: microscopes, histological and parasitological samples, bones and dry anatomic parts, dedicated equipment for microbiology. **Animal handling instruction** is done with dedicated animals located in facilities nearby the CHEV\* and handled in adapted areas with full safety equipment.

**Table 6.3. Premises for lecturing**

Number of places per lecture hall							
Hall	Honor-Magat	J Froget	E Chatelain	Hall 3	Hall 4	Clinics hall	ENSV* hall + Chauveau +Galtier
Places	450	250 PMR*	128 + 7 PMR*	128 + 7 PMR*	126	104	50
Total number of places in lecture halls : 1400							

\* PMR : disability access

**Table 6.4. Premises for group work (number of rooms that can be used for supervised group work)**

Room	Rooms 1 – 7 - 8	Room ENSV + P3	Room 5	English room + Bfpsa*+ Bertin	3 rooms ENSV* + Henon	Room 9 + P4	Rooms 2-3-4-6
Places	10 /room	15	18	19	25	30	32
Total number of places in rooms for group work : 423							

**Table 6.5. Premises for practical work (number of laboratories for practical work by students)**

Laboratory	Physiology parasitology	Nutrition	pathology	Anatomy	food hygiene	infectiology
places	32	32	32	32	32	32
Total number of places in laboratories : 192						

*« Please give a brief description of health and safety measures in place in the premises for practical work and in the laboratories to which undergraduate students have access »*

Every year, a specific program is adopted upon the advice of the CHSCT\* regarding professional training on various safety procedures for staff, faculty members and students. The professors and technicians who handle X-rays received specialized training. Students receive a personal dosimeter and instructions in radiological

protection prior to coming to the CHEV\*, and when they use the equipment, they are supervised by technicians trained in radiological protection. Students receive a special teaching program during the curriculum regarding X-rays regulations. Handling of radioactive materials is subject to special approval under the responsibility of a trained academic staff member. In addition, staff and students have the option of taking first aid training at the institution. The equine clinic and the SIAMU\* have developed a document for staff and students describing all the safety procedures to follow in the "Equine Clinic and SIAMU\* Vademecum," which is updated annually. Specific procedures for basic hygiene and cleaning are posted in different areas of the CHEV\* and explained to students before they enter the CHEV\*.

All rooms especially those dedicated to practical teaching are equipped with safety material as requested by law. Some specific equipment is posted in the teaching lab of infectiology.

Students received dedicated biosafety information when they first enter the teaching hospital. They also receive regular update on specific safety procedures but also on the way to react in face on specific cases related to potential human transmittable disease.

**Rounds rooms:** clinical rounds are done daily in the morning in dedicated rooms located near the hospital in different areas.

**Small animals rooms** (carnivores and other small animals): these are located within the CHEV\*. Waiting rooms are adequate to house dogs, cats or other pets safely and with no contact between each other, cleanly and adapted to the caseload. Pre-examination boxes are separated from each other and provided with basic equipment and a water supply. Consultation rooms are allocated to various specialties with the necessary equipment, and allow up to 10 students to safely observe the teacher, the student responsible for the case, the animal and the owner. All consultation rooms are connected to the central system for patient following. Because specific rotations are organized in the fields of surgery, reproduction, internal medicine and endoscopy, dermatology, ophthalmology, anesthesiology, emergency - intensive care and imaging (see below), cardiology, oncology, neurology and behavioral pathology, and hematology, dedicated equipment is available for each specialty either directly in the consulting room or in a centralized lab.

The hospitalization facilities are compartmentalized into four independent zones, equipped with examination material and basic treatment equipment, one reserved for cats. Another area is set aside for clinical courses in preventive medicine (vaccination, anti-parasite treatments and nutritional advice). Exotic animals and birds are examined in the specific room and on dedicated days.

**Equine rooms** are adapted for housing and management of horses. Hospitalization area includes basic equipment for follow up of patients and a squeeze cage for implementing treatments under safe conditions. The examination room is wide enough to allow safe handling of a horse with students around, and is provided with equipment for examination (endoscopy, rectal palpation, etc.) Two surgery rooms are operational, each with an adapted stall for anesthesia and recovery and a dedicated place for preparation of the surgery team. One is reserved for highly contaminated surgery (abdominal, wounds and respiratory track) and the other is reserved for bone and joint surgery. A separate area is reserved for natural mating and reproduction examination. It includes a few boxes.

**Animal production rooms:** these are partly within the production animals section of the CHEV\* where students have access to animals (either owner's animals or animals belonging to the school) and facilities including hospitalization box and barn and examination unit. Adapted equipment for management of cattle in safe conditions is present. A surgery room is dedicated for surgery on small ruminants and calves. For adult cows, the surgery is mainly done standing in a special examination stall. In case of heavy surgery, the equine unit can be used. A separate, entirely renovated unit is dedicated to small ruminants and calves. Twice a week, the students travel in two minibuses to private practices in the school's vicinity to examine field cases. The school has acquired a bovine private practice located near the campus to allow students to visit cases on farm. 4 cars adapted to carry on 4 students and a vet are used. A van has been adapted to collect live cows on the farm in order to increase the caseload of the hospital, another for collecting dead cows to the necropsy unit. Porcine and poultry are only considered on field visits given the high biosafety requirements of this production.

A special procedure has been developed for staff, students and animals to provide full safety for persons and animals. This includes management of waste, cleaning and disinfection.

The same procedures are implemented. Students receive instruction on dedicated safety procedures for isolation units during their training (annex 5-12). Safety procedures are posted in the buildings, and building statutes are readily available.

The necropsy room and the anatomic part are specially equipped and designed for biosecurity including changing rooms with dedicated boots and clothes (for necropsy), a "one way" circulation for people and separate entrance for cadavers(see annex 6-5, annex 6-6).



### 6.1.5. Diagnostic laboratories and clinical support services

*Briefly describe the facilities available for clinical diagnostic work*

**Diagnostic laboratory:** There is a central lab inside the small animal area of the CHEV\*, including equipment for collecting blood samples, preparing the samples for analysis directly or by hematology, cytology equipment or to be sent in dedicated labs located in the main building (biochemistry, cytology, toxicology, parasitology). Samples for bacteriology are sent either to the LVD\* on campus or to outside labs. Samples for histology are prepared in the CHEV\* and analyzed in the anatomopathological unit.

*Indicate the nature of these services and how they are organized (e.g. diagnostic imaging, anesthesia...)*

#### Central clinical support services

**Imaging:** The imaging facility has X-ray and ultrasound equipment designed for small animals, equines and bovines identical to what is ordinarily found in a French veterinary practice. One room is set aside for radiographic and ultrasound examination of bovines and equines, one room for SA radiographic examination, and another room for ultrasound examination of small animals. The school is equipped with digital imaging system. Facilities also include a room for film development and a dark room for case analysis with students. An ultrasound room, a magnetic resonance imagery (MRI\*) areas for small animals and a specific room for MRI\* “standing-horse” are also available. A CT Scan is available on campus for small animals.

#### Anaesthesia

A special room, under controlled entrance regulation and control, has been designated for the storage of anaesthetics (some of which are kept in a controlled refrigerator) and their delivery to residents and interns by specific personnel: technicians and anaesthesiology residents. Specific equipment is devoted to storage of dangerous products. All the safety measures regarding anaesthetic products are under law regulations.

**Necropsy:** The post-mortem room provides dedicated space for examination of large and small animals with handling facilities and refrigerator room for cadavers. All physical parts are treated after necropsy by a specific company with a special agreement for this activity. The circulation of people (personnel and students wearing the required clothing and special boots required for this unit, compulsory exit via the boot wash), and cadavers and waste is detailed in a procedure (annex 6-5).

**Pharmacy:** There is only one central pharmacy for the CHEV\* where all drugs and treatments are kept for every area of the clinic. Close control of the use of treatments across the CHEV\* is maintained under the supervision of a pharmacist, as required by law. The students are directly involved in the pharmaceutical aspect of medications and in intake and monitoring of patients during all rotations (invoicing, information, writing prescriptions). Some medications that are toxic and/or specifically regulated (e.g. barbiturates for euthanasia, opiates) are kept under lock and key and controlled by the staff responsible for the pharmacy.

**Equipment:** Since 2005, the school has acquired and renewed its teaching equipment to follow standards of veterinary practice. After buying a private bovine practice (UCRA) to provide adequate teaching material in bovine, the school has upgraded its equipment for diagnostic imaging (ultrasound), endoscopy, anesthesia and surgery (specific equipment for “classical” surgery and osteoarticular surgery for the three clinical tracks). The College has transportation vehicles to bring live large animals to the hospitals and dead animals to necropsy. In its equine program, the acquisition of state-of-art surgical equipment (vertebral stabilization) has helped in case recruitment. An MRI for standing horse has been acquired (450 k€) and a contract with private companies for MRIs and scans for small animals has been signed.

### 6.1.6. Slaughterhouse facilities

*« Describe briefly the slaughterhouse facility to which the Faculty has access, including distances from the Faculty and level of activity »*

Students (S10, S11 and S12, by 1/8 of the year) have access to the CIBEVAIL slaughterhouses in Corbas (about 60 cattle, 30 calves and 200 sheep per day) for ante-mortem inspection of animals, offal and carcasses for detection of lesions, diagnosis and meat quality (cf. Chap 7. 7.1.4.). This facility is fully approved by dedicated regulations.

Corbas is 20 km from Marcy l'Etoile, and students travel there in a special bus.

The School has a collaborative agreement with INFOMA\* whose technicians work in slaughterhouses) to provide a half-day per week in a TP room where students can view lesions on parts collected in the region's slaughterhouses.

### 6.1.7. Foodstuff processing unit

*« Describe briefly any access that the Faculty has to foodstuff processing units »*

Due to legislation, it is very complicated for foodstuff processing units to host students. They receive only theoretical information during the curriculum.

### 6.1.8. Waste management

*« Briefly describe the systems and equipment used for disposing of waste material: cadavers, carcasses, biological waste of different types, excreta ... »*

Storage of cadavers and carcasses of all species is centralised in the necropsy building, in the refrigerated unit and removed weekly by licensed company authorized to treat those waste. 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: - hospital waste (including any biological, contaminated or suspect soiled materials) or collected in the waste bins or specific yellow containers, stored in covered, closed and locked areas, before they are picked up by a specialised company; - ordinary waste (paper, cardboard, etc.; - chemical waste (solvents, laboratory products) for which there is a specific pick-up at least twice a year.

Effluent contaminated by pathogens or biological products, or suspected of being so, or originating from a specific location (hospital, necropsy, isolation building, area for the excreta of small animals receiving chemotherapy, area for the excreta of hospitalised small animals) is taken to a treatment plant before being eliminated via the sewer system. The Establishment has been authorised to release it into the sewer system, as well as using the storm drain; the national regulation stipulates that this system must be inspected annually.

Highly pathogenic micro-organisms and toxins (MOT) are covered by specific regulations (premises, authorisations, safety, and training) and regular inspection by the ANSM\*.

### 6.1.9. Future changes

*« Outline any proposed changes in the premises that will have a substantial effect on the Faculty and indicate the stage which these have reached ».*

There are many defined and agreed-upon projects (i.e. confirmed by management and budgeted for) concerning the premises:

- at CHEV:

- Equine neonatology and emergency (Annex 6-7) and development of a reception area and waiting room for horse owners: work to begin in fourth-quarter 2015, and a parking area for vans will be developed; these scheduled projects will make it possible to install two high-flow water supply points to facilitate cleaning of the equine clinic's yard, and repaving the exit of the clinical amphitheatre;

- Repairs to the walls in the equine hospitalisation boxes (under way);

- Relocation of the large animal surgery room closer to the bovine hospital: plan to be finalised in fourth-quarter 2015; repairs to the floors in the bovine stalls;

- Development of an area for housing "wild rodents": consultation end of 2015;

- Creation of a new pharmacy premise, located between the small-animal dermatology-oncology area and the current laboratory, which will free up the current space for a central clinical pathology lab for all species: programme finalised by the end of 2015;

- Room for euthanizing small pets whose owners wish to see them prior to incineration and/or necropsy;

- Development of an area located near the central laboratory dedicated to frozen-section procedures on biopsied or surgical samples.

- Outside CHEV:

- Renovations under way on facilities to house the "CRB-anim" research lab: Centre de Ressources Biologiques, i.e. samples (blood, biopsies, tissues removed surgically or during autopsies) to comprise a biological research centre for studies and comparative scientific pathology work; first phase to be delivered September 2015;

- Renovations scheduled for the laboratories (e.g. P3 dedicated to leptospirosis) and animal housing, according to regulations in effect;

- Video surveillance equipment to protect people and property is to be installed in front of the ICI-B\* and the SIAMU\*.

There is a specific process for biosafety (CHEV, laboratories) (Annex 2.5.3): - recruiting a person to take charge of identifying risks and proposing protective measures to be written up and implemented ; - raising awareness among personnel and students through meetings, including for students returning to clinical work (Y3 S10, Y4 S11 and Y5 S12) ; - developing information documents (small posters, logos), summary sheets and fact sheets (print and electronic formats) ; - writing procedures applicable for specific premises (necropsy room: Annex 6-6, isolation of contagious animals: annexes 5-11, 5-12). For the energy security, work will soon begin to acquire a new emergency generator with funding from the Ministry and upgrade the fire safety system in the central building, the CHEV and the Galtier building.

## 6.2. Comments

*« Comment the adequacy of the buildings in general for undergraduate teaching »*

The buildings on the campus as a whole are satisfactory for providing theoretical, practical and clinical training to students. They need permanent care as the school was built 50 years ago. Improvements are made regularly and more than 15 million euros were spend in renewing and rebuilding during the last 10 years.

*« Comment on the adequacy of the equipment in general for undergraduate teaching »*

Equipment are regularly upgraded especially in areas where there is a lot of evolutions like diagnostic imaging. Contract with private companies allow the school to have access to CT scan and SA MRI without the charge of maintenance and renewal. Every year, a special budget is assigned to replace pedagogic equipment.

*« Comment on the maintenance of buildings and equipment »*

Being built in 1978 maintenance of building and equipment is an important activity of the dedicated persons. Each year a dedicated budget is provided by the state government on request of the school and safety upgrade is a priority. The last big investment was a complete renovation of the campus's electrical system in 2013 including the power supply system. Regular maintenance is planned on a pluri-annual schedule even if emerging problems can change the plans. All lectures rooms were recently renovated providing adequate teaching space. The school engaged a high level of renovation to allow easy access for disabled people (support of the government and local authorities).

## 6.3 Suggestions

*« if you are unhappy with any situation, please list any improvements you would make in order of preference »*

Some rooms or facilities must be defined and dealt with promptly:

- change rooms for students (male, female, the disabled, toilets and showers);
- a workroom for interns treating pets;
- better separation of dogs and cats in waiting and pre-consultation areas
- an area for the hospitalisation of NAC\*;
- redevelopment of the clinical teaching areas for imaging, which are currently too cramped, or design and construction of a dedicated area for this activity;
- an area dedicated to physiotherapy;
- Integration of the CERREC\* within CHEV\*,near the preventive medicine activities, thereby strengthening the area dedicated to healthy animals with the future addition of a consultation room for genetic screening (molecular biology analyses) and hip dysplasia ;
- it is now necessary to continue with maintenance of the façades and replacement of the window frames, and to use the results of the energy efficiency audit under way (launched in June 2015, conclusions in Sept2015) and insulation work, with co-funding by the state and the local government (Contrat Plan État-Région 2016-2020). However, new premises must now be designed to upgrade state-of-the-art equipment and activities (referred cases, training of residents and interns, etc.):
- Improved structuring of the imaging rooms and reflection on the design of an interventional imaging unit,
- Development of a room for wildlife species in the necropsy facility,
- Expansion of the ICI-B\* to meet growing need.

There must be a programmed investment plan for the phased replacement of the basic equipment used for student training and acquisition of up-to-date materials (microscopes, magnifiers, computers, analysers, etc.). The lack of proper change rooms intended specifically for students must be remedied promptly.

# Animals & Teaching Material of Animal Origin



Animals &  
Teaching Material  
of Animal Origin

## 7. ANIMALS AND TEACHING MATERIAL OF ANIMAL ORIGIN

### 7.1. Factual information

#### 7.1.1. Anatomy

« Indicate the materials that are used in practical anatomical training and how these are obtained and stored »

Several sources are used for teaching anatomy:

- animal cadavers: - study of the trunk wall (S5): 2 goats and two dogs; training for ¼ of the year (2 hours of TD\* per student); - study of the digestive system ("intestines" module S6): 75 rats; training for ¼ of the year (2 students per animal 2h of TP\* 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 TP\* 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 TP\* per student);

Rabbits and rats come from laboratories that supply laboratory animals and perform euthanasia. The animals are used immediately or frozen and kept in cold storage according to the schedule of sessions.

The dogs are animals provided by a local shelter SPA\* after it had to euthanize them; a specific contract specifies the sanitary conditions. After they are catheterised and their vascular system is flushed, the animals are frozen.

The goats that are sold to the school are culls; they are quarantined in the isolation facility for large suspicious or contagious animals and tested to screen for tuberculosis, brucellosis and Q fever. The use and preparation methods (including euthanasia) of these animals for TP\* is subject to the approval by the ethics committee.

- fresh anatomical parts: - study 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 TP\*); - study of pelvic limbs ("study of limbs" module S8): 32 dog limbs, 40 goat limbs, 8 horse limbs; - study "horse forequarters" S8: 2 thoracic limbs prepared by the teacher; ¼ of the year's training , 2h TD\* 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.

- dried anatomical specimens: 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);

- TD\* and TP\* on live animals: palpatory anatomy of the limbs and of the trunk with the teaching herd (dogs and horses); these manipulations and the maintenance of teaching herds are subject to the approval of the ethics committee.

Most of the slideshows used and explanatory documents prepared by faculty members are available on the Vetotice website with links to other websites ("Online Veterinary Anatomy Museum," "Virtual canine anatomy" of the University of Colorado; "Anatomy of the dog and cat" through the University of Washington).

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.

**Table 7.1. Material used in practical anatomical training**

	dog		ruminant		equine		other	
	2013 -2014	2012-2013	2013 -2014	2012-2013	2013 -2014	2012-2013	2013 -2014	2012-2013
live animals	10	4			4-5			
cadavers	18	16	20 goats	22 goats	0	0	75 rats 80 rabbits	75 rats 80 rabbits
specimen	32 thoracic limbs 32 pelvic limbs	32 thoracic limbs 32 pelvic limbs	Goat : 40 thoracic limbs 40 pelvic limbs	Goat : 40 thoracic limbs 40 pelvic limbs	10 thoracic limbs 10 pelvic limbs	10 thoracic limbs 10 pelvic limbs		
other								
eg ultrasound								
computer assisted teaching	Used as a support from university teaching sites offering a virtual approach (see section below)							



### 7.1.2. Pathology

*« Indicate the nature and extent of any additional sources of material for the teaching of necropsies and pathological anatomy, including slaughterhouse material »*

**Table 7.2. Number of necropsies over the past 3 years**

Species		Number of necropsies			Average
		2014	2013	2012	
Food-producing animals	cattle	83	82	111	92
	small ruminants	48	29	61	46
	pigs		2	8	-
	other farm animals	see others*			-
Equine		72	56	65	64
Poultry		47	16	25	
Rabbits (+ hare)		8 (+13)	11 (+20)	9 (+20)	
Companion animals / exotic	dogs	147	153	151	117
	cats	115	98	106	106
Others*		57	61	55	57

Any animal that dies on campus, regardless of the species, is autopsied in the necropsy room. The line "others"\* represents the majority of farm animals (chickens, ducks, rabbits and pigs) brought to campus from farm visits via the UCRA\*, the rest being represented by some wild animals (wild rabbits). The figures for cattle have decreased since 2012 due to the lack of internal assistance for transporting corpses from the farm to the campus. A new position has been assigned to carry out this task with a vehicle reserved for this purpose in 2015, which will increase this number again. No anatomical parts are brought from slaughterhouses to campus. However, the examination of live animals, carcasses and offal is discussed in 7.1.4.

### 7.1.3. Animal production

*« Indicate the availability of food-producing animals for the practical teaching of students : on the site of the institution, on other sites to which the institution has access »*

On the veterinary Campus, the faculty has a teaching herd of 17 cattle, 14 of which are leased to 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. They are used by student groups Y2, Y3 and Y4. The teaching exercises that are performed are submitted to the ethics committee before being carried out.

Ruminants from outside farms mainly under the UCRA practice (large and small) are also admitted to the hospitals with visits and supervised rounds. The care, further examinations and the possible autopsies are done by the students under control of the responsible staff members.

Off campus, students from Y4 and Y5 have access to rural customers within the UCRA\*, school owned practice at the 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, surgery, 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, and, occasionally pigs.

All farms are subject to a global livestock health inspection every year from the Y4 students (about 180 farms per year), with the exception of when there was special instruction by the local sanitary agency (DDPP\*) in 2014, which limited visits to farms with more than 5 animals (147 cattle farms). 16 farms had a monthly in depth follow-up visit (Y4 and Y5) subject to an agreement with the school.

### 7.1.4. Food hygiene / public health

*« Indicate the availability of farm animals and products of animal origin for the practical teaching of students in veterinary public health, food hygiene, inspection and technology »*

The school have a contract with a commercial slaughterhouse (CIBEVIAL, Corbas) which provide access to bovine, sheep and swine carcasses for veterinary public health, food hygiene inspection: about 10-15 carcasses totally condemned per TP (pleurisy, foreign body, cachexia, peritonitis,...).

The school has a collaboration agreement with the INFOMA\* (National Institute training of staff of the technicians work in slaughterhouses) for providing a half day per week in a TP room enabling our students to

view lesions on samples collected in slaughterhouses in the region: 25-30 viscera condemned per TP (abscess, hepatitis, parasites,...).

### 7.1.5. Consultations and patient flow services

#### 7.1.5.1. Consultation

*« State the number of weeks, in the course of year, during which the clinics are open; state the number of consultation days each week; state the consultation hours.*

*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 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 for 40 weeks, 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 because they have no economic value but are of educational interest. At the UCRA (Arbresle) for 52 weeks, 7 days a week, throughout the year to meet the training needs of students in their rural or mixed year; this consists of farm visits for first opinions and emergencies, with the students being supervised by the EC\*, PH\*.

#### 7.1.5.2. Patient flow

*« The number of animals to be stated are for all disciplines combined (medicine, surgery, reproduction, etc). In table 7.3 only animals coming into the Faculty should be included. Animals studied in practical teaching outside the Faculty should be entered in the section entitled « ambulatory clinic » (table 7.4). The term « consultation » refers to those patients which come in and go out during daily consultation hours. « Hospitalization » refers to those patients which are retained in the clinic as « in patients » following presentation ».*

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

Species		Number of cases						Average
		2014		2013		2012		
		a	b	a	b	a	b	
Food producing	Bovine	85	85	79	79	95	95	86
	Ovine, caprine	22	22	14	14	20	20	18
	Porcine							
	Other farm animals							
Poultry		6		14		2		7
Rabbits		-		1		1		0,6
Equine		1345	1236	1262	1070	1195	1073	1267
Companion animals /exotics	Canine	9047	1786	9157	1812	9532	2072	9245
	Feline	4217	713	4464	820	4832	1059	4504
	Others	154	12	222	24	213	29	196

The figures for records listed on Clovis (electronic clinical registration and follow-up system) are for the animal, the number of consultations and visits carried out. There were over 19 000 records of all kinds of animals listed on Clovis in 2014. The figures are for the animals examined on campus: production animals are all hospitalised, as well as a high proportion of horses. Averages are calculated by animal species and from the numbers of animals examined. The line "others" refers to the NACs and some wild animals (e.g. rabbits).

#### 7.1.6. Vehicles for animal transport

*State the number and nature of the Faculty vehicles that can be used to bring sick animals to the clinics.*

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. These livestock trucks can transport two animals at a time and do not require special permits (B permit is sufficient).

### **7.1.7. on-call emergency service**

*« Outline what emergency service is available (full time, 24h service, ON-CALL or 8-22h duty) and discriminate for species »*

For domestic carnivores and the NACs, 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. The SIAMU is equipped to deal with all emergencies and may solicit clinicians on call from other services, including imaging and surgery.

For horses, the establishment operates 7 days a week, 24 hours a day, throughout the year. All the skills can be mobilised: medicine, anesthesiology, 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.

For the 3 tracks, students (including the interns) and the residents involved work in the reception and management of cases with the help of faculty members and hospital practitioners standing by and ready to intervene.

### **7.1.8. On farm teaching and outside patient care**

#### **7.1.8.1. Ambulatory (mobile) clinic**

*« The ambulatory (mobile) clinic is defined as a unit which provides on-call outside services to farms and other institutions and is generally operated on a commercial basis. State the number of hours of operation per week. Is emergency service provided 24h/day, 365 days per year? What is the degree of student participation (include duties)? »*

With regard to horses, the establishment has developed an outpatient service allowing us to take 4 Y5 students (and residents) on each trip to farms, equestrian centers or private homes, one half day per week. This allows us, in particular, to give the students the opportunity to deal with first opinion cases. This is also the case with the equestrian center located on campus. Race meetings and competitions or contests can mobilise a group of students for a whole week; in the absence of these events, the trips are rarer.

The establishment is also involved in several equestrian events, such as horse shows in the Rhone-Alpes and Auvergne region and the French championships in July. Finally, an agreement with the horse racing society in Lyon (over 60 events per year) allows our students to become familiar with the routine veterinarian procedures of horse identification, immunisation checkups, minor medical care (wounds, traumas ...), always under the supervision of a faculty member or hospital practitioner (see chap5. §5.1.1).

For production animals, as part of their clinical rotation and population medicine, students have access to a classic mix practice at the Arbresle site (located 10 km from the school), 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: - students in Y4 (group of 3 or 4 students) have one mandatory week a year ; Y5 students enrolled in the pure rural track have 4 weeks in UCRA, where they participate in population medicine. The same applies for students in mixed tracks for a semester.

*State the number, the type and the seating capacity of the vehicles used to transport students working in the ambulatory (mobile) clinic.*

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.

*State the approximative number of sick animals (specify cattle, swine, equine, poultry or small ruminants, others) seen by the ambulatory clinic per year during the past three years*

There are no factory farms or production units for poultry or rabbits; however, the figures presented are by default because sales of drugs to farmers whose farms are known and visited are not recorded. The amount of sales that were done as part of a teaching demonstration to students were: in 2012: 594; 2013: 272; 2014: 228.

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

species		Number of patients			Average
		2014	2013	2012	
Food-producing animals	cattle	1571	1818	1614	1667
	small ruminants	49	74	105	76
	pigs				
	other farm animals				
Poultry (no of flocks)		29	17	10	18
Rabbits (no productions units)					
Equine		239	294	294	275
others					

*State the average number of visits in a year made by the ambulatory clinic to farms and other institutions.*

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 take up a lot of time depending on the time of year.

#### **7.1.8.2. Other on farm services and outside teaching**

*« If there is no on duty ambulatory (mobile) clinic, a Faculty may have defined contracts with farms or other institutions to allow for outside teaching and patient care. Similarly, a faculty provides herd-health services. Please indicate if and to what extent this applies to your Faculty. If applicable, please provide no. of patients seen on outside teaching.*

Not applicable because it is a mobile clinic. The school is providing herd-health service to its client; some of them are under a contract for regular visits (see above).

#### **7.1.9. Other information**

*« indicate any notable additional outside sources of material for clinical training purposes, such as animal charities, animals awaiting slaughter,... indicate how the level of clinical service that is offered by the Faculty (in small animals, equines and production animals) compares with outside practices in term of facilities, hours of service, equipment, expertise, responsiveness,... »*

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 provides this free service.

During visits to the slaughterhouse, students receive training on *ante-mortem* inspection of animals for slaughter (see § 7.1.4.).

Clinical training received by students for all animal species is based on extended capacity compared to outside practice and fulfils several criteria:

- The capacity of the campus to receive, examine, vaccinate (and furthermore offer all preventive measures), hospitalise, operate and perform additional tests required for every animal spontaneously presented by the owner or at the request of a referring colleague. This presupposes, besides personal and premises, equipment and laboratories as close as possible that provide up-to-date science and a maximum of techniques.
- this training on campus is carried out on the "training ground", particularly for production animals, giving the students the opportunity to learn the what they need to know as future practitioners during visits to operations, livestock, equestrian centres and while conducting health visits and working in population medicine. The two situations are not in a hierarchy, but are complementary to each other.

*« Provide an indication in percentage terms of the proportion of cases that are primary (i.e. first opinion) and referrals (provide a breakdown by species, if helpful). If the Faculty has a particular aim or policy as regards this mix, describe it ».*

**Table 7-5. % of referrals per year and per species**

	2012			2013			2014		
	total	referred	% Referred	Total	Referred	% Referred	total	referred	% Referred
Equids	1489	712	52	1556	708	45.5	1584	861	54.3
Dog	9739	1817	19	9157	1939	21	9047	2057	22.7
Cat	4837	604	13	4464	583	13	4217	607	14

The percentages referred cases are either stable or increasing slightly; 45% of horses and 80% of carnivores, on average, are very useful for training the students in giving a first opinion. The only cases referred among the production animals are animals with non-economic value" transferred free of charge and hospitalised in the school for educational purposes.

*« indicate what areas of clinical specialization are covered and the extent of coverage (for example, a veterinarian with a particular specialization may see patients in the clinic for one day a week, 3 afternoons, etc.) ».*

Annex 10-1 lists the number of specialist supervisors by department and college with a total of 36, which permits us to enrol 17 residents within 10 open residences (Annex 10-2).

This structure is supplemented with the addition of some contracting personnel: a dentistry specialist (one morning a week), another specialist to ensure the provision of ophthalmic consultation and treatments (with a DESV in Ophthalmology, once a week) and a specialist to perform endoscopy (a half day per week).

For example, in the medical pathology rotations for pets, specific tasks (such as hospital missions) are defined and a (half) day is devoted to a medical specialty (oncology, dermatology, neurology, etc. (Annex 7-1).

*« indicate the relationship the Faculty has with outside practitioners (in small companion animals, equines and production animals) in terms of matters such as referral work, providing diagnostic or advisory services for private practitioners participating in teaching, holiday or 'seeing practice' work for students, feedback on the level of clinical training. Describe (if applicable) any other relationships with outside organisations that are routinely used to provide students with training (in particular practical training) in other clinical subjects (e.g. pathology work, interaction with state veterinary work) ».*

Practitioners from all sectors participate in the training of students:

- by supporting them during externships;
- by participating in Y5 tutored externships;
- by referring complicated clinical cases or ones which sometimes require sophisticated complementary tests (imaging ...) or major surgery (neurosurgery, ...) (see Table 7-5) to the campus; it may be sometimes colleagues working at a distance from the school (more distant regions or foreign countries, for example Switzerland, for equines); these referrals are almost exclusively for carnivorous animals and equines;
- By sending samples for purposes of analysis: bacteriology, parasitology, molecular biology, serology, hematology - cytology and autopsies.

*« Provide an outline of the administrative system(s) used for patients, e.g. in terms of how case records are kept, how data are retrieved, whether systems are centralized, etc... »*

The clinical cases are recorded on the CLOVIS common computer system at 4 ENV and at clinical sectors.

The Clovis computerized record management tool is used systematically by all clinicians and students for consultations. Once the client makes contact with the institution, the appointment and reasons for consultation are entered by the secretariat. A unique number is assigned to the patient. The record is filled out throughout the consultation or hospitalization with diagnostic hypotheses, results and interpretations of various complementary tests (hematological and biochemical analysis, parasitic analysis, imaging, including digital imaging, etc.), the final diagnosis and therapy, as well billing. Preliminary versions during consultation are recorded on paper and then transcribed into the computer system by the student.

A real computerized file is thus created around the patient, which can be reused in other consultations, such as follow-up consultations. A paper backup is systematically archived for security. This computer tool was developed specifically for our veterinary school, and it is shared by the four French schools. For example, it includes a step for the medical report to be validated by the faculty member, without which the report cannot be printed and given to the client. Similarly, cost elements, either in terms of estimate costs or final billing, are overseen by senior or administrative staff. At all stages the student is aware of the costs of the care process. Taken together, all the clinical records form a database to which students and clinicians have access at any time. For students and clinicians it is a regularly used source of information for veterinary doctoral theses or publications, respectively.

If needed, due to the pooling done by the software, ECs, PHs, interns and residents are able to accumulate confirmed clinical cases around a common theme (largest cohort, rare diseases, atypical forms, etc.) for clinical analysis and publications. Students can view these files when they present cases to their peers under the supervision of an EC; and may also list clinical cases they have managed, since their names are associated with animals' records.



### 7.1.10. Ratios

#### Animals available for clinical education

**R11** = no food-producing animals seen at faculty / no students graduating annually (1)  
=  $104 / 109 = 0,95$

**R12** = no individual food-animal consultations outside the faculty (2) / no students graduating annually  
=  $1743 / 109 = 16$

**R13** = number of herd health visits (3) / no students graduating annually  
=  $180 / 109 = 1,65$

**R14** = no of equine cases (4) / no students graduating annually  
=  $1267 / 109 = 11,6$

**R15** = no of poultry / rabbit cases (5) / no students graduating annually  
=  $26 / 109 = 0,24$

**R16** = no of companion animals seen at faculty (6) / no students graduating annually  
=  $13945 / 109 = 127$

**R17** = no poultry (flocks) / rabbits (production units) seen (7)/ no students graduating annually  
=  $3 / 109 = 0,027$

#### Necropsies available for clinical education

**R18** = no necropsies food producing animals + equine (8) / no students graduating annually  
=  $202 / 109 = 1,85$

**R19** = no of necropsies poultry / rabbits (9)/ no students graduating annually  
=  $20 / 109 = 0,18$

**R20** = no of necropsies companion animals (10)/ no students graduating annually  
=  $223 / 109 = 2$

(1) this number includes students who received their diploma at the end of undergraduate veterinary training :  $(120 + 113 + 95) / 3 = 109$  (cf. table 9.4 ); n° food-producing animals seen at faculty :  $86+18 = 104$  ( see table 7.3)

(2)  $1743 = 1667 + 76$  (table 7.4)

(3) 180 visits limited by national regulations in 2014, (cf 7.1.3)

(4) 1267 (table 7.3)

(5)  $26 = 18$  on farm visits (cf table 7.4a) + 8 on campus visits(table 7.3)

(6)  $9245 + 4504 + 196 = 13945$  (table 7.3)

(7) Poultry flocks visited in Y1 and Y4 + some flocks seen in UCRA

### 7.1.11. Other species

*« Indicate how the faculty deals with fish and other food producing species »*

Apart from theoretical concepts concerning species that are taught through the CM and TD, there is no structured teaching devoted to aquaculture or fish farming because these productions and activities are not predominant in the Rhône-Alpes region.

However, interested students can do their Y5 in another French or foreign school geographically better placed to provide such education.

### 7.2. Comments

*« Feel free to comment on all data provided in this Chapter. Comment on major developments in the clinical services, now and in the near future. Comment on local conditions or circumstances that might influence the ratios in tables 7.5 and 7.6 »*

The institution has initiated a policy of continuous development of clinical activities to benefit the education of students; several projects which allow us to ensure new activities, to offer new services or improve the overall operation are retained in the investment section of the budget: see chap 6 § 6.1.9.

The UCRA\* practice is a very efficient tool to develop teaching on farm animals. The progress on herd health management teaching has a big impact in the field of production animals.

The development of virtual teaching for anatomy allows for less use of animals (living or dead) and it can be used by distance learning students and permanently to support other teaching methods (in pathology surgery, imaging and ultrasound, etc.).

While some food producing animals (such as fish and pigs) do not exist in the region because of the geography and the regional economy, others do exist but are inaccessible to large numbers of students (for instance poultry, pig factory farms, etc.) due to sanitation and hygiene regulations as is also the case with slaughterhouses. Despite increasing collaboration with some agricultural colleges that have these types of farms and clients, it is

difficult to access support for the teaching of animal science and medical pathology of such sectors and it is insufficient as demonstrated by the ratios involving farmyard animals and corresponding production units (R15, R17 and R19).

### **7.3. Suggestions**

*« If the denominators in tables 7.5 and 7.6 for your faculty are not meeting the range as indicated in Annex I, Supplement A, what can be done to improve these ratios? »*

The ratios R15, 17 and 19 demonstrate the insufficient presence of certain food production animals, both in the field of medical pathology of high productivity farms. Some directions have to be worked on and improved:

- closer cooperation with regional agricultural colleges that allow our students access to more farms and therefore a better understanding of zootechnical, economic, health and pathological aspects: hygiene, preventive medicine and group practice, autopsies poultry, etc. (contract with the school in Bourg with effect from September 2015);

- In so far as these productions become increasingly associated with specialised skills (or specialists), this in-depth teaching could be used for some volunteers and interested students who, as part of their Y5, could benefit more from the practical teaching in Nantes.

Regardless of cost, some activities are not sufficiently structured today and /or does not provide the necessary equipment:

- "new pets" are now selected for a consultation led by several teachers including one specifically recruited for this purpose. However, hospitalisation of very diverse species (mammals, birds, reptiles, etc.) should be ensured through appropriate and specific premises;

- Wildlife necropsy requires a designated zone inside the venue due to the presumed or confirmed presence of zoonotic pathogens (this project is being considered).



# Library & Learning Resources



Library &  
Learning  
Resources



## 8. LIBRARY AND LEARNING RESOURCES

### 8.1. Factual information

#### 8.1.1. Library and other information technology services

*“Give a general description of the library / libraries of the Faculty / university that are available to students. Indicate how the library / libraries are managed (e.g. library committee).”*

The Library is housed in a 700-square-metre facility that includes a 90-seat study hall and access to 10 computer stations in a Wi-Fi environment. Users also have access to a photocopier/printer/scanner.

Outside the Library, students can also use a 15-seat computer room equipped with 15 computers with open access. A classroom, accessible with a teacher, has an additional 18 workstations. All of the classrooms are equipped with, at minimum, an RJ45 plug for Internet access via the wired network. The student residences also have Internet access. There is Wi-Fi access in strategic locations on campus (honor lecture hall and other lecture halls, ENSV.)

The students come to the Library to use the resources, receive training in researching scientific and technical information, and to work alone or in groups. They also have access to an interlibrary loan service. The Library is open from 8:30 a.m. to 7 p.m., for more than 50 hours per week during semester. It is closed for one week at Christmas and three weeks in August. The Library is situated near the School’s administrative building and can be reached directly from these buildings, although there is also an entrance from the outside on the ground floor. This location facilitates access for those with reduced mobility.

The budget for acquisition of library resources has remained stable over the years despite a difficult economic environment. Some €10,000 (2013 budget) are spent annually on the purchase of books and subscriptions to journals and databases. This represents an average investment of €62 per user (students and teachers).

Through its participation in the Couperin purchasing group (University Consortium for access to digital documents), the library limits its spending on acquisitions and has access to digital products negotiated at the national level without additional cost. The multidisciplinary database Springerlinks is an excellent example. It provides access to the archives of 1000 pre-1996 electronic journals and more than 8,500 pre-2004 e-books

There is no “library committee” but the selection of periodicals and the purchase of e-books is based on direct consultations with the coordinators of the teaching units and faculty members as well as in meetings focusing on specific issues. Works are also selected on the basis of reviews in specialized journals, the recommended reading lists of the American Veterinary Medical Association (AVMA) and suggestions from faculty and students.

*“For each major library of the Faculty, please provide the following information, either in narrative or tabular form.” **Main library:** “Is this specific to the veterinary training establishment? Is this common to two or more establishments?”*

The library is specific to the vet school. The primary mission of Vet Agro Sup Lyon’s Veterinary Library is to provide the Establishment’s university community with the resources and services needed for initial and continuing education and research. The Library serves more than 600 students, more than 80 faculty members and the entire staff, in addition to external users (practicing veterinarians, consultants, companies). The Library provides documentation for students’ basic training but also for teachers and residents, according to their disciplines, research topics and specialties.

There is effective cooperation with the library at the agronomic campus, in particular for managing shared subscriptions, specifications for tendering subscriptions, and pooling of resources (including veterinary theses) among the four French veterinary schools. An exchange service between their libraries has made it possible to enrich the thesis collection and meet strong demand from students. Users (personnel and students) have access to the libraries on at the Université de Lyon and those of the three other ENVs\*.

In addition, the Library provides students with training in bibliographic research and document management: four sessions to introduce them to these resources and four training sessions on bibliographic reference management software (Zotero) are given to first-year students in the lecture hall.

A 2014 study to determine the students’ scientific and technical information needs led to the creation of the “Ateliers du jeudi.” In these workshops, which last between 60 and 90 minutes, students delve deeper into a topic in small groups and receive personalized training. Fourteen workshops have trained 38 people in PubMed, Zotero and the Library’s resources. In addition, to meet demand, 56 individual training sessions were given during the year to students and ECs.

- *“Full time equivalents of part time employees? Number of full-time employees?”*

The head librarian holds a master’s degree in library and information studies from McGill University (Montreal). She works with two people qualified in documentation. Two student assistants are hired when school is in

session to keep Library open in the evening and ensure the continuity of the reference and circulation services (3 FTE).

The head of the Documentation Centre of the National Centre for Veterinary Toxicological Information and the Veterinary Pharmacovigilance Centre of Lyon holds a master's degree in information science from the National School of Information Science and Libraries (ENSSIB)

The library staff keeps its knowledge up to date through regular training with the URFIST, the Regional Scientific and Technical Information Training Unit in Lyon. This is an inter-university service for staff in institutions of higher education. It offers training on the new uses of information as well as digital tools and resources.

- *"Number of journals received each year as hard copies. Numbers of full access electronic journals"*

The Veterinary Library's collections cover the fields of veterinary science, animal science and life sciences. The Library subscribes to more than 90 electronic periodicals, including some of the leading specialized veterinary science journals, among them the four titles of the Veterinary Clinics of North America.

The contemporary holdings consist of more than 7,000 works (specialized monographs, guides, manuals, reference works), conference proceedings and more than 21,000 theses from French and foreign veterinary schools, more than 1,440 theses by VetAgro Sup students available online and nearly 500 multimedia documents (videos, CDs, DVDs). This digital collection grows by more than 100 theses every year.

Ninety per cent of the veterinary science periodicals are indexed in the Web Of Science. Most of the titles are included in the third edition of the *Basic List of Veterinary Medical Serials (1)*. Elsevier's Freedom subscription collection and the Wiley STM collection provide access to the full text of more than 3,000 online scientific journals. The Library also receives the print versions of 31 titles. A collection of about 200 non-current titles is always available for consultation.

(1) Basic list of veterinary medical serials, third edition: using a decision matrix to update the core list of veterinary journal. Ugaz; Ana G. et al. *J Med Libr Assoc.* Oct 2010; 98(4): 282–292.  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2947140/>

- *"Availabilities for online literature search"*

A new expanded document portal (<http://portaildoc-veto.vetagro-sup.fr/>) went online in November 2012. Designed as a teaching tool, the portal is intended to provide concrete support for users doing documentary research. The objectives were to centralize access to documentary resources, make visible the whole resources available on campus, support users in their literature search in catalogues and databases, and provide a simple and user-friendly interface.

The portal provides access to many scientific databases: PubMed, Web of Science, Science direct, Wiley Online Library and Sagaweb. Using these databases, users can access the full text of numerous articles to which VetAgro Sup subscribes. With the implementation of Shibboleth (a consortium of identity providers that recognizes users from higher-education and research establishments to provide access to a remote resource), VAS personnel and students now have roaming access to the electronic resources of the main publishers.

More than 200 electronic books in veterinary science have been available since 2013. With the new, more intuitive query interface for the [Library's catalogues](#) introduced in 2014, more functionalities can now be offered. A [user guide](#) was produced and made available, as well as thematic guides for novice users: "subject plus." A new tool, "AtoZ," provides an online database for all journals and e-books on a given topic, available in the Library or via open access.

### **Subsidiary libraries of the Faculty**

*"Please describe the subsidiary (e.g. departmental) libraries of the Faculty and arrangements for student access"*

Users also have access to the specialized veterinary toxicology and pharmacology collection of the Centre National d'Informations Toxicologiques Vétérinaires (CNITV) and the Centre de Pharmacovigilance Vétérinaire de Lyon (CPVL), located on the veterinary campus of VetAgro Sup. This extensive collection of some 30,000 articles as well as conference proceedings, theses and works on veterinary pharmacology, toxicology and medications is referenced in the Veterinary Library's catalogue. A full-time staff-member with a master's in information science is responsible for managing the centre.

The laboratories and departments have often put together collections of complementary works or manuals or specific to a given discipline, which are frequently used by the department staff as a source of useful data and information for their daily tasks. These subsidiary libraries are accessible to staff and students, under the responsibility of the teachers in the department concerned.



*“Indicate whether the main library holds a list of individual books of the subsidiary libraries”*

The Library still has no updated, exhaustive listing of the works in question, most of which are also available at the central Library; they are standard reference works that provide information and data very frequently used by the personnel of the departments concerned.

*“Describe any other information services and how they are supported and how student access is regulated”*

Documents at the subsidiary libraries are available to all staff and students, under the control of the personnel of the department concerned.

## 8.2 Comments

*“Please comment the adequacy of the books and accessible journals, of the opening hours and of the provision of reading places and support personnel”*

The VetAgro Sup Library’s print and electronic documentary resources meet users’ needs, as demonstrated by the following significant figures from 2014: - 28,412 articles (PDFs) downloaded from the Elsevier platform ; - 2,066 works and theses loaned ; - 367,632 downloads of online theses ; - 3,299 documents (works, theses, periodicals) for onsite use ; - 500 downloads and/or online reading of e-books, from the Dawson era platform; - 3,000 queries on WOS ; - 3,749 unique visitors queried the Library’s online catalogue and conducted 32,052 searches ; - 59,254 people visited the Library to use the resources and to work on site ; - 600 orientation and reference questions to the librarians; - 200 e-books.

To complement the Library staff’s work schedules, students are hired to work temporarily to keep the service open and check out documents; in addition, remote electronic access to the collection (via Shibboleth) and e-books greatly expands this availability.

*“Please comment on the Faculty’s provision of IT facilities and the approach to self-learning, and on the further developments in this area.”*

Concerning e-learning, convinced of the advantages of ‘blended’ teaching, in 2007 VetAgro Sup acquired an online education platform: <http://vetotice.vetagro-sup.fr/> (see login and password on dedicated AEEEEV platform) based on the moodle system. IT people were also dedicated (1 technician and 1 pedagogic engineer). At its inception, the teaching platform was used by a handful of “pioneer” professors, and today, more than half of the teachers use it: some merely to post a PDF, while others, with the support of the education engineering service, have completely revamped their teaching and provide students a much-appreciated interactive and personalized learning experience.

Our objective is to reach 100% of courses in ‘blended’ format, and we have realized that, beyond the technical aspect which is now under control, the ‘support through changes’ aspect is what will make a difference:

- Support through changes for teachers through simple, practical, concise, hands-on training (in small groups) on site. A modular educational technology program allows teachers to become versed in these new technologies.
- Support through changes for students, who must become involved in their own education. A ‘Learning to Learn’ program is being designed based on the University of Lausanne model. Lastly, the novelty of massive online open courses (MOOCs) is a challenge to our instructors, and at the last educational seminar, the ‘flipped’ education model was singled out as a way to rejuvenate veterinary education in order to better meet the demands of the 21st century. We are partners in the creation of a MOOC on “decision-making in a complex world” in collaboration with the members of the CHEL[s] and with support from the Université de Lyon.

## 8.3 Suggestions

VetAgro Sup should also take advantage of IDEX (future investment project funded by the Commissariat Général à l’Investissement and the Agence Nationale de la Recherche) aimed at the massive acquisition of electronic documents, including archives of scientific journals, in order to establish a common foundation for all French researchers, professors and students. VetAgro Sup students thus also have access to an archive of journals from Oxford University Press, Nature Publishing Group, Elsevier, Wiley, Sage, etc.

The Library has the following development objectives:

- Offer, develop and share quality documentary resources needed for students and education, enriching the collections (including electronic) and increasing collaboration with the other ENVs
- Improve user training: maintain and adapt training for first year students, develop self-study materials for e-learning;
- Facilitate access to information: enrich the website (add FAQs, discovery tool), facilitate location of open-access electronic documents (for example, teaching resources), improve off-campus access (set up a proxy), develop a disciplinary approach (guides, thematic monitoring).

Regarding e-learning, there is an active development based on the identification of a dedicated person linked with the vice dean for teaching whose responsibility is to work with faculty members to expend the practice and

develop the system. Based on the analysis of a new pedagogical practice committee, the new strategic plan focused on digital education. This is also based on the active development of adequate facilities and equipment allowed by finance and relations with other school of higher education and university of Lyon. This is also allowed by sharing experience on new development like MOOCs, SPOC, serious games with other faculty members of university of Lyon.

- Partner in the VetAgro Sup digital school project: ensure a link with the TICE cell to improve the interface between documentary resources and the learning platform (guides, open-access documents, courses, teaching resources);

- Improve and expand e-learning offering, with more participation by teachers and greater cooperation with other establishments for training and educational innovation.

# Admission & Enrolment



Admission &  
Enrolment

## 9. STUDENT ADMISSION AND ENROLMENT

### 9.1. Undergraduate courses

#### 9.1.1. Undergraduate student numbers

Veterinary students are enrolled for their entire education (MNY: 5 years) following a selection through a common national competitive access examination).

117 students up to the class of 2012 are admitted by the ENV, plus 137 starting in the 2013 class (20 additional students). This increase in the number of students has required the additional facilities and recruitment mentioned in chapters 6.7 and 10.

**Table 9.1: Undergraduate student composition in year prior to visitation 2014-15**

	Total number of undergraduate students	630
	Total number of male students	167
	Total number of female students	463
	Foreign students (for 1or 2 semester(s))	
	- from EU countries	18
	- from non-EU countries	6

The 18 and 6 foreign students enrolled are not included in the number of 630 students because they have just taken a year or a semester in Lyon.

#### 9.1.2. Student admission

*“State the minimum admission requirements. Indicate whether there is a limit to the number of students admitted each year. Describe how the number of government – funded student places is determined. Outline any selection process (or criteria) used in addition to the minimum admission requirements*

*Describe whether students applying for and/or starting veterinary training have an equal or very variable knowledge base in scientific disciplines from their previous studies. Describe any circumstances under which extra students may be admitted to the undergraduate veterinary course. Outline any changes foreseen in the number of students admitted annually. If applicable, describe how the Faculty plans to adjust to these changes”.*

Access to veterinary schools is based on a competitive examination after two years of study after obtaining the Baccalaureate. The vast majority of students graduate from a Bac in sciences: mathematics, biology, physics and chemistry, French and a foreign language. The law requires that competitions be national and these generally recruit approximately 550 students for the four veterinary schools each year: Alfort, Lyon, Nantes and Toulouse. Assignment to a school depends on rank in the competition and choices made by the candidates.

The DEVE\* office manages need-based scholarships (each year, more than 35% of students) and mobility scholarships for study abroad. Granting of need-based scholarships is based on criteria that are not specific to the School but determined at the national level for higher education. Students receive information by mail and can consult the web portal.

The number of students admitted by competitive examination is set annually by the Ministry of Agriculture (117 students admitted per year per ENV, 137 from 2013). An applicant cannot submit more than 2 times, all competitions combined.

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

**Competition A** ([www.concours-agro-veto.net](http://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, see the BCPST program in [annex 9.1](#)). Students who pass this competitive examination represent 80% of those admitted to the ENV.

**Competition A TB** ([www.concours-agro-veto.net](http://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 program is the same as competition A adding 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](http://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 program 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](http://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](http://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.

**Table 9.2: Intake of veterinary students in the past five years**

Year	number applying for admission	number admitted	
		standard intake	other entry mode
N* Sept 2014	137	137	0
N – 1 Sept 2013	137	137	0
N – 2 Sept 2012	117	117	0
N – 3 Sept 2011	117	117	0
N – 4 Sept 2010	117	117	0
Average	125	125	0

\*year prior to evaluation

### 9.1.3. Student flow

**Table 9.3. Student flow and total number of undergraduate veterinary students (see explanations below)**

Number of students present after admitted year 1 (2014-2015)			Initial enrolment	Number of additionally admitted students (repeated Students)
	Y1 <sup>1)</sup>	158	137	+21
	Y2	130	137	- 21 + 14
	Y3	112	117	-14 + 9
	Y4	118	117	- 9 + 10
	Y5	112	117	- 10 et +4 +1 = 112
	number undergraduate	630	625	

<sup>1)</sup> mark year matching MNY

The theoretical enrolment without additional admissions is 625 (2 graduating classes at 137 and 3 graduating classes at 117); the actual number is 630, and the difference of 5 is due to 4 students from another ENV and one repeating Y5 who should not have appeared in the contingent if he had graduated.

These 630 students are distributed across the five years heterogeneously because some are repeating:

- Y1 total 137 + 21 repeaters, or 158;
- Y2 "lost" 21 students who repeat Y1 and "gained" 14 repeaters for a total of 130;
- Y3 "lost" 14 students who repeat Y2 and "gained" 9 repeaters for a total of 112;
- Y4 "lost" 9 students who repeat Y3 and "gained" 10 repeaters for a total of 118;
- Y5 "lost" 10 students who registered in another ENV, and "gained" 4 students from another ENV and 1 repeater, for a total of 112.

**Table 9.4: Number of students graduating annually over the past five years:**

Year	Number graduating
N* 2014	120
N – 1 2013	113
N – 2 2012	95
N – 3 2011	112
N – 4 2010	115
average	111

\*year prior to visitation

The figure of 95 is explained by the fact that two students did not pass their theses, 11 enrolled in another ENV, 2 have come to Lyon. Figures for the last 3 years (2012-2014 inclusive) yield an average of 109, the number used in calculating ratios: number of graduating students annually.



**Table 9.5: Average duration of studies (distribution of students in years)\***

Duration of attendance 2014-15	number
Years 0 <sup>1)</sup>	557
Years 1	71
Years 2	2
Years 3	0
Years 4	0
Years 5	0
Years > 5	0

1) Year matching MNY allotted to the veterinary curriculum

\*year prior to visitation

Table 9.5 means that 2 students have repeated 2 times and 71 once compared to an enrolment of 557 students who have never repeated. The proportion is low: 0.3% and 11% respectively for a total enrolment of 630.

*Describe the requirements (in terms of completing subjects and examinations) for progression to a subsequent year of the course*

*Describe the academic circumstances under which the Faculty would oblige students to leave the course.*

The transition of a student to the next year and the right to defend his practical thesis are authorized by the Plenary Board of instructors after validation of all the semester exams (mid-January, in the second half June (Art. 11: Annex 4-5). The student is authorized to attend the remedial session (art.21: Annex 4-5) for the examinations he did not pass in January and/or June (see§ 5.1.3. in chap5).

In the event at least 2 TUs (teaching unit) are not passed in the remedial session, the student is allowed to repeat his year; a year can be repeated only once, no second chance is allowed (except for special conditions, e.g., health exemption, approved by the CE\*); cf. art. 21 and 22 (Annex 4-5).

If a single TU is not validated in a remedial session, the student can have it included in a "bridge year," i.e., a higher year but with the obligation to retake the exam for the EU concerned (see Art 21 Annex 4-5; chap5.§ 5.1.3.). These rules for the organization of teaching and training courses as well as the tests of learning are spelled out in the academic regulations (see Annex 4-5 Sections 3, 4, 5 and 6).

By law a student is not allowed to repeat twice the same year. Except for medical problem, this will lead to automatic leave of course.

## 9.2. Comments

*« Comment on standard of the students starting the course*

*Comment on the ability of the Faculty to satisfactorily decide the number of students it can accept*

*Comment on the factors that determine the number of students admitted*

*Comment on the adequacy of the facilities and teaching programme to train the existing number of students*

*Comment on the progress made by students in their studies and the Faculty's ability to ensure that satisfactory progress is maintained*

*Comment on the percentage of students that will eventually graduate”*

The level of students admitted to the school is generally good in terms of the scientific and biological knowledge essential to follow the veterinary curriculum. The Y1 students must take the TOEIC during semester S6 (see Art. 7a Annex 4-5).

The number of students admitted to each ENV is set, after consultation of the ENV deans, by the Minister responsible for Agriculture (137 per ENV since September 2013). The last increase leads to a maximum intake considering the capacity of the school for hosting those students. The school was slightly supported by the government with a faculty position but no more financial support was implemented. Diversity of the way of entrance is also set by the government.

Each school assigns human and financial resources to its teaching and research missions according to finances allocated and staff positions assigned by the State, as well as recruitment done by the institution on its own budget.

The advancement of each student to the next higher year is validated by the CE\* based on the results of tests of learning. The instruction given (theoretical, practical and clinical) is subject to regular, systematic evaluation, the results of which are discussed in the CSP\*, which can introduce improvements and changes in the organization and provision of instruction which are then validated by the CE\* (see chap5).

100% of students admitted to the first year of school are graduated.

### 9.3. Suggestions

*« If you are not satisfied with the situation, please state in order of importance any suggestions that you may have concerning this chapter if you feel unhappy about:*

- *the number of students admitted*

The current number of students admitted is the maximum possible for our institution in terms of its human, infrastructure, financial and technical capacities. As state funding just expend through a new faculty member position, the institution should have the right to recruit more contract staff from its own funds (technicians, engineers, etc.) in order to improve student resources and reinforce support functions.

This would also entail expanded clinical capacity (number of cases of all species) so that per student ratios are respected and quality training can be provided. A financial report will be compiled once the 137 2013-14 Y1 have completed their entire curriculum.

- *The drop-out percentage and reasons if known,*
- *The average duration of studies,*
- *Other aspects.*

The current term of 5 years at a school plus the 2 years of preparation (BCPST or faculty) puts our students at a disadvantage compared to the average European curriculum, especially as regards pursuing additional training (internship, residency): they arrive on the labour market later and the cost of their education is high.

Other channels of recruitment should be considered, for example, for foreign students with an interim test to assess the student's motivation.



# Academic & Support Staff



Academic &  
Support Staff



## 10. ACADEMIC AND SUPPORT STAFF

### 10.1 Factual information

#### *« Outline how the allocation of staff to the Faculty is determined »*

Official positions are allocated to the establishment ("budgeted posts") and defined each year by the Ministry responsible for agriculture, whether for faculty members or administrative and technical staff. This number may eventually be increased: the higher number of students joining an ENV\* has been accompanied by an additional faculty position. Every year the school is discussing with the Ministry to replace retired people. Up to know the Ministry is strictly replacing each position upon the request of the school. The school is then responsible for the allocation of the positions.

Contractual positions ("non-budgeted posts") budgeted directly by the institution are subject to authorization by the Ministry of Finance, which sets a maximum authorized number the school chooses the assignment of those positions. This category covers fixed-term contract staff ("CDD"), whose contracts may be renewed up to a maximum of 6 years, and contract staff of indeterminate duration ("CDI") which are permanent positions.

#### *« Outline how the allocation of staff to the departments (or other units) within the Faculty is determined »*

The process for allocation of faculty positions takes place annually in the following stages:

- In April-May of year n, the Dean's office notifies departments of the number of positions available for the year n+1 made vacant by retirements, transfers or promotions ;
- The departments submit the number and type of positions they need; these requests are substantiated and prioritized after internal arbitration between disciplines;
- These requests are submitted to the plenary CE\* in the spring with the necessary arguments, but limited to teaching assignments. The Dean's office via the DG may also propose an interesting profile, discipline or new and/or complementary missions to the Council. Through its elected representatives to the council, the CE\* votes on the educational profiles of the positions requested and prioritizes them.
- The profiles selected by the CE\* are then presented to the CS\* for research missions: chosen subject, RU\* in which the future colleague will carry out his scientific activities. The CS issues an opinion.
- The CA\* checks that it is in line with the institution's strategy and make the final decision.
- The proposal for position is then submitted to the DGER (ministry of Agriculture) for arbitration and final decision (November-December year n). Positions are then open by the ministry in two sessions (spring and fall) for year n+1.

The hospital practitioner positions are defined by a similar procedure without consultation with the CS, since these positions do not have a major responsibility for research.

Requests for "budgeted" positions of engineers, technicians and administrative staff are made by the departments and the RU to the DGA with a description and rationale for the decision by the Dean's Office and transmission to the DGER.

The "non-budgeted" positions are decided by the Dean's Office via the DGA; they are required to be included within the limits set by the Ministry of Finance, regardless of the institution's resources.

#### *« Indicate whether there are difficulties in recruiting or retaining staff »*

The numbers of Class A "budgeted" positions (faculty and supervisors: hospital doctors, engineers) are maintained so that the academic staff / student ratio is maintained.

However, several major problems complicate the process:

- difficulties recruiting a part time staff member to occupy the share of work time "freed" by a staff member who decides to work part time;
- The low level of salaries which is unattractive for young faculty members starting their careers or for seniors - including foreigners - especially in some disciplines;
- Limited promotion opportunities because of the age pyramid and the low number of retirements in the upcoming years;
- The disappearance of category C state positions (operating staff) which requires the institution to make use of external companies to provide certain services: upkeep-maintenance, cleaning, security, etc.

No exemption is granted by the ministries concerning the total number of "non-budgeted" positions, making it very difficult to fulfill the institution's (new) needs or missions; for certain clinical disciplines, it is difficult to combine university thesis and specialization (college degree) even if the college allows the graduate to be a candidate in an MC competition for some years. Moreover, category C contract staff cannot be recruited for more than 70% FTE, so limited working hours and very low wages.

*« Describe (if appropriate) any relevant trends or changes in staff levels or the ability to fill vacancies over the past decades »*

The supervisory positions are renewed and authorized by the Ministry as retirements require; in addition, the increase in the number of students admitted to the school (20 additional students in the year beginning in 2013) was accompanied by an additional Category A faculty position payed by the State. In addition to the required criteria (PhD for MC competitive examination, HDR for a PR competitive examination), the institution recognizes the European or American specialty College degree (e.g., for hospital physicians), which opens up residencies on the campus and allows recruiting of residents (annex 10-1 and 10-2). As far as possible the institution uses the possibility of recruiting clinicians, whether for occupation of government positions (competitive examinations on an engineer list) or contract staff of the institution.

Some occasional or limited clinical activities can be carried out by temporary employees provided by the institution as long as the individual temporary employee concerned has sufficient external paid work. The gradual disappearance of category C positions, however, requires that the institution contract with external companies.

*« Indicate whether it is easy to employ additional staff from service income (e.g. from revenues of clinical or diagnostic work) »*

The revenue generated by the institution's operations (analysis laboratories, research contracts, partnerships with industrial firms or agencies, technical platforms including the CHEV and I-Cl.B, etc.) covers the institution's investment requirements (new projects, equipment, etc.) and also dedicated employees. These revenues, however, only allow for recruitment within the limits imposed by the Ministry of Finance, so it could be difficult to recruit human resources for certain missions. The limits were recently reset by the government by it could be not enough in the future to fulfill all of the school duties.

*« Describe the regulations governing outside work, including consultation and private practice, by staff working at the establishment ».*

Government staff and contract workers must devote all of the working time for which they are paid to the tasks which they are responsible, as precisely described in their job descriptions.

This does not prevent the employee from taking on additional paid responsibilities (training, clinical activities, expertise, etc.) on these conditions:

- The service obligations must be fulfilled; they are set out by the official concerned and submitted to the DGA for authorization of concurrent work;
- They are subject to professional regulation (registration with the College of veterinarians and declaration of activity to agencies that collect social security contributions for a private practice);
- They must not be prejudicial to the institution (unfair competition).

The institution strongly encourages staff concerned to declare this additional activity through the institution.

*Describe the possibilities and financial provisions for the academic staff to: a) attend scientific meetings; b) go on a sabbatical leave.*

Participation in scientific conferences is a necessity: the institution provides assistance to all staff as long as the faculty member communicates or is (co)-author of a poster; travel and other costs incurred are subject to authorization from the DGA. This also applies for specialty college congresses, attendance at which is required to retain the title of specialist. The school provide a special budget for such activities. The research unit to which the faculty member belongs also contribute to financing for scientific conference.

The sabbatical year is allowed by regulation.

Tables 10.1 and 10.2 are constructed from the following definitions:

- Budgeted posts = government paid employees
- Non-budgeted-posts = contractual paid on the school budget
- Teaching staff include faculty members (EC), clinicians (PH), English teachers (PCEA), Public health officers (ISPV) and residents (the latter are 100% FTE and spend more than 20% of their time training students)
- Research staff = IR/IE with research missions, public health officers with research mission and postdoc



**Table 10.1. Personnel in the establishment assigned to veterinary training (staff as of 31.12.14)**

	Budgeted posts (fte)		Non-budgeted posts (fte)		Total (fte)	
	VS	NVS	VS	NVS	VS	NVS
<b>1. academic staff</b>						
Teaching staff	74.4	6	31.9		106,3	6
Research staff	1	1	1	1	2	2
Other*	0.7				0,7	
Total fte	76.1	7	32.9	1	109	8
Total fte VS+NVS	83.1		33.9		117	
Fte providing last year	77.6	8	26.8		112	
<b>2. support staff</b>						
a) responsible of the care and treatment of animals	12.5		15.3		27.8	
b) responsible for the preparation of practical and clinical teaching	22.8		11.59		34.39	
c) responsible for administration, general services, maintenance, etc...	39.03		32.66		71.69	
d) engaged in research work	21.2		47.2		68.4	
e) others** (please specify)	1.7		4.2		5.9	
Total support staff	97.23		110.95		208.18	
<b>3. total staff = total fte VS+NVS + total support staff</b>	<b>180.33</b>		<b>144.85</b>		<b>325.18</b>	

The DG is placed in the other\* category of academic staff at 70% FTE for the veterinary campus. The other\*\* line of the support staff category includes staff assigned to implementing the quality and hygiene - safety policy.

**Table 10.2. Allocation of academic (veterinary surgeon and non-veterinary surgeon) teaching staff – expressed as FTE – and support staff to the various departments**

Depart name	Academic teaching staff							Support staff				Total Acad + sup
	Full prof.		Assoc. prof.		Other		Total Acad staff	Techn	Anim	Adm	Total Supp. staff	
	VS	NVS	VS	NVS	VS	NVS		b+d+e	a	c		
Comp Ax	8		21		18.75	0.5	48.25	108.69	27.8	71.9		320.48
Equin	4		5		9.25	0.5	18.75					
Ax prod	7	1	8.8	1	6.25	0.5	24.55					
Ind-bio-R	10	1	7	1	1.25	0.5	20.75					
<b>Total</b>	29	2	41.8	2	35.5	2	<b>112.3</b>	108.69	27.8	71.9	<b>208.18</b>	

The technical, animal handling and administrative staff has not been allocated among departments because they are administratively attached to either the general administration (SG) or a research unit which explains the merged presentation of the 4 departments (columns b + d + e, a, c). The personnel assigned to the institution as a whole are included in these tables for 70% of their FTE equivalence corresponding to the time spent on the veterinary campus (e.g., SG, heads of administrative support services, etc.).

The difference between the total table 10.1 (which is 325.18) and table 10.2 (which is 320.48) is 4.7 which corresponds to the total of the research staff line (or 4) and the other\* line (0.7) of Table 10.1

Individual contractors do not appear in these tables.

#### Indicators for teaching capacity (see annex)

R1 = no undergraduate veterinary students / no total academic fte in veterinary training  
 $= 630 / 112.3 = 5.6$

R2 = no undergraduate students at faculty / no FTE total faculty  
 $= 630 / 117 = 5.38$

R3 = no undergraduate veterinary students / no VS fte in veterinary training  
 $= 630 / 109 = 5.77$

R4 = no students graduating annually / no VS fte veterinary training  
 $= 109 / 109 = 1$

R5 = no total fte support staff in veterinary training / no total fte academic staff in veterinary training  $= 208.18 / 112.3 = 1.85$

## 10.2 Comments

### *« Comment on the numbers of personnel in the various categories »*

The ratios obtained reflect an overall satisfactory situation for the general operation of the school and the mentoring and student training mission. However, the number of supervisors for scientific research is too low and the number of support staff for clinical teaching could be better.

### *« Comment on the salary levels, especially those of academic staff in relation to the level of income in the private sector »*

Salaries for faculty at the start of their careers are notoriously inadequate in view of the number of years of training received.

In addition, in certain sectors, it is advisable to have a PhD and a specialty college degree, which further extends the number of years: in fact, if a specialist can be a candidate in an MC competitive exam, he latter must defend his HDR (and therefore hold a PhD) in order to apply for a professorship. For some disciplines, the salary gap between the public and private sector (e.g., imaging, surgery, etc.) is substantial. Although some of the faculty members can supplement their salaries by doing on-call nights and weekends, the disparity remains large. However, the disparity is weighted if it is calculated over the entire career, including retirement.

### *« Comment on the ease or difficulty of recruiting and retaining personnel »*

A number of difficulties limit recruitment opportunities:

- The length of the process (from the spring of year  $n$  for a competitive recruitment examination at the earliest in the spring of year  $n + 1$ );
- The workforce is maintained constant, so it is difficult to meet requests for support positions or positions entailing new responsibilities or disciplines, and to recruit foreign teachers and researchers;
- Exceeding the maximum number of contract staff established by the Ministry of Finance is prohibited, even if the institution has the necessary resources (technical and administrative positions for clinics, laboratories, etc.); in addition, these fixed-term contracts force the institution to cut competent and trained personnel and replace them with other staff;
- The length of the course of studies, the many examinations and competitions (veterinary doctoral, internship, PhD, college degree, HDR) and low pay rates mean that in some disciplines (for which remuneration in private practice is much higher) there are very few candidates.

Contract staff paid by the institution (excluding teaching) cannot be recruited beyond six years, which forces the institution to cut the staff member in question (who has benefited from specific training and/or training paid by the institution) and recruit a replacement (for whom it is often necessary to provide suitable training). This high turnover—particularly in areas where the salary in the private sector is high does considerable harm to staff stability and work efficiency. The only arguments for keeping deserving staff are motivation—student training, research, clinical activities, are examples—and the chances of promotion which do not depend on the institution for government staff positions.

### *« Comment on the percentage of veterinarians in the academic staff »*

The proportion of veterinarians on the academic staff is high (109 for 9 or a ratio of 12 veterinarians for each non-veterinarian) due to clinician positions, which, by regulation, must be occupied by veterinarians.

## 10.3 Suggestions

The main problem is the strict rules of the hiring and promotion system and low salaries for faculty at the start of their careers. This mainly depends of national regulations.

It should be made possible to:

- Increase recruitment for staff on own budget, especially operational staff (technicians, administrative, etc.);
- Recruit category C contractual staff at 100% FTE rather than 70% ;
- Not include the PhD students in the total number of FTE paid on school budget to allow an increase of the maximum number of staff people that the school can employ;
- Favour the advancement of faculty by making a balanced assessment of teaching activities, clinical and research missions; publication requirements have too much weight in evaluating faculty applications at the expense of educational innovation and clinical constraints;
- Take into consideration the level of college specialist in the salary scale of faculty members recruited;
- Facilitate administrative procedures to ensure mobility, the possibility of choosing a sabbatical year, of bringing in foreign faculty or researchers with a purchasing power comparable to that in their country of origin which is include in the new strategic plan of the school.



# Continuing Education



Continuing  
Education



## 11. CONTINUING EDUCATION

### 11.1. Factual information

*Please describe the role of the Faculty in providing continuing education*

#### **Continuing education organised and provided by the Establishment**

The Establishment offers complementary distance continuing education, adapted to life long training, in accordance with continuing education rules and accredited by the CLFC\* (national accrediting body for vet continuous education): short training courses leading to qualifications and diplomas offered in the context of acquiring, maintaining or upgrading knowledge; à la carte and individual training. Practical courses for upgrading or acquiring new skills can be organised in response to demand. Most of these activities take place on the veterinary campus. The average annual number of trainees is more than 2,000, with 16,000 to 20,000 trainee-hours per year (Annex 11-1).

The administrative and logistical management of these continuing education activities is handled by a dedicated office (the Bureau des Formations Professionnelles en Santé Animal (BFPSA\*), whose mission is to enhance and promote the continuing education activities offered by the School's teachers to animal health professionals. The teachers are experts in their field and have broad practical experience.

Every year, a range of continuing education activities is offered in all fields of veterinary science, for pets and NAC\*, production animals, horses and laboratory animals. This course offering is posted on a dedicated website maintained by the Establishment using the Mig@l Web interface from GesCOF for the administrative management of short and continuing education activities (since 2015). The complete list of courses organised by the BFPSA\* for 2012, 2013 and 2014 is presented in annex 11-1.

These courses are designed for practising veterinarians who wish to improve their knowledge and skills in specific areas (annex 11-2) as well as other professionals in contact with animals or animal products, including some in collaboration with institutional and private partners. The educational and financial results for 2012 to 2014 inclusive are presented in annex 11-3.

#### **Courses organised by BFPSA for the Establishment's external partners (annex 11-4)**

Many organisations approach the BFPSA\* to organise training courses on its site, with or without participation of the Establishment's teachers.

Most often, it is for services such as rental of the Hénon technical support centre and its dedicated staff for practical work, or venues for conferences open to students free of charge and drawing on the expertise of VetAgro Sup's faculty. The list of courses or services organised by the BFPSA\* in 2014 is appended to this report. There were 10 of these courses or services in 2014, for seven organisations, in particular, professional organisations (AFVAC\*, AVEF\*, GTV\*).

#### **Distance learning courses**

The Establishment has a VETOTICE digital platform for hosting courses, tests, forums, quizzes, etc. The BFPSA uses this resource to post the teachers' presentations online.

Since 2011, some teachers, in conjunction with industrial partners, have also been presenting open distance courses offered in the form of evening lectures as webcasts to subscribers. To maximise the practical aspect of the training, some teachers offer preparatory Web conferences in which they present the basics of theory. Learners can view the content offline as often as they wish.

Other projects are under discussion with other partners, including production of e-learning modules in genetics and medical imaging.

#### **Training provided by the ENSV**

The ENSV relies on an active network of 200 external professionals and on VetAgro Sup's teaching staff for its continuing education activities. Experts from the ministry responsible for Agriculture form the vast majority (76% of enrolments in 2013, but declining since 2012 with a growing number of trainees from the private sector: 19% in 2013 vs 0% in 2012). The ENSV's core training is in public health and the environment. The course offering is presented in the continuing education calendar published each year on the site. The revenues posted in the 2014 educational and financial results were more than €660,000, with 2,217 students and 16,617 hours of training.

## 11.2. Comments

*Comment on the quality of the continuing education programmes in which the Faculty is involved.*

All courses are subject to a quality approach: recording, monitoring and validating attendance, accreditation by the national accrediting body (CFCV) and accordance with national regulations, evaluation of the teaching provided. The courses and the teachers are systematically evaluated.

*Comment on the degree of participation by veterinarians in the continuing education programmes in which the faculty is involved.*

The audience for the training activities is primarily veterinarians, as seen in the summary table of courses (1,713 veterinary trainees, 1,900 trainees in total for 2014) 54 faculty members from VETAGRO SUP, of a total of 164, were involved in the BFPSA's continuing education activities in 2014, which represented 1,724 hours of training.

This figure fluctuates every year: it was 85 in 2012 and 37 in 2013. There is therefore significant potential for attracting participants, and we have indicated the actions we plan to take in the "suggestions" section.

Since March 2015, the BFPSA has been using the new GesCOF continuing education management software, which should improve the processing of applications, monitoring of training and statistical reporting. The Mig@1 software (CMS) makes it possible to better publicise the course offering and will facilitate the registration process.

Digital education is a major priority at the school, and the BFPSA is closely involved, supporting the e-learning projects of teachers and/or external partners (genetics, medical imaging, etc.).

## 11.3. Suggestions

With the 2014 vocational training reform, there was an opportunity to propose the modularisation of long training courses in the form of a "unit of professional skills" eligible for the personal training account, a key component of the reform.

For the veterinary curriculum, only diplomas such as the CEAV or some DESVs are available through continuing education and can therefore be "modularised."

The trend toward greater use of digital technology in education also means revisiting the support provided to faculty in moving toward new teaching methods. Teacher training and support are already offered on the VetAgro Sup agronomic campus in the practical implementation of these methods. Sharing and exchanges are planned with the veterinary campus with a view to benefiting the entire faculty.

Since July 2014, a "digital" package for teachers has been available on VETOTICE. It allows them to explore opportunities in digital teaching and new teaching methods, as part of the overall e-learning approach. Another important area is developing short courses with economic players given the school's competitive edge in the area of practical work: the Hénon technical support centre available at the BFPSA.

With the internationalisation of the campus, there is also a need to develop courses offered in English for a multicultural audience. Some summer schools are already provided (equine, ENSV)

The creation of the Institut Agronomique, Vétérinaire et Forestier de France will make it possible to optimise these projects as part of broader collaboration with all the higher education establishments concerned. Lastly, diversification of the course offer will provide new opportunities for cooperation with our agronomist colleagues.





# Postgraduate Education



## 12. POSTGRADUATE EDUCATION

*This heading covers all further training leading to a diploma – special postgraduates studies, PhD courses, research training programmes and national or European college specialised qualifications. Please provide details of all postgraduate training opportunities in tabular form under « factual information ».*

### 12.1. Factual information

#### 12.1.1. Clinical specialty training (interns and residents)

*« Indicate whether students involved in this training receive a grant or a salary. Indicate any programmes that are certified by the European Board of Veterinary Specializations ».*

**Interns** are veterinary doctors with student status who are selected via a national competitive examination; the general organization of the competition and the training provided are described in annex 12-1 modified in annex 12-2. Specific provisions concerning registration, the course of training, evaluation and awarding of the degree as well as discipline are set out in Section 8 - Specific provisions concerning internship - in annex 4-5. Interns are registered not by discipline, but within a clinical sector (pets - horses - ruminants) in which they do a rotation involving all disciplines and activities (medicine, hospitals, surgery, emergency, imaging, anesthesia, etc.). The number of interns is set each year by the Ministry responsible for Agriculture. Interns who have met the requirements of their training receive the national diploma with mention of the type of residency obtained. Interns are unpaid but exempted from tuition fees.

**Residents** are employed by the institution. They follow the training program set by each college according to the general rules of the EBVS, the opening of which has been accepted into VetAgro Sup and the dedicated college. The training takes 3 years. They are compensated with an indexed salary that progresses from the 1st year to the 3rd. Most applicants are holders of the intern degree. The number of faculty members who are diplomates of a specialty college is 36 (annex 10-1), the number of residencies on campus open is 9 for 17 residents as at 12.31.14 (annex 10-2). Some colleges have a multi-species aspect that involves the 3 departments (ECVD, ECVI, ECVA, ECAR, for example); however, for administrative and logistical reasons, they are "attached" to a department.

**Table 12.1.1. Clinical specialty training (as at 12.31.14) and see annex 10-2**

Department	N° of interns	N° of residents	Diploma or title anticipated
Companion animal Dep.	18	1 ECAR 2 ECVIM 1 ECVIM-Onc 3 ECVS 2 ECVA 1 ECVD	Former intern in ... And specialist in ....
Equine Dep.	8	2 ECVIM 2 ECVS 1 ECVI 1 ECAR 1 ECVA	
Animal Health & Production Dep.	4	1 ECBHM	
TOTAL	30	18	

The institution participates in the training of graduate vets as part of the CEAVs\* and DESV\*:

The CEAVs correspond to instruction provided in part by faculty members at the 4 French vet schools, and on the other hand by practitioners; this training corresponds to advanced knowledge and expertise in a given field;

- o In internal medicine of companion animals cf.

<http://www.vet-alfort.fr/web/fr/80-detail-de-la-formation-continue.php?theme=28&item=993&keyword>

Whose administrative headquarters and teaching locations are rotated between the schools. Even though the CEAV may be based in a school other than Lyon, faculty members on the Lyon campus are involved in the organization and training.

- o in veterinary public health organized by the ENSV\* see

<http://www.ensv.fr/formations/enseignements-academiques/ceav-spv>

The DESV\* corresponds to specialist training for a 3-year period with the participation of faculty members from the ENV, including Lyon: internal medicine of companion animals, livestock breeding and equine pathology, laboratory animal science, surgery on companion animals. <http://www.vetagro-sup.fr/formations/cursus-veterinaire/specialisations/desv/>

### 12.1.2. Research education programmes

*« Please indicate when and where and whether the students require a grant or a salary ».*

Through its registered members in research units the institution participates in training of PhD students (preparing a thesis or PhD) enrolled in a doctoral school at a University (mainly Lyon). VAS\* participates in three graduate schools: Interdisciplinary Health Sciences, Life Sciences-Health-Agronomy-Environment, Microsystem Evolution Modeling Microbiology

**Table 12.2. Number of research students enrolled in different programmes.**

Type of degree	Full time	Part time	duration
PhD	2012-13 : 26 2013-14 : 28 2014-15 : 27		3 years

By regulation, all students enrolled in a university thesis program receive an allowance or scholarship awarded in whole by the institution or in partnership with a research agency or university.

### 12.2. Comments

*« Comment on the number of postgraduate diplomas / titles awarded annually ».*

The institution provides training to interns enrolled in each sector: all registered students fulfill the required obligations and are graduated. Most residents supervised by specialist colleagues of the institution have been approved for examination by the college concerned. The institution invests in the training of graduates (participation in the colleges' congresses) and in the recruitment and training of residents. The school is paying for main part of the salary of residents and provide extra support for their education.

*« Comment on the percentage of veterinarians participating in postgraduate research training »* 65 faculty members (excluding IR and PH) from the veterinary campus are members of a RU and as such are involved, often with colleagues at the university, in training of PhD students; more than 60 of these are veterinarians. Few of them, however, continue with a post-doc.

### 12.3 suggestions

Student awareness of activities and research professions is quantitatively insufficient (see suggestions chap13. Research); only one traineeship in Y3 of 2 weeks minimum may be research oriented. This period is too short and in addition the research topic can be replaced by a topic from industry and food health quality. By contrast, the number of Y5 doing a double veterinary campus-master curriculum is rising: 5 in 2012-13, six in 2013-14 and 10 in 2014-15. The institution also wishes to direct these students toward a PhD and a postdoc.

Material assistance to interns should be reviewed: currently, they are reimbursed for their tuition fees as students; however, an inter-ENV agreement defining the amount of compensation awarded (for example in the form of housing assistance) would be desirable; they can still benefit from scholarships like other students, according to regulatory criteria from the class admitted in 2015.

The number of open residencies should continue to increase (currently 10 for 18 residents); some are scheduled in the coming months: - intensive care and emergency medicine once the corresponding college is created; - parasitology for which an MC colleague from the school will do his first year in the class admitted in 2015. This increase automatically results in a higher cost borne by the institution, which therefore must seek external partners.



# Research



## 13. RESEARCH

*The details requested under this heading relate only to research experience offered to students during their undergraduate training, for example through project work.*

### 13.1. Factual information

*« Indicate the involvement of undergraduate students in research, including the time spent, percentage of students involved and outcome required ».*

Research at VetAgro Sup is organized around three themes: - emerging pathologies and infection risks (PERI) - adaptation of production systems and food quality (ASPQA\*); - regional development (DT). Only the PERI and ASPQA axes involve faculty members in the veterinary program.

PERI includes units working on: - emerging pathologies: especially cancers, infertility problems, locomotor disabilities, sepsis situations and pathologies associated with the ecotoxicity of certain products; - the study of infectious risks associated with zoonosis or vector-borne diseases.

ASPQA\* includes units working on systems adaptation and husbandry practices: - increased system flexibility and resilience; - changing characteristics of products in terms of consumer perception and behaviour and microbial ecology throughout the food technology chain.

**Table 13.1. List of URs involving ECs on the veterinary campus**

RU	Topics
UMR5558 Lyon1-CNRS	Biometrics and evolutionary biology
UR 1233	Wild rodents, health risks and population management
	Environment-cell interactions
UR ICE	Sepsis
EA-4174 Lyon1 INSERM	Cardiovascular, metabolism, diabetes, nutrition
CARMEN Lyon1-INSERM	Animal epidemiology
EPIA INRA-VAS	Retrovirology
UMR754 Retroviruses Lyon1 - INRA	Medical imaging, computational complexity
UMR 5525 Grenoble1-CNRS	Mycoplasmoses in ruminants
UMR Mycoplasmoses - ANSES	Microbial ecology
UMR 5557 CNRS-INRA-Lyon1	

Veterinary students are involved in fields of research in various forms:

- Awareness of careers in research and access routes (open annual lecture)
- Organizing an open house for PhD students and residents: presentation of ongoing work submitted or published or archived;
- Research laboratory training in Y3 (min 2 weeks)
- Registration in masters possible in Y4 (University of Lyon and Clermont-Ferrand) cf. Tables 13.2 and 13.3; a double Y4-master2 animal bio-experimentation curriculum focused on scientific issues, techniques and animal ethics; all these masters can be pursued by registration in graduate school for preparation and defence of a doctoral thesis (see Table 13.4);
- Defence of professional thesis on an experimental topic: 2012: 46 theses; 2013: 59 theses; 2014: 72 theses (the average annual number of defences is 120);
- Permanent exhibition of posters submitted by members of the institution illustrating topics



**Table 13.2. List of masters involving or jointly sponsored by VAS and in which veterinary students are enrolled**

cf. list of doctoral students:

<http://www.vetagro-sup.fr/recherche/formation-par-la-recherche/doctorat/annuaire-doctorants/>

cf. list of PhDs defended:

<http://www.vetagro-sup.fr/recherche/formation-par-la-recherche/doctorat/theses-soutenues-des-doctorants-de-nos-laboratoires-de-recherche/>

Universities	Title of Masters (and specialty) and Doctoral Schools
LYON	<p>Masters</p> <ul style="list-style-type: none"> <li>- Ecoscience - Microbiology</li> <li>- Physiology and Neuroscience (animal bio-experimentation)</li> <li>- Pharmaceutical Sciences (veterinary medicine)</li> <li>- Science, technology and health (MERESTE: environment toxicology and ecotoxicology research)</li> <li>- Cancer research</li> <li>- Biohealth computing Erasmus Mundus</li> <li>- Political science (public policy and comparative government)</li> <li>- Economics, management (business management and administration)</li> </ul> <p>Doctoral schools (ED)</p> <ul style="list-style-type: none"> <li>- ED interdisciplinary health science (EDISS)</li> <li>- ED evolution, ecosystems, microbiology, modeling (E2M2)</li> </ul>
CLERMONT	<p>Master -Nutrition, health, food</p> <p>ED life sciences, health, agriculture, environment</p>

**Table 13.3. Number of Lyon veterinary students in double 5A-master 2 curriculum**

year	Number of students enrolled	In VAS co-sponsored masters	In other masters
2012-13	5	3	2
2013-14	6	1	5
2014-15	10	4	6

**Table 13.4. Number of students enrolled in university thesis programs via a UR involving the institution**

year	Number of students
2012-13	26
2013-14	28
2014-15	27

In addition, students can participate in research and animal experimentation activities via the ICIB\*: the Institute provides support for training in radiology education, medical biology laboratory activities and motivated the design of a Chair of Excellence dedicated to transplants. It involves students:

- As employees involved in handling animals and preclinical acts; some of them may then use their work on laboratory animals for their doctoral theses, medical theses or residencies (e.g., in clinical pathology, laboratory animals, etc.);
- After training and preparing for the level 2 degree in animal experimentation. Y1 Students have access to TD an on preclinical research and a visit by 1/8 of the year to facilities.

Two specific programs allow students to participate in research work:

- **Merial Veterinary Scholars Program** : Biomedical Research Opportunities for Veterinary Students  
The mission of the Merial Veterinary Scholars Program is to expose veterinary students in their first or second year of veterinary school to biomedical research and career opportunities in research. The Merial Veterinary Scholars Program culminates in a national symposium where veterinary students participating in the program gather from all over the U.S. and Canada to present their research findings and share experiences from their various programs. Presentations by and networking opportunities with invited veterinary scientists, researchers and faculty members are also part of the national symposium program.

The 2013 Merial NIH National Veterinary Scholars Symposium was hosted by Michigan State University August 1-4th 2013

Through the partnership and commitment to support biomedical research of each veterinary institution and the Merial Veterinary Scholars Program, it is hoped that these experiences will stimulate scholars and future veterinarians to consider a career in biomedical research.

The selection could include 0 to 3 students of the school/ year. For VetAgro Sup, one student was selected in 2009/2010, 2011/2012, 2012/2013 and 2013/2014.

- **French German Summer School for the promotion of veterinary science**

All German and German speaking veterinary schools (Berlin, Giessen, Hanover, Leipzig, Munich, Vienna and Zurich), 4 French Veterinary Schools and the Faculty of Veterinary Medicine of the University of Liège have partnered to organize an annual two-week Summer School. The objective is to train students of high scientific quality to encourage and develop research collaborations between participating French and German institutions. Registration, travel and accommodation are funded by the institutions. 2 students from Lyon were selected in 2013, none in 2014, 2 in 2015.

### 13.2. Comments

*« Comment on the opportunities for students to participate in active research work »*

Veterinary expertise in research professions (public or private) is in demand by research agencies and industry partners; introducing these to students is important so they know about professional opportunities and potential careers. This approach also relies on collaboration by the institution with research agencies (INRA, INSERM, CNRS, etc.), universities and business partners. It is clear that the results posted in recent years are still insufficient (in quantitative terms) and therefore require greater or more relevant communication and more registrations by veterinary students in masters and doctoral programs.

### 13.3 Suggestions

*« Will students be given more opportunity to participate in research activities? if so, how will this be done ?*

To respond to these comments, it may be appropriate to propose the following measures:

- Create a "research passport" just as there is a clinical skills passport. This passport would show the following information:
  - the nature, duration, results obtained and comments by the student and supervisors on the traineeship in a RU; this traineeship should be mandatory (like clinical traineeships): it is currently not, and this is due to lack of free time in the curriculum; the student may also complete a traineeship in a RU in the summer with a clear teaching objective (e.g., creation of a poster); the duration of the traineeship (2 weeks), even for raising awareness, is too short;
  - validation of skills acquired in this traineeship through training provided within the veterinary curriculum and in the masters program on several topics: animal experimentation (e.g., via the Bourgelat Institute), ethics, experimental procedures, preparatory work for the drafting of a publication or oral communication, bibliographical research, knowledge of statistics—this validation work would reveal shortcomings or weaknesses to be compensated by subsequent additional training.
- Expand proposals for a double Y5-master 2 curriculum;
- Formulation of a clinical research policy under the responsibility of the Assistant to the Vice-Dean of Science responsible for this mission.

## GLOSSARY

### List of acronyms

AAALAC	Association for Assessment and Accreditation of Laboratory Animal Care
AERES = HCERES	Evaluation Agency for Research and Higher Education
AFVAC	French Professional Organization of Veterinarians for Companion Animals
AFVAC junior	Student AFVAC association
ANR	National Agency of Research
ANSES	National Agency for Food, Environmental and Occupational Health and Safety
AP	Animal of Productions
ASPQA	Adaptation of production systems and food quality
AVEF	French Professional Organization of Veterinarians for Equids
AVEF junior	Student association AVEF
AVMA	American Veterinary Medical Association
BCPST	Biology, Chemistry, Physics and Earth Sciences (S1 à S4)
BEVE	DEVE* office
BFPSA	Office in charge of continuing education
BTS	Diploma of a 2-year course (S1 à S4)
BTSA	Diploma of an Agricultural 2-year course
CA	Board of Governors
CE	Faculty Assembly (cf. EC)
CEAV	Certificate of Veterinary in-depth Studies
CERREC	Center of Study on Reproduction and Husbandry of Dog
CEVE	Curriculum and Students Affairs Council
CHEL[s]	Four Lyon establishments of higher education join forces to create the Collège des Hautes Etudes - Lyon Science [s]
CHEV	Veterinary Teaching Hospital
CHSCT	Committee of Hygiene, Security and Working Conditions
CLOVIS	Medical Records Management Software
CM	Lecture
CNECA	National Council of Faculties Members from MAAF
CNESER	National Council of Higher Education and Research
CNESERAAV	National Council of higher Education and Research for Agricultural, Food and Veterinary
CNITV	Vet anti-Poison Center
CNRS	National Center of Scientific Research
CNSMD	Conservatoire National Supérieur de la Musique et de la Danse = School for higher education dedicated to music and dance
COB	Club Olympique Bourgelat = Students Association for Sports
COMUE	Lyon Saint-Etienne community of universities and establishments
COP	Objectives and Performance Contract
CPVL	Veterinary Pharmacovigilance Center of Lyon
CRB-anim	Center of Biological Resources
CROUS	Administrative Service for Students Residence
CS	Scientific council
CSP	Curriculum Committee
CT	Technical Committee
CU	Course Unit
DDPP	Direction Départementale de Protection des Populations = Regional Direction of Human and Animals Health Protection
DEFV	Diploma of Fundamental Veterinarian Studies (end of 4Y)
DESV	National Board of Specialized Veterinary Studies
DEVE	Education and Students Affairs Direction
DG	General Direction of VAS
DGER	Education and Research Direction of MAAF
DVM	Veterinary Medicine Doctor (end of 5Y)
DUT	Technological Diploma of a University 2-year course (S1 à S4)
EAEVE	European Association of Establishments of Veterinary Education

EC	Faculty member
EC-Lyon	Ecole Centrale de Lyon : school for higher education dedicated to management
ECTS	European Credit Transfer System
ENITAC	National School of Agronomic Engineers
ENS	Ecole Normale Supérieure : school for higher education dedicated to teacher
ENSV	National School for Veterinary Public Health Officers
ENV	National Veterinary School
ENVA	National Veterinary School of Alfort
ENVL	National Veterinary School of Lyon
EPCSCP	Public Institute for Science, Culture and Professional Education
EPFL	Ecole Polytechnique Fédérale de Lausanne
Eq	Equid
FECAVA	Federation of European Companion Animal Veterinary Associations
FTE	Full Time Equivalent
FVE	Federation of Veterinarians of Europe
GDS	Groupeement de Défense Sanitaire: association for sanitary defense
GTV	French Association of Veterinarians for Animals Productions
GTV junior	Student GTV association
HCERES	High Agency of Evaluation for Research and Higher Education
HDR	Degree of Ability to lead Research Programs
IATOS	Engineers, Administrative, Technical staff
IAVFF	Cooperative national public administrative establishment
I-CI.B	Claude Bourgelat Institute
INFOMA	National Institute for staff of the Minister in charge of Agriculture
INRA	National Agronomic Research Institute
LNR	National Reference Laboratory
LVD	Regional Veterinary Laboratory
MAAF	Ministry of Agriculture, Agri-Food and Forest
MC	Associate Professor
MOOC	Massive Open On line Course
MRI (=IRM)	Magnetic Resonance Imaging
MVSP	Meriel Vet Scholarship Program
OIE	World Organization for Animal Health
PERI	Emerging Pathologies and Infectious Risks
PH	Clinical Track Faculty Member
PhD	Thesis of University
PR	Professor
QCM	Multiple Choice Question (MCQ)
QROC	Open and Correct Answer Question
SA	Small Animals
Sciences Po Lyon	School for higher education dedicated to politics
SIAMU	Clinical Unit for Intensive Care and Emergency for Small Animals
SNVEL	National Union of veterinary practitioners
SNVEL junior	Student SNVEL association
SP	Strategic plan
STEC	Shigatoxin <i>Escherichia coli</i>
TC	Clinical works
TD	Directed works
TICE	IT Technology and Communication for Education
TP	Practical works
UCBL	University Cl. Bernard Lyon 1
UCRA	Practice rural clinics of L'Arbresle
UMR	Joint research unit
UMR 5525	Techniques for biomedical engineering and complexity management – informatics, mathematics and applications (UJF Grenoble – CNRS)
UMR 5558	Biometry and evolutionary biology unit (Lyon1 - CNRS)
UMRH 1213	Herbivorous joint research unit (INRA-VAS)

UMR Mycoplasmoses	Joint research unit on Mycoplasmosis of Ruminants (ANSES-VAS)
UMR 754 Retrovirus	Joint research unit on Retrovirus and comparative pathology (INRA-VAS-Univ Lyon1 – EPHE)
UR = RU	Research unit
UR ICE	Joint research unit on Environment and interaction cells
UR SEPSIS	Research unit on hemostasis, inflammation and sepsis
UR 1233	Research unit on wild rodents, sanitary risks and population management
VAS	VetAgro Sup
VetoTice	Web for Vet Campus of VetAgro Sup
1A = 1Y	First year of vet curriculum (S5-S6)
2A = 2Y	Second year (S7-S8)
3A = 3Y	Third year (S9-S10)
4A = 4Y	Fourth year (S11-S12)
5A = 5Y	Fifth year (S13-S14)