
**AMERICAN VETERINARY MEDICAL ASSOCIATION
COUNCIL ON EDUCATION
(AVMA COE)**

Report of Evaluation	VetAgro Sup Campus Vétérinaire de Lyon 1 avenue Bourgelat F-69280 Marcy l'Etoile France
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Director General / Dean	Dr. Stéphane Martinot
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GLOSSARY OF ABBREVIATIONS

AVMA	American Veterinary Medical Association
AP	Animal Production
ASPQA	Adaption of Production Systems and Food Quality
BTS	Diploma of a 2-year course
BTSA	Diploma of an Agricultural 2-year course
CA	Board of Governors
CEAV	Certificate of Veterinary In-Depth Studies
CERREC	Center on Study of Reproduction of Carnivores
CHEV	Veterinary Teaching Hospital
CLOVIS	Medical records management software
CNECA	National commission for faculty evaluation
CNITV	Veterinary Anti-Poison Center
COE	Council on Education
CPVL	Veterinary Pharmacovigilance Center of Lyon
CU	Course Unit
DEFV	Diploma of Fundamental Veterinarian Studies
DESV	Board of Specialized Veterinary Studies
DEVE	Education and Students Affairs Office
DGER	Education and Research Directorate of MAAF
ENSV	French national school for veterinary public health officers
ENV	National Veterinary School
ENVL	National Veterinary School of Lyon
Eq	Equine
ICI-B	Claude Bourgelat Institute (center for pre-clinical research)
LVD	Laboratory Department Analytical
MAAF	Minister of Agriculture, Agri-Food and Forest
PERI	Emerging Pathologies and Infectious Disease Risks
SA	Small animals
SIAMU	Clinic Unit for Emergencies and Intensive Care
STEC	Shigatoxin E.coli
UCRA	Practice bovine clinics of L'Arbresle
UR	Research Unit
VAS	VetAgro Sup (includes the Vet Campus of Lyon, Lyon Vet School)

Introduction

Founded in 1761, the Ecole Nationale Vétérinaire de Lyon (ENVL) was the first veterinary school in the world. ENVL now part of VetAgro Sup (VAS) is located in Marcy l'Etoile.

VAS was established in January 2010, with the official status of a public institute for science, culture, and professional education under French law (Code of Education) through the merger of:

- ENVL, one of the four French veterinary schools;
- the Agricultural Engineers School at Clermont-Ferrand, one of seven French agronomic schools; and
- Ecole Nationale des Services Vétérinaires (ENSV), the only French national school for veterinary public health officers.

The School considers its strengths to be:

- Intelligent, motivated students who possess a strong scientific background.
- Faculty who are active and open to the changes required by new challenges to the veterinary profession.
- A professional and devoted staff.
- The School's ability to maintain a high level of nongovernmental funding.
- A dedicated research unit, which supports teaching or research, and respond to the needs of the pharmaceutical industry in the Lyon region.

The School considers its challenges to be:

- Its relatively small size requires a high level of energy, competencies and resources to cover all necessary topics.
- The low average salary of faculty, and difficulties faced by some faculty, especially faculty with clinical responsibilities, in their careers because promotion is heavily influenced by research achievement.

STANDARD

1. Organization

The school/college must develop and follow its mission statement.

An accredited college of veterinary medicine must be a part of an institution of higher learning accredited by an organization recognized for that purpose by its country's government. A college may be accredited only when it is a major academic administrative division of the parent institution and is afforded the same recognition, status, and autonomy as other professional colleges in that institution.

The chief executive officer or dean must be a veterinarian, and the officer(s) responsible for the professional, ethical, and academic affairs of the veterinary medical teaching hospital must also be a veterinarian.

There must be sufficient administrative staff to adequately manage the affairs of the college as appropriate to the enrollment and operation.

Organization

Background: The School's mission is to "provide training to veterinarians in all aspects of their profession, including in particular improvement of domestic and production animal health as well as public health, economy and environment."

The School is accredited by a decree signed by the French Ministry of Agriculture (MAAF), which allows ENVL to award the Diploma of Fundamental Veterinarian Studies (DEFV) at the end of Year 4. ENVL also has authority to award internship diplomas (companion animal, equine, production animal). MAAF reviews and accredits the four National Veterinary Schools (ENVs) on a five-year cycle. At the end of Year 5, after validating that graduates have completed all requirements of the professional curriculum, the DVM degree is awarded by the University of Lyon, which is accredited on a five-year cycle by the Ministry of Higher Education and Research. The DVM degree is required by the French veterinary licensing body to obtain a license to practice in France.

The Lyon veterinary campus (the School) of VAS is under direct responsibility of the Education and Research Directorate (DGER) of the MAAF. The MAAF establishes the general guidelines

for veterinary education considering international recommendations, its own political commitment to public and animal health, and input from the veterinary profession in France. The DGER implements an agreement on program objectives with each ENV based on the general guidelines and determines the financial support provided to each ENV annually, including personnel paid by the government. Annually, the DGER regulates the number of veterinary students for each ENV, sets tuition, and determines scholarships based on financial need. The School is represented by its director general (dean) on the board of governors of institutions of agronomic higher education and the assembly of deans of institutions of veterinary education. These assemblies have an advisory and consulting role for the DGER on strategic choices about education and financing. Some ENV faculty are elected to represent their peers at the national level in the National Council of Higher Education and Agricultural, Agri-food, and Veterinary Research, as well as on a number of national advisory boards, in particular those working on veterinary curriculum reform.

The School is administered by a Board of Governors (CA) made up of 32 members: eight elected faculty (four professors, four associate professors), four elected staff representatives, four elected student representatives, and 16 external members including representatives of the veterinary profession and MAAF who are proposed by the dean and nominated by the MAAF. The CA meets at least twice a year, defines the strategic direction of the School in all areas (teaching, research, service), and is responsible for all aspects of the School's general technical, educational, administrative and financial operations. It appoints a standing commission of seven members that meets as often as needed, and to which it delegates various responsibilities, and

also a financial commission to prepare all financial and budgetary elements. The president of the CA is elected from the external members.

The dean (director general) is a veterinarian appointed for a five year term (with a one time renewal) by the Minister of Agriculture on the advice of the Board of Governors. The dean has direct fiscal and personnel authority, which is validated by the Board of Governors, and also has ultimate responsibility for the development and organization of the curriculum, development of teaching staff and equipment, and organization of support staff. The dean directs the administrative, financial, material, educational and scientific operations, and chairs various internal committees and is assisted by two deputy deans (one responsible for the veterinary campus in Marcy l'Etoile and one for the Agricultural Engineers campus in Clermont). The deputy dean for the veterinary campus is a veterinarian, and is charge of the veterinary teaching hospital (CHEV), and more specifically, for supervising the professional, ethical, and academic affairs of the campus. The dean also appoints the head of administrative affairs as well as the vice dean for curriculum and student affairs, vice dean for research, vice dean for communication, and vice dean for external affairs.

The School is divided into nine training units (in charge of the first four years of the core program) and four departments (in charge of the last year of the core curriculum and the specialized years), each of which is directed by either a Unit or Department chair appointed from among the academic staff by the dean after recommendation by unit or departmental faculty. A Departmental Council including representatives from the academic staff, students, support staff

and the veterinary profession define the department's strategic orientation for teaching in alignment with the VAS strategic plan.

Research units (UR) are composed of faculty and staff from the School and may also include researchers from universities and/or national research agencies (joint research units, mixed research units). Nearly all ENVL faculty belong to a UR, and the scientific program of each UR is validated by the research council. Every UR is evaluated and accredited nationally every five years.

Teaching and/or research platforms identify the tools that support teaching and research and are administered separately from the units to ensure good management and development of tools, as well as to ensure that they are open to complementary external activities. There are two main teaching platforms, the teaching hospital (CHEV) and the center for preclinical research (Claude Bourgelat Institute; ICI-B).

School governance committees include:

- Executive Committee—composed of the dean, deputy deans, vice deans, assistant directors, head of administrative affairs, and department and research unit chairs. It assists the dean in administration of the School.
- Faculty Assembly—composed of 40 elected faculty members. It coordinates teaching activities, determines the composition of examination juries, and establishes examination results and related sanctions.

- Curriculum and Students Affairs Committee—composed of members of the Board of Governors chosen from members external to the School, with a majority of representatives of the veterinary profession, and representatives elected from faculty members and students. It examines all questions concerning teaching and pedagogical affairs and makes proposals regarding the institution’s educational policies.
- Scientific Committee—composed of elected professors, researchers, and students, and representatives of national research institutions and partners. It formulates proposals concerning scientific policy and makes recommendations on research policy and allocation of credits dedicated to research.
- Animal Ethics Committee—composed of outside members and representatives of the faculty, staff, and students. It evaluates animal experimentation activities, as well as research and practical protocols affecting animals.
- Technical Committee—deals with issues related to employment, working rules, and salaries of employees paid directly by the School.
- Hygiene and Safety Committee and Working Conditions—in charge of hygiene and safety issues.
- Lecturer Grades Commission—in charge of evaluating the promotions of faculty members.
- Veterinary Teaching Hospital Council—in charge of all technical and organizational matters for the CHEV.

Finding: The Council finds that the school meets this standard.

Commentary: The site team verified that:

- ENVL and the research units are accredited on a regular cycle by the French Ministries;
- The ENVL has the same recognition, status, and autonomy as other ENVs in France;
- The School implements a strategic plan on a five-year cycle and meets its mission statement;
- The dean and hospital director are veterinarians; and
- There are sufficient administrative staff members to adequately manage the affairs of the college related to its enrollment and mission.

STANDARD

2. Finances

Finances must be adequate to sustain the educational programs and mission of the college.

Colleges with non DVM undergraduate degree programs must clearly report finances (expenditures and revenues) specific to those programs separately from finances (expenditures and revenues) dedicated to all other educational programs.

Clinical services, field services and teaching hospitals must function as instructional resources. Instructional integrity of these resources must take priority over financial self-sufficiency of clinical services operations.

Finances

Background: Information recorded in the tables is in euros (as of September 6, 2013, €1 equaled \$1.31). In 2010, the School's financial structure changed because of the merger of the ENVL with the Agricultural Engineers' School at Clermont-Ferrand. Consistent with the data for years 2008 and 2009, the financial data from 2010 forward reflects only the ENVL budget.

Total expenditures rose 34% from 2008 to 2012, which is consistent with the specific spending increases observed on instruction (28% increase) and academic support (32% increase). Several challenges were faced by the School that led to this increase. The School experienced cuts in state appropriations from 2009, although it appears that the state appropriations increased in Table B every year, and by 19% from 2008 to 2012. This is explained by the details that are included in Table 1, which records the salaries of all persons paid directly by the government (more than 80% of the total shown in Table 1). This also includes the amount given by the government for student financial aid, which increases every year because of the increasing number of students who meet the criteria for financial aid. The creation of Vet Agro Sup in 2010 resulted in an increase in state funding by €250 k annually to support of ENSV.

As the school is responsible for all the expenditures usually covered by the University in the classic “college of veterinary medicine model,” these are assembled under the “general management” column. This includes O and M plan expenditures. The increase of expenditures for educational activity services are mainly related to hiring of new support staff who are not paid by the state but paid directly by the school. This was made possible by increasing caseload and revenue from the teaching hospital (CHEV; 39% increase from 2008 to 2012) and by developing revenues from diagnostic labs and other sources from sales and services.

