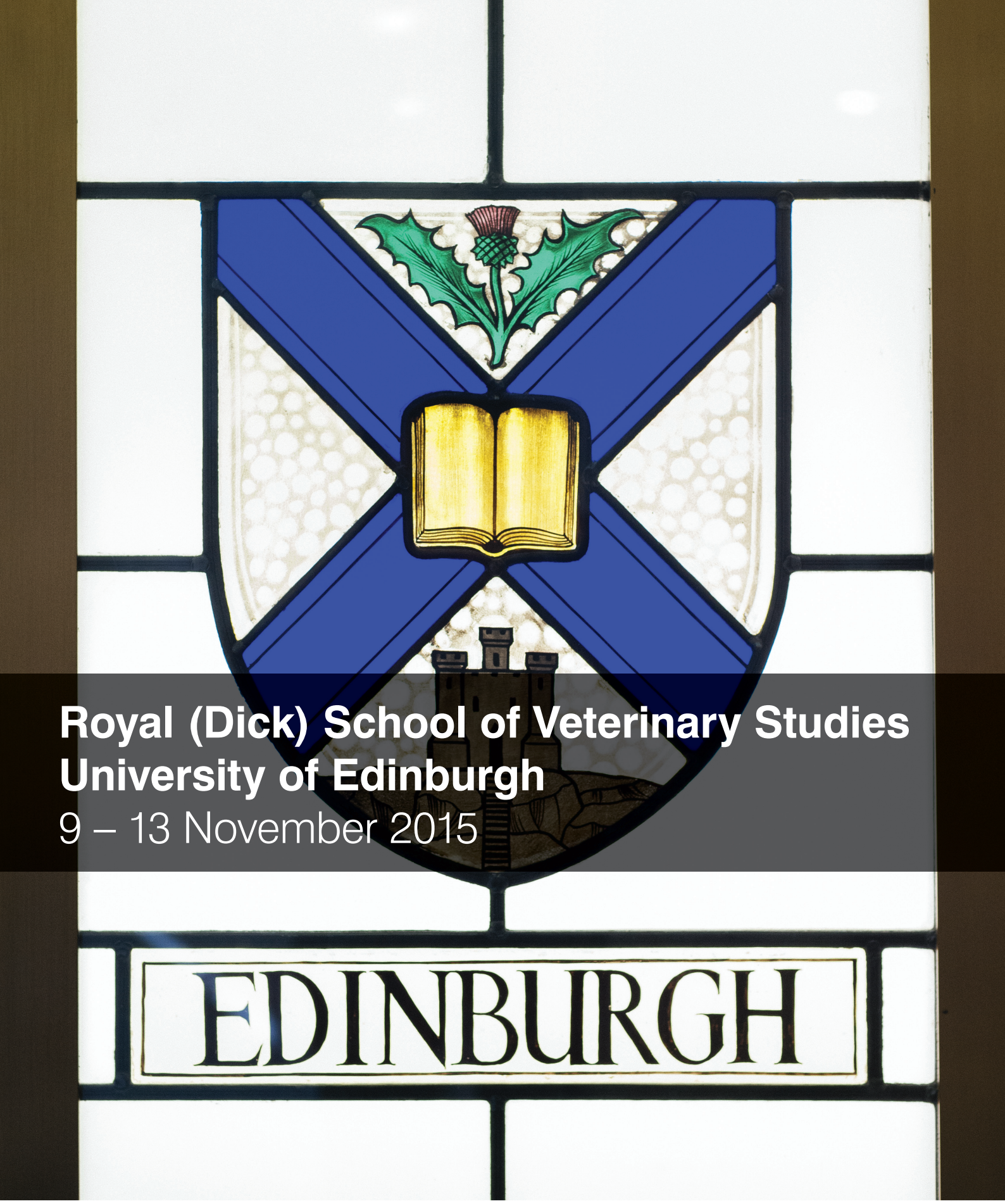


Royal (Dick) School of Veterinary Studies
University of Edinburgh

9 – 13 November 2015

RCVS SETTING VETERINARY STANDARDS

Royal (Dick) School of Veterinary Studies
University of Edinburgh

9 – 13 November 2015

Report to the Council of the Royal College of Veterinary Surgeons (RCVS) in accordance with Section 5 of the Veterinary Surgeons Act 1966,

and

to the European Committee of Veterinary Education (ECOVE) in compliance with European Directive 2005/36/EC

Contents

List of Visitors

Professor Stephen May VetMB MA PhD DEO DVR DipECVS FRCVS, Co-Chair, RCVS

Dr Deborah Kochevar, Co-Chair, AVMA

Professor Pierre Lekeux DVM PhD Dipl ECVPT, EAEVE Coordinator

Mrs Lynne Hill MVB MBA MRCVS, RCVS

Professor Birgit Nørrung DVM PhD DipECVPH, AVMA visitor (nominated by RCVS as the host country regulatory authority)

Dr Herbert Whiteley, AVMA

Dr Jack Wilson, Canadian VMA

Professor Norm Williamson MVSc MANZCVS DipACT, AVBC

Dr Philip H. Kass, AVMA COE Observer

Professor Thomas Blaha Dipl ECVPH ECPHM, EAEVE

Miss Poppy McGeown, EAEVE nominated student representative

Also present

Mrs Christine Warman

Head of Education, RCVS

Dr Karen Brandt DVM

Director, AVMA Education & Research Division

Glossary of abbreviations

AVBC	Australasian Veterinary Boards Council (Inc)
AVMA	American Veterinary Medical Association
BBSRC	Biotechnology and Biological Sciences Research Council.
BVM&S	Bachelor of Veterinary Medicine and Surgery
CE	Continuing Education
CertAVP	Certificate in Advanced Veterinary Practice
CMVM	College of Medicine and Veterinary Medicine
COE	Council on Education
CPD	Continuing Professional Development
CQAC	College Quality Assurance Committee
CT	Computed Tomography
DHHPS	Dairy Herd Health and Productivity Service
EAEVE	European Association of Establishments for Veterinary Education
ECAT	Edinburgh Clinical Academic Track
EDCH	Edinburgh Dog and Cat Home
EEVeC	Edinburgh Electronic Veterinary Curriculum
EMS	Extra-Mural Studies
EU	European Union
FAP	Farm Animal Practice
GEP	Graduate Entry Programme
HEA	Higher Education Authority
HfSA	Hospital for Small Animals
IAD	Institute for Academic Development
IB	International Baccalaureate
LSoKVL	Lady Smith of Kelvin Veterinary Library
LTC	Learning and Teaching Committee
MCQ	Multiple Choice Questions
MMI	Multiple Mini Interviews
MOOC	Massive Open Online Course

MRCVS	Member of the Royal College of Veterinary Surgeons
NAVLE	North American Veterinary Licensing Examination
NOVICE Network	Network of Veterinarians in Continuing Education
NSS	National Student Survey
OV	Official Veterinarian
PACS	Picture Archiving and Communication System
PDSA	People's Dispensary for Sick Animals
PGR	Postgraduate Research
PGT	Postgraduate Taught
PMS	Practice Management System
QR Codes	Quick Response Codes
R(D)SVS	The Royal (Dick) School of Veterinary Studies
RCVS	Royal College of Veterinary Surgeons
REF	Research Excellence Framework
RUK	Rest of United Kingdom
SEU	Scottish and European Union
SFC	Scottish Funding Council
SQA	Scottish Qualifications Authority
SQAEC	Senatus Quality Assurance and Enhancement Committee
SRUC	Scotland's Rural College
SSLC	Staff Student Liaison Committee
SSPCA	Scottish Society for Prevention of Cruelty to Animals
UCAS	Universities and College Admissions Service
VDS	Veterinary Defence Society
VERC	Veterinary Ethical Review Committee
VLE	Virtual Learning Environment
VMCAS	Veterinary Medical College Application Service
VMQAC	Veterinary Medicine Quality Assurance Committee
VTO	Veterinary Teaching Organisation

Background to the joint international visit

The visitation to the Royal (Dick) School of Veterinary Studies, University of Edinburgh was undertaken by Visitors representing the RCVS, the Council on Education of the American Veterinary Medical Association (AVMA COE), the Australian Veterinary Boards Council (AVBC) and the European Association of Establishments for Veterinary Education (EAEVE).

The procedure for the visit, including the composition of the visit team and the documentation and criteria to be followed, had been agreed by the International Accreditors Working Group, comprising representatives of each of the accrediting bodies, at a meeting at AVMA's offices in Chicago on 28-29 March, 2011. Following detailed consideration and a comparison of each organisation's accreditation criteria and procedures, it was agreed to follow the AVMA 11 accreditation standards, supplemented by additional information required by RCVS and AVBC, in particular relating to extra-mural studies (EMS), and data relating to the statistical indicators required by EAEVE.

The visit was conducted as a single site visit, with two co-Chairs nominated by the RCVS and by the AVMA. The team stayed together for the majority of the visit, separating only to visit the off-site abattoir and practices used for teaching, and worked together as a group on drafting the report. The report on each of the standards, including the commendations and recommendations/suggestions, therefore represents the combined views of the whole international team. The report on each of the standards is for consideration separately by each country's accrediting body, which is free to reach its own conclusions on accreditation based on its own national requirements.

An additional 12th standard on EMS has been added to this edition of the report, and the EAEVE indicators and a copy of the visitation timetable have been appended for presentation to RCVS and EAEVE committees. The report has been re-formatted and some spellings anglicised for the sake of consistency with RCVS house-style.

The Chairs and visit team members would like to thank the University and especially the Dean/Head of School, Professor David Argyle, and his staff, for their hospitality and cooperation during the visit. The team was also grateful for all the work that the School staff had put into preparing the thorough self-evaluation report, which formed the basis of discussions during the visit.

Summary

The findings in the summary are based on the visitors' review and are subject to confirmation by each individual accrediting agency.

The overall impression of the visitors is that this is a positive working and learning environment.

The team has the following findings:

Standard 1 – Organisation
- The University, College, and School are commended for the quality and comprehensive nature of support provided to the professional program.
- It is apparent to the visitors that University administration is highly supportive of the School both organisationally and financially.
- As the School develops it is suggested that Management looks at clearer policies for membership and turnover of committee appointments, to further enhance both the managerial and governance functions and assure inclusivity of all its processes.

Standard 2 – Finances
- The University is commended for its fiscal support of the teaching, research and clinical strands of the Veterinary School's work to support the education of high quality veterinary graduates.

Standard 3 – Physical Facilities
- School facilities are well designed and provide a high quality collegial learning and work environment.
- The quality, range and maintenance of the teaching and learning resources in the establishment are commended.
- The School has a well-defined strategic plan for further facility development.

Standard 4 – Clinical Resources
- Overall the caseload available for student learning opportunities is well-balanced.
- The production animal farms provide a diverse array of learning opportunities.

Standard 5 – Information Resources
- The School is commended for the adoption of innovative technologies and pedagogical methods to enhance the student learning experience.

Standard 6 – Students
- The School is commended for the quality and variety of student support services available.
- Students are enthusiastic and highly supportive of the faculty and administration.

Standard 7 – Admissions
- Students are very positive about the admissions process which provides a positive impression of the school.
- The School is encouraged to review the process of appointment to the admissions committee to ensure broad representation of faculty and develop a plan to provide regular turnover of committee members.

Standard 8 – Faculty
- The School is commended for the way its comprehensive support for all faculty and staff has led to high morale throughout the organisation.
- The annual appraisal and promotion process, together with a robust workload allocation model, support individual faculty and staff development.

Standard 9 – Curriculum
- The use of innovative teaching methods and technologies provide a multi-modal, broad-based, multi-species learning experience for students.
- The visitors believe that the reorganisation of the fifth year curriculum has enhanced the clinical learning experience.
- The School is commended for the quality of curricular assessment and effective cross-referencing of curricular outcomes to accreditation criteria.
- The School is encouraged to allocate credits so that they reflect student effort.

Standard 10 – Research
- The University and College are commended for the successful integration of the Roslin Institute and School faculty which creates a robust research environment for faculty, veterinary students, and graduate students.

Standard 11 – Outcomes Assessment
- Use of assessment data to modify and improve the curriculum and student learning experience is a strength of the school.
- The School is commended for their contribution to the pedagogical literature on outcomes assessment.
- The School is encouraged to continue to look at creative ways or methods to gather employer feedback on the competence of graduates.

The team was impressed with the overall support, facilities, and fiscal resources provided and planned for the veterinary medical educational programme.

Standard 12 – Continuing and Postgraduate Education

- The School delivers courses to surrounding referral practices
- The School supports the RCVS CertAVP
- The School has increased the number of PhD students

Standard 13 – EMS

- Various databases exist for students to find forms and practices for EMS placements
- Student activity is recorded through Pebblepad
- Staff can be contacted from placements but there is no 24/7 cover. It is suggested that the School looks into the provision of a 24/7 contact number in case of emergency.

Introduction to The Royal (Dick) School of Veterinary Studies R(D)SVS at the University of Edinburgh

The R(D)SVS was founded in 1823 and the School's mission is to benefit society and the environment by educating veterinary surgeons to become members of world-wide public and professional health care teams; and to advance veterinary and comparative medicine through research into disease and disease processes, with the goal of improving the health and welfare of both animals and human beings. The R(D)SVS' major objective is to educate and to advance knowledge through research and clinical service. As such, it identifies three core pillars in which it is dedicated to providing excellence:

- Education
- Research
- Clinical Service

This involves creating a research-led educational environment that serves to enhance the health and wellness of animals and people, nationally and globally.

The success of the R(D)SVS in meeting its varied objectives is a result of the talented academic and administrative staff who have a shared commitment to driving excellence. The responsibility for assessment of progress and success is shared amongst the School divisions, School committees, its research institute and Campus administration.

Strengths considered by the School include:

- Outstanding academic, administrative and support staff with high morale.
- Opportunities for academic staff to be promoted on the basis of either Research, Clinical Excellence, Teaching or a combination of these.
- Significant inward investment into infrastructure creating an exceptional environment for teaching, research and clinical service.
- Recruitment and retention of key staff.
- A highly successful research programme through the Roslin Institute, ranking 1st in the UK for research power in the most recent REF (2014) exercise.
- Campus infrastructure and resources.
- A strong education programme and a commitment to an outstanding student experience with strong support and welfare mechanisms for students experiencing difficulties.
- Teaching spaces including two clinical skills laboratories with advanced teaching aids.
- A strong clinical infrastructure that underpins clinical teaching.
- A strong postgraduate programme.

Challenges considered by the School include:

- Student debt is a major consideration for the School. The University has made available significant bursary options for non-full fee students, but increasing student debt amongst fee-paying non-EU students is an escalating problem. The University, through its North America Office, is actively encouraging philanthropic giving for the support of bursaries and scholarships for both USA and Canadian students across the University, and is one of its key funding aims going forward.
- Further escalation of salaries in both the basic and clinical sciences could put a strain on the School's ability to remain competitive in recruitment and retention of excellent faculty members.
- The success and growth of clinical and research programs results in space being used very intensively.
- Despite a successful REF outcome, the University received a £14M reduction in its grant from the SFC. This reduced the expected increase in QR income (research component of Scottish Funding Council grant) that the School had anticipated from their REF result.

1. Organisation

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 organisation recognised 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 enrolment and operation.

Background

The University of Edinburgh is a degree-awarding institution as recognised by the Secretary of State and by Royal Charter. The Institution is recognised as a University by the Privy Council. In terms of Quality Assurance, the University undergoes an Enhancement-Led Institutional Review (ELIR) every four years. ELIR is the method by which the Quality Assurance Agency (Scotland) reviews universities and other higher education institutions in Scotland. The University's next review takes place in October and November 2015. The previous review took place in 2011 where the University received the highest possible outcome, that of "confidence" in the University's current, and likely future, management of the academic standards of its awards and the quality of the student learning experience it provides.

The School's mission is to benefit society and the environment by educating veterinary surgeons to become members of world-wide public and professional health care teams; and to advance veterinary and comparative medicine through research into disease and disease processes, with the goal of improving the health and welfare of both animals and human beings

The School is one of two schools within the College of Medicine and Veterinary Medicine. The Royal (Dick) School of Veterinary Studies is located on the Easter Bush Campus of the University of Edinburgh and comprises the School teaching building (including teaching labs), the associated hospitals and clinics, the Roslin Institute building and accompanying University farms. The School is structured to include eight Academic Divisions, The Veterinary Teaching Organisation VTO) and the Roslin Institute. The eight core divisions are:

- Preclinical Veterinary Sciences
- Pathology
- Production Animal, Food Security and Public Health
- Equine Sciences
- Companion Animal Sciences
- Anaesthesiology
- Veterinary Medical Education
- Animal Welfare and Conservation Medicine

In 2008, the School incorporated the Roslin Institute, where the vast majority of the School's research is now based within the Institute. The Director of the Institute is Associate Dean for Research and the Institute comprises five research divisions:

- Genetics and Genomics
- Infection and Immunity
- Developmental Biology
- Neurobiology
- Translational Veterinary Sciences

Professor David Argyle is the Head of School and the Dean of Veterinary Medicine. He chairs both the School Operations Executive and the Senior Management Group. The School has the following major committees:

- School Operations Executive
- Senior Management Group
- Learning and Teaching Committee
- BVM&S Board of Studies
- Admissions Executive
- Quality Assurance Committee
- Finance and Contracts Committee
- Business Operations Committee
- Health and Safety Committee
- Genetic Modification and Biological Safety Committee
- Radiation Protection Committee
- Estates and Buildings Services Committee
- IT Strategy Group
- Veterinary Ethical Review Committee
- R(D)SVS Career Support Committee

The Roslin Institute, in accordance with BBSRC core funding, has an internal governance structure that includes the following:

- Institute Executive, chaired by the Director
- Science Management Group, chaired by the Director
- Business and Finance group that is focused on Research Income and Infrastructure
- Operations Committee
- Research Quality Committee
- Animal Ethical and Welfare Committee (Research requiring Home Office License)
- Institute Negotiation and Consultative Committee

Comments

The University administration is highly supportive of the School both organisationally and financially.
The Head of School and Academic Heads of the Clinical Divisions are all veterinarians and well-qualified for their roles. In addition, they are well supported by senior administrative directors for each clinical service.

The School has a comprehensive range of committees with appropriate linkages to provide both managerial control and appropriate governance at several different levels. The Learning and Teaching Committee has frequent meetings of a smaller core, at the same time as providing less frequent forums (twice per year) of a more comprehensive cross section of the faculty. In some instances it was difficult to understand the rationale for how appointments to committees were made.

The School was well staffed for support of all aspects of its academic mission.

Commendation

The University, College and School are commended for the quality and comprehensive nature of support provided to the professional programme.

Suggestion

It is suggested that School Management look at clearer policies for membership and turnover of committee appointments, to further enhance both the managerial and governance functions and ensure inclusivity of all its processes.

2. Finances

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

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

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

Background

In line with the overall strategic plan there has been a steady growth in total income for the School over the last five years rising 25% from £38.39M to £47.87M. This growth in income has been supported by all the activities of the School. The State Appropriations have increased by over 12% during this period despite the student numbers funded by the state remaining static over the same period. The income from tuition fees has grown considerably and is a reflection of some increase in numbers in both their fee paying undergraduate and postgraduate programmes.

Research income has continued to grow over the five years largely as a result of greater numbers and success in competitive grant applications. The School's research activity has a success rate of 35-40% per annum compared to the national average of 25% for research council and charitable activity. The teaching hospitals have continued to grow despite the recession having a significant impact on the equine services during this period. The diagnostic laboratory income has grown, not just as a result of increased numbers of cases going through the clinics but also, as a result of transfer of some pathology services from the Roslin Institute into the Easter Bush Pathology service. Other income, generated from the farm, has grown steadily.

Overall the expenditure of the School has risen by 20 % over the last five years. The increased expenditure in Instruction and Academic support is a reflection of the investment in staff and equipment to improve the quality of teaching and to support increased student numbers. The high cost in academic support in 2011/12 was largely as a result of a central University overcharge that was rectified in 2012/13. There was an increase in real costs across these two years due to a significant investing in equipment and some increased costs relating to restructuring which resulted in savings in subsequent years.

In 2012/13 the School invested significantly in the student experience, which can be seen in the increased student services costs and student aid expenditure from this period onwards.

The rise in expenditure in the teaching hospitals has been driven by the growth of the business is well controlled and in line with increases in income. The School has committed to building a new Equine Diagnostic, Surgical and Critical Care unit at total cost of £3.7M, which will partly be funded by the University and partly by the School. The School also intends to purchase a replacement CT scanner and a MRI scanner in the Hospital for Small Animals. The expenditure in the diagnostic laboratories has fluctuated as a result of investment in equipment and transfer of some staff from the Roslin Institute, but is well controlled and demonstrates a reduction over the five years. Expenditure from other sources comes from the farm and these costs have risen considerably due to significant increases in the world prices of the major inputs of feed, fertiliser and power and the transfer of staff from Agricultural Wages Board employment terms to University terms.

There has been increased investment in all research resources as the Roslin Institute has grown in size. This investment has been with a view to future requirements and is currently slightly ahead of income. The other sponsored activity expenditure shows a significant cost increase in 2012/13 which was due to a capital repayment to the central University. External and public services expenditure has risen in line with activity which is mainly providing courses for an external body.

R(D)SVS has improved its financial performance over the past five years with growth in all major areas of revenue. The growth in income has been necessary to support the growth in all areas; student numbers, clinical activity and research. This growth has been achieved while largely keeping costs under control, allowing the School to demonstrate a small surplus.

In certain specific areas the growth in revenue has not kept pace with costs. This is notable for research where currently the expenditure is ahead of revenue, which reflects a planned investment in staff and equipment for the future. Farm revenue has recently failed to cover costs but is governed by world prices in commodities, which have fluctuated widely in recent years. The farms are a key resource and the School plans to support them during this period of price fluctuation. The diagnostic laboratories income fails to cover all their costs but

this is largely as a result of a failure to identify and attribute true costs of the teaching effort within the commercial service and a limited ability to compete for outside work due to scale.
The Sponsor Program Income/cost recovery apparently shows a reduction in revenue although this has been re-assigned to Roslin in recent years.

Comments

There is a clearly articulated vision for the consolidation of high quality educational, research and clinical facilities on a single site, and the University's past and planned investment in its achievement.

Commendations

The University is commended for its fiscal support of the teaching, research and clinical strands of the Veterinary School's work to support the education of high quality veterinary graduates.

Table 2.1. Total expenditures for immediate past 5 fiscal years – Direct and Indirect Expenses

Year	Instruction	Academic Support	Student services	Teaching hospital	Diagnostic Lab	Other	Un-sponsored student Aid	Sponsored student Aid	SponsoredResearch	Other Sponsored Activity	Ext & Public Services	Total Direct Expenses
2013/14	2,816,571	5,510,272	256,351	6,281,330	144,948	1,009,867	326,892	164,201	26,963,948	2,099,107	54,470	45,627,958
2012/13	2,597,209	4,860,569	140,998	6,185,643	249,319	966,135	287,254	148,613	25,962,017	4,961,786	36,005	46,395,549
2011/12	2,566,399	6,678,461	12,045	5,580,101	132,418	859,032	30,876	179,728	25,750,205	2,509,875	36,656	44,335,795
2010/11	2,082,834	5,316,594	16,167	4,968,691	134,884	716,319	51,100	100,080	24,258,468	2,660,385	24,942	40,330,364
2009/10	2,046,750	3,723,112	10,154	4,666,349	168,767	614,433	74,524	211,449	23,190,481	3,317,484	14,821	38,038,324
%change	37	48	2424	34	-14	64	339	-22	16	-37	267	20

Table 2.2. School revenue (sources of funds) from all sources for immediate past 5 fiscal years

Year	State Appropriations	Benefits	Tuition fees	Is Tuition estimated	Endowment income	Gifts for	Sponsor programme income/cost recovery	Other - research	Teaching	Diagnostic Lab	Other	Reserves &	Total Revenue
2013/14	5,309,340	0	6,964,205	NO	138,303	705,687	748,977	26,549,585	6,537,358	106,767	807,500		47,867,722
2012/13	5,485,462	0	6,489,606	NO	112,811	770,982	1,005,796	25,579,507	5,986,334	100,356	659,572	-34,124	46,156,302
2011/12	4,715,088	0	4,992,503	NO	104,311	248,741	1,099,060	26,261,255	5,314,382	97,678	730,027	-58,148	43,504,896
2010/11	4,313,331	0	4,337,447	NO	112,466	997,672	1,019,111	24,373,903	5,080,838	77,231	660,157	-7,861	40,964,295
2009/10	4,721,938	0	3,681,611	NO	118,772	426,635	1,112,792	23,196,704	4,697,632	80,602	628,320	-276,799	38,388,208
%change	12		89	NO	16	65	-32	13	39	32	28		25

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 services 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.

Background

Following the completion of the new Veterinary Teaching building in 2011 and the Roslin Institute building in the same year the relocation of all activities previously carried out at the Summerhall Campus in Edinburgh and at the old Roslin Institute building in Roslin are now located on a single site at the Easter Bush Campus. The Easter Bush Campus now accommodates the following facilities:

- **The Veterinary Teaching** building provides the majority of the formal teaching facilities, student support facilities and administration offices capable of accommodating the needs of the undergraduates. The ground floor has a large atrium and reception area, a cafeteria, two large lecture theatres each with a capacity of 202, two digital group teaching suites each capable of seating 48 students in groups with access to computers, a 100 seat seminar room, an anatomy dissection room, a post mortem room with a bio-secure viewing gallery and associated diagnostic laboratories, a multi-head microscope teaching room, two large teaching laboratories, a student common room, student locker room, showers and a student gym. On the first floor there is a large library with journals, textbooks and capacity for 95 study places and six open access computers. There are five tutorial/meeting rooms and a quiet study room leading directly off the library and five other larger tutorial/meeting rooms on the same floor. All these tutorial rooms can be used for private study when not in timetabled use. For more practically based study there is a large 'study landscape' with teaching aids, specimens and group study areas with computer access and a small animal clinical skills laboratory which houses further specimens and clinical equipment. In addition, on this floor there is the BVM&S student hub which houses student support services, teaching administration and the admissions team. The top floor of the building consists of academic and administration staff offices, meeting rooms, a second multi-head microscope room for teaching and a staff breakout area.

- **The Hospital for Small Animals** (HfSA) accommodates the first opinion (primary) dog and cat small animal practice, first opinion (primary) exotic animal practice and referral services. The Hospital houses diagnostic and therapeutic facilities that include consulting rooms, treatment rooms, imaging facilities, a pharmacy, a range of surgical theatres with preparation areas and recovery suites, emergency and critical care facilities, laboratory facilities, kenneling and isolation facilities for both pathogen control and radiation protection. The Hospital has overnight accommodation for staff and students on emergency and critical care rotations. There is office accommodation for the academic clinical staff and administrative staff. There is a range of tutorial rooms and an extension to the building completed in 2009, the Riddell-Swan Veterinary Cancer Centre, includes a therapeutic linear accelerator, CT scanning and Positron Emission Tomography capability.

- **The Equine Hospital** services both the first opinion equine practice (ambulatory) and referral services. The Hospital has three large diagnostic and treatment rooms, which are designed to accommodate student teaching with adequate space for large groups and various teaching aids such as whiteboards, posters and

anatomic specimens. A range of up-to-date diagnostic equipment (e.g. ultrasound, endoscopy) is available to use in these area; this equipment has been chosen to ensure clinical excellence as well as to provide a good student learning experience. There is stabling for 36 horses, a pharmacy, clinical laboratory, student break out areas, and staff facilities within the hospital. There are indoor and outdoor trotting areas used for demonstration/tutorials and diagnosis of clinical cases. Adjoining the main hospital is a surgical unit, which has two theatres and a radiography facility with support services and tutorial space. Isolation facilities, (two dedicated boxes with adjoining personnel changing and preparation areas), a scintigraphy unit and a standing MRI unit are all separate, but close to, the main hospital. Computed Tomography (CT) services are accessed in a shared facility in the Hospital for Small Animals.

- **The Farm Animal Hospital** accommodates the farm animal teaching facility which has a range of animal accommodation capable of housing all the main agricultural species. Included in this building are student changing facilities, tutorial rooms, teaching laboratories, procedure rooms and animal handling facilities. This facility is dedicated to teaching using donated clinical cases. There are isolation facilities close to, but separate from the Hospital, allowing the treatment of referred cases.

- **Easter Bush Middle Wing** accommodates the first opinion Farm Animal Practice (ambulatory). Facilities include reception area, student break-out area, tutorial room, pharmacy, and diagnostic laboratory. This wing also accommodates the farm and equine clinical staff.

- **F Block** – includes the large animal clinical skills teaching facility, tutorial rooms, the exotic animal teaching facility, an equine scintigraphy unit and farm animal isolation facilities

- **Langhill Farm** - the School manages a 250 hectare livestock farm in the land that surrounds the Campus. The main farm steading is two miles from the Campus and houses the cattle facilities. These facilities include housing capable of accommodating the 230 cow dairy herd and all of the young stock. It has a modern milking facility and associated handling facilities. Although all of the farm facilities are used for demonstration and teaching, to provide a safe and unhindered access to cattle for teaching there is a dedicated building with specially designed stocks used for certain classes. There are tutorial rooms and student changing facilities on site.

- **The sheep enterprise** is located adjacent to the main Campus within walking distance of the teaching building and has a sheep shed used to demonstrate both husbandry and veterinary care. There are dedicated changing facilities.

- **The Roslin Institute** building houses the majority of the R(D)SVS research staff. This building provides office and laboratory accommodation for over 500 staff. The ground floor and basement provides some office space, cafeteria, a 300 seat auditorium, seminar rooms, cell-sorting and imaging facilities, laboratory support services and a 980m2 Specific Pathogen Free (SPF) rodent facility. The two upper floors consist of 1980m2 of Cat 2 containment laboratory space (as defined by the Advisory Committee on Dangerous Pathogens (ACDP)), office accommodation, meeting rooms and breakout areas. Cat 3 (ACDP) containment laboratories are available on the upper floors.

- **Animal Research Facilities –** to service the research requirements for farm animals there are three main facilities. Dryden farm, located three miles from the Campus has accommodation for all the key farm species and specialist facilities including embryo manipulation, surgery and critical-care. The Greenwood building, on Easter Bush Campus, offers poultry accommodation and specialist facilities for a range of studies. The Bumstead building, opened in 2014, contains in-bred lines of poultry under SPF conditions to service the national requirement for this resource.

A core clinical rotation and a selected rotation in small animal first opinion practice takes place at Inglis Veterinary Practice in Cowdenbeath, Fife. All students are required to complete the core rotation. The practice is 25 miles away and is 45 minutes away by car. There are regular trains and buses that serve Cowdenbeath from Edinburgh.

The responsibility for Health and Safety across the School lies with the Dean. The Dean manages this through the Campus Operating Officer and a Health and Safety team consisting of 2.5 FTE staff. The Health and Safety Manager reports directly to the Campus Operating Officer and, as required, directly to the Dean. The Campus hosts a Health and Safety Committee, which has a student representative as part of the Committee membership. The Committee receives formal reports from the Genetic Modification & Biological Safety

Committee, and the Radiation Protection Committee. These Committees report and provide Minutes directly to the Senior Management Groups of the R(D)SVS and Roslin Institute.

Where required, Health and Safety notices and information are clearly displayed across the Campus. All staff and students receive a general health and safety induction as part of their formal induction process at the beginning of their employment or studies. Additional and specific Health and Safety information, instruction and supervision takes place local to the specific hazard or higher risk procedure. Staff that are responsible for supervision of students during lectures, practical classes and clinics are invited to attend Health and Safety Awareness training for those with Supervisory responsibilities.

The Campus has a Biological Safety Officer who provides advice on the safe use and handling of biological agents, including pathogens. The School has Radiation Protection Supervisors (RPSs) in key areas of the School who are responsible for ensuring compliance with the University policy on the safe use of radiation and other relevant legislation. Fire safety arrangements are based on fire risk assessments that are conducted by the University Fire Safety Officer. First Aid Equipment, including defibrillators are available across the Campus. There are trained First Aiders and three dedicated First Aid Rooms available at the Campus. Proactive systems to monitor the effectiveness of the School's Health and Safety arrangements includes both locally arranged audits and external risk control agencies inspections and audits. The online Accident and Incident Reporting system (AIR), managed by the University of Edinburgh Health & Safety Department, is used to report any accident, incident or near-miss which occurs at the School.

Comments

There is a new specifically designed four year old highly functional teaching building that provides the majority of teaching spaces, student support services, study spaces, catering, social areas and staff offices. A renovated building provides a multi-purpose practical teaching complex with a large animal clinical skills laboratory, exotic animal facility and other practical teaching laboratories. Also on site there are teaching hospitals for small animals, horses and production animals as well as the newly constructed Roslin Research Institute. In addition, the school also manages an adjacent dairy farm with a herd of 230 cows, and supporting stock, a sheep farm as well as research animal facilities on and off site. All buildings are without exception well equipped and maintained whether new builds, renovations or old building stock. They provide an exceptional learning environment for students. The University operates a building and equipment maintenance and replacement program that pro-actively ensures that inspections and replacements occur in a timely fashion that noticeably maintain an excellent learning environment.

School facilities are well designed and provide a high quality collegial learning and work environment.

Animal accommodation allowed animals to be housed in environments that are appropriate to maintain their welfare. Equipment was available to allow examination, diagnosis and treatment of all major species. Safety equipment, training, notifications and processes were evident throughout all facilities.

Commendations

The quality, range and maintenance of the teaching and learning resources in the establishment are commended.

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 programmes 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 centres. The teaching hospital(s) shall provide nursing care and instruction in nursing procedures. A supervised field service and/or ambulatory programme 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 programmes of the college.

Background

Normal animals in a clinical setting (Final Year):
Access to normal animals uses the School's first opinion hospital based in the Hospital for Small Animals and their ambulatory practices (farm, equine, dog and cat and exotic species) which provide preventative health care services. There is also access to normal animals at the Edinburgh Dog and Cat Home (EDCH), Five Sisters Zoo, the Scottish Society for the Prevention of Cruelty to Animals (SSPCA) and the Inglis Veterinary Centre. Activities are integrated fully into the teaching programme with complete student involvement.

Normal animals in a non-clinical setting (Years 1 to 4):
The School has their own dairy farm and sheep flock and has direct involvement with Scotland's Rural College beef and sheep farms locally, which have over 3,000 beef cattle and sheep. It has an on-site Exotic Animal Teaching Facility, which houses a range of small mammals, reptiles and birds and access to the EDCH. It has a group of teaching horses (10), which are used for a number of formal classes and student volunteering (stable management and routine care). Students can also access healthy horses through the Edinburgh University Exmoor Pony Trekking Section and be involved in their routine care. Activities are integrated as needed into the teaching program.

Clinically diseased animals (Years 3, 4 & Final Year)
Companion Animal (Hospital for Small Animals), Primary, Secondary and Tertiary Cases; (Final Year)
There is a robust and expanding clinical case load at all levels of care for companion animals, including dog, cat, rabbit, and other small mammals, reptiles and birds, which are more than adequate to meet teaching needs. The HfSA admits cases for all the major specialisms except for ophthalmology, which is taught in the primary care clinic.

Opportunities are provided for all Final Year students to perform neutering procedures in the HfSA. Edinburgh undergraduates also have increased access to the small animal neutering caseload (and other surgical caseload) through the core rotation at the Inglis Practice. Rabbit neutering experience is also provided though their partnership with the SSPCA.

Farm (Farm Animal Practice; FAP) and Equine Ambulatory Services (Years 3, 4 & Final Year);
These operate as separate units within Production Animal Services and Equine Veterinary Services. The School is seeing recovery in primary care equine case numbers adequate for its teaching requirements, and has recently taken on an equine first opinion case-load from a local practice of approximately 600 clients and 1000 horses. The FAP has a strong caseload, operates herd health schemes (Scottish Government initiative), services three pig farms with quarterly herd-health visits and will be providing veterinary services for a 100 head deer farm. The School actively recruits farm animal cases to maintain adequate numbers for their educational needs.

Equine Referral and Hospitalised Equine Cases; (Years 3, 4 and Final Year)
There is a robust equine referral case load that has stabilized since the recession and is now recovering, and there is a large and increasing emergency equine case load. The Equine hospital admits cases covering all disciplines. Activities are integrated fully into the BVM&S teaching programme with

complete student involvement (Final Year). Hospitalised equine cases are also used for Year 3 & 4 practical classes, centered on normal clinical examination with clinician and peer-to-peer instruction (Year 3), and diseased animals clinical syndromes (Year 4).

Clinical Support Services; (Final Year)
The Hospitals have the full range of support services, including diagnostic imaging, anaesthesia and pathology incorporated into the clinical activities and with students fully involved in their delivery.

The current Practice Management Systems (PMS; Tristan) was introduced in 2007 and now covers all areas of clinical and diagnostic services activity including billing, and complies with both legal and professional requirements. The ambulatory services record details in the field and transfer to the computer system on return to the workplace.

The students have full access to the system through password-protection, can contribute to small animal case records and have their case notes reviewed and approved or rejected by their attending clinician. Database searching is used for teaching and clinical research, including student research projects. Diagnostic images are accessed using PACS linked to the PMS and images are always available to students. The school is working on a replacement Practice Management System which can deliver greater business, research and teaching support. Of particular interest is a system which can provide mobile functionality for their ambulatory practices and direct integration with PACS.

The 'Virtual Veterinary Practice' is maintained for all years teaching and includes audio and video podcasts of core clinical techniques, heart and lung sounds and interesting cases within the Virtual Clinic, Virtual Post Mortem Room and Virtual Slidebox. Data from the Langhill dairy herds and the Easter Bush sheep flock are fed into the Virtual Farm and students can access information at a herd or flock level or individually on their own adopted animals in real time.

Teaching Hospital

Table 4.1 – number of Patient Visits

Animal Species	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	% change in 5 years
Bovine	110	120	140	154	92	-16%
Canine	8488	9432	10621	11404	12763	+50%
Caprine	2	5	9	2	2	0%
Equine	1587	1335	1270	1192	1316	-17%
Feline	1964	2305	2676	2272	2860	+46%
Ovine	290	304	202	320	82	-72%
Porcine	0	6	8	7	0	0%
Caged Pet Birds	396	329	343	369	391	-1%
Caged Pet Mammals	922	1314	1370	1471	1559	+69%
Avian Wildlife	5	23	24	25	27	+440%
Total Exotics	2217	2361	2460	2642	2800	+26%
Other (camelids)	2	2	2	2	2	0%

Table Definitions
Number of Patient Visits – total number of times the patient visits the hospital (if Buffy visits the hospital 3 times this year, this would count as 3 visits)

Table 4.2 Numbers Hospitalised

Animal Species	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	% change in 5 years
Bovine	110	120	140	154	92	-16%
Canine	1748	1988	1897	2390	2581	+48%
Caprine	2	5	9	2	2	0%
Equine	1428	1202	1143	1073	1184	-17%
Feline	390	465	488	556	630	+62%
Ovine	290	304	202	320	82	-72%
Porcine	0	6	8	7	0	0%
Caged Pet Birds	84	70	73	78	83	-1%
Caged Pet Mammals	195	278	290	311	330	+69%
Avian Wildlife	5	23	24	25	27	+440%
Other	2	2	2	2	2	0%

Number Hospitalised – number of patients that were hospitalised.

Table 4.3 Number of Hospital Days

Animal Species	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	% change in 5 years
Bovine	550	600	700	770	644	+17%
Canine	5973	5790	5526	6960	7516	+26%
Caprine	6	15	27	6	6	0%
Equine	4601	4356	3469	4674	3630	-21%
Feline	1531	1616	1695	1932	2188	+43%
Ovine	870	912	606	960	1148	+32%
Porcine	0	0	0	0	0	0%
Caged Pet Birds	160	118	101	99	111	-30%
Caged Pet Mammals	373	470	404	395	444	+19%
Avian Wildlife	7	27	23	23	25	+285%
Exotics total	897	845	725	709	798	-11%
Other	14	14	10	10	14	0%

Number of Hospital Days – cumulative days that the total number of patients were hospitalised.

Ambulatory/Field Service Program

Table 4.4

	2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
Animal Species	**# of Farm (site) Calls**	**# Animals Examined / Treated**	**# of Farm (site) Calls**	**# Animals Examined / Treated**	**# of Farm (site) Calls**	**# Animals Examined / Treated**	**# of Farm (site) Calls**	**# Animals Examined / Treated**	**# of Farm (site) Calls**	**# Animals Examined / Treated**
Ruminants*	1630	36480	1746	39480	1752	39596	1663	37584	1621	36634
Equine**	2896	3620	2599	3249	2556	3195	2852	3565	2684	3356
Porcine	19	30	23	23	24	24	11	11	18	18
Other***	25		24		2		1		12	

*For farm visits the Practice Management System (PMS) records each visit as an appointment and does not record the number of animals examined. For visits involving ruminants it is estimated that 1 in 5 calls are for single animals. 2 in 5 calls are initially for single animal but average 6.2 in 5 calls are routine planned work and average 50 animals. This provides an average of 22.6 animals per call when attending ruminants. The practice client profile indicates that the numbers of cattle and sheep calls are very similar. Caprine numbers are low but are included in ruminant analysis.
**For equine case management, the PMS records each animal attended as an appointment rather than each visit. It is estimated that an average 1.25 animals are examined per visit.
***Other species include a small number of units (%) with Llamas/Alpacas. In 2014 the School began providing veterinary services for a deer farm. 2009-2010 and 2010-2011 included calls to research primate units. Students did not access these cases. The research unit no longer exists.

Number of Farm (site) Calls – total number of calls/visits made to farms/operations.
Number of Animals Examined/Treated – number of individual animals examined/treated.

Herd/Flock Health Program

Table 4.5

	Describe the clinical resources for production medical training by production group below
Dairy	The Dairy Herd Health and Productivity Service (DHHPS) is the R(D)SVS farm animal extension service, specialising in dairy production medicine and consultancy services. Data and resources available to students via the DHHPS include nutritional monitoring, DairyCo Mastitis Control Plan, DairyCo Healthy Hooves lameness control, herd management and analysis software including Interherd, Interherd+, TotalVet (and analysis of DairyComp305 outputs), and milk recording data access from NMR and CIS. The Farm Animal Practice has 6 dairy farm clients, including R(D)SVS Langhill Dairy Farm which is utilised extensively for rectal palpation teaching, animal husbandry and production animal management. In addition, a further 9 dairy units (who are clients of neighbouring veterinary practices) are visited as part of Final Year rotation teaching. Herd sizes range from 100 to 600 cows, giving students exposure to the variation in dairy units they will encounter in veterinary practice. Students utilise data from the farms to write farm-specific reports as part of Final Year rotations on aspects such as fertility, mastitis, lameness, nutrition, young stock management etc.
Beef Feedlots	The FAP has approximately 70 farms that fatten stock to sale and/or slaughter, and students are exposed to production systems and disease control on such units as part of their Final Year rotations. The Easter Howgate Beef Unit is utilised extensively for teaching of students. Students look at aspects such as infectious disease control (e.g. BVD), approach and investigation of bovine respiratory disease outbreaks, monitoring performance data such as liveweight gains etc.
Cow-Calf	The FAP has approximately 67 suckled calf farms, and students are exposed to production systems and disease control on such units as part of their Final Year rotations. The SRUC facility at Easter Howgate Beef Unit is less than a mile away, and utilised extensively for teaching of students. Students look at aspects such as analysis of performance data (for example calves weaned per year), Bull Breeding Soundness Examinations, infectious disease control for BVD and Johne's disease etc.
Small Ruminants	The FAP has approximately 85 sheep farms, and students are exposed to production systems and disease control on such units as part of their Final Year rotations. The R(D)SVS also has a 300 ewe sheep flock which is utilized extensively for animal husbandry teaching. In addition, there are 11 goat flocks, although these are mostly smallholdings. Students look at aspects such as analysis of performance data (for example lambs born per year), Ram Breeding Soundness Examinations, infectious disease control for abortion agents, control of endo- and ectoparasites etc.
Swine	The FAP has 3 commercial pig farms, one of which is the SRUC research facility at Easter Howgate. In addition, a further 7 smallholding clients keep pigs. Students are taken on the three-monthly Scottish Pig Industry Initiative (SPII) health visits to the three commercial pig farms, which are required as part of their farm assurance scheme for disease control. There are also close links with Lysan Eppink of Boehringer Ingelheim (a specialist pig veterinary consultant) for student teaching.
Poultry	The R(D)SVS has an association with St. David's Poultry Team, which is a UK wide commercial poultry consultancy service that has a base at R(D) SVS run by Dr Barry Thorp. This provides opportunities for exposure to the commercial layer, broiler and breeder sectors and also game birds, and the health and welfare issues associated with large and small scale poultry production. There is a Poultry selected rotation in Final Year.
Fish	A Memorandum of Understanding was signed between R(D)SVS and the Institute of Aquaculture, University of Stirling to allow exposure to aquaculture. This includes visits to fish farms, and placements with fish veterinarians. The Institute of Aquaculture has developed a selected rotation for Final Year vet students interested in aquaculture or aquatic systems.
Equine	The equine first opinion practice runs the reproduction service and provides a seasonal but steady source of equine reproduction and young-stock work for students. The practice has on its books 1 small stud farm (10 mares) and numerous single owners who are pursuing breeding of their mares usually by using chilled and frozen semen but occasionally by natural service. The reproduction service also provides a stallion collection service and frozen semen storage facilities.
Other	The FAP also services a 100 deer farm, and 5 clients with llamas/alpacas. FAP clinicians run an afternoon session for Final Year students during the selected rotations on "backyard farm animals", concentrating on smallholder unit issues.

Table 4.6

Hospital	Learning Rotation (duration)	Surgical and medical facilities	Necropsy	Imaging	Diag. Support Services	Isolation	Intensive or critical care	Reference Materials	Medical records
Inglis	1 wk core. 3 wk selected.	Yes	Yes	Yes	Yes	Minimal	Minimal	Yes	Yes

Table 4.7

Off-campus site: Number & educational experience	Duration of rotation	Number of students per year	Faculty mentor approved (check)	Off-site evaluator	Written educational objective(s) (check)	Educational outcomes assessed and student evaluations reviewed
Inglis	1 wk core. 3 wk selected.	All Final Year	Yes	Dr A Tjolle	Yes	Yes

Comments

The School has developed a plan to address the static or decreasing case load in equine and food animal. Data from the past 10 months indicate a substantial increase in case material. Even without this increase teaching material/cases are adequate. The acquisition of the equine practice has provided a better balance of types of cases. The production animal farms provide a diverse array of learning opportunities.

The School has a robust exotic animal practice and program in husbandry in these species. They have a large case load in rabbits which is an important part of primary care practice in the UK. The Inglis practice is an excellent resource for first opinion cases.

Overall the caseload available for student learning opportunities is well-balanced.

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.

Background

The Lady Smith of Kelvin Veterinary Library (LSoKVL) is the library for Easter Bush campus and is part of the University of Edinburgh Library (EUL), one of the largest university libraries in the UK. R(D)SVS staff and students have access to a large range of veterinary, medical and life sciences print and e-resources. EUL has over 3.4 million print books, over 360,000 e-books, over 48,000 e-journals and over 200 bibliographic databases. EUL's e-resources include CAB Abstracts, VetMed Resource and Veterinary Record Case Reports. EUL recently purchased a new Library Management Platform. The new DicoverEd search combines the functionality of the former library catalogue and discovery tool as a single search tool helping staff and students search quickly and easily across most collections (both in print and online). EUL uses Talis Aspire to provide a flexible and dynamic way for Course Organisers to give students easy access to a wide range of resources. List structure is flexible and statistics on Resource List usage are provided.

LSoKVL has c20,000 volumes of books and journals. In addition to veterinary material, the library holds a selection of titles in the biological and medical sciences. LSoKVL also lends bone boxes to students across all years. Students can borrow items from any EUL site, items can be delivered to the LSoKVL or scanned and emailed (within copyright allowances). Library users can log in to their library account and renew and request books remotely. Items which are not held can be recommended for purchase using the student Recommend a Book (RAB) service or requested on inter-library loan.

The Reserve Section holds well-used short loan textbooks to support the curriculum. Veterinary textbooks are also purchased for the High Use Book (HUB) collection in the Main Library in Edinburgh. EUL has an e-reserve facility. This electronic reserve collection provides scans of book chapters, journal articles etc. for inclusion in password protected virtual learning environments (VLEs). This allows students to access some required reading without competing over limited numbers of textbooks. This is becoming less well used as more e-books are purchased.

During semester the LSoKVL is staffed 45 hours per week, with all students having access for an additional 53 hours using swipe access. Fourth and Final Year students, and clinical staff, have 24 hour swipe access. The LSoKVL has 95 study spaces and five seminar rooms which may be used for group study, six open access PCs and a cloud enabled printer/copier/scanner. The Study Landscape and Vet School cafeteria provide 33 public-access PCs with two cloud enabled printers. Public-access PCs and printers are replaced on a 4 year cycle and are supported by Information Services Group (ISG) staff.

Library Materials Budget

The Veterinary Library budget is allocated by the Head of Library Academic Support from within the CMVM allocation. The Academic Support Librarian (ASL) for Veterinary Medicine is responsible for the management of this allocation and selects material for purchase, seeking advice from School staff as appropriate.

Materials expenditure	2010-11	2011-2012	2012-2013	2013-2014
Print books	£11,123	£9,992	£13,740	£5,140
EBooks	£1,306	£3,180	£14,472**	£1,921
Print journals	£3,024	£3,118	£2,702	£2,836
Print & ejournals	£13,415	£12,096	£11,025	£11,570
*Ejournals	£123,354	£131,610	£12,470	£11,490
Databases	£5,679	£21,781	£15,094	£16,733
Inter-library loans	£910	£1,010	£885	£1,030
*Vet CORe			£129,986	£147,567
Total	**£158,811**	**£182,788**	**£200,373**	**£198,286**

*In 2012-13 the University Library introduced a Central Online Resources (CORe) fund. This includes titles which are used by two or more Colleges or three or more Schools. Funds are top-sliced from School allocations in proportion to their CORe titles. This includes ejournals in publisher 'bundle deals'.

**In 2012-13 the Library purchased CABI's Custom 100 ebook package, for perpetual access. The Library also purchased ebooks with multi-user access to support online courses and purchased some more expensive ebooks, such as Fields' Virology and Encyclopedia of Medical and Veterinary Entomology.

The Academic Support Librarian (ASL), a professional librarian, is full time and has responsibility for collection development, managing the library materials budget, for liaising with staff and students of the School and for the provision of information skills, etc. The LSoKVL Helpdesk is staffed by Helpdesk Assistants, who are able to help students with any problems they may have in finding information.

Front –line support for students is provided across the University by a mix of ISG Helpdesk (Library) and Helpline (User support staff). User support staff are backed by an on-site campus ISG team. The on-site IS team provide campus specific IT expertise and a presence for resolving IT issues of a physical nature.

Teaching and learning resources include the following:

- Continued creation of instructive video resources, to support blended teaching in the Clinical Skills Labs and via YouTube as open access resources for public engagement and education.
- Use of QR codes and other technologies to facilitate ease of access for students.
- Development of the virtual environments used in the Schools programmes, such as tutorial spaces and training resources for postgraduates in Easter Bush Farm and the Virtual Pharmacy for undergraduates in Second Life.
- Purchase of a 3D printer to create physical objects for student learning to complement the traditional bone boxes. The development of 3D computer models also feeds into research to produce other types of 3D resources to help students develop their spatial awareness.
- Massive Open Online Courses (MOOCs) – serving a dual role in facilitating wider public engagement and helping faculty develop new modes of teaching.
- Supporting student-generated resources to encourage peer learning.
- In addition to software licensed by the University and CMVM, the School licenses a number of software packages for its students, such as the Glass Horse.
- The School also has bought twenty licenses for the Articulate Storyline software, which is being used by lecturers and students to create interactive learning resources.

Comments

The School is proactive in investigating and adopting new and innovative methods for learning and teaching. They provide numerous opportunities for faculty to integrate new methodologies and pedagogical methods. The Digital Education Unit is an excellent resource.

Commendations

The School is commended for the adoption of innovative technologies and pedagogical methods to enhance the student learning experience.

6. Students

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

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

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

In relationship to enrolment, the colleges must provide accurate information for all advertisements regarding the educational programme by providing clear and current information for prospective students. Further, 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 programmes 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.

Background

Numbers on the BVM&S programme are relatively stable with a slight rebalancing of numbers of students coming into the 5 year programme and the 4 year programme. There are no plans to increase the intake. First year is the first year of the five year programme; First-year GEP is first year of the 4 year programme. Cohorts merge for the last 3 years of both programmes. Over the past 5 years there has been an increase in the number of postgraduate students registered in the School, in particular PhD students. This reflects the research ethos of the School and the support both financial and in terms of opportunity and environment provided by the School and the Roslin Institute for training postgraduate students.

Veterinary Medical Programme – numbers of enrolled students
5 Year Programme

Class	2010/11	2011/12	2012/13	2013/14	2014/15
First-year	119	125	129	130	131
Second-year	105	103	110	115	114
Third-year	85	121	109	108	118
Fourth-year	98	80	110	107	108
Fifth-year (Final Year)	87	95	84	104	104
# Graduated	87	95	84	104	104

GEP Programme

Class	2010/11	2011/12	2012/13	2013/14	2014/15
First-year	62	68	66	51	51
Second-year	63	58	57	59	44
Third-year	50	59	54	54	55
Fourth-year (Final Year)	47	47	59	56	53
# Graduated	47	47	59	56	53

The School supports widening participation (WP) and the number of WP applicants and entrants has been reasonably stable in recent years.

DVM Students per year for last five years entering through WP route direct from High School

Year of Entry	Funded places* where WP criteria can be considered	Number WP applicants	Number WP entrants	% WP students in funded places
2014/15	72	17	7	9.7
2013/14	72	19	6	8.3
2012/13	72	18	6	8.3
2011/12	72	17	6	8.3
2010/11	76	10	2	2.6

*Funded places – comprises Scottish Funding Council (SFC) sponsored Scottish and European Union students (SEU) and Rest of UK students (RUK) (England, Wales and Northern Ireland).

The University provides a number of support services for students across its campuses – the Student Counselling Service, the Student Disability Service and The Advice Place. Student counselling is provided both centrally and on Campus. There are counselors attending the Campus for sessions two days a week. A member of the counselling team regularly attends the School Student Support Management Group.

The School operates a house system. There are ten houses headed up by a Senior House Tutor, each including 5-6 Personal Tutors and approximately seventy students. Every student has a Personal Tutor, a member of the teaching faculty who provides academic and pastoral support and guidance. Additional support comes from a network of Year Administrators/Student Support Officers, the School Student Experience Officer, the Student Support Team and the Student Peer Supporters. The School offers dedicated study skills advice, through drop-in and individual bookable sessions. There are also workshops and other events on offer where students can try out various techniques and talk to fellow students about what methods they use.

The School has a vibrant clubs and societies offering and faculty are supportive of new initiatives suggested by students.

The University Careers Service assists with career planning, information on employers, job applications and CVs, preparing for job interviews and developing employability skills. The Careers Service has a named Careers Advisor for the School who visits the campus throughout the year to provide this guidance. The School also runs its own careers events and talks including the annual "Vet Choice" event showcasing a range of career opportunities for the students. The development of the student CV is an annual requirement within the personal portfolio and Final Year students are offered individual drop in sessions to help prepare their CV for job applications by members of the professional skills team.

The School continually seeks input from the students with regards to their experience whilst studying at the R(D)SVS. There are many opportunities for the students to engage with the School and these are at as many different times of the year and in as many different formats as possible – tailored questionnaires/surveys, open 'Town-Hall' meetings with the Dean, written comments that can be posted (anonymously) in the comments box, input into formal decision making committee meetings and staff attendance at student meetings. The School shows the students what they do with their feedback through a "You said… we did…" response which is posted electronically to them, reproduced on cards and placed on tables in the cafeteria, handed out in welfare week and included as pages within the student handbook.

Work is already underway on the new Easter Bush Innovation Centre, which will provide additional student facilities in addition to being a focal point for the Campus. This centre will provide new gym facilities, more catering outlets, a mini supermarket and an outreach laboratory where students will interact with local junior and high schools. The Campus is also developing a series of jogging tracks and walkways to promote exercise and relaxation of staff and students.

Comments

The services provided for the students by the School are comprehensive and of high quality.

Commendations

The School is commended for the quality and variety of student support services available.

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 programme in veterinary medicine, as well as courses that contribute to a broad general education. The goal of pre-veterinary 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.

Background

Minimum Entry Requirements for the BVM&S Programme.

1. **SQA Highers and Advanced Highers (Secondary (High) School Scottish System) –** Highers which are generally taken in the 5th year of High School (S5): Grades AAAAB. Five Highers including Chemistry (A), Biology (A) and either Mathematics or Physics to be achieved by the end of S5. If Biology has not been studied in S5, it should be taken in S6 to Higher level. Advanced Highers, which are generally taken in the 6th year of High School (S6): Grades BB at Advances Higher in Chemistry and another science subject. If possible Advanced Higher Biology, as this will be beneficial for the first year of the course. If Physics has not previously been studied to Standard Grade or Higher level, it should be studied in sixth year to either Standard Grade, Intermediate 2 or Higher level.
2. **A levels –** Three A levels: Grades AAA in Chemistry, Biology and one other approved subject. If Physics has not been studied to A level then we require a good pass at GCSE level.
3. **International Baccalaureate (IB) –** The minimum entry requirement is 38 points. This must include:
   - Higher level in Chemistry, Biology and either Maths or Physics
   - Score 7,6,6 or better in all Higher level subjects with 7 in Chemistry
   - Where Higher level Maths or Physics is not possible, another subject at Higher level may be accepted, subject to approval. In this case, 6 at Standard level in Maths or Physics is required.

   If Physics does not form part of the IB Diploma, candidates must be also provide evidence of a qualification at a minimum SQA standard Grade 2 or GSCE Grade B or equivalent in this subject.
4. **Advanced Placements (AP) –** 3 APs all at score 4 or above in Chemistry, Biology and either Maths/Physics. If Physics has not been studied as part of the AP examinations, candidates must also provide evidence of a qualification at a minimum of SQA Standard Grade 2 or GCSE Grade B or equivalent in this subject.
5. **Canadian High School Diploma –** High School Diploma candidates will be considered provided very high marks have been achieved in Grade 12 courses including Chemistry, Biology and Maths/Physics. Specific requirements will vary depending upon the province.
6. **Pre-Vet –** Applicants who have completed the first 2 years of a pre-vet degree with a minimum GPA of 3.4 are eligible to apply for the 5-year BVM&S.
7. **Graduates applying for entry into the 4 year Graduate Entry Programme –** The minimum requirement is an Upper Second Class Honours degree (or equivalent) or a minimum GPA of 3.4 in an appropriate Animal or Biological Science Degree.

Applications from prospective funded students are received through the University and Colleges Admissions Service (UCAS). In 2013-14 the School received 391 SEU and 579 RUK applications (for entry year 2014/15) for the 72 available funded places (36 SEU and 36 RUK). 122 SEU and 211 RUK applicants were interviewed resulting in 58 and 57 offers, respectively.

All UCAS applications are screened for eligibility by the admissions team. Applications are then scored on a number of criteria which are: Academic ability and record, work experience, academic reference from the head teacher and motivation and extracurricular activities as detailed in the applicant's personal statement.

Based on application scores, applicants are selected and invited for interview. In 2013-14 the interview process changed from a panel interview to a multiple mini interview format (MMI). Each interview comprises seven interview stations. An interviewer is present at five of the stations with the remaining two left unstaffed where applicants follow instructions to complete either a numeracy test or a practical task. The majority of interviewers are members of the academic staff with con-

tribution from external practitioners. All interviewers undergo general and station-specific training. The Admissions Committee then reviews the cycle process from applicant scoring through to and including interview of candidates.

Applications from self-funded students (full-fee students) are received through UCAS or VMCAS (Veterinary Medical College Application Service). Each year 80-100 international and UK students are accepted onto the 5-year or Graduate Entry (GEP) programmes. In 2013-14, 48 and 46 students entered the 5 year and GEP programmes respectively. The GEP programme is specifically designed for those applicants who already have a first degree in an appropriate subject area and after completion of an initial bespoke year, progress directly to the third year of the BVM&S 5-year programme.

Each applicant is evaluated on an individual basis taking into account their academic ability and record, references, personal statements, work experience and evidence of motivation. From this current year (for admission in 2015) all full fee eligible applicants are also invited for interview. Interview venues include Edinburgh, North America and Asia. The interview format is identical to that used for funded student applicants and the same scoring criteria apply.

Year of entry	State residents		Non-residents		Contract students		Total	
	A/P*	O/A**	A/P*	O/A**	A/P*	O/A**	A/P*	O/A**
2014/15	970/72	115/70	481/108	308/94	n/a	n/a	1451/180	423/164
2013/14	1014/72	119/73	569/108	327/93	n/a	n/a	1583/180	446/166
2012/13	904/72	111/72	584/108	331/101	n/a	n/a	1488/180	442/173
2011/12	854/72	115/72	525/108	331/105	5/5 #	5/4 #	1384/184 #	451/178 #
2010/11	823/76	123/76	507/108	318/98	n/a	n/a	1330/180	441/174

*A/P = Applications/Positions Available
**O/A = Offers Made/Entrants
= Places were offered to 5 Antiguan students due to damage to their vet school. The 4 students who accepted entered into Year 3 of the programme and these figures are included in the total for the A/P column in that year.

The R(D)SVS is fully engaged with the University of Edinburgh's policy for Widening Participation. At the level of Admissions application, contextualised data are used to identify prospective students applying through UCAS who come from a widening participation background. This allows consideration of candidates who may not quite meet the entry requirements and who fulfil widening participation criteria to be included in the interview process.

In addition to academic achievement, applications from prospective students are evaluated in relation to extracurricular achievements, academic and non-academic references and career exploration through work experience. Work experience specifically is scored based on experience with animals and veterinary experience (paid or un-paid). Animal experience may include a wide range of experiences such as working in kennels and catteries, dairy, equine, pigs and abattoir/slaughter house. Veterinary experience can relate to a variety of different types of veterinary experience but also may include laboratory and research work.

The seven areas covered in the MMI are: work experience, career exploration , data interpretation, numeracy skills, practical task, awareness of animal welfare and moral and ethical dilemmas. This allows a wide variety of attributes to be evaluated including communication skills, numeracy, problem solving, manