

**Revisitation Self Evaluation Report (RSER) for the VEE at  
the Swedish University of Agricultural Sciences (SLU),  
Faculty of Veterinary Medicine and Animals Sciences,  
Autumn 2025.**

*August 15, 2025*

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## Introduction

Veterinary training in Sweden began in Skara in 1775 and celebrates its 250 years jubilee this year. It was later moved to Stockholm, before arriving in Uppsala (Ultuna campus) in 1977. Since then, the VEE (Faculty of Veterinary Medicine and Animal Science) has been part of the Swedish University of Agricultural Sciences (SLU), which is the only university in Sweden to offer veterinary education.

The VEE has been visited by EAEVE in 1997, 2007 and 2018. During the visit March 2024, several areas worthy of praise were identified:

- Collegiate and supportive environment between staff and students
- Strong involvement of students in the VEE committees
- Comprehensive review and enhancement of the curriculum
- Well-designed and well-implemented pre-clinical training
- Innovative student-driven clinic
- Well-developed ambulatory clinic
- Outstanding intramural and extramural facilities with excellent equipment and maintenance
- Attractive and numerous student meeting and resting facilities
- Access to dairy cattle and pig units for excellent hands-on training
- Extensive online teaching material.

The VEE was compliant with most ESEVT Standards. However, following areas of concern were identified:

### *Two Major Deficiencies:*

- *The VEE is not compliant with Standard 9.2. because the number and range of skills of teaching staff at the VTH-pet clinic are insufficient.*
- *The VEE is not compliant with Standard 9.4 because of insufficient involvement of teaching staff in designing the VTH's contribution to clinical teaching and research and in its day-to-day management.*

### *Six Minor Deficiencies:*

- *The VEE is partially compliant with Standard 1.3 because of the operating plan not including a timeframe and indicators for the increase in student numbers.*
- *The VEE is partially compliant with Standard 1.6 because of suboptimal involvement of recent graduates in the design of the new curriculum.*
- *The VEE is partially compliant with Standard 2.1 because of suboptimal funding for the clinical training.*
- *The VEE is partially compliant with Standard 3.1.3 because of suboptimal clinical training in exotic pets.*
- *The VEE is partially compliant with Standard 4.4 because of suboptimal training in pet emergency cases.*
- *The VEE is partially compliant with Standard 4.9 because of suboptimal posting of biosecurity rules in some rooms.*

Major changes since the Visitation March 2024:

The management of the Faculty of Veterinary Medicine and Animals Sciences changed from Jan 1, 2025, Professor Nils Fall was elected as the new Dean, and a new Faculty Board was elected.

Moreover, the annual VTH core funding increased by 30 MSEK (2.7 M€, 1EUR=11SEK) from 2025 and thereafter. With this increased core funding and the changes in VTH operations, the VTH budget is now balanced.

During 2024, a new department structure was introduced with the merger of departments of Biomedicine and Veterinary Public Health (BVF), Animal Genetics (HGEN) and Anatomy, Physiology and Biochemistry (AFB) into department of Animal Biosciences (HBIO). Moreover, the departments of Animal Nutrition, and Animal Hygiene and Ethology, were merged into department of Applied Animal Biosciences (THV). The VTH was merged with the Department of Clinical Sciences with a view to integrate research, teaching, and clinical work more closely.

The new Head of the department of Clinical Sciences is Associate Professor Bodil Ström-Holst, and the new director for the small animal hospital is Maria Karlsson, DVM. In the new department, a key feature for integration is the 3 management committees (for companion animals, equines, and production animals) that include representatives for teaching, research, and clinics. These committees have weekly meetings and are the fora for preparing, shaping and taking decisions on management, strategy, teaching, veterinary services, research, and recruitment.

The main objective for the new department of Clinical Sciences (including VTH), is to accommodate the larger student cohorts starting clinical training during academic year of 2026/2027. Hence, the VEE and VTH now operate under the principle that all patients entering the VTH during daytime and semester time are available for teaching and research, to ensure sufficient student caseload.

Under the new management, the small animal clinic has been turned around and steadily increased the number of patients, with the numbers Q1-2 2025, exceeding Q1-2 2024. The changes include increased opening hours with 24-hour staffing Monday to Saturday and weekend inpatient services. The small animal emergency clinic has had increased opening hours during public holidays with positive results and increased number of patients and has been open 24/7 during the summer (2025). The extended opening hours will increase the number of companion animal and exotic animal cases presented for necropsy.

The goal is to have the VTH operating 24/7 in 2026 pursuing a strategy of incremental increases of opening hours. Regarding ambulatory training with the official district veterinary organization (mainly farm animals), a pilot trial commenced now with a view of the full implementation in 2027 whereby students will do their food animal clinical training at veterinary stations.

## 1. Correction of Major Deficiencies

### 1.1. Major Deficiency 1:

**Standard 9.4 - The VEE must provide evidence that it utilises a well-defined, comprehensive and publicised programme for the professional growth and development of teaching and support staff, including formal appraisal and informal mentoring procedures. Staff must have the opportunity to contribute to the VEE's direction and decision-making processes. Promotion criteria for teaching and support staff must be clear and explicit. Promotions for teaching staff must recognise excellence in and (if permitted by the national or university law) place equal emphasis on all aspects of teaching (including clinical teaching), research, service and other scholarly activities.**

#### Analysis of the findings

*The team considers that the VEE is not compliant with Standard 9.4. The involvement of teaching staff and other professionals in the past and present decisions concerning the changes in the VTH, was found to be notably insufficient. This includes decisions regarding working conditions and the selection and hiring of new experienced teaching staff. A distancing and eventual dissension of more experienced academic staff regarding the functioning of the VTH is evident. Planning, strategy and management inadequacy may explain the reduction in caseload and eventually the delay or unsuccessful recruiting of more specialised and experienced veterinarians to replace those recently leaving the VEE.*

#### Suggestions for improvement

*It is suggested that teaching staff are more involved and called to participate in the organisation of the VTH.*

#### Decision

*The VEE is not compliant with Standard 9.4 because of insufficient involvement of teaching staff in designing the VTH's contribution to clinical teaching and research and in its day-to-day management.*

#### 1.1.1 Factual Information

Integration of VTH and the Department of Clinical Sciences into one Department. In July 2024, the veterinary teaching hospital (VTH) merged with the Department of Clinical Sciences under a new integrated management structure (see Figure 1). This reorganization will enhance the synergies between academia, teaching, and clinical practice, fostering the exchange of ideas and involvement of academic staff in the daily operations of the VTH. The joint management teams with clinical and academic staff, now operate collaboratively, ensuring a unified vision for the future, including preparation for veterinary education establishment (VEE) accreditation.

This integrated structure has improved alignment with institutional objectives, enhanced financial oversight, enabled more effective use of staff and patient cases for teaching purposes. Staff should be involved with at least two of the three core activities - teaching, research, and clinical work. Moreover, the academic staff, clinicians and management are pulling in the same direction, of which two major aims are accreditation of the veterinary training, and building up of residency

programs.

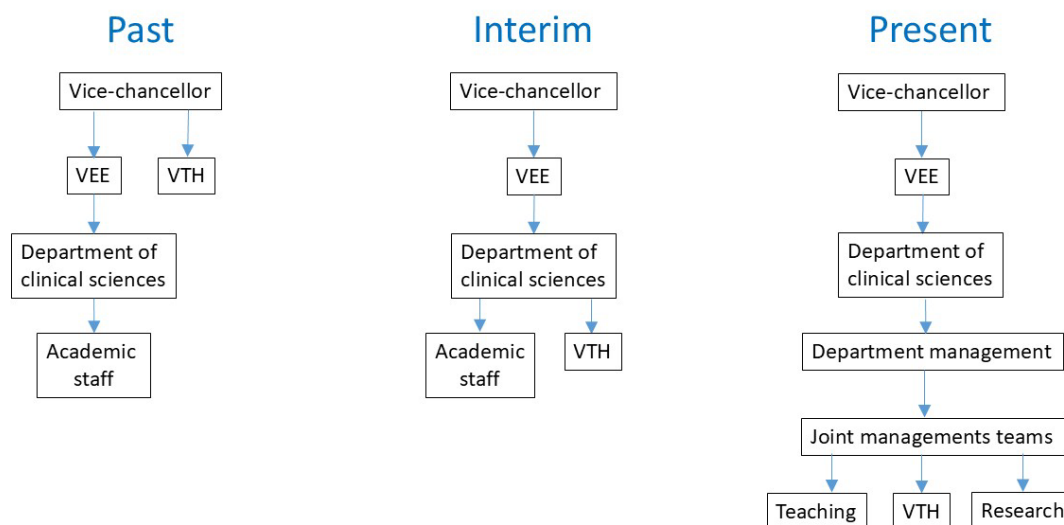


Figure 1. Simplified overview of the VEE, department of clinical sciences and VTH organization; past, interim, and present. Note that the VEE has two additional departments - applied biosciences (THV) and animal biosciences (HBIO).

### Management and Governance

The management team holds monthly meetings in two alternating formats:

- Strategic meetings (every other month) with the head of department, assistant heads for the VTH, teaching, and research, the head of administration, the heads of the four academic staff groups, the director of the VTH, and the heads of subjects (usually professors or senior lecturers).
- Operational meetings (alternating months) focused on practical aspects. These exclude department heads and instead bring together subject heads (professors or senior lecturers), the VTH Director, and veterinary medical officers. This structure ensures academic staff are involved in both strategic planning and day-to-day operations.

### Recruitment and Staffing

Weekly recruitment meetings allow VTH and Department managers, as well as subject heads, to discuss staffing needs. Requirements are outlined in advance, allowing collaborative development of integrated roles combining clinical duties with teaching and/or research. Recruitment processes, including interviews, are carried out jointly by managers from both the VTH, Department, for higher positions (lecturer and professors) the VEE management, and academic leadership. The recruitment processes are described in more detail in Appendix 1.

### Collaborative Projects and Initiatives

Several joint projects illustrate the benefits of this integrated model. For instance:

- A surgery unit project involved senior academic staff and the director of the small animal clinic working together to improve clinical workflows.
- The equine clinic has launched an initiative to align teaching content,

assessments, and practical clinical training. This initiative involves both VTH and VEE staff.

- Development of anesthesia and intensive care where diplomates train junior veterinarians in pain management and sedation of dogs and cats and management of emergency patients in general, as preparation for night duties.

#### Senior Academic Staff in Advisory and Clinical Roles

Senior academic staff in advisory and clinical roles are present at both the small animal clinic and the equine clinic. At the small animal clinic, they are responsible for treatment protocols in internal medicine, surgery, and anaesthesia. They assist the department head by providing input on handling patient related complaints and deviations related to identified patient safety deficiencies. Under the new organizational structure, academic and clinical staff jointly develop protocols and share responsibility. Academic staff also support on call operations by providing telephone support and participating in emergency shifts.

Professors of small animal internal medicine and surgery maintain close contact with the small animal clinic's director, reflecting the integration of clinical and academic functions. This collaboration has led to significant improvements in treatment protocols, working conditions, and ultimately patient care, client satisfaction, and teaching. It has also reduced ethical stress among staff regarding deficiencies in patient care and enabled more critically ill patients to be treated at a high standard. Client numbers have increased compared to 2024 (Figure 2, section 2.1.1), which has also led to financial stabilization (deficit reduced from 25.4 MSEK in Jan–July 2024, to 8.3 MSEK in the same period 2025) for the small animal clinic, which means that the VTH is in the black when including the added core funding.

#### Support for Junior Veterinarians

An academic colleague has now been appointed as supervisor for early-career veterinarians. She collaborates closely with the veterinary medical officers, subject representatives, the head veterinarian, and the department head. This role ensures that junior veterinarians receive adequate training in emergency and intensive care to qualify for on-call duties (definition in Appendix 1). In collaboration with senior academic staff, she also leads development of the care ward to support advanced emergency and postoperative care. Senior academic staff mentor junior colleagues and uphold high academic standards during clinical rounds, held four days per week.

Radiological expertise is available during off-hours through online company (Idexx) that provide high-level competence in the field. This service has been implemented to ensure quality of care and reduce the risk of ethical stress among on-call veterinarians when the imaging department is closed. A similar setup exists for medical backup via VIN (Veterinary Information Network), where the on-call veterinarian can receive advice within an hour regarding emergency cases or hospitalized patients with complex medical issues that cannot wait until senior veterinary expertise is available the following day.

#### Daily Collaboration and Communication

Both academic staff and VTH personnel participate in regular team meetings organized by subject or species area to integrate teaching, research, and clinical perspectives on current topics. Communication between the VEE and VTH has

improved. The head of department issues a weekly newsletter with updates from both units, distributed to all staff. Updates on the Canvas learning platform now allow VTH clinics to access course materials for students in years 4 and 5, improving coordination between clinical operations and teaching. Recorded clinical rounds for the “on call ready” concept are also stored there for junior veterinarians.

#### Strengthening Community and Communication

Departmental meetings are held every two weeks at VTH to foster interdisciplinary understanding and reinforce the shared mission. These sessions enable immediate staff feedback and are followed by informal social gatherings, strengthening the sense of community.

#### **1.1.2. Comments**

With the new organizational structure, academic staff, VTH personnel, and department management have united to address the deficiencies identified by the visiting evaluation team and ensure a supportive clinical environment that prioritizes the needs of current and future veterinary students. A successful turnaround has been achieved. Academic (including clinical) staff and students are now the primary drivers for continued accreditation.

### **1.2 Major Deficiency 2**

**Standard 9.2 - The total number, qualifications and skills of all staff involved with the study programme, including teaching, technical, administrative and support staff, must be sufficient and appropriate to deliver the study programme and fulfil the VEE’s mission.**

**A procedure must be in place to assess if the staff involved with teaching display competence and effective teaching skills in all relevant aspects of the curriculum that they teach, regardless of whether they are full or part-time, teaching or support staff, senior or junior, permanent or temporary, teachers. Guidelines for the minimum training to teach and to assess are provided in Annex 6, Standard 9.1.**

#### **Analysis of the findings**

*The team considers that the VEE is non-compliant with standard 9.2. because it was found that the number and range of skills of the teaching staff at the pet (dogs, cats and exotic animals) VTH clinic are insufficient. This circumstance led to a reduction in opening hours with a consequent substantial decrease in caseload and emergency cases to which the students are exposed to. Other important consequences are that PhD students and residents are experiencing an undesirable increase in clinical work and responsibilities, and resident programmes may see their quality reduced.*

*The team was not presented with evidence that solutions toward increasing the number and range of skills among teaching staff at the pet-VTH are being implemented, prepared or sought, especially in view of the soon-expected increase in students. So, the concern is that the situation will be worse in the near future.*

#### **Suggestions for improvement**

*It is suggested that conditions for the enrolment of adequate number of experienced*

*veterinarians are planned and implemented.*

### **Decision**

*The VEE is not compliant with Standard 9.2. because the number and range of skills of teaching staff at the VTH-pet clinic are insufficient.*

#### **1.2.1 Factual Information**

Since the visitation 2024, VTH has received an increase of the annual core funding of SEK 30 M (approx. EUR 2.7 M), and the VEE and VTH have undergone structural changes: VTH merged with the Department of Clinical Sciences, joint leadership groups were formed (academic, teaching, research, clinical), and strategic recruitments were initiated.

A new head of the small animal clinic, Dr. Maria Karlsson, was recruited, an experienced animal hospital leader, who has given clear directives for VTH operations and development. Successful hires include specialists in dermatology and anaesthesiology, as well as veterinarians with expertise in dentistry and exotic animals.

To ensure that teaching staff at the small animal clinic possess sufficient competence, the Department of Clinical Sciences secured funding for continuing professional education (CPE): SEK 7.5 M (approximately EUR 0.7 M) for initiatives aimed at increasing the number of on-call certified personnel, extending clinic hours, and boosting patient flow to ensure sufficient clinical training. Additionally, SEK 2.6 M (approx. EUR 0.2 M) has been allocated for specialized training in anaesthesia, surgery, pedagogics, opportunities for structured training (observerships), and in clinical skills. These activities will continue to ensure that new staff are adequately trained for the job: working and teaching at the VTH.

VTH plans to expand its small animal clinic's emergency services to a 24/7 schedule by fall 2026. The first phase extends the current 24/5 operation to 24/7 during summer 2025 to build goodwill and increase patient flow ahead of the fall semester. A trial run of 24/7 during New Year 2024 and Easter 2025 resulted in increased patient numbers and a positive financial outcome. During autumn 2025, the clinic will revert to 24/5. A second expansion phase is scheduled to coincide with the arrival of a larger student cohort in the 2026/2027 academic year.

This expansion is designed to increase the clinic's caseload to accommodate a growing student body - an increase from 100 to 145 admitted per year. Full expansion of clinical rotations (years 4 and 5) will be reached by the academic year of 2027-2028.

Senior academic staff (professors and senior lecturers) are actively engaged in both the strategic management and day-to-day operations of the clinic. They also play a key role in supervising and supporting less experienced colleagues and training new staff.

Moreover, the first phase of this expansion (2025–2026) will provide training opportunities for junior staff. In parallel, the teaching skills training for clinical

veterinarians and veterinary nurses is ongoing, enabling them to further develop and enhance their teaching skills and become part of the academic staff.

#### Strategic Staff Development and Recruitment

VTH aims to achieve 24/7 operation at the small animal clinic by the end of 2026 through a phased implementation plan:

- 24/7 operation during Easter and summer 2025.
- Three veterinary medical specialists from the Academy (internal medicine, surgery, anaesthesiology) responsible for quality assurance in their fields
- Recruitment of two anaesthesiology diplomates (fall 2025, winter 2026) with joint appointments between the Academy and the small animal clinic. These will strengthen surgical and postoperative care and oversee intensive care cases. They will also lead ongoing training for veterinarians and veterinary nurses.
- Recruitment of a neurology specialist during fall 2025/winter 2026
- Hiring of four additional veterinarians and six veterinary nurses
- Expansion of certified on-call staff to maintain 24/7 service

These measures are intended to maintain an acceptable veterinarian-to-student ratio after the program expansion. The aim is to enhance integration between clinic and academy, e.g., academic personnel provide clinical care during off-hours.

In Appendix 1, the processes of recruitment, skill levels, and competence development for staff are described in more detail.

#### Funding for Continuing Professional Education

As a part of the lump sum funding for the enlargement of the program (described more in detail under 2.1.1), the department of Clinical Sciences was granted a total of 7,5 MSEK (around 0.7 MEUR) specifically designated to activities focused on expanding the number of on-call qualified staff, extending clinic opening hours and increasing patient throughput to ensure adequate clinical training opportunities. An additional 2,6 MSEK (around 0.2 MEUR) was granted for specialized training in anaesthesia and surgery, pedagogy, auscultation and clinical skills training.

#### **1.2.2. Comments**

By addressing the concerns raised by the visiting team through recruitment of experienced personnel, better integration of academic staff in the management and operation of the VTH as well continual professional education of employees, the VEE is confident that there is sufficient staff with adequate range of skills at VTH pet clinic to be able to meet the demands of the increased student cohort entering the clinic 2026/2027. This is evidenced by the table of indicators (see Tables 1 and 2 under pt 2.1) where the number of students graduating was expanded to 135 per year i.e., > 90% graduation.

## 2. Correction of Minor Deficiencies

### 2.1 Minor Deficiency 1:

**Standard 1.3: The VEE must have a strategic plan, which includes a SWOT analysis of its current activities, short- and medium-term objectives, and an operating plan with a timeframe and indicators for its implementation. The development and implementation of the VEE's strategy must include a role for students and other stakeholders, both internal and external, and the strategy must have a formal status and be publicly available.**

#### **Analysis of the findings/Comments**

*The VEE has a formal strategic plan aligned with the university strategy, a SWOT analysis, an operating plan with activities and an evaluation of the implementation. The development and implementation of the VEE's strategy includes input from students and other stakeholders, both internal and external.*

#### **Suggestions for improvement**

*The operating plan needs to be updated and expanded to include details related to the increased student numbers. The plan should include the timeframe and indicators for the first cohort moving up the curriculum year-on-year and how each successive intake of the larger cohort will be accommodated.*

#### **Decision**

*The VEE is partially compliant with Standard 1.3 because of the operating plan not including a timeframe and indicators for the increase in student numbers.*

### 2.1.1 Factual Information

#### Background and government funding

The Swedish government has increased the annual core VEE funding by 71 MSEK (6.5MEUR) to expand the veterinary program from 100 to 145 students and the veterinary nursing program from 100 to 115 students. Moreover, a lump-sum grant of 75 MSEK (6.8MEUR) was given in 2023 to expand infrastructure, purchase equipment (clinical training center), and hire academic teaching staff 9 months before the increased student cohorts enter classes. Designated funds were set aside to cover the hiring of academic staff at the department of Clinical Sciences, totaling 7.2 MSEK.

Furthermore, the Department of Clinical Sciences has received 7.5 MSEK (0.68 M€) from the expansion project (i.e. the lump sum grant) for competence development to prepare for the larger student cohorts. These funds will be spent during 2025 and will lead to an increased on-call competent staff, and to successively extend VTH opening hours, contributing to a raised patient influx, ensuring enough cases for the increased student numbers.

Currently, the animal patient number meets the existing student cohorts' needs. To accommodate the increasing student population, another way to increase the number of teaching cases will be utilizing a larger share of existing patients as well as increasing the overall patient volume. Therefore, the VEE has adopted the principle that all animals entering the VTH are available for teaching and research. Notably,

the small animal clinic has reported a rising patient count since December 2024 (Figure 2).

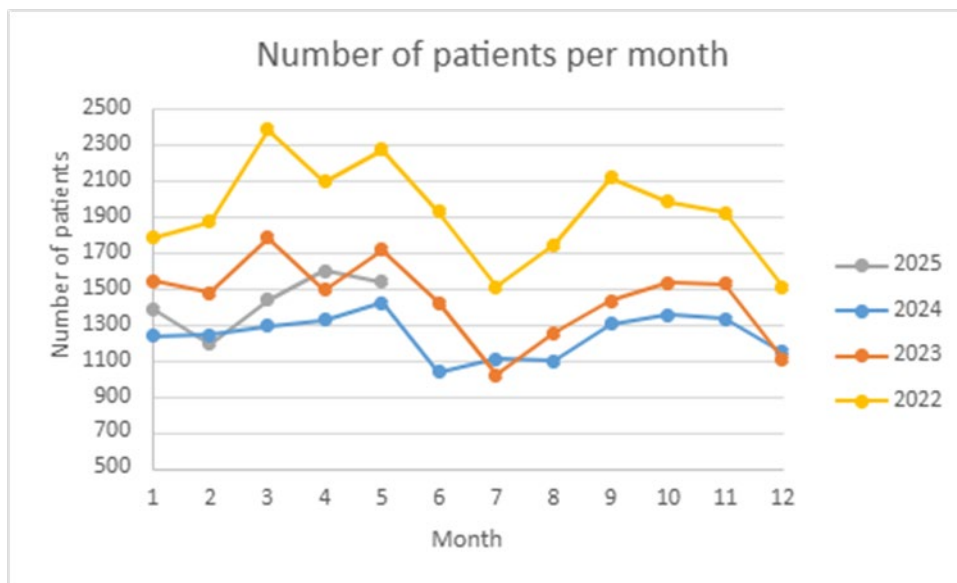


Figure 2. Monthly case load at the small animal clinic from 2022 to 2025

#### Project Timeline and Curriculum Development

The project to prepare the VEE for 145 veterinary students commenced in late 2021 and was completed in 2022. The first cohort in the new curriculum was admitted in the autumn 2023. The expansion planning covered infrastructure, competencies and recruitment, external cooperation, and teaching methodology. The curriculum design was based on feedback from students, future employers, and other stakeholders. The reformed curriculum (VP23) aims at:

- increasing clinical training,
- introducing early clinically related practical training and exposure to live animals
- increasing the use of models and manikins
- increased use of SLU livestock research center at Lövsta (11 km from the main campus)
- External cooperation where resources and skills were lacking such as food animal practice where a distributed model will apply from 2027.
- student wellbeing, sustainable studies, and professional development
- give the students more confidence as veterinary professionals upon graduation

The first increased student cohorts completed their first two years by summer 2025 (please see Appendix 4 for their evaluation of those first 2 years). They will enter clinical training in the 2026/2027 academic year.

The transitional planning for the overlapping years before the full implementation of the new curriculum (VP23) in 2028 is completed, and the syllabuses for the clinical years are now (summer 2025) being finalized (Table 1, Appendix 2). The VEE is on schedule for the course development.

### Infrastructure, Clinical Training Capacity, Staffing, and Recruitment

The following will be completed by autumn 2026:

- The capacity of the clinical training center (live animals and models) will be doubled compared to today.
- The ruminant clinic will be rebuilt to improve infection control, work and student environment, and accommodate increased student numbers.
- Parts of current training/education at campus Ultuna will move to Lövsta, allowing an increased number of ruminants for training/teaching.
- New and enlarged student dressing rooms.
- A final agreement on cooperation with *Distriktsveterinärerna* (Official veterinary services) regarding clinical training in ambulatory practice is planned by the end of 2025 and commencing spring 2027.
- Recruitment of staff for the year 4-5 clinical rotations.
- Optimized usage of the VTH clinical facilities, e.g.: group rooms for clinical students, space and workflow adjustments to allow student participation in all aspects of the clinical work, seminar rooms, and lunchrooms for clinical students and staff.

Please see Appendix 2 - Tables 1 and 2, for details on the infrastructure planning regarding increased student numbers.

### Implementation Experience and Feedback

#### *Student perspectives:*

VP23 students were positive (overall satisfaction average 4 out of 5) with the new curriculum in the course evaluations see enclosed English summary in Appendix 4).

The program study directors conducted an extra evaluation for the first-year students in VP23 focusing on the new professional development (PU) teaching as a streamed topic. The students found the PU module relevant and interesting and saw the benefits of introducing PU early in the veterinary program. They appreciated the live animal handling sessions and the use of manikins interchangeably with live animals. They provided feedback on optimizing PU-related teaching in relation to other teaching elements and exams.

#### *Staff perspectives:*

The staff's experience of the implementation of the new curriculum (VP23) is that it has worked better than expected. The student lab has exceeded expectations, and the staff is positive about the hiring of an administrator who supports the course management in year 1.

The implementation has generated additional work with tight deadlines, and the number of teachers has not increased proportionally to the student numbers for preclinical years.

Factors generating additional work include limitations in the size of lecture halls, exam halls and dissection rooms, competition for exam rooms, shortage of animal material, extended time marking exams and an increase in the number of students needing academic support. The teaching staff noted lower student attendance at lectures, impacting academic performance and peer interaction. This might reflect post-COVID behavior changes.

These experiences have informed the organizational and educational planning of VP23's clinical parts. Infrastructure investments and staffing enhancements are now implemented for the later years of the program. Analyzing Tables 1 and 2 of indicators have been informative as they have indicated points for mitigating measures.

Table 1 Indicators with the current program with 81 students graduating per year

Name of the VEE:		Swedish University of Agricultural Sciences (SLU)			
Date of the form filling:		August 8, 2025			
Calculated Indicators from raw data		VEE values	Median values <sup>1</sup>	Minimal values <sup>2</sup>	Balance <sup>3</sup>
I1	n° of FTE teaching staff involved in veterinary training / n° of undergraduate students	0.202	0.15	0.13	0.076
I2	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	1.012	0.84	0.63	0.382
I3	n° of FTE support staff involved in veterinary training / n° of students graduating annually	1.102	0.88	0.54	0.562
I4	n° of hours of practical (non-clinical) training	853.667	953.50	700.59	153.077
I5	n° of hours of Core Clinical Training (CCT)	915.333	941.58	704.80	210.533
I6	n° of hours of VPH (including FSQ) training	336.000	293.50	191.80	144.200
I7	n° of hours of extra-mural practical training in VPH (including FSQ)	80.000	75.00	31.80	48.200
I8	n° of companion animal patients seen intra-murally and extra-murally / n° of students graduating annually	87.225	67.37	44.01	43.215
I9	n° of individual ruminants and pig patients seen intra-murally and extra-murally / n° of students graduating annually	27.270	18.75	9.74	17.530
I10	n° of equine patients seen intra-murally and extra-murally / n° of students graduating annually	43.717	5.96	2.15	41.567
I11	n° of rabbit, rodent, bird and exotic seen intra-murally and extra-murally / n° of students graduating annually	2.152	3.11	1.16	0.992
I12	n° of visits to ruminant and pig herds / n° of students graduating annually	3.414	1.29	0.54	2.874
I13	n° of visits to poultry, rabbit, fish and bee units / n° of students graduating annually	0.020	0.11	0.04	-0.024
I14	n° of companion animal necropsies / n° of students graduating annually	1.549	2.11	1.40	0.149
I15	n° of ruminant and pig necropsies / n° of students graduating annually	1.582	1.36	0.90	0.682
I16	n° of equine necropsies / n° of students graduating annually	0.758	0.18	0.10	0.658
I17	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually	1.143	2.65	0.88	0.263
I18	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually	0.184	0.27	0.06	0.124
I19	n° of PhD-students graduating annually / n° of students graduating annually	0.217	0.15	0.07	0.147

Table 2 Indicators with 135 students graduating per year

Name of the VEE:		Swedish University of Agricultural Sciences (SLU)			
Date of the form filling:		August 8, 2025			
Calculated Indicators from raw data		VEE values	Median values <sup>1</sup>	Minimal values <sup>2</sup>	Balance <sup>3</sup>
I1	n° of FTE teaching staff involved in veterinary training / n° of undergraduate students	0.202	0.15	0.13	0.076
I2	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	0.610	0.84	0.63	-0.020
I3	n° of FTE support staff involved in veterinary training / n° of students graduating annually	0.664	0.88	0.54	0.124
I4	n° of hours of practical (non-clinical) training	853.667	953.50	700.59	153.077
I5	n° of hours of Core Clinical Training (CCT)	915.333	941.58	704.80	210.533
I6	n° of hours of VPH (including FSQ) training	336.000	293.50	191.80	144.200
I7	n° of hours of extra-mural practical training in VPH (including FSQ)	80.000	75.00	31.80	48.200
I8	n° of companion animal patients seen intra-murally and extra-murally / n° of students graduating annually	86.166	67.37	44.01	42.156
I9	n° of individual ruminants and pig patients seen intra-murally and extra-murally / n° of students graduating annually	16.188	18.75	9.74	6.448
I10	n° of equine patients seen intra-murally and extra-murally / n° of students graduating annually	26.338	5.96	2.15	24.188
I11	n° of rabbit, rodent, bird and exotic seen intra-murally and extra-murally / n° of students graduating annually	1.296	3.11	1.16	0.136
I12	n° of visits to ruminant and pig herds / n° of students graduating annually	2.057	1.29	0.54	1.517
I13	n° of visits to poultry and farmed rabbit units / n° of students graduating annually	0.012	0.11	0.04	-0.032
I14	n° of companion animal necropsies / n° of students graduating annually	0.933	2.11	1.40	-0.467
I15	n° of ruminant and pig necropsies / n° of students graduating annually	0.953	1.36	0.90	0.053
I16	n° of equine necropsies / n° of students graduating annually	0.457	0.18	0.10	0.357
I17	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually	0.689	2.65	0.88	-0.191
I18	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually	0.111	0.27	0.06	0.051
I19	n° of PhD graduating annually / n° of students graduating annually	0.131	0.15	0.07	0.061

Comments on the tables of indicators and compensating measures:

- The ongoing hiring of new teachers as academic staff will keep the values above the minimum values (I2) after enlargement.
- The number of visits to poultry farms and farmed rabbit units will be difficult to reach and there will be a need for compensating measures like showing

- films, or equivalent (I13).
- The number of companion animal necropsies will need to increase to > 200 cases per year which is the same number as during the years when the VTH operated 24/7, in addition contacts with other animal hospitals for admitting cases for necropsy has been made (I14)
  - The number of cases for exotic animals will increase as all students must do necropsy of rodents during their laboratory animal course and should do necropsy of a layer, made possible with the increased capacity for frozen storage.

### 2.1.2 Comments

Curriculum design and implementation within a limited timeframe involved identifying and handling bottlenecks, including limitations in teaching resources, adjusting to the increase in student numbers while still improving the curriculum.

The new curriculum implementation has proceeded as planned and, with just a few exceptions, the indicators for a larger student cohort are already met.

### 2.2 Minor Deficiency 2:

**Standard 1.6: The VEE must monitor and periodically review its activities, both quantitative and qualitative, to ensure that they achieve the objectives set for them and respond to the needs of students and society. The VEE must make public how this analysis of information has been utilised in the further development of its activities and provide evidence as to the involvement of both students and staff in the provision, analysis and implementation of such data. Evidence must be provided that the QA loops are fully closed (Plan Do Check Adjust cycles) to efficiently enhance the quality of education. Any action planned or taken as a result of this data analysis must be communicated to all those concerned.**

#### Analysis of the findings/Comments

*The VEE monitors and reviews its activities against its objectives with qualitative and quantitative components through its quality assurance loops, processes, committees, staff and student input, and reports. The steps, participants and processes (including actions) are associated with the Plan Do Check Adjust cycle. External stakeholders contribute and some recent graduates provide informal qualitative feedback after graduation.*

#### Suggestions for improvement

*The VEE's mechanisms to gather specific feedback from recent graduates working in the profession should be expanded to include regular collection of quantitative data on how well the programme prepares them in the Day One Competences and the information should be used to inform current and ongoing curricular changes.*

#### Decision

*The VEE is partially compliant with Standard 1.6 because of suboptimal involvement of recent graduates in the design of the new curriculum.*

### 2.2.1 Factual information

The feedback from graduates, the industry and stakeholders are crucial in the development and quality assurance of the veterinary program. An alumni survey has been implemented in the regular QA-cycle for the program. The results will be reported to the program board alongside the annual program evaluations. The survey will be sent annually to alumni registered in the SLU alumni network, two years after graduation from the veterinary program. Questions focus on Day-One-Competences and transition to working life. There has been issues with the GDPR legislation but those appear now to be resolved.

The first survey was distributed in January 2025; unfortunately, only a few students responded. The results show that students feel confident in clinical examinations, diagnostic investigations/planning, and medical treatment. They feel less confident with surgical procedures and working on-call independently.

Additional involvement of graduates included consultation of an external advisory board during the expansion project. The VEE re-established our stakeholders' advisory board (Branschrådet) with a wide representation of members, including recent graduates, this commenced autumn 2024. This board meets biannually and is crucial for the development of the veterinary program.

For each graduating class, the VEE evaluates the veterinary program. By the time the program evaluation is distributed, most graduates have already entered the veterinary workforce during the summer between year 5 and year 6 (master thesis).

### 2.2.2 Comments

Developing and maintaining relevant veterinary education requires feedback from stakeholders and recent graduates. As a result of the implemented changes and regular surveys, the programme will receive important feedback from recent graduates, strengthen the QA-loop, and improve veterinary education. A lesson learned, is the need to work actively to get enough responses.

### 2.3 Minor Deficiency 3:

**Standard 2.1: Finances must be demonstrably adequate to sustain the requirements for the VEE to meet its mission and to achieve its objectives for education, research and services. The description must include both expenditures (separated into personnel costs, operating costs, maintenance costs and equipment) and revenues (separated into public funding, tuition fees, services, research grants and other sources).**

#### Analysis of the findings

*The funding of the VEE has been satisfactory in recent years and has enabled it to respond adequately to its activities, mission, and functions. However, the VTH is in a worrying situation, as its deficit has steadily increased, reaching €3 million in the last financial year. As the VTH and the Department of Clinical Sciences have recently merged, the VEE budget must cover this deficit.*

*Although the deficit of the VTH is funded by SLU every year, sufficient financial resources must be available to ensure long-term clinical training.*

## Suggestions for improvement

*The VEE must secure its own funding to carry out its mission successfully.*

### Decision

*The VEE is partially compliant with Standard 2.1 because of suboptimal funding for the clinical training.*

#### 2.3.1 Factual information

Several strategic actions and investments have been undertaken to accommodate the growing number of students. The Swedish government gave permanent annual funding of 71 million SEK (6.5 MEUR) to expand the veterinary program from 100 to 145 students and the veterinary nursing program from 100 to 115 students. The allocation of this additional funding is outlined in Table 3 below.

Table 3. Allocation of increased Swedish government annual funding

	MSEK
Increased funding for veterinary program	31,5
Increased funding for veterinary nursing program	5,1
Recruitment of senior lecturers and professors	10,7
Infrastructure, permanent increased funding	17,3
Increase faculty common costs, permanent funding	6,4
<b>Total</b>	<b>71,0</b>

The Table 4 below shows the impact on the veterinary program. With an increase of 31.5 MSEK in core annual funding, the average funding per student has increased for the clinical part of the program (2.8%).

Table 4. Impact of increased core funding.

	VP17	VP23	Change, %
Funding, MSEK	72.4	103.9	43.5%
No. of students	503	708	40.8%
Funding/student, SEK	143 936	146 751	2.0%
<i>Funding/student pre-clinic, SEK</i>	<i>54 076</i>	<i>54 379</i>	<i>0.6%</i>
<i>Funding/student, clinic, SEK</i>	<i>89 861</i>	<i>92 373</i>	<i>2.8%</i>

In addition to the permanent annual core funding, the Swedish government provided a lump sum grant (75 MSEK - 6.8 MEUR) in 2023 for infrastructure development, equipment procurement, project management, transition costs, and recruitment of academic staff nine months before they start teaching the larger student cohorts enter the program.

Furthermore, the Department of Clinical Sciences was allocated 7.5 MSEK (0.7 MEUR) from the expansion project (i.e., the lump sum grant) to support continuous professional education (CPE) of academic staff in preparation for the increased number of students. These funds will be used in 2025 to expand the number of on-call qualified staff, extend clinic opening hours, and increase patient numbers to ensure sufficient clinical training.

### 2.3.2 Comments

The VEE has a solid financial foundation for the veterinary program now and in the future with the increased operating budget and improved VTH finances, in line with the increased student numbers.

## 2.4. Minor Deficiency 4

**Standard 3.1: The curriculum must be designed, resourced and managed to ensure all graduates have achieved the graduate attributes expected to be fully compliant with the EU Directive 2005/36/EC (as amended by directive 2013/55/EU) and its Annex V.4.1. The curriculum must include the subjects (input) and must allow the acquisition of the Day One Competences (output) listed in the ESEVT SOP Annex 2.**

**This concerns:**

- **Basic Sciences**
- **Clinical Sciences in companion animals (including equine and exotic pets)**
- **Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management)**
- **Veterinary Public Health (including Food Safety and Quality)**
- **Professional Knowledge (including soft skills, e.g. communication, team working skills, management skills).**

**When part of the study programme cannot be organised because of imposed regulations or constraints, convincing compensations must be developed and implemented.**

**If a VEE offers more than one study programme to become a veterinarian, e.g. in different languages or in collaboration with other VEEs, all study programmes and respective curricula must be described separately in the SER.**

**For each Standard, the VEE must explain if there are differences or not with the basic programme and all this information must be provided as a formal annex to the SER. Similarly, if a VEE implements a tracking (elective) system in its study programme, it must provide a clear explanation of the tracking system in the SER.**

### Analysis of the findings

*The student-driven clinic is praiseworthy. Clinical sciences in companion animals include a good total number of hours, a good balance between core subjects and a good proportion of hours between lectures, seminars, supervised self-learning, laboratory and desk-based work, as well as work on non-clinical and clinical animals. Around 50% of the practical rotations offered by the VTH involve dogs, cats, and horses. Suboptimal clinical training is provided in exotic pets, including birds.*

### Decision

*The VEE is partially compliant with Standard 3.1.3 because of suboptimal clinical training in exotic pets.*

### 2.4.1 Factual information

Since the visitation the clinical training in exotic pets has increased (see Table 5) and in November 2024, a dedicated exotic pet veterinarian joined the VTH. This recruitment was advertised on social media and through a campaign promoting the possibility to book appointments for rabbits and rodents. Additionally, a vaccination campaign for rabbits occurred from April to May 2025, offering a free dental check-up. This was intended to give students practical training handling rabbits.

#### Clinical training

Students have a mandatory day with exotic patients during the small animal clinical rotation. Interested students can opt to further extend their time spent in the exotic animal clinic, open every Tuesday. The students are also involved in exotic cases in the diagnostic imaging clinic during their diagnostic imaging and small animal rotations. Interested students may also participate in exotic animal medicine during their two weeks of extra-mural elective training. We expect actions taken will lead to an increased number of exotic cases before the larger cohort of students enters the clinic in the academic year 2026/2027. The matter is closely monitored, and further actions will be taken if the case load doesn't develop as planned.

Table 5. Number of exotic animal patients during the academic years 2023/2024 and 2024/2025.

	2023/2024	2024/2025
Individual cases	123	139
Appointments	141	158

#### Necropsies

The number of necropsied rabbits, rodents, birds, and exotics has increased compared to previous years, partly because animals necropsied during the laboratory animal medicine course, were not included in these statistics previously (Table 6).

Table 6. Number of necropsied exotic animals during the academic years 2022/2023, 2023/2024 and 2024/2025.

<b>Rabbits, rodents, birds and exotics</b>	<b>2024/2025</b>	<b>2023/2024</b>	<b>2022/2023</b>
Rabbit	10	5	21
Guinea pig	2		3
Hamster	1		
Rat	51		
Mouse	50		
Birds (poultry)	48	51	32
Lizzard		1	
Turtle	1		
Chinchilla	1		
Gerbil	1		
Hedgehog	1		
<b>Total</b>	<b>166</b>	<b>57</b>	<b>56</b>

### Preclinical teaching

The VEE mapped all teaching in exotic animals including laboratory animals (please refer to Appendix 3 for details). Before the clinical training, students receive 57 lecturing hours on exotic animals, plus 3 hours on research animals in wildlife, and rabbits and rodents. The students have 7.5 practical training hours on handling and euthanasia of exotic animals and 3 practical training hours on necropsy of laboratory animals. Four additional lecture hours on exotic animals will be added to the veterinary clinical skills course in years 3-4 of the new curriculum (VP23).

### **2.4.2 Comments**

The VEE has now re-mapped its training in exotic animals, including the rodent training during the laboratory animal course and hired a dedicated clinician for exotic animals. Thus, the elements for compliance are in place but need to be followed up in the interim reports (2027 and 2029).

### **2.5 Minor Deficiency 5:**

**Standard 4.4: Core clinical teaching facilities must be provided in a veterinary teaching hospital (VTH) with 24/7 emergency services at least for companion animals and equines. Within the VTH, the VEE must unequivocally demonstrate that the standard of education and clinical research is compliant with all ESEVT Standards, e.g. research based and evidence-based clinical training supervised by teaching staff trained to teach and to assess, availability for staff and students of facilities and patients for performing clinical research and relevant QA procedures.**

**For ruminants, on-call service must be available if emergency services do not exist for those species in a VTH.**

**The VEE must ensure state-of-the-art standards of teaching clinics which remain comparable with or exceed the best available clinics in the private sector. The VTH and any hospitals, practices and facilities which are involved with the core curriculum must be compliant with the ESEVT Standards and meet the relevant national Veterinary Practice Standards.**

### **Analysis of the findings**

*Both the pet clinic and the horse clinic are well-structured and equipped for education, practical training, and animal welfare. The VEE has a high-standard diagnostic imaging unit and an adequate laboratory for diagnostics. The CTC offers the students the possibility to train on organs and dummies before entering the clinical rotations on live animals.*

*The availability of the Lovsta Kott AB slaughterhouse is a good opportunity for teaching and for students to carry out practical work on FSQ and VPH.*

*In the pet clinic, the 24/7 service is currently reduced to 4 days/week due to a reduction in staff. As a result, suboptimal training in pet emergency cases is provided. This is partially compensated by an excellent ambulatory 24/7 service for ruminants and horses and by 24/4 emergency services for companion animals.*

### Suggestions for improvement

*It is suggested to re-open the emergency services 7 days a week in order to increase the exposure of students to pet emergency cases.*

### Decision

*The VEE is partially compliant with Standard 4.4 because of suboptimal training in pet emergency cases.*

#### 2.5.1 Factual Information

The reorganization and turnaround of the VTH small animal clinic has significantly improved training in emergency care for companion animals compared to the status in October 2024. Key initiatives included recruiting experienced staff, targeted training in essential competencies, and both pedagogical and clinical development of current staff to prepare them for after-hours emergency work. These efforts resulted in notable improvements in the quality of veterinary services offered to clients, which in turn enhances the clinical training experience for veterinary students.

Each student must complete two evening shifts and one night shift dedicated to small animal emergencies to gain hands-on experience in emergency care. Additional voluntary shifts are available during the semester and holidays. As previously noted, the VTH will expand its small animal emergency services to a 24/7 operation by autumn 2026 at the latest using an incremental approach. The first phase was to increase from the current 24/5 to 24/7 during easter and summer 2025, to create goodwill and increase patient flows before autumn 2025. A 24/5 service including Sundays will resume in autumn 2025. A second phase is planned to align with the arrival of the larger student cohort in the 2026/2027 academic year. The emergency caseload increased compared with the previous year (see Table 7). The planned extension of clinic operating hours in summer 2025 is expected to increase the overall number of emergency cases. The actions taken to increase the caseload of emergency patients as well as the restructuring of the VTH will ensure sufficient clinical exposure for an expanded student cohort arriving in late 2026.

Table 7. Emergency patient caseload for the academic years 2023/2024 and 2024/2025.

	2023/2024	2024/2025
Individual cases (total)	1986	2204
Appointments (total)	2281	2533

#### 2.5.2 Comments

The VTH has been restructured with new management, strategic recruitments, and CPE with the explicit goal of a 24/7 emergency service in the small animal clinic before end of 2026. The VEE and VTH have made significant progress toward that goal. Ongoing efforts to achieve 24/7 and monitor the student caseload of emergency patients will continue to ensure sufficient training for the increased student cohorts and will be followed up in the interim progress reports 2027 and 2029.

## 2.6. Minor Deficiency 6:

**Standard 4.9: Operational policies and procedures (including biosecurity, good laboratory practice and good clinical practice) must be taught and posted (in different languages if the curriculum is taught in them) for students, staff and visitors and a biosecurity manual must be developed and made easily available for all relevant persons. The VEE must demonstrate a clear commitment for the delivery and the implementation of biosecurity, e.g. by a specific committee structure. The VEE must have a system of QA to monitor and assure clinical, laboratory and farm services, including regular monitoring of the feedback from students, staff and clients.**

### Analysis of the findings/Comments

*A manual containing all the procedures and documents related to the environmental work at SLU, and more specifically at VHC, is available online, and students and staff are well-trained in biosecurity. However, the posting of biosecurity rules in some rooms, i.e., entrance to the isolation units, has been noted.*

### Suggestions for improvement

*It is suggested that biosecurity signage in the VEE be reinforced and that biosecurity rules be posted in Swedish and English, particularly at the entrance to all isolation units.*

### Decision

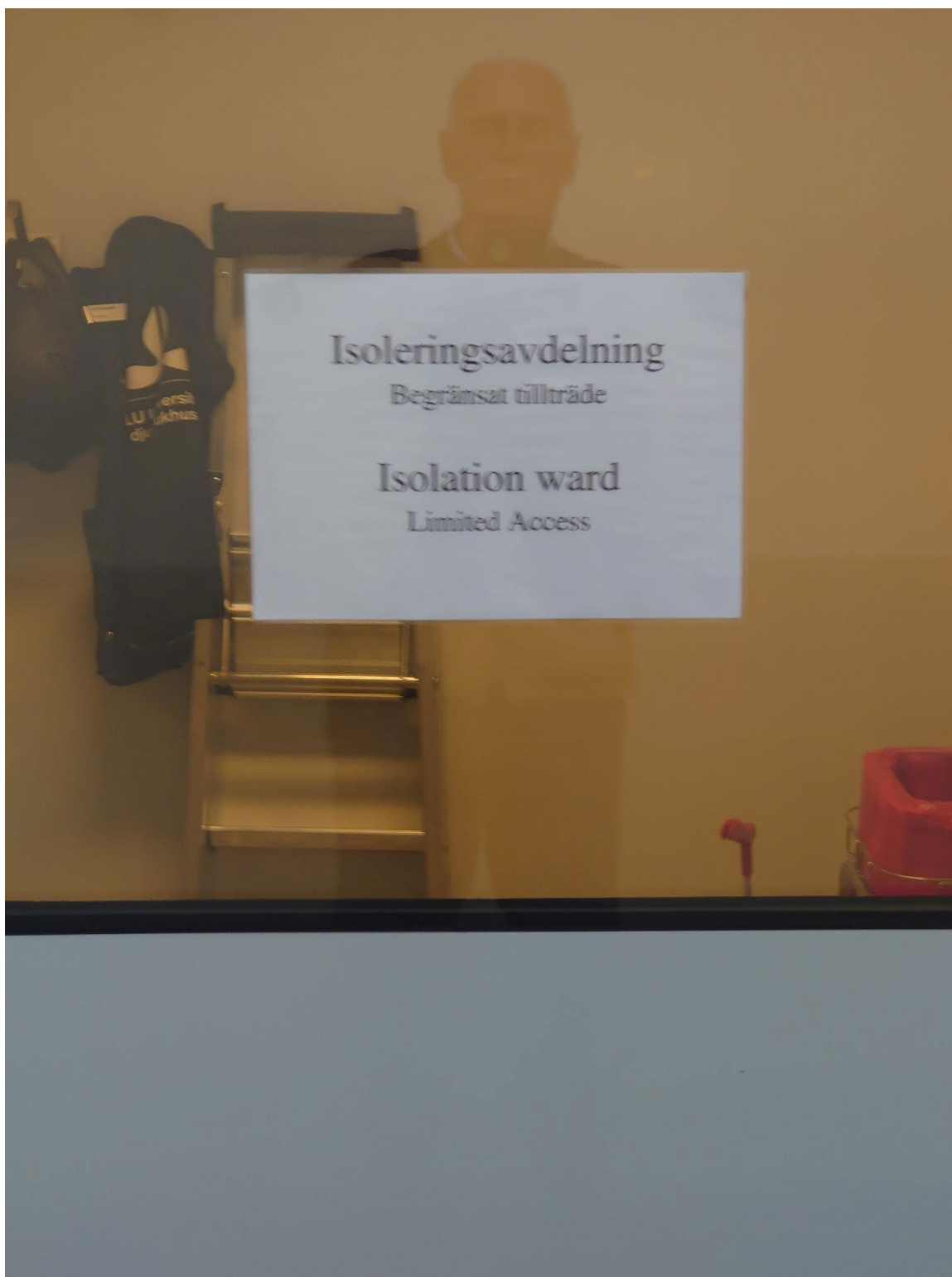
*The VEE is partially compliant with Standard 4.9 because of suboptimal posting of biosecurity rules in some rooms.*

#### 2.6.1. Factual information

Biosecurity is part of the syllabus for the courses veterinary clinical skills (year 3 VP23) and veterinary propaedeutics (year 4 VP17). All practical and clinical teaching involves a degree of introduction to relevant biosecurity measures, and students are given feedback on their performance. The learning objectives state students should work correctly regarding hygiene, infection control, biosafety, occupational safety, and animal welfare. Students should also explain principles for achieving high biosecurity in animal husbandry. Internal audits are conducted regularly to ensure biosecurity. The insufficient posting of biosecurity rules has been rectified; see enclosed photos.

#### 2.6.1. Comments

The signage has been posted in the isolation wards for large animals, and it is recalled that biosecurity is a major topic in the curriculum.





### 3.ESEVT Indicators

Included are the Indicator Tables including raw data and indicators.

Table 1A of indicators – raw data

Name of the VEE:		Swedish Univeristy of Agricultural Sciences (SLU)				
Name & mail of the VEE's Head:		Nils Fall; dekan@slu.se				
Date of the form filling:		August 8, 2025				
Raw data from the last 3 complete academic years		2025/24	2024/23	2023/22	Mean	
1	n° of FTE teaching staff involved in veterinary training	115	115	106	112.0	
2	n° of undergraduate students	593	559	515	555.7	
3	n° of FTE veterinarians involved in veterinary training	85	85	77	82.3	
4	n° of students graduating annually	83	74	87	81.3	
5	n° of FTE support staff involved in veterinary training	111	74	84	89.7	
6	n° of hours of practical (non-clinical) training	862	862	837	853.7	
7	n° of hours of Core Clinical Training (CCT)	922	912	912	915.3	
8	n° of hours of VPH (including FSQ) training	336	336	336	336.0	
9	n° of hours of extra-mural practical training in VPH (including FSQ)	80	80	80	80.0	
10	n° of companion animal patients seen intra-murally	6289	6536	8408	7077.7	
11	n° of individual ruminant and pig patients seen intra-murally	114	123	263	166.7	
12	n° of equine patients seen intra-murally	2154	2316	2981	2483.7	
13	n° of rabbit, rodent, bird and exotic patients seen intra-murally	139	123	263	175.0	
14	n° of companion animal patients seen extra-murally	50	0	0	16.7	
15	n° of individual ruminants and pig patients seen extra-murally	1963	2753	1438	2051.3	
16	n° of equine patients seen extra-murally	772	1077	1367	1072.0	
17	n° of rabbit, rodent, bird and exotic patients seen extra-murally	0	0	0	0.0	
18	n° of visits to ruminant and pig herds	523	142	168	277.7	
19	n° of visits to poultry, farmed rabbit, fish and bee units	3	1	1	1.7	
20	n° of companion animal necropsies	122	104	152	126.0	
21	n° of ruminant and pig necropsies	151	140	95	128.7	
22	n° of equine necropsies	65	46	74	61.7	
23	n° of rabbit, rodent, bird and exotic pet necropsies	166	57	56	93.0	
24	n° of FTE specialised veterinarians involved in veterinary training	15	15	15	15.0	
25	n° of PhD-students graduating annually	15	19	19	17.7	

Table 1B Table of indicators

Name of the VEE:		Swedish Univeristy of Agricultural Sciences (SLU)			
Date of the form filling:		August 8, 2025			
Calculated Indicators from raw data		VEE values	Median values <sup>1</sup>	Minimal values <sup>2</sup>	Balance <sup>3</sup>
11	n° of FTE teaching staff involved in veterinary training / n° of undergraduate students	0.202	0.15	0.13	0.076
12	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	1.012	0.84	0.63	0.382
13	n° of FTE support staff involved in veterinary training / n° of students graduating annually	1.102	0.88	0.54	0.562
14	n° of hours of practical (non-clinical) training	853.667	953.50	700.59	153.077
15	n° of hours of Core Clinical Training (CCT)	915.333	941.58	704.80	210.533
16	n° of hours of VPH (including FSQ) training	336.000	293.50	191.80	144.200
17	n° of hours of extra-mural practical training in VPH (including FSQ)	80.000	75.00	31.80	48.200
18	n° of companion animal patients seen intra-murally and extra-murally / n° of students graduating annually	87.225	67.37	44.01	43.215
19	n° of individual ruminants and pig patients seen intra-murally and extra-murally / n° of students graduating annually	27.270	18.75	9.74	17.530
110	n° of equine patients seen intra-murally and extra-murally / n° of students graduating annually	43.717	5.96	2.15	41.567
111	n° of rabbit, rodent, bird and exotic seen intra-murally and extra-murally / n° of students graduating annually	2.152	3.11	1.16	0.992
112	n° of visits to ruminant and pig herds / n° of students graduating annually	3.414	1.29	0.54	2.874
113	n° of visits to poultry, rabbit, fish and bee units / n° of students graduating annually	0.020	0.11	0.04	-0.024
114	n° of companion animal necropsies / n° of students graduating annually	1.549	2.11	1.40	0.149
115	n° of ruminant and pig necropsies / n° of students graduating annually	1.582	1.36	0.90	0.682
116	n° of equine necropsies / n° of students graduating annually	0.758	0.18	0.10	0.658
117	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually	1.143	2.65	0.88	0.263
118	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually	0.184	0.27	0.06	0.124
119	n° of PhD-students graduating annually / n° of students graduating annually	0.217	0.15	0.07	0.147

## **Appendix 1. Description of processes at VTH regarding recruitment and continuing professional education of personnel**

### **Definitions of on-call qualifications**

A veterinarian is considered on-call qualified if they are able to:

- Independently manage emergency patients, including surgical and medical decisions
- Develop treatment plans for in-patients
- Perform emergency surgery, with access to back-up support if needed
- Establish anaesthesia protocols for emergency cases in collaboration with an anaesthesia-trained veterinary nurse
- Conduct CPR and stabilize critically ill patients

A veterinary nurse is considered on-call qualified if they are able to:

- Assess medical and surgical conditions to ensure patient safety
- Triage and prioritize cases appropriately
- Create in-patient care plans
- Perform CPR, and provide basic anaesthesia and ICU care
- Develop anaesthesia protocols in collaboration with an anaesthesia-trained veterinarian

### **Recruitment, intradepartmental collaboration and competence development**

Weekly recruitment meetings involve VTH management, VEE management, and subject heads. Pre-identified staffing needs are shared in advance which enables creation of integrated clinical-academic roles, supporting teaching, clinical duties, and research. This collaborative recruitment model has proven more effective and cost-efficient than previous processes. The actions outlined below (see Table 1 for overview) have been possible based on collaboration between academic staff, including subject heads in small animal surgery and internal medicine, and staff working at the VTH. These efforts are expected to significantly increase the number of on-call qualified veterinarians, improve the quality of veterinary services, and enhance the clinical training of veterinary students.

- A senior academic veterinarian has been appointed as clinical coordinator for junior veterinarians and is part of the Small Animal Clinic management team. The responsibility for this role is ensuring that junior staff reach the competence needed for emergency out-of-hours care, leading the development of the inpatient ward for advanced emergency and post-operative care and ensuring academic quality of clinical rounds as well as mentoring less experienced colleagues.
- Recruitment of specialists including 1 EBVS specialist in dermatology, 1 veterinarian with expertise in odontology and exotic animal medicine and surgery and 1 EBVS specialist in small animal surgery (currently pursuing a PhD, returned to support orthopaedic cases).
- Specialist training: 1 board-eligible veterinarian scheduled to take the ECVS exam in 2026, 1 veterinarian has completed and passed the national specialist programme (stage 1), 3 veterinarians enrolled in national specialist programme (stage 1). Ongoing support is provided to help others complete their training.
- A junior veterinarian receives mentorship from an EBVS specialist in ophthalmology
- A junior veterinarian receives mentorship from an EBVS specialist in dermatology

- Mandatory rounds on managing emergency patients for junior staff, led by academic teachers (2024/2025)
- Clinical forum led by speakers from the VEE and VTH on a variety of clinically relevant topics, both covering recent advances as well as "back to basics" reminders. Examples include dermatological aspects, taurine deficiency in dogs, forgotten lab tests, diagnosing reduced renal function, sedation – more than medetomidine, antibiotics from a clinical perspective, the sore eye, feed trends, interpretation of leukocytes, calcium – what to consider in the clinic, ASA –scoring for anaesthesiology and surgical check lists
- Anaesthesiology training including an anaesthesia and analgesia course provided in-house by EBVS and American-certified specialists (late 2024), in-house anaesthesia coordinator (20% FTE) assigned to junior vet training (starting 2025), recruitment of two diplomates in anaesthesiology (see Strategic Staff Development and Recruitment section 1.2.1)
- Surgery training including specialist support in orthopaedics from a national specialist program Steg 2 surgeon (3 days/month through mid-2025), external surgical course and surgical training using cadavers (pig, cat, dog) both externally and under EBVS supervision
- Ultrasound training including training junior staff in performing ultrasound examinations as well as additional training provided to improve after-hours diagnostic skills.
- Pedagogical development, including review of all clinical staff's teaching skills completed with the goal of having all staff complete pedagogical training by end of 2025, or at the latest early 2026. New employees are required to undergo the same training.
- Veterinary nurse development. To increase the number of on-call qualified veterinary nurses, training has included intubation and catheterization, including central venous access, surgical assistance using cadaver labs, rounds and training on topics such as CPR and SBAR techniques, snake bites and blood transfusions and stress reduction in surgical patients. Veterinary nurses also have open access to the lectures given to the veterinarians under training to become on-call qualified. Participation in shared training sessions with veterinarians training in anaesthesia includes supervision by EBVS anaesthesia diplomates, lectures by European and American board-certified specialists and hands-on training in surgical and ICU units alongside experienced veterinary nurses.

Table 1. Summary of training arranged to increase the number of on-call qualified veterinarians.

<b>Training</b>	<b>Duration</b>	<b>Participants</b>
Anaesthesiology course	2-day course with EBVS and American certified specialists in anaesthesia	9 vets, 12 veterinary nurses
Clinical forum led by speakers from VTH and VEE	11 rounds, 45 minutes each	All vets
Surgery course, external	2-day course with steg-2 specialists in small animal surgery	4 vets
Ophthalmology training	Supervision by EBVS specialist in ophthalmology	1 vet
Pedagogical course	Basic – 4 hours	4 technical staff
	Intermediate – 16 hours	19 vets, 10 veterinary nurses, 8 technical staff
	Advanced – 8 hours	10-15 vets small animal clinics
Series of rounds on managing emergency patients	16 lectures, 1 hour each	All less experienced vets
Surgical skill training, in-house	3 hours	9 vets
Ultrasound course, external	2-day course with EBVS certified specialists in diagnostic imaging	3 vets
Ultrasound POCUS training, in-house	2 hours	5 vets
Ultrasound training, in-house	1 week + follow-up days	4 vets

## Appendix 2 Planning for the enlargement of veterinary program

Table 1. Planning for timeline syllabus and schedule clinical courses for years 3,4, 5 for the novel program (VP23) ■ Green: Completed. In time according to standard time for course planning, ■ Yellow: Work in progress. According to standard time frame for course planning, ■ Blue: Work in progress. Ahead of standard time frame for course planning, ■ Red: Overdue.

Course	Syllabus complete	Detailed planning	Scheduling	Start of course
Laboratory Animal Medicine	Autumn -24	Spring -25	Spring -25 (May)	Autumn -25
Scientific methodology	Autumn -24	Spring -25	Spring -25 (May)	Autumn -25
Veterinary clinical skills 1	Autumn -24	Autumn -25	Autumn -25 (Nov)	Spring -26
Veterinary clinical skills 2	Autumn -25	Spring -26	Spring -26 (May)	Autumn -27
Clinical veterinary medicine 1	Autumn -25	Spring -26	Spring -26 (May)	Autumn -27
Clinical veterinary medicine 2	Autumn -25	Spring -26	Spring -26 (May)	Autumn -27
Clinical veterinary medicine 2	Autumn -25	Spring -26	Autumn -26 (Nov)	Spring -27
Clinical veterinary medicine 2	Autumn -25	Spring -26	Spring -27 (May)	Autumn -27
Clinical veterinary medicine 3	Autumn -26	Autumn -27	Autumn -27	Spring -28

Table 2. Actions planned regarding infrastructure, recruitment of staff and external cooperation. ■ Green: Completed. ■ Yellow: Work in progress. ■ Red: Overdue.

	Actions	Completed/to be completed
Infrastructure	Auditorium and lecture halls	Completed
	Laboratory and dissection capacity	Completed
	Freezer rooms and storage rooms on campus	Completed
	Clinical training centres (stage 1)	Completed
	New dressing room students	End of 2025
	Clinical training centre (stage 2)	Autumn of 2026
	Ruminant clinic, upgrade	Autumn of 2026
Recruitment of staff	Final planning of clinical facilities	Autumn of 2026
	Recruitment of staff to the pre-clinic years	Completed
External cooperation	Recruitment of staff for the clinical rotation, year 4-5,5	Spring of 2026
	Increased usage of SLU livestock research centre in Lövsta	Completed
	Final agreement with Distriktsveterinärerna (DV) regarding clinical training in ambulatory practice	End of 2025

### Appendix 3 - Mapping of preclinical teaching in exotic animals

Year	Course	Subject	Lectures*	
1	Ethology	Film: Positive training and handling of rabbits and parrots.	2	
	Basic anatomy, tissue histology and biochemistry	Lecture: Anatomy of poultry	1	
		Practical training: Dissection poultry	1,5	
	Advanced anatomy, histology and physiology	Lecture: Respiration of birds	1	
		Lecture: Reproduction physiology of birds	2	
		Lecture: Digestion physiology of birds and small herbivores	2	
2	Animal husbandry and animal welfare	Lecture: Nutrition including exotic animals and birds	1	
		Lecture: Animal husbandry and animal health in chicken and broiler production	1	
		Visit to broiler herd	4	
		Lecture: Stable climate and ventilation (including poultry)	2	
		Lecture: Noise and light in animal stables (including poultry)	2	
		Lecture: Ecological animal husbandry (including poultry)	2	
		Lecture: Animal transport and slaughter (including poultry)	3	
		Lecture: Pre-trial and new technology (including poultry)	2	
		Case presentation: Designing an animal production facility with a focus on what is optimal from the animals' point of view. Egg production and broilers.	2	
		Lecture: Animal husbandry and animal health in rabbits, rodents, birds and reptiles	2	
		Infection biology	Lecture: Parasites in poultry	1
			Lecture: Viral diseases in exotic animals, mainly poultry	1
			Lecture: Parasites in exotic animals, mainly companion birds and reptiles	1
	Lecture: Parasites in camelids		1	
	Lecture: Viral diseases in fish		1	
	Food safety	Lecture: Poultry slaughter	3	
		Lecture: Rabbit slaughter	1	
		Lecture: Official control of poultry slaughterhouses	1	
	3	Introduction to clinical studies and diagnostic imaging	Lecture about clinical nutrition involving exotic animals	<1

	Laboratory animal medicine	Lecture: Diseases of rabbits and rodents	3
		Lecture: Wild animals in research	1
		Lecture: Rabbits as research animals	1
		Lecture: Rats as research animals	1
		Lecture: Pathology of mice and rats	2
		Practical training: Necropsy of rabbits and rodents	3
		Practical training: Handling of mice and rats	3
		Practical training: Injection of mice and rats	3
4	Anaesthesiology	Lecture: Anaesthesia of exotic animals	1
	Clinical pathology	Lectures involving exotic animals	<1
	Diagnostic imaging	Radiographs of frog and turtle	<1
		Diagnostic imaging case report about a rabbit	<1
	Ruminant medicine	Film about reindeer	1
	Small animal surgery and medicine	Power point lecture on rabbits	1
		Power point lecture on guinea pigs	1
Veterinary propaedeutics	Lectures about poultry focusing on the veterinary role, animal husbandry, control programs, vaccination, infection control, herd investigation, hobby poultry and diseases including epizootic diseases	10	

\*1 lecture = 45 minutes

## Appendix 4 - English translation and summary from the students' feedback in the enlarged program (VP 23) after first 2 years.

### Student views on the new curriculum for the veterinary programme at SLU

We are the first class to follow the new curriculum since the veterinary programme was adjusted in the autumn of 2023. We are very satisfied with the programme, in particular with the increased focus supplementing the theoretical knowledge with applied knowledge already within the first years of the programme.

It is difficult to make direct comparisons with the previous curriculum as we have no direct experience from it other than speaking with students ahead of us. The following notes reflect on the overall design of the programme attempting to focus on the new and improved curriculum.

- The veterinary programme clearly is important to the university. The lecturer density is high and most of the lecturers are PhDs or specialists. The lecturers are very accommodating in offering their time, knowledge and expertise, far beyond the call of duty. It is obvious they really care about our understanding, our learning success and providing us with the skills necessary in our future careers.
- The programme early on focuses on real situations and applied knowledge, above and beyond learning theoretical knowledge.

This is reflected, for example, in the new first-year modules in applied anatomy, which focus on a holistic approach to how different organ systems relate to each other, for example through the use of diagnostic imaging.

We are also exposed to practical applications using case-based learning in core student groups, for example in the physiology course during year 1 how feeding alternatives affects health and production.

Applying theoretical knowledge in real-life scenarios is difficult, time-consuming and requires more teaching resources to manage than pure theoretical learning. However, it is worth it as it provides us with a much deeper understanding of the complex systems involved. It also facilitates and accelerates learning in subsequent courses through better understanding of the interconnectedness.

- There have been ample opportunities for ethical reflections on animals and animal husbandry. This increases the understanding that the same facts can be viewed from several angles, increases acceptance of others' opinions, and provides the opportunity to ground one's own convictions on controversial issues and to be able to argue for them. Although the class holds widely differing views on controversial issues, the scheduled ethical reflections have contributed to increasing the tolerance within the class and between the class and the university.
- A new feature is the increased emphasis on communication. For example, during dissections throughout the first-year anatomy classes, each group was tasked with

demonstrating their findings for parallel student groups. Similar communication training opportunities have been included in almost every course. Although awkward at first, the method has proven to greatly enhance learning as well as building communicative skills.

- A major change from the past is that we have met the most common animals from start of the programme instead of starting in year 3. This provides a better understanding of the animals and the conditions they are held in.

This method has also had two other significant effects. Most students are more confident that they have chosen the right occupational path after early on handling horses, dogs, cats, cows, goats, chicken or pigs. Also, some students who have visited an actual barn realised that the veterinary profession is not for them. In both cases, this contributes to the effectiveness of the programme as more students persevere and those who likely would drop out later leave early.

The new curriculum has placed many practical steps several years earlier, such as administering injections. This means that it is possible to work as a veterinary assistant, already after the second year, which significantly increases the opportunities for hands-on training. This will lead to a higher level of competence at graduation.

- In the beginning of the second year, the new course in animal welfare provided insights into the conditions of animal husbandry focusing on production animals. The course included a week-long field trip to farms and slaughterhouses and has been very useful for subsequent courses in pathology and infection biology.
- Throughout the courses, we have also been spending quite a lot of time in the laboratory learning techniques for analysing and diagnosing infectious agents, counting parasite eggs, affecting enzymatic reactions, running different types of PCRs, sequencing DNA and discovering genetic variations. This hands-on experience greatly supplements the theoretical knowledge we learn in class.
- Most of the exams are computer-based which is much better than the previous paper-based exams. However, the faculty has been inventive with regards to alternative examination methods.

For example, in the new animal welfare course the traditional examination has been replaced with demonstrating that we could apply our learning by proposing the design of animal husbandry systems, such as how milk-producing cows should be provided for with regards to pastures, shelter, ventilation, health-promoting features and enrichment of the environment. Apart from training communication skills, this practical approach provides a much deeper understanding of how to assess animal welfare and production factors than a purely theoretical, knowledge-based exam would have provided. In some other courses, theoretical exams have been supplemented with mandatory presentations on lab results or group discussions.

These alternative examination methods likely take more resources to provide, but they are appreciated as they promote application of knowledge and communication skills.

- The programme grading scale is based on a pass/fail system. The requirement for a pass is higher than it would be with a more granular grading scale. This increases the likelihood of sufficient first-day skills.

The pass/fail system also stimulates co-operation instead of competition between students. This means that the study climate is nicer and that it is easy to get assistance from fellow students.

Although we believe the curriculum is outstanding, there are still a few aspects of the veterinary programme which could benefit from improvements.

- The programme would benefit from more diversity in terms of age, gender and previous experiences amongst students. While this is difficult to organise under the national admission system, alternative admission methods have been tested in the past and may be possible to revisit.
- The curriculum is one-size-fits-all. It would benefit from allowing some specialisation in later years in certain types of animals or practices, instead of everyone only having access to the same compulsory courses.
- The new curriculum does not waste any time and there have not been any slow periods as there is just so much material to cover within the programme to provide us with sufficient first-day skills. The curriculum could benefit from an even more thorough introduction to study techniques in the beginning of, and throughout, the programme as some students feel that the pace and demands on them are difficult to cope with.

Based on the first two years with the new curriculum, we have high hopes that the remaining years will demonstrate the same high quality to foster us to become outstanding veterinarians.