The expenditures from “other sponsored activity” and “extension and public services” are far less than the resources spent by the same activities. This made it possible for the School to develop its support to teaching programs (increased by 28% of related expenditures) and to implement its support to teaching activities (increased by 32% of related expenditures) despite a reduction in state support. There are no endowment revenues in the school budget; instead the school relies on dedicated fiscal laws that allow companies or private persons to make donations (“gift for current use” in table B) which has increased in recent years.

Table A – Total Expenditures for Immediate Past 5 Fiscal Years

Years	Instruction	Academic support	Student services	Services of Educational Activity			Sponsor Student Aid	Sponsoring Research (except faculty salary)	Other sponsor ICLB	Ext. and Public service BFPSA	DGS	Total
				Teaching hospital (Except faculty salary)	Diagnostic lab	Other Amount CPVL						
2008	7,299,394	1,421,526	334,241	3,833,369	1,563,384	245,380	311,607	2,017,449	617,996	383,161	4,699,048	22,726,555
2009	7,677,659	1,682,991	329,373	4,099,504	1,738,409	225,698	368,736	2,354,600	657,254	466,136	4,970,492	24,570,852
2010	8,455,852	1,887,789	311,046	4,662,663	2,017,314	246,986	392,271	2,562,475	899,190	565,853	5,247,296	27,248,736
2011	8,931,503	1,882,348	310,437	5,132,039	2,125,779	256,603	419,654	2,854,538	1,088,414	661,564	5,145,284	28,808,163
2012	9,344,328	1,884,041	313,377	5,703,516	2,663,309	271,456	457,738	2,805,650	1,225,150	579,599	5,190,175	30,438,339
% change	28.02%	32.54%	-6.24%	48.79%	70.36%	10.63%	46.90%	39.07%	98.25%	51.27%	10.45%	33.93%

**Table B - COLLEGE REVENUE (SOURCES OF FUNDS)
FROM ALL SOURCES FOR IMMEDIATE PAST 5 FISCAL YEARS**

Year	State Appropriations*	Benefits	Tuition & Fees	Is tuition estimated amount?	Endowment Income (Current yr.)	Gifts for Current Use	Sponsored Program Income/ Cost Recovery	Other	SALES and SERVICES			Reserves and Transfers	TOTAL REVENUE
									Teaching Hospital	Diagnostic Lab	Other Sources from Sales & Services		
2008	13,933,967		584,898			49,012	1,096,938	1,773,163	2,407,391	1,454,878	1,670,423		22,970,669
2009	14,509,643		723,117			142,645	1,058,809	2,305,529	2,525,698	1,413,049	2,174,547		24,853,037
2010	15,580,464		1,061,991			249,183	835,317	2,175,600	2,773,527	1,689,494	2,780,494		27,146,070
2011	15,886,476		1,046,970			340,615	1,393,386	2,652,264	3,029,667	2,196,685	2,779,683		29,325,746
2012	16,591,411		1,058,919			221,255	1,411,770	2,021,583	3,363,834	2,369,211	3,889,376		30,927,359
%	19.07%		81.04%			351.43%	28.70%	14.01%	39.73%	62.85%	132.84%		34.64%

*See Table 1 for a detailed break-down of state appropriations.

Table 1: Details on “State Appropriation” data from Table B

Years	Financial Support from the Government	Support for ENSV	Support for Student Aid from the Government	State Salaries (for the DVM Program)	Total
2008	2,351,074		260,170	11,322,723	13,933,967
2009	2,333,242		317,910	11,858,491	14,509,643
2010	2,489,025	266,709	336,371	12,488,359	15,580,464
2011	2,390,273	253,925	400,915	12,841,363	15,886,476
2012	2,381,905	247,000	446,306	13,516,200	16,591,411

In Table B, resources summarized as “others” represent the results of specific programs sponsored by local authorities to support student jobs, and also the results of financial operations. Sponsored research expenditures are directly related to sponsored research incomes, which have increased by 30% in recent years.

Teaching hospital (CHEV) revenues are only generated by payment for clinical services for patient care. There is no dedicated funding from the state appropriation (except salaries for some faculty and support staff positions directly paid by the Ministry) for the CHEV. The increase in CHEV income over the last five years reflects increased case load and new fee structures comparable to private practice fees. The difference I/C in Table 2 is covered by the global state appropriation and is a subsidy for CHEV operations. In the same period, there has been increased expenditures for the CHEV primarily reflecting increased clinical faculty and support staff (paid by the school) and the development of residency programs. Table 4 (Self-study, p. 8) presents the evolution of expenditures for instructors and staff for the last five years.

Table 2: Percentage of Hospital Income to Total Operational Costs

Years	Incomes	Costs	Technical staff salary paid by government	Total costs without salaries paid by government	Difference I/C (values)	% Incomes/Costs
2008	2,407,391	3,833,369	897,123	2,936,246	-528,855	81.99%
2009	2,525,698	4,099,504	1,004,695	3,094,809	-569,111	81.61%
2010	2,773,527	4,662,663	1,323,136	3,339,527	-566,000	83.05%
2011	3,029,667	5,132,039	1,352,576	3,779,463	-749,796	80.16%
2012	3,363,834	5,703,516	1,432,468	4,271,048	-907,214	78.76%

Until the economy improves, no growth in state appropriation is anticipated in the coming years.

The Ministry determines student tuition which increased from €1200 in 2008-09 to €2000 in 2011-12; however, this was partially offset by an increase in the number of students on financial aid, paying no fees (149 to 227) and the shortfall between actual tuition and the amount provided by the Ministry to the School for these students. For the School to advance its strategic plans to develop its teaching facilities and programs, additional revenue generation will be from initiatives to develop new services for the public and industry.

The number of faculty and staff positions allocated to each of the four ENVs and the salaries and benefits for these positions are determined by, and directly paid by, the Ministry. Compensation for faculty and staff, beyond those supported by the Ministry are the responsibility of the School. The School has some flexibility in allocation of funds generated from income producing units and research.

The annual budget is developed by the School leadership (dean, deputy dean of the veterinary campus, department heads and unit leaders). The dean makes the final decision on allocations and recommends the budget for approval to the Board of Governors.

The Ministry increased the class sizes for all schools in France by 20 students for the class starting in the fall of 2013. Additional funds for these added students were not provided by the government. Because additional resources were not provided, the four deans requested a moratorium on this increase in class size after 2013, until the effect of this one time increase, is evaluated on all five years of the professional program.

Finding: The Council finds that the school meets this standard.

Commentary: The School and its leadership have an in-depth understanding of the budget process and have the ability to appropriately manage the funds for the mission of the School.

Finances appear to be adequate to sustain the educational programs and mission, and the School's clinical units function as instructional resources. The School is responding creatively to budget challenges by developing new clinical and other services to increase revenue streams.

The School should monitor the effect on teaching and clinical experience with the increased class size especially because additional funding was not provided.

STANDARD

3. Physical Facilities and Equipment

All aspects of the physical facilities must provide an appropriate learning environment. Classrooms, teaching laboratories, teaching hospitals, which may include but are not limited to ambulatory/field service vehicles, seminar rooms, and other teaching spaces shall be clean, maintained in good repair, and adequate in number, size, and equipment for the instructional purposes intended and the number of students enrolled.

Administrative and faculty offices and research laboratories must be sufficient for the needs of the faculty and staff.

An accredited college must maintain an on-campus veterinary teaching hospital(s), or have formal affiliation with one or more off-campus veterinary hospitals used for teaching. Appropriate diagnostic and therapeutic service components, including but not limited to pharmacy, diagnostic imaging, diagnostic support services, dedicated isolation facilities, intensive/critical care, ambulatory/field service vehicles, and necropsy facilities must be provided to support the teaching hospital(s) or facilities with operational policies and procedures posted in appropriate places.

Facilities for the housing of animals used for teaching and research shall be sufficient in number, properly constructed, and maintained in a manner consistent with accepted animal welfare standards. Adequate teaching, laboratory, research, and clinical equipment must be available for examination, diagnosis, and treatment of all animals used by the college. Safety of personnel and animals must be assured.

Physical Facilities and Equipment

Background: The veterinary campus of Vet Agro Sup is located 14 km west of Lyon, with two locations: the main campus in Marcy l'Etoile and a livestock ambulatory clinic (UCRA) 14 km from the campus in L'Arbresle. The main campus (108 acres) has 41,000 m² of facilities, which includes: instructional facilities, administrative offices, diagnostic and research laboratories, offices and labs for all academic departments, clinical teaching rooms and hospitals. A student housing complex is located on the campus, separated from the research and teaching areas. Campus entry is monitored and there is a centralized night time surveillance system, a day care center at the campus entry, and other service buildings located throughout the campus.

The central three-story building contains administration, audiovisual and IT support, a library, five lecture theaters (one 350-seat, one 200-seat and three 120-seat), other smaller lecture rooms, an adequate number of teaching laboratories, a learning center (110-seats with computers), cafeteria, and student store. Five attached wings contain different teaching, diagnostic and research units and laboratories (for example, biochemistry and endocrinology, toxicology,

parasitology, histology, etc.), the Center of Study on Reproduction of Carnivores (CERREC), the Veterinary Anti-Poison Center (CNITV) and the Veterinary Pharmacovigilance Center of Lyon (CPVL). Most educational units have classrooms for small group sessions.

Located adjacent to the central building is ENSV, a World Organization for Animal Health collaborating center for training public health veterinary officers in France, which includes a small amphitheater (50 seats), some lecture rooms, and offices.

The teaching hospital (**CHEV**) complex is comprehensive and contains adequate clinical space and also support spaces for teaching animals. The **small animal hospital** includes:

- reception and cashiering, waiting areas, medical records,
- four dedicated areas for preliminary examinations,
- five consultation rooms (each accommodating 10-15 students),
- three clinical case discussion rooms (accommodating ~20 students),
- surgical suites including one with an image transmission system,
- Separate hospitalization areas for dogs (4) and cats (4) and a small animal isolation ward including some limited diagnostic laboratory equipment for student use,
- medical imaging suite (radiography, ultrasound, MRI). A CT unit is located in the ICI-B,
- a central pharmacy,
- a hematology and cytology laboratory and sample receiving,
- central supplies and sterilization unit for the entire hospital,
- a separate clinic for emergencies and intensive Care (SIAMU),
- a separate small animal preventive medicine clinic, and

- a rest area for students doing on-call duty nights and weekends.

The **equine clinic** includes:

- reception, medical records, and waiting area,
- an orthopedic examination area including lameness evaluation areas,
- two examination and treatment rooms,
- an imaging suite (digital radiography, ultrasonography),
- a standing MR unit,
- two surgery rooms both connected to a teaching gallery; one with image transmission capability,
- hospitalization area (19 stalls; two stalls for day-hospitalization) including paddocks,
- pharmacy,
- equipment storage,
- teaching rooms for clinical rounds,
- a 100-seat amphitheater equipped to accommodate large animals for educational demonstrations,
- a separate equine reproduction unit with examination and teaching rooms, stallion collection room, laboratory for assisted reproductive techniques, and stalls, and
- one ambulatory vehicle for regulatory work.

The **livestock clinic** includes:

- adequate examination and teaching areas,
- demonstration room,

- standing surgery suite,
- medicine and equipment storage,
- hospitalization facilities with 11 stalls for cattle,
- a separate building for sheep, goats and pigs, and
- paddocks for housing teaching cattle.

UCRA, located in L'Arbresle, is a private ambulatory practice that was acquired by the School to provide veterinary services (dairy, sheep, goats, pigs) to the region and provide students with adequate exposure in clinical production animal medicine. It is staffed by clinical faculty, residents and interns, and has four ambulatory vehicles, reception, pharmacy and equipment storage, offices and rounds area.

There is a separate appropriately sized and equipped **necropsy suite** with an adjacent separate **anatomy teaching laboratory** with adequate storage for fresh cadavers. Both areas are served by a central changing room specially equipped and designed for biosecurity.

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

The Claude Bourgelat Institute (ICI-B)—is a secure GLP accredited facility housing experimental animals (rodents, dogs, cats, pigs, sheep, and monkeys) and includes laboratories, surgical suite, and research animal facility up to protection level 2 (A2).

Student residence and campus restaurant—student housing (325 individual rooms), a university restaurant, fitness room, equestrian center, and several dedicated sports fields are located on the campus.

The School has its own Hygiene, Safety & Working Conditions Committee that meets at least twice yearly to establish, adapt, implement and monitor compliance with national regulations for occupational health and safety, applicable to an educational institution accessible to the public. The campus is classified and inspected regularly by government agencies, and is subject to regulations governing facility security, handling of toxic chemicals and radioactive products, and is inspected regularly by independent commissions. In September 2004, an internal security unit was created to upgrade the site's safety, including biosafety. A specific medical agreement reflecting the site's particular risks has been in effect since January 1, 2005. Inspections by specific and independent agencies (for example, agency for drug safety, agency for micro-organisms and toxins) and several public services (inspector of hygiene and safety, inspector for storing and using particular controlled substances and cytotoxic drugs) are performed regularly.

There is a central pharmacy in the CHEV where drugs and supplies are kept for all clinical areas. Close control of the use of drugs across the CHEV is maintained under the supervision of a pharmacist. Students are directly involved in researching the pharmacology and therapeutic aspects of medications for their cases in the pharmacy, can consult with the pharmacist, and then present this information and a draft prescription to their supervising clinician for approval for dispensing.

Controlled substances are appropriately secured and monitored throughout the hospital. Controlled and cytotoxic drugs are only dispensed to, and administered by, licensed veterinarians. The relevant hospital areas with controlled substances were pharmacy, anesthesiology, emergency and intensive care, small and large animal hospital treatment areas, and for cytotoxic drugs, the designated oncology treatment area. Card key access and double key systems were in place and not accessible to students. The ambulatory vehicles at UCRA had locked drug boxes bolted to the vehicle frame and hidden behind the rear seat. The pharmacist and pharmacy staff perform regular controlled substance inventory as required by law and also perform monthly drug and supply inventory throughout the CHEV.

A separate large animal isolation unit for contagious or suspected contagious diseases was constructed two years ago and has appropriate biosafety controls and posted protocols, and is in compliance with monitoring and reporting required by France and OIE. The facility includes separate and separated client viewing, and internally four dual purpose bovine and equine stall separated by high walls that are open at the ceiling. Case load is approximately 10-20 animals annually.

There is a separate small animal isolation facility and also an isolation ward within SIAMU. There are appropriate posted biosecurity protocols. Students receive instruction on isolation safety procedures and use of the units during their training.

Other safety protocols and procedures are posted in buildings throughout the campus.

The diagnostic imaging suite has radiography and ultrasound equipment for small animals, horses, and livestock with a dedicated room for large animals, radiography suite for small animals, separate room for small animal ultrasonography, spaces for image processing, case review with students, and resident office space. MRI for small animals and a specific room for standing-horse MRI are located within the CHEV and a CT scanner is located within ICI-B.

There is a central diagnostic laboratory within the small animal clinic that includes equipment for collecting blood samples, preparing samples for analysis directly (hematology, cytology) or collection of specimens to be sent to dedicated laboratories located in the central 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 interpreted by the pathologists.

The School has identified problems with the surfaces of stalls in the bovine clinic and is testing different wall treatments that withstand disinfection and meet biosecurity standards. Once a suitable material is identified it will be installed in the bovine stalls. The cleanliness of the bovine teaching area, although adequate was not to the level of other areas of the large animal facilities. The general appearance of the equine clinic was acceptable but could use some refurbishing in the examination treatment rooms and diagnostic imaging suite. The condition of the equine stall walls were adequate but will need painting or other surface treatment in the near future. The surgical suites and induction recovery rooms were well maintained.

The equine ambulatory vehicle did not have portable radiographic and ultrasound equipment typical of contemporary equine ambulatory vehicles; however, this equipment was apparently available for checkout if needed.

The preliminary examination areas for small animals while functional appeared to be somewhat congested with little separation of client animals.

The electronic medical records system, CLOVIS, is common to all four French veterinary schools. The system can be used to search cases at all colleges in France as well as in VetAgro Sup. Students use the system for case review and learning.

Finding: The Council finds that the school meets this standard.

Commentary: The School safety program is well developed and appropriate procedures are in place for oversight of controlled and cytotoxic drugs.

STANDARD

4. Clinical Resources

Normal and diseased animals of various domestic and exotic species must be available for instructional purposes, either as clinical patients or provided by the institution. While precise numbers are not specified, in-hospital patients and outpatients including field service/ambulatory and herd health/production medicine programs are required to provide the necessary quantity and quality of clinical instruction.

It is essential that a diverse and sufficient number of surgical and medical patients be available during an on-campus clinical activity for the students' clinical educational experience. Experience can include exposure to clinical education at off-campus sites provided the college reviews these clinical experiences and educational outcomes. Further, such clinical experiences should occur in a setting that provides access to subject matter experts, reference resources, modern and complete clinical laboratories, advanced diagnostic instrumentation and ready confirmation (including necropsy). Such examples could include a contractual arrangement with nearby practitioners who serve as adjunct faculty members and off-campus field practice centers. The teaching hospital(s) shall provide nursing care and instruction in nursing procedures. A supervised field service and/or ambulatory program must be maintained in which students are offered multiple opportunities to obtain clinical experience under field conditions. Under all situations students must be active participants in the workup of the patient, including physical diagnosis and diagnostic problem oriented decision making.

Medical records must be comprehensive and maintained in an effective retrieval system to efficiently support the teaching, research and service programs of the college.

Clinical Resources

Background: The clinical program in the CHEV is comprehensive for companion animals, horses and livestock, and includes required and elective rotations in each major species grouping and in various specialties. Externship weeks in private practice are mandatory and complement clinical training in the CHEV.

Students are supervised by faculty, residents, and interns as well as practitioners (employed by the School), some of whom practice partially in private practice and hold consultations at the school. Some clinical rotations have veterinary nurses to assist in patient care; however, in some clinical services, nurses are also used for other tasks apparently because of insufficient staff for routine cleaning of animal holding/treatment areas.

In 2008, to respond to challenges for livestock caseload, the School developed a population medicine department to teach mainly large and small ruminant animal medicine. Students are

able to participate in a few dedicated farm visits to study pigs and poultry, but because the school is located outside the main areas of that production, students wishing to specialize further in these species, in rabbit breeding, wildlife, or aquaculture can do so in Year 5 at one of the other ENV or through externships.

Various analytical laboratories are open for student use during clinical rotations. The small animal clinic and the emergency and critical care areas were equipped with hematology and serum chemistry analyzers, blood gas and electrolyte equipment. A hematology and cytology laboratory was located in the small animal clinic of the CHEV; however other diagnostic laboratory services were located in other buildings beyond the CHEV. Students must deliver the samples to the laboratory between cases. The School is planning on consolidating clinical diagnostic laboratory services in the CHEV in the near future.

Other programs that complement clinical training are the CNITV and CPVL (National Pharmacovigilance Center and toxicological data) train students to participate in a poison control hot line open to the profession and the public free of charge 24/7. CERREC (study of and research in carnivore reproduction) exposes students to the study of canine and feline reproduction and the Claude Bourgelat Institute (ICI-B; center for research and clinical trials on small and medium-sized animal models in which students are involved) educates students on the importance of animal based research.

Table A: Teaching Hospital

Animal Species	Number of Patient Visits	Number Hospitalized	Number of Hospital Days
Bovine			
2008	33	33	495
2009	29	29	435
2010	54	54	810
2011	56	56	840
2012	92	92	1,380
Canine			
2008	7,969	1,443	3,599
2009	8,211	1,628	5,752
2010	8,261	1,792	5,823
2011	9,215	2,141	6,269
2012	9,539	2,076	5,528
Caprine			
2008	75	0	0
2009	3	0	0
2010	9	0	0
2011	32	13	932
2012	35	10	321
Equine			
2008	1,143	822	4,735
2009	1,342	890	6,639
2010	1,553	1,121	6,745
2011	1,469	1,084	7,696
2012	1,489	1,080	8,530
Feline			
2008	3,804	1,027	2,094
2009	3,867	988	2,350
2010	3,764	1,129	2,728
2011	4,320	1,338	3,180
2012	4,833	1,059	2,515
Ovine			
2008	121	0	0
2009	2	0	0
2010	11	7	411
2011	15	6	264
2012	34	10	221
Porcine			
2008	7	1	123
2009	2	0	0
2010	1	0	0
2011	2	1	3
2012	3	1	37

Continued on next page

Animal Species	Number of Patient Visits	Number Hospitalized	Number of Hospital Days
Caged Pet Birds			
2008	3	0	0
2009	1	0	0
2010	--	--	--
2011	7	0	0
2012	6	0	0
Caged Pet Mammals			
2008	166	26	38
2009	231	48	61
2010	157	26	152
2011	188	41	50
2012	207	29	35
Other			
2008	75	7	15
2009	68	9	12
2010	114	8	544
2011	227	21	668
2012	436	9	256

Table B Ambulatory/Field Service Program

Animal Species	# of Farm (site) Visits	# of Animals Examined/Treated
Bovine		
2008	186	1,793
2009	186	1,380
2010	186	1,434
2011	186	1,334
2012	186	1,355
Caprine		
2008	186	64
2009	186	--
2010	186	1
2011	186	2
2012	186	7
Equine		
2008	--	135
2009	--	336
2010	--	363
2011	--	197
2012	--	175
Ovine		
2008	186	107
2009	186	--
2010	186	1
2011	186	2
2012	186	9

Adequacy of Caseload for Clinical Training

The **small animal** caseload has continued to increase over the last five years and the School is examining options for expanding the hospital.

Despite the recession, the **equine** caseload has been growing in terms of visits (~1,500/year), hospitalized cases, and duration of hospitalization. This has necessitated ongoing investment in equipment and facilities. An equine ambulatory service involves mostly provision of regulatory services at race tracks, and recently at major horse shows. No portable radiographic or ultrasound equipment was apparently available for use in the ambulatory vehicle.

The low number of hospitalized **cattle** in 2008 and 2009 reflects facilities renovations between September 2008 and March 2009, months that typically have a heavier clinical case load.

Livestock health regulations largely preclude discharge of admitted patients, which are typically necropsied after diagnosis. Students have the opportunity to follow these cases through pathology after working them up and performing appropriate procedures.

Primary exposure to **sheep and goats** is through the ambulatory practice (UCRA). Students desiring further clinical training in Year 5 can do this at other ENVs or through externships.

UCRA, a private livestock practice purchased by the School provides excellent clinical training in herd health management. The practice has 186 cattle breeders (12,178 head); 49 goat farmers (1,938 goats) and 95 sheep farmers (3,247 sheep). Sixteen cattle farms are used in the

population medicine program. In 2012, 52 livestock farms were visited more than 10 times per year, 16 between six and 10 times per year, and 12 less than five times.

UCRA is not a major source for swine medicine, given the low number of breeding farms located near the school. Further, those farms are highly specialized and do not allow repeated visits by students. Under animal health regulations, commercial swine can only be transported to slaughterhouses. The few hospitalized pigs are pet pigs. Those students desiring more intensive training in swine medicine in Year 5 do this at other institutions. Collaboration with agricultural colleges in regions with hog farms is under discussion to broaden training opportunities.

Caseload in **caged companion mammals** is increasing because of recruitment of specialists (and hiring a research professor in 2014), and will require dedicated hospital space. **Bird and reptile** caseload is small, and wildlife is not included in the CHEV activities but the feasibility of expanding services in these species is being studied.

The **Preventive Health program for small animals** located in a separate building provides students with comprehensive experience under faculty supervision in client communication, history taking, physical examination, routine diagnostics, vaccination and anthelmintic administration.

Integrated and Sequential Clinical Training

Students from several years (Y3-Y5) are present in different CHEV rotations; each class is divided into "clinical groups," each of which is assigned to a species area (small

animal/equine/production animal) and to a specific clinical activity (first opinion or specialty consultation, hospitals, imaging, central laboratory, surgery, emergency medicine, autopsy, etc.) for a given time (at least one week). As a result, at the end of five semesters (S10 - S14 inclusive) each student would have been trained on all clinical activities for all major species groupings, and developed the clinical skills required for graduation.

In S10 (2nd semester of 3Y), students are observers and nurses, they attend physical examinations; develop and practice hygiene (biosecurity) and restraint; and develop understanding of the general functioning of the CHEV.

In S11 and S12 (4Y), students gradually become active participants and are particularly responsible for pre-consultations, which involves gathering background, case history and performing comprehensive clinical examinations. This first stage draws on clinical reasoning to formulate possible rule-outs or diagnoses justifying one or more additional procedures, some of which can be carried out by students (blood samples, urinary catheterization, etc.). During the pre-consultation, students often work in pairs (4Y-3Y or 5Y-4Y) with assistance from interns. The case is then presented by the student to a faculty member (EC), a hospital doctor or resident in the presence of the owner. The diagnostic procedure to be performed is then evaluated, confirmed or rejected before further exploration, sample taking, and possible hospitalization are ordered.

In S13 and S14 (5Y), students have completed their core courses, have their DEFV (Diploma of Fundamental Veterinarian Studies) and select one of six clinical tracks for their pre-

specialization (companion animals, equine, production animals or a combination of two major species groupings) or pursue studies in industry, public health or research that could result in the awarding of a masters or PhD degree.

In clinical rotations, with the help of interns and residents, Year 5 students assume responsibility for monitoring of several cases and supervision of Year 4 students; management and monitoring of hospitalized cases; performing in-depth examinations; and interpretation of test results, always under the supervision of a faculty member. They write prescriptions for care and treatment (checked and signed by a faculty member), accompany the client to the pharmacy for dispensing of medications; finalize the medical record for clinician approval, and accompany the owner to the cashier.

For all consultations, clinical findings are recorded and entered directly into the CLOVIS medical record database by students, who are responsible for preparing consultation and hospitalization reports. These are then validated by a faculty member. Referred cases are systematically described in a precise, detailed report summarizing the diagnostic procedure and suggested treatment; after approval by the faculty member or resident, this report is sent to the referring veterinarian who then decides if the case should be further treated in the CHEV or could be managed in the referral practice.

For hospitalized animals, students follow cases assigned to them until discharge. Each day, students participate in rounds led by a senior clinician, and during the day discuss cases with their faculty clinicians. Students dispense care, days and nights and on weekends, as needed, and

manage patient records. They provide daily reports to owners. For horses, communication with owners is handled by interns; for production animals, by faculty members, hospital practitioners, and interns.

A team of faculty and technicians handles companion animal emergencies. This operates in an appropriately equipped separate facility, 11 months a year. Students are always supervised and never in an isolated situation with the client 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.

In population medicine, students perform a full herd "audit," which involves collection and analysis of breeding records; visits to the breeder; access to the entire herd, as well as all facilities on 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.

CLOVIS, a computerized medical record management system, common to the four ENVs, is used systematically by all clinicians and students for consultations, is comprehensive, and allows ready retrieval of clinical information. Portions of the medical record are recorded electronically and other components are paper based.

Finding: The Council finds that the school meets this standard.

Commentary: The School has an appropriate number of normal and diseased animals for the preclinical and clinical teaching programs in its teaching hospital and livestock practice.

Complementary or supplementary clinical experiences are also provided through the other ENVs and externships in selected species (for example, poultry, rabbits, and aquaculture). The small animal Preventive Health program provides outstanding clinical exposure to wellness examinations and preventive health care (vaccinations, worming, etc.). UCRA provides excellent clinical training opportunities in livestock medicine and heard health.

STANDARD

5. Library and Information Resources

Libraries and information retrieval are essential to veterinary medical education, research, public service, and continuing education. Timely access to information resources, whether through print, electronic media, or other means, must be available to students and faculty. The library shall be administered by a qualified librarian. The college shall have access to the human and physical resources necessary for development of instructional materials.

Library and Information Resources

Background: The library includes a 110 seat work room and access to 10 computer workstations in a wireless environment, a photocopier, printer, and scanner. The library is open Monday to Friday from 8:30 a.m. to 7 p.m. during the academic year (typically more than 50 hours/week) when a student monitor is on duty, and until 5 p.m. outside this period. It is closed for one week at Christmas and three weeks in August.

The head librarian holds an MLIS from McGill University, Montreal. She works with two staff qualified in documentation. The head of the Documentation Center of the National Center for Veterinary Toxicological Information and the Veterinary Pharmacovigilance Center of Lyon holds a master's degree in information science from the National School of Information Science and Libraries.

The collection covers veterinary science, animal sciences, and life sciences. As the first veterinary school in the world, the library has a diverse collection in veterinary sciences, with more than 15,500 documents referenced in the catalog of this old collection. The collection is composed of precious works from the 16th to the 19th century, some of which are available in full text; more than 400 old documents can be viewed on the Library website.

The contemporary collection is composed of more than 6,000 books (specialized monographs, guides, manuals, reference works), conference proceedings, and 22,714 professional and PhD theses from French and foreign veterinary schools. The library subscribes to more than 90 major veterinary science electronic journals. Bundled subscriptions to Freedom Elsevier and the Wiley STM collection provide full-text access to over 3,000 online scientific journals. Sagaweb, the AFNOR (French Standards Association) portal, provides full-text access to more than 30,000 French standards in effect, and many international standards. The documentary portal provides access to several scientific databases: PubMed, Web of Science, Science Direct, Wiley Online Library and Springer Link. Via these databases, users can access the full text of many articles, depending on VetAgro Sup subscriptions. The library catalog has over 200 eBooks in veterinary science. More than 400 non-current journal titles are searchable via open access. There are over 430 multimedia documents (videos, CD-DVD). Available electronic resources are growing.

The budget for acquisition of library resources has remained stable with approximately €110,000 (2013 budget) spent annually on the purchase of books and subscriptions to journals and databases. This represents an average investment of €162 per user (students and faculty).

The library staff receives regular training with the Regional Scientific and Technical Information Training Unit in Lyon, an inter-university service for staff that offers training on the new uses of information as well as digital tools and resources.

The School uses an “E-learning” platform - MOODLE (modular object oriented dynamic learning environment); approximately one half of the faculty use this methodology.

Finding: The Council finds that the school meets this standard.

Commentary: The librarian is credentialed and the library has appropriate and timely access to print and electronic resources to support the professional curriculum and faculty research. The School provides adequate resources for development of instructional materials.

Students appreciate the excellent access to electronic and hard copy resources and the helpfulness of the librarian and staff.

STANDARD

6. Students

The number of professional degree students, DVM or equivalent, must be consistent with the resources and the mission of the college.

Colleges should establish post-DVM/VMD programs such as internships, residencies and advanced degrees (e.g., MS, PhD), that complement and strengthen the professional program.

Student support services must be available within the college or university.

In relationship to enrollment, the colleges must provide accurate information for all advertisements regarding the educational program by providing clear and current information for prospective students. Further, printed catalog or electronic information, must state the purpose and goals of the program, provide admission requirements and procedures, state degree requirements, present faculty descriptions, clearly state information on tuition and fees along with procedures for withdrawal, give necessary information for financial aid programs, and provide an accurate academic calendar. The information will include national and state requirements for licensure.

Each accredited college must provide a mechanism for students, anonymously if they wish, to offer suggestions, comments, and complaints regarding compliance of the college with the Standards of Accreditation. These materials shall be made available to the Council annually.

Students

Background: The number of students enrolled in the four ENVs each year is set by the Ministry of Agriculture. In 2012, the government increased the number of First Year students admitted to each ENV by 20 from 117 in 2012-2013 to 137 for 2013-2014. Financial resources from the Ministry have not been increased proportionately for the increased enrollment. The deans have requested a moratorium for subsequent years until the impact of this increase is fully evaluated throughout the five year program.

Veterinary Medical Program

Class	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
First-year (1Y)	125 (114+11r)	123 (116+7r)	119 (117+2r)	122 (117+5r)	122 (117+5r)
Second-year (2Y)	108 (107+1r)	120 (118+2r)	129 (121+10r-2d)	120 (114+6r)	122 (117+5r)
Third-year (3Y)	110 (109+1r)	106	111 (110+1m)	124 (123+1r)	117 (115+2r)
Fourth-year (4Y)	0*	109 (110-1m)	106	110	122
Master grade	0	109	106	110	N/A
Fifth-year (5Y)	118 (40+78)	78***	117 (109+12-4)	97 (106+2-11)	107
Graduated DVM	40**	75	113	95	N/A

r: redoublant (repeat the class); d: demission (absolute attrition); m: mutation

0*: No students in Fourth-year in 2008-2009, due to changes in the degree course. The 118 students in 3Y in 2007-2008 moved directly to the last year (extra study year corresponding to 5Y).

40**: of the 118 5Y students in 2008-2009, only 40 defended their veterinary thesis (four years of training).

78***: 78 wanted to do an additional year of training. As a result, these students had a five-year program.

Graduated DVM : students who obtain their professional veterinary thesis at the end of 5Y.

N/A : not available yet.

Changes in student numbers between years reflect students repeating the year. Resignations (d; absolute attrition) are very rare. The variation between 4Y and 5Y reflects student transfers between the four ENVs. For example, in 2010-2011: four Lyon students did their 5Y at another school and 12 students from other French schools did their 5Y at Lyon. Transfers for 5Y between schools is limited to 20%. Transfers (m) between ENV before 5Y are only allowed on an exceptional basis, and require review and approval by the Board of Directors of the four ENVs.

A very small number of 5Y students (three in 2010, four in 2011, two in 2012) did not defend their professional thesis. Some students postpone their thesis defense for one to two years, but during this period they cannot practice as veterinarians. Others who find positions in industry or research do not need the veterinary thesis to work; however, if they choose not to defend their thesis, they do not receive the DVM degree from the University of Lyon.

Interns, Residents and Graduate Students per year

Academic year	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Interns					
Equine	9	7	7	8	9
Small Animal	16	16	4	15	17
Animal Production	3	0	3	4	3
Residents					
Equine	2	2	4	4	4.5*
Small Animal	7	7	7	9	8.5*
Animal Production	0	0	0	1	1
Masters in Research	19	6	16	11	13
PhD in Research	36	33	33	32	29

*Residency in Anesthesiology: 0.5 small animals and 0.5 equine

† Include veterinary and non-veterinary students in the research units of the veterinary school and whose major advisor is a member of the veterinary school.

The maximum number of interns is set by the Ministry of Agriculture for each discipline. In

2010-2011, the lower number of small animal interns reflected changes in the degree program.

The number of residents is increasing because the veterinary school encourages hiring or training of professors with diplomas from the European (27) or American (5) specialty colleges.

Research degrees are granted by the University of Lyon even if students are in research units within the veterinary school. Research units like the ICI-B have a positive impact in maintaining the number of graduate students.

DVM Students per year for Last Five Years

Academic Year	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Total DVM	461	536	582	573	590
Minority	NA	NA	NA	NA	NA

NA = not applicable

French law prohibits diversified recruitment or maintaining records based on ethnic origin.

Other Educational Programs

Academic Year	Activities				
	Additional Clinical Year Students	Veterinary Technician Program	Undergraduate Programs	Other	
	Foreign Students (bilateral agreement) ¹	Bachelor Animal Health ²	Clinical Externships Equine Department ³	DESV ⁴	CEAV ⁵
2008-2009	20	24	/	1	40
2009-2010	15	24	/	2	39
2010-2011	15	24	/	4	43
2011-2012	24	24	2	3	
2012-2013	26	24	(currently enrolling)	2	

(1) Bilateral scientific and pedagogic agreements exist between the veterinary school and the University of Montreal, two Brazilian universities and 22 European universities.

(2) Program in collaboration with 2 other institutions. Only part of the training (35%) is carried out by instructors and staff of the Veterinary School.

(3) New program since June 2012: Equine clinical program in English for a period of 1 to 3 months (June to September). Applicants must be students in veterinary medicine in their last 2 years of studies

(4) DESV (Board of Specialized Veterinary Studies) in Equine Pathology and DESV in Internal Medicine

(5) CEAV (Certificate of Veterinary in-depth Studies) in Internal Medicine: regarding organization and theoretical training, there is a rotation through the 4 ENV with a duration of four years in each veterinary school (Lyon from 2007 to 2011). However, clinical internships are held each year at the 4 ENV.

Foreign students can complete one semester and more often two semesters of training, taking mainly 2Y and 3Y courses, and clinical rotations in 3Y. A small number of students take 4Y

clinical rotations. For these rotations, they complement groups of French students and spend about 40% of the time in free clinics.

Certificate of Veterinary In-Depth Studies (CEAV) and Board of Specialized Veterinary Studies (DESV) students are veterinarians who complete their training with supplementary years (one year for CEAV, three years for DESV which is comparable to training in the specialty colleges).

Information for prospective students is on the School's website (<http://www.vetagro-sup.fr/futurs-étudiants>) and is also provided at career fairs, at the annual Open House on campus, and can be requested by contacting the School.

Student Support Services

The Office for Education and Students manages most student services including:

- Enrollment of students and interns
- International student exchanges
- Thesis file management
- Preventive health
- Recording student absences
- Assignment of an instructor-advisor (mentor) to each student
- Organizes instruction, clinical rotations, and examinations
- Manages externship agreements
- Enters and processes grades
- Records externship approvals,
- Ensures classification of students.

Additional student services include:

- Housing aid
- Financial aid and scholarships
- Internship abroad programs
- Student advising

- Graduation ceremony
- Professional and social clubs and organizations.

In addition, an on-site doctor is available to provide students with medical advice for physical or psychological problems. First year students must undergo an obligatory medical examination.

All students are assigned an academic mentor throughout the curriculum. Students in academic difficulty are also assigned tutors. Students repeating a year have a personalized study program developed by the Associate Dean.

The School does not provide career placement services, but positions available are posted in strategic location for student access. There is a high demand for veterinarians in France and employment is not a problem for graduates.

At the beginning of the academic year, information on AVMA accreditation is given to all students and is also available on the School's website. Students can submit their comments confidentially either electronically or by using the suggestion box.

Finding: The Council finds that the school meets this standard.

Commentary: Information for prospective students is comprehensive and readily available.

Opportunities for all student comments and suggestions are confidential and readily accessible.

Students commented that the associate dean and staff were readily accessible and open to

suggestions for improvements and in resolving concerns. Students interviewed felt well supported by the Office of Education and Students and spoke highly of the associate dean. They had good access to support services in general and also to information concerning externships through the faculty, and specifically their assigned mentor.

Students interviewed by the site team had all listed ENVL as their first choice. Reasons given were its good reputation within France, the access to production animals, a varied and interesting case load, the quality of student life and the availability of student housing on campus.

The number of internships and residencies appears sufficient for the clinical program and are effectively used in training of the professional students. Likewise, graduate students are appropriately integrated into the preclinical professional curriculum.

The site team concurs with the administration that the impact of the additional 20 students admitted in the 2013-14 academic year standards should be monitored closely, specifically regarding its effect on clinical resources, facilities, faculty, in addition to the other standards.

STANDARD

7. Admissions

The college shall have a well-defined and officially stated admissions policy. The policy shall provide for an admissions committee, a majority of whom shall be full-time faculty members. The committee shall make recommendations regarding the students to be admitted to the professional curriculum upon consideration of applications of candidates who meet the academic and other requirements as defined in the college's formal admission policy.

Subjects for admission shall include those courses prerequisite to the professional program in veterinary medicine, as well as courses that contribute to a broad general education. The goal of preveterinary education shall be to provide a broad base upon which professional education may be built, leading to lifelong learning with continued professional and personal development.

Factors other than academic achievement should be considered for admission criteria.

Admission

Background: By French law, the process for admission into veterinary school is common to all four ENV and is largely managed centrally by the state, with the four deans acting as the final selection committee based on applicant examination performance and preference for a particular ENV. Only European nationals can be admitted into veterinary school. The number of students in each admitted class, currently 137, is set by the Ministry of Agriculture and is identical for each of the four ENV.

To broaden the diversity of experience of admitted applicants, there are five pathways (competitions) for entry into veterinary medicine, each of which has a different relative number of allocated positions:

- **Competition A** (~80%) for baccalaureate students (high school diploma) who complete two years of rigorous academic preparatory classes before taking a national examination. The preparatory curriculum covers plant, animal, and cell biology; chemistry; physics; geology; philosophy; computer science; French; information technology; a foreign language and culture; and sports education. In addition to mastery of content determined by written and oral examinations, students develop competency in critical thinking, scientific method and managing information, written and oral communication,

philosophy, language and cultural diversity, organization skills, team work, time and stress management, reflection, and physical health.

- **Competition A TB** (~2%) for baccalaureate students in preparatory technological sciences and laboratory technology series (STL biochemistry or bioengineering specialty) or Science and Agricultural and Life Technology series (STAV). Similar to competition A, these applicants also have training in biochemistry and biology techniques, computer science, and geography (same competencies as mentioned for competition A).
- **Competition B** (~9.5%) for university students enrolled in the 2nd or 3rd year of a bachelor's degree program in life sciences related fields. These examinations cover animal, plant cellular and molecular biology, genetics, chemistry, mathematics and a foreign language (same competencies as mentioned for competition A).
- **Competition C** (~7.5%) for university graduates with degrees: DUT (Biological Engineering/Applied Biology, BTS and BTSA (same competencies as mentioned for competition A).
- **Competition D** (~1%) for physicians, pharmacists, dentists, or individuals with Masters degrees, primarily in biology. The applicant's curriculum vitae and motivation are considered, and candidates are selected after an interview.

For each pathway, upon acceptance into a veterinary school the student has a sound basis in biological sciences, and has the general intellectual culture needed to assimilate knowledge and skills during the veterinary program. The primary pathway for admission is the preparatory classes where students acquire the knowledge and skills to pass the entrance examination for one

of the major schools of Biology: École Normale Supérieure (training of future university professors, top-level scientific administrators, etc.), Agricultural Schools, and Veterinary Schools. Competitions A, B and C take place in two stages: written examination to select students who, above a minimum overall average, that are eligible for admission followed by an oral examination/interview to select those to be admitted. The four deans are the final selection committee based on applicant examination performance and preference for a particular ENV. For veterinary medicine, there are approximately 2,500 applicants for 468 positions each year. Applicants have two opportunities to be admitted.

Competition C is used as a mechanism to increase the number of applicants that might pursue careers as livestock veterinarians.

Competition D is for candidates who are first selected based on their record (CV and letter of motivation): a test of eligibility, and are admitted after an interview.

Opportunities to take preparatory classes are geographically distributed throughout France and open to all students regardless of socioeconomic background, including underprivileged or disadvantaged students. The French government provides scholarships to all students with financial need.

Although the general organization of competitions is under the authority of the Ministry of Agriculture, the deans representing the faculty of the ENV, make recommendations for the curriculum of the preparatory classes to reflect the skills necessary to succeed in a veterinary

curriculum. The last revision of the preparatory courses incorporated recommendations from faculty committees from all four ENVs. To ensure fairness, consistency, and equal opportunity in student admission, professional schools in France, including the veterinary schools, are not allowed to have their own admissions committees. It was made clear to the site team that changes in this process would remove veterinary medicine from the grand écoles and diminish the stature of the profession among the health professions in France.

Number of Students by Type of Competition

Academic year	Competition A		Competition B		Competition C		Competition ATB		Competition D		TOTAL	
	O/A	VAS	O/A	VAS	O/A	VAS	O/A	VAS	O/A	VAS	O/A	VAS
2008-09	1,695/376	94	339/40	10	143/32	8	36/4	1	52/4	1	2,265/456	114
2009-10	1,749/376	94	392/44	11	171/36	9	49/8	2	44/4	0	2,405/473	116
2010-11	1,880/376	94	384/46	11	178/36	9	46/5	2	42/4	1	2,530/474	117
2011-12	1,985/376	94	387/45	12	197/36	9	66/7	1	48/4	1	2,683/475	117
2012-13	1,845/376	94	379/44	11	217/36	9	59/8	2	48/4	1	2,548/478	117

O: candidates for all France

A: admitted to the 4 ENV

VAS: admitted to Lyon

Students from other veterinary schools can take part of their training in France (for example, Erasmus students from EU countries), but cannot graduate from a French veterinary school (see background in Standard 6).

Transfers between the four ENVs are rare and require approval by the Board of Directors of the ENV. In Year 5, students can complete part of their clinical training at another ENV in areas of specialty not available at their own ENV.

Finding: The COE finds that the college meets this standard.

Commentary: French law prohibits the four veterinary schools from having individual admission committees. Outcomes of the process, specifically, low attrition rate, success of students completing the professional program and remaining in the profession, and the diverse, high quality students (as related by the faculty and alumni) appear to validate the selection and admissions process.

The site team confirmed that students that otherwise would not have had an opportunity to attend veterinary school were selected from diverse backgrounds and those with financial need were fully supported with scholarships. Pre-veterinary preparation provides a strong scientific foundation in the biological sciences complemented by cultural development and nonacademic skills and proficiency.

STANDARD

8. Faculty

Faculty numbers and qualifications must be sufficient to deliver the educational program and fulfill the mission of the college. Participation in scholarly activities is an important criterion in evaluating the faculty and the college. The college shall give evidence that it utilizes a well-defined and comprehensive program for the evaluation of professional growth, development, and scholarly activities of the faculty.

Academic positions must offer the security and benefits necessary to maintain stability, continuity, and competence of the faculty. Part-time faculty, residents, and graduate students may supplement the teaching efforts of the full-time permanent faculty if appropriately integrated into the instructional program.

Faculty

Background: There are a fixed number of state funded professorial positions, paid directly by the Ministry of Agriculture. These tenure track faculty are either full professors (n=31) or associate professors (n=48), all with a required 50% effort assignment to research. There are no assistant professors by law because these positions are reserved for young instructors working on PhDs. Most clinical track faculty (PH= hospital practitioner) are on contract to the School (n=14; 12.67 FTE) and three are employed by the Ministry of Agriculture. There are four temporary lecturers, equivalent to one PH. Clinical faculty have proven professional experience; some are Diplomates of European or American specialty colleges.

Faculty and clinicians (n=97) are members of one of four departments: Biological Science and Public Health; Small Animal; Equine; or Animal Production. Research is conducted in research units separate from the departments.

Veterinarians

Title	DVM only	MS	PhD	Board Certified	Board Certified and MS	Board Certified and PhD	TOTAL
Administrator	1		1			3	5
Professor	4		10			10	24
Associate Professor	4		24	3		10	41
Assistant Professor							0
Part-time Lecturer*	4						4
Total	13	0	35	3	0	23	74

*Temporary replacement lecturers in dentistry, ophthalmology, clinical nutrition and dermatology

Non-Veterinarians

Title	MS	PhD	Board Certified	Board Certified and MS	Board Certified and PhD	Total
Administrator						0
Professor		2				2
Associate Professor	2 *	5				7
Assistant Professor						0
Total	2	7	0	0	0	9

*English professor

State funded faculty positions have been stable for more than 10 years; every retirement/resignation is replaced by opening a new position. The number of full professor positions (n=31) remains constant, so for junior faculty to be promoted to full professor there needs to be an open full professor position, which is filled by open competition among faculty from all four ENVs.

In 2014, recruitments are planned for associate professors in parasitology (avian and other companion mammals), carnivore nutrition, and anatomic pathology. The School has converted some funded faculty positions assigned by the Ministry into clinical track positions (HP); three HPs have been recruited this way.

Tenure track faculty are evaluated annually for promotion by a national commission composed of elected faculty from all institutions of higher education of the Ministry of Agriculture (CNECA). Faculty must complete an activity report that is submitted with the dean's recommendation to the CNECA. Each year a specific number of promotions are offered in each category (full professor, associate professor). The CNECA considers the dean's recommendation but makes independent decisions.

If an associate professor achieves the required level to be promoted to full professor, an internal commission of the School evaluates the activity report and makes a proposal to the educational council to open a new full professor position in the selected field. A national competitive examination is then held the following year. When a full professorship opens up in a discipline, candidates who already have HDRs (a degree required to lead and conduct research programs) can apply, depending on discipline expertise, and take a national examination. Success in these examinations allows the candidate of choice to hold the position as a trainee for one year (for assistant professor), after which a tenure commission assesses performance and makes a recommendation to the DGER of the Ministry of Agriculture on whether full professor status should be granted.

For clinical track faculty, those employed by the Ministry follow national promotion rules that consider quality of service, age, and seniority. For those employed directly by the School, security of employment is determined by the Board of Governors depending on the overall budget and teaching needs.

Under French law, tenure track faculty are required to spend 50% of their time in research and 50% in teaching and service. Clinical track faculty are mandated to work full time on teaching and service, but can be engaged in research programs on request by the research unit and after departmental approval. The criteria for advancement considers the relative balance of different activities.

A national program is offered to train new faculty in teaching methods. The relationship of many faculty with external research units allows latitude for external scientific seminars. Participation in, and presentations at, international conferences are encouraged. Faculty can pursue international training experiences, subject to administrative approval and provided a replacement can be identified for the period of leave. Supplementary courses are offered to faculty to enable them to acquire or improve skills in teaching (with universities), scientific research (molecular biology, animal experimentation) or in the English language. Department Heads receive one day of training in administration.

Because the number of state funded faculty positions is fixed, expansion of the clinical program requires that other revenue streams, primarily clinical income, must be used to support many clinical faculty positions. Competitive salaries for recruitment and retention of clinical specialists is an additional budget challenge. A long term objective is to secure additional state funded

clinical positions in recognition of the expansion of specialty disciplines for the clinical training program.

Support Staff*

	Clerical	Technical	Total
Clinical	25.78	74.25	100.02
Non-clinical	37.27	55.73	92.99
Research	6.40	48.35	54.75
Total	69.44	178.32	247.76

* The distribution of staff positions is determined by the Dean.

The level of technical support for faculty in the CHEV is variable, with some disciplines being well supported and others having minimal support.

Finding: The Council finds that the school meets this standard.

Commentary: Faculty were generally satisfied with career advancement, mentoring, evaluation, professional development opportunities and resources; however the need for additional clinical faculty in some disciplines was considered desirable for program expansion and provision of a broader range of clinical specialties. Some clinical faculty expressed the need for additional veterinary technicians and animal care staff. Some clinical faculty expressed concern about the relative weighting of clinical responsibilities in annual assessment.

The Dean and CHEV director should review the number of technicians assigned to all disciplines within the CHEV, and ensure adequate support for clinical instruction and patient care.

STANDARD

9. Curriculum

The curriculum shall extend over a period equivalent to a minimum of four academic years, including a minimum of one academic year of hands-on clinical education. The curriculum and educational process should initiate and promote lifelong learning in each professional degree candidate.

The curriculum in veterinary medicine is the purview of the faculty of each college, but must be managed centrally based upon the mission and resources of the college. There must be sufficient flexibility in curriculum planning and management to facilitate timely revisions in response to emerging issues, and advancements in knowledge and technology. The curriculum as a whole must be regularly reviewed and managed by a college curriculum committee. The majority of the members of the curriculum committee must be full-time faculty. Curriculum evaluations should include the gathering of sufficient qualitative and quantitative information to assure the curriculum content provides current concepts and principles as well as instructional quality and effectiveness.

The curriculum shall provide:

- a. an understanding of the central biological principles and mechanisms that underlie animal health and disease from the molecular and cellular level to organismal and population manifestations.
- b. scientific, discipline-based instruction in an orderly and concise manner so that students gain an understanding of normal function, homeostasis, pathophysiology, mechanisms of health/disease, and the natural history and manifestations of important animal diseases, both domestic and foreign.
- c. instruction in both the theory and practice of medicine and surgery applicable to a broad range of species. The instruction must include principles and hands-on experiences in physical and laboratory diagnostic methods and interpretation (including diagnostic imaging, diagnostic pathology, and necropsy), disease prevention, biosecurity, therapeutic intervention (including surgery), and patient management and care (including intensive care, emergency medicine and isolation procedures) involving clinical diseases of individual animals and populations. Instruction should emphasize problem solving that results in making and applying medical judgments.
- d. instruction in the principles of epidemiology, zoonoses, food safety, the interrelationship of animals and the environment, and the contribution of the veterinarian to the overall public and professional healthcare teams.
- e. opportunities for students to learn how to acquire information from clients (e.g., history) and about patients (e.g., medical records), to obtain, store and retrieve such information, and to communicate effectively with clients and colleagues.
- f. opportunities throughout the curriculum for students to gain an understanding of professional ethics, delivery of professional services to the public, personal and business finance and management skills; and gain an understanding of the breadth of veterinary medicine, career opportunities and other information about the profession.
- g. knowledge, skills, values, attitudes, aptitudes and behaviors necessary to address responsibly the health and well being of animals in the context of ever-changing societal expectations.
- h. fair and equitable assessment of student progress. The grading system for the college must be relevant and applied to all students in a fair and uniform manner.

Curriculum

Background: The general program objective is to prepare veterinarians responding to the needs of society in animal health, welfare, and public health.

This program ensures that graduates:

- know the morphologic and physiologic characteristics that define a healthy animal, and pathophysiology;
- know the mechanisms of production, processing and marketing of food for humans and animals;
- ensure animal or animal population health, including diagnosis, treatment and prevention of disease;
- can manage, prescribe, administer, supervise administration, prepare and dispense drugs in accordance with the objectives of public health and animal health;
- can ensure safety and quality of animal-based feed and animal food, prevent zoonotic diseases, protect the environment, contribute to the advancement of comparative medicine;
- apply best professional practices and ethics;
- are aware of ethical responsibilities of veterinarians relating to care for an animal, any other professional activities as well as relations with the client.

Before entry into the professional curriculum, most admitted students (~80%) have completed two intensive preparatory years, taught by specialist instructors in high schools throughout France. A description of the prerequisite course is provided in Standard 7.

The framework for the professional curriculum, set by legislative decree (in 2007), is common for all four French veterinary schools, and was negotiated by the Schools, with extensive faculty input at the discipline level, and the profession with the Ministry of Agriculture. Guided by the national framework, the faculty of each School decides the relative weighting of discipline

content and mode of delivery. The ENVL faculty developed a blended delivery approach using multidisciplinary courses, with integration of preclinical and clinical content reinforced with practical laboratory sessions. Additionally, early animal experience, small group learning sessions, and graduated clinical exposure beginning in Year 3, enhance student learning through peer teaching and emphasis on the importance of preclinical knowledge for practice. The new curriculum was fully implemented in 2011.

After admission, the five-year veterinary curriculum is organized into:

- Four years for the Core Curriculum (eight semesters - S5 to S12; [S1-4 = two years of preparatory classes taken before the national competitive examination for admission to one of the four ENVs in France – competition A under Admissions]);
 - Years 1, 2 are primarily preclinical sciences;
 - Year 3 is primarily clinical sciences; and
 - Year 4 courses are equally divided (two 16 week clinical rotation blocks) between production animal medicine and veterinary public health; and equine and companion animals.

Fifth year as a specialization year in a professional stream (two semesters: S13-S14). Students have a choice between nine streams: veterinary public health, research (Master II), industry (professional masters) and six clinical streams. The Lyon School is the only French school offering six clinical streams—small animal (SA), equine (Eq), animal production (AP), and three mixed clinical streams (SA-Eq, SA-AP, and Eq-AP). The approximate distribution of students by

clinical streams for the last four years is 36% SA; 13% Eq, 14% AP; 7% SA-Eq; 15% SA-AP; and 8% Eq-AP.

Professional knowledge modules (for example, veterinary practice management [Year 4 - one week; Year 5 - one week]; animal health accreditation [Year 4 - one week]; and radiation protection competency (Year 5 – one week]) are taught to all students.

At the end of Year 4, students are awarded the Diploma of Fundamental Veterinary Studies (DEFV), equivalent to a Master's degree and awarded by ENV Lyon (Vet Agro Sup). To be awarded the DVM degree by the University of Lyon at the end of Year 5, students must have:

- 1) they completed clinical training validated (a jury of faculty and one professional) or have obtained a National Masters (research stream) or completed the ENSV program (French National School for Veterinary Public Health Officers; veterinary public health stream);
- 2) completed part of their clinical training in a foreign country; and
- 3) submitted and defended a thesis (jury of thesis advisor, one faculty member, and one member from the Faculty of Medicine, who serves as Chair).

Each academic year corresponds to 60 credits (related to the European Credit Transfer System) composed of 32 weeks of instruction. Students are required to complete externships in all five years of the curriculum:

- Year 1: ruminant husbandry (two weeks); pig, poultry, or rabbit husbandry (one week);

- Year 2: rural clinic (two weeks); free choice (two weeks minimum);
- Year 3: private clinic (two weeks); industry, food safety or research (two week minimum);
- Year 4: free choice (two week minimum) clinic (two weeks); professional choice (two weeks; aligned with Year 5 training preference); rural clinic (two weeks);
- Year 5: the number of required weeks of externships varies by clinical stream (range, not required for SA but recommended, up to 14 weeks for animal production, see Appendices of the Self-Study, p. 36).

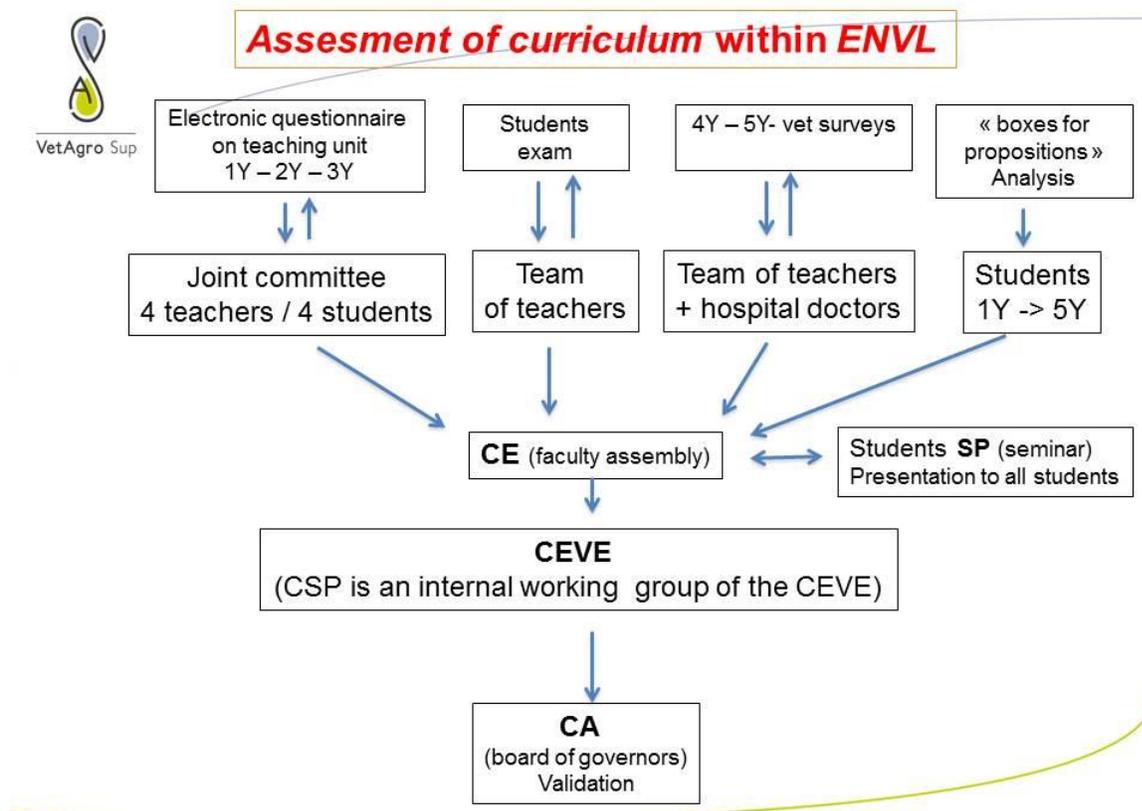
Students gain clinical experience in the teaching hospital in the 2nd semester of Year 3 (S10), and throughout Years 4 and 5, such that students are typically working with an upper class student, an intern and resident, and a faculty clinician.

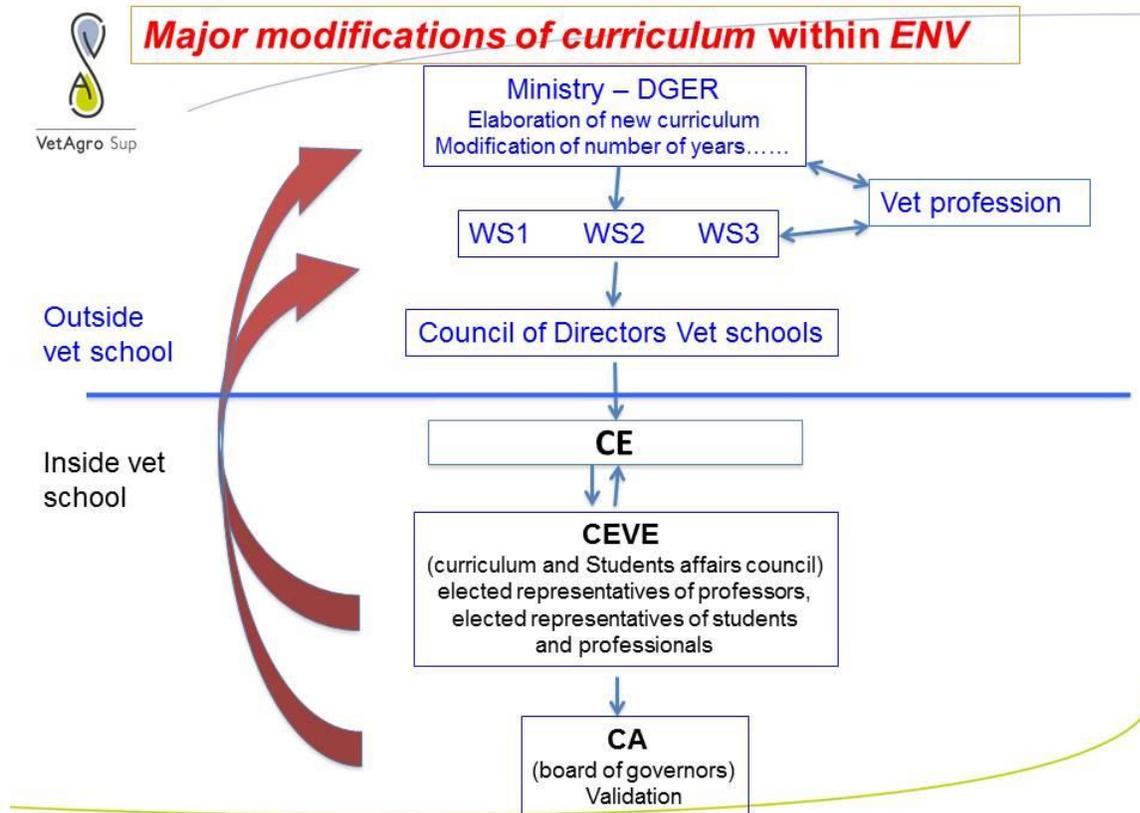
Students are required to pass an English proficiency examination and the long term plan nationally is for up to 20% of courses to be given in English.

Each year, the curriculum is evaluated and improved by the instructors. In March-April the Education and Students Affairs Office (DEVE) organizes work sessions with all instructors to better coordinate the content of different Course Units (CU). Alongside this, the Curriculum Committee made up of instructors and students meets two to three times a year. It allows students to express their opinions about their instruction and student life. The CUs are evaluated by students confidentially through questionnaires each semester after the examination, at least once every three years. The results are transmitted in the form of histograms and short comments

to the head of the CU and to members of the Evaluation Committee. The Evaluation Committee is composed of instructors and students in equal number, and organizes the preparation of CU questionnaires. Similar questionnaires on the evaluation of clinical rotations are under development.

The process for curricular review and change within ENVL and for the four ENVs are illustrated:





By regulation, teacher evaluation is performed by CNECA. The instructors' council gives advice on education guidelines and programs and course regulations. Proposals for development and improvement from all these working groups are synthesized and presented to the Curriculum and Student Affairs Council.

Finding: The Council finds that the school meets this standard.

Commentary: There is a national framework for the DVM curriculum, developed with extensive faculty and professional input, which is common to all four French veterinary schools.

The professional curriculum is comprehensive, and its content and delivery is regularly reviewed and managed by a faculty curriculum committee, elected by their peers, and with student representation, based on faculty and student input. The integration of Year 3 and Year 4 students into the clinical program working with Year 5 students facilitates early clinical exposure, and through peer teaching reinforces clinical proficiency.

STANDARD

10. Research

The College shall maintain substantial research activities of high quality that integrate with and strengthen the professional program.

Research

Background: Research at VAS is organized around three themes: emerging pathologies and infectious disease risks (PERI), adaptation of production systems and food quality (ASPQA) and regional development. Only the PERI and ASQPA areas involve faculty from the veterinary program.

PERI comprises units working on the study of emerging disease, especially cancer, infertility, locomotor disorders, ecotoxicity, and the study of infectious risks associated with zoonosis or vector transmitted diseases or in connection with the study of the ecology of pathogens at different scales.

ASPQA comprises units working on the adaptation of breeding systems and practices, to improve the flexibility and increase resilience of animal production systems, and to the changing characteristics of products in relation to their production conditions and constraints, as well as those involved in the study of the adaptation of functional properties of food, both to better correspond to consumer perception and behavior, and in relation to the microbial ecology along the chain of agri-food technologies.

Many research programs developed by the faculty members of the school have a direct impact on the professional program. Many of them are based on animal models provided by the teaching hospital, whereas others are supported by dedicated resources within the school, such as the biological resources center or the ICI-B. Among all topics covered by the school, two in

particular reinforce the professional program, either by offering more intensive use of clinical cases for students or by opening student's minds to further medical developments.

In clinical research, three programs can be singled out:

Animal Welfare—research units work on large animals (bovine and equine) or small animals. A mixed research unit between VAS and the Agricultural National Research Institution is working on building specific tools for the evaluation of animal welfare in farms and slaughter houses.

Within the CHEV, professional students are engaged in research projects on anesthesiology and pain management for small animals and horses.

Oncology— developed within the unit (dedicated VAS research unit) this unit works on increasing the cost/benefit ratio for treatment of spontaneous or induced cancer. Initial studies were conducted on canine lymphoma, but have been extended to other types of cancer. A Master's program has been developed on cancer research, and is open to veterinary students.

Traumatology and aging (geriatric) in small animals and equine—studies are being conducted to understand the physiopathology of osteoarthritis and degenerative cutaneous diseases. This research is used directly in the CHEV providing opportunities for professional student required thesis work (10 professional thesis), resident research and graduate research (eight Masters, three PhD).

Research programs in the area of **veterinary public health** include:

Vector borne diseases—one unit is working on ticks and arthropod-borne diseases, another on leptospirosis. The research focuses on developing and testing molecular tools for detection and

epidemiological monitoring of leptospirosis in domestic animals and treatment of this disease in emergency medicine.

Shigatoxin E.coli (STECs)—the EMSA team of the research unit called CALITYSS develops optimized detection methods to determine the prevalence of STEC in food matrices. It also studies the growth and survival of STEC in food and the environment in a microbial ecology approach.

Within the professional curriculum, there is an opportunity for an elective externship in a research unit. There is also a dedicated program within the veterinary curriculum on laboratory animals where students develop basic knowledge on animal handling and welfare during research. Coursework in statistics, experimental design, and scientific literature review occur in Years 2 and 3. Students also have the opportunity to take courses through the University of Lyon, enabling highly motivated students to complement their veterinary education with basic science for research. In some cases, students may be allowed to take a Master's program during Year 5 (one in 2008, and 2009; zero in 2010; three in 2011, five in 2012). This program requires approval by the faculty assembly. At the end of 5Y, these students are awarded a DVM and a Master's degree, which allows them to enter PhD programs (one in 2011).

Students are exposed to research through their required Year 5 thesis. Both the research and literature review theses give students an understanding of research methodology, literature evaluation, and critical thinking. Thirty to fifty students per year participate in a research thesis. Students doing the research thesis typically identify a faculty research mentor and topic at the end of Year 3 or beginning of Year 4. The other students complete a literature review thesis and

typically identify a faculty mentor and topic in Year 4. Students (about 50 students per year) have the opportunity to work in the various research laboratories associated with the school, with local biopharmaceutical companies or with research units associated with the University of Lyon.

Finding: The Council finds that the school meets this standard.

Commentary: The site team reviewed both original research and literature review theses from a number of years, all of which were available in the library. Preparatory coursework in the DVM curriculum and the Year 5 thesis exposes students to a variety of research experiences and gives them a good understanding of the importance of research in practice and the profession.

STANDARD

11. Outcomes Assessment

Outcomes of the DVM program must be measured, analyzed, and considered to improve the program. Student achievement during the pre-clinical and clinical curriculum and after graduation must be included in outcome assessment. New graduates must have the basic scientific knowledge, skills, and values to provide entry-level health care, independently, at the time of graduation.

The school/college must develop relevant measures and provide evidence that students/graduates have attained the following competencies.

1. Comprehensive patient diagnosis (problem solving skills), appropriate use of clinical laboratory testing, and record management.
2. Comprehensive treatment planning including patient referral when indicated.
3. Anesthesia and pain management, patient welfare.
4. Basic surgery skills, experience, and case management.
5. Basic medicine skills, experience and case management.
6. Emergency and intensive care case management.
7. Health promotion, disease prevention/biosecurity, zoonosis, and food safety.
8. Client communication and ethical conduct.
9. Critical analysis of new information and research findings relevant to veterinary medicine.

Outcomes Assessment

Background: Assessment of veterinary student performance in mastering the curriculum is measured by individual faculty members through objective testing instruments in the didactic portion of the curriculum and by direct observation during clinical rotations. Data to demonstrate outcomes of the educational and/or institutional program(s) are continually collected by a number of means, including, but not limited to, surveys, interviews, focus groups, self-assessments, third-party provider, the School, and the French Ministry of Agriculture. Different committees are involved in the process of improving the program, and all include students.

Tools used to assess the DVM program include:

- Post-graduate Survey 1, focusing on employment and satisfaction of the graduating classes.
- Post-graduation Survey 2, a more detailed survey, including demographic data on new graduates as well as satisfaction and preparedness opinions.
- A survey at the end of Year 4 that assesses the first four years of the curriculum.

- A survey at the end of the Year 5 on specific veterinary subjects and preparedness to practice in different disciplines.
- A survey of employers of graduates.
- Evaluation of specific discipline or teaching units made by the DEVE (modules).

Methods used in benchmarking the educational program include:

- The EAEVE evaluation.
- Evaluation by the French Ministry of Education.
- The Ministry of Agriculture has commission experts to benchmark French schools relative to other European schools.
- The Guénet expert's report, Senator Vétérinaire December 2008 for the Prime Minister, Vallat, Director General of the OIE, November 2009 for the Agriculture Minister.

To practice in France new graduates need to successfully complete the professional veterinary thesis at the end of Year 5. No examination is required by the National Veterinary Chamber, thus, graduating students are not required to take the NAVLE, so NAVLE pass rate data cannot be reported. The School is aware that some of its graduates have successfully passed NAVLE (NEB and CCT) examinations to practice in various states and provinces in North America; however, specific data is unavailable.

Student attrition is low.

Student Attrition Rates

Relative Class	Academic Year	Attrition*	Reason for Relative Attrition		Absolute Attrition	
			Academic	Personal	Academic	Personal
First Year	2008-09	7	7	0	0	0
	2009-10	4	2	0	1	1
	2010-11	5	5	0	0	0
	2011-12	5	5	0	0	0
Second Year	2008-09	2	2	0	0	0
	2009-10	10	9 (1*)	1	0	0
	2010-11	6	6	0	0	0
	2011-12	5	5	0	0	0
Third Year	2008-09	0	0	0	0	0
	2009-10	0	0	0	0	0
	2010-11	1	1	0	0	0
	2011-12	2	1	1	0	0
Fourth Year	2008-09	0	0	0	0	0
	2009-10	0	0	0	0	0
	2010-11	0	0	0	0	0
	2011-12	0	0	0	0	0

*Disciplinary

Students repeating for academic reasons (because of poor academic results) are allowed to repeat that year.

Assessment of Clinical Competency

Both indirect and direct methods are used to assess clinical competency. During year 4, students are evaluated in each clinical rotation weekly with emphasis on: general conduct, attendance, progress in understanding clinical cases, skill at interpretation of clinical signs, and development of therapeutic and surgical proficiency (clinical competencies: 1-5, 8).

In some clinical disciplines (for example, small animal medicine, pathology), students are required to present an end of rotation case report in a rounds setting, that is evaluated with direct feedback provided (clinical competencies: 1, 2, 9). Likewise evaluated presentations and case studies are required during rotations in food safety, infectious diseases, and preventive medicine

(clinical competencies: 7, 8). Direct assessment is performed at the end of each SIAMU rotation (clinical competencies: 1-6, disease prevention/biosecurity [7], 8).

All externship performance is evaluated by practitioners or supervising personnel (primarily summative; however, in some clinical practices formative evaluations are provided and recorded).

In Year 5, direct assessment is performed in all clinical disciplines by daily, and end of rotation, feedback. Methods of recording direct assessment vary by discipline, for example, small animal medicine single page form to a detailed portfolio for production animal medicine that identifies skills (including core/elective) and level of completion (observe, perform, evaluated). Final end of year assessment for pure species streams (SA, Eq, production animal) involves jury examination varying in length from 30-45 minutes by a team of clinical faculty and practitioners, and assesses professional and clinical knowledge and skills. Use of similar jury assessment for the mixed streams is under discussion.

Surveys submitted to students at the end of Year 5 are analyzed to verify acquisition of certain professional and clinical skills.

The 2012 employment survey conducted on students graduating in 2009 (n = 33) and 2010 (n = 93) shows that one to two years after graduation, 87% are engaged in professional activity; 68% have a contract of indefinite length with ~90% in a senior position. Only 13% have a fixed length

contract, half of them for a period of less than eight months. Nearly 70% of students had signed employment contracts during Year 5 before thesis defense.

A survey performed in 2011 on students graduating in 2006, showed that 91% of respondents had a job, including 60% in companion animals, 7% in equine, 17% in production animals (mixed or exclusive activity); 89% were satisfied or very satisfied with their jobs and ~90% considered their training (knowledge, clinical skills) had prepared them fairly well or very well for professional practice.

A survey of employers yielded only five responses. This low response rate reflects both a lack of a robust database of employers and a cultural change because employers are not used to providing feedback. The small number of respondents prevents any interpretation of the data. Discussions were underway nationally to provide e-mail addresses for all veterinarians and to develop a more robust method of tracking graduates and their employers.

Instructors have regular opportunities to provide program feedback, whether at department meetings, the CHEV, faculty meetings, or administration councils. For example, the adequacy of the number of clinical cases receives special attention in the CHEV. Equipment and building development needs are brought up at least twice annually during budget discussions with the departments and the CHEV. Available information resources are the subject of a regular exchange between faculty representatives and the librarian. Students are intellectually well prepared upon admission with strong basic scientific knowledge, but less prepared with overall

knowledge of the veterinary profession. In addition, interns and residents are surveyed about the adequacy of clinical resources for their needs.

Finding: The Council finds that the school meets this standard.

Commentary: Overall there is a comprehensive program for indirect and direct assessment of the nine clinical competencies throughout the professional program. Other methods for direct assessment of clinical competencies are being piloted in different disciplines. Students confirmed receiving regular feedback on their clinical performance and also receiving the input of faculty mentors guiding them in achieving clinical experience in identified areas of deficiency during their training.

Discussion amongst the four Schools and the Ministry is continuing about a national approach to soliciting information on employer satisfaction of graduates. Survey data on the curriculum for entry level graduate preparation has been analyzed and is being provided to the faculty and curriculum committees for discussion and potential curriculum changes.

Strengths:

1. Organization
2. Finances
3. Physical Facilities and Equipment

The School has a well-defined and effectively implemented safety plan throughout campus facilities.

The equine reproduction facility is well designed and provides an excellent student learning environment.

4. Clinical Resources

The school-owned UCRA ambulatory practice provides excellent opportunities for professional students to see livestock with clinical problems commonly encountered in routine veterinary practice.

The Preventive Health program for dogs and cats provides a unique opportunity for students to develop primary care competencies in an excellent learning environment.

Student participation in the Veterinary Anti-poison Center (CNITV) provides opportunities for experiential learning in communication with veterinarians and clients in animal poisoning.

5. Library and Information Resources

6. Students

Students are pleased with the educational experience and active support provided by the administration and staff.

7. Admission

8. Faculty

9. Curriculum

Student-centered curriculum allows students to pursue individual interests and optimize career preparation.

10. Research Programs

The School is commended for providing extensive student exposure to research throughout the professional program and creating a culture that embraces the importance of research in professional growth.

11. Outcomes Assessment

The School is commended for establishing an effective process to collect, analyze, and distribute direct and indirect outcomes assessment data to the Curriculum Committee and other relevant groups.

Recommendations:

Non-compliance for a standard will be indicated by *

Minor deficiency for a standard will be indicated by †

No designation indicates a recommendation for improvement of the quality of the program

1. Organization

2. Finances

The School should regularly evaluate whether the number of professional degree students remains consistent with available resources and make necessary adjustments as the new cohort moves through each year of the curriculum.

3. Physical Facilities and Equipment

The School is encouraged to complete ongoing refurbishment of stalls in the equine and bovine hospitals.

The School is encouraged to improve routine maintenance of the equine hospital.

The School is encouraged to complete plans to co-locate the diagnostic and clinical pathology laboratories to optimize operational efficiency.

4. Clinical Resources

The School is encouraged to continue integration of the paper and electronic medical record in CLOVIS.

5. Library and Information Resources

6. Students

7. Admission

The College is strongly encouraged to extend faculty involvement in the admissions process for the Competition A pathway to admission.

8. Faculty

The Dean and CHEV director are encouraged to review the number of technicians assigned to all technical sections of the hospitals to ensure adequate staff support is available to meet the teaching, research, and service mission of the School.

The School is encouraged to continue efforts to obtain Ministry support for additional clinical faculty positions and resources to ensure the ability to provide competitive salaries for clinical specialists.

9. Curriculum

10. Research Programs

11. Outcomes Assessment

The College is encouraged to develop and implement a more effective strategy to collect employer assessment data to enhance the ongoing improvement of pre-clinical and clinical education.

The School should continue to implement direct assessment of individual student achievement of the nine clinical competencies for companion animals.

CLASSIFICATION OF ACCREDITATION

The VetAgro Sup Campus Vétérinaire de Lyon is accredited for a period up to seven years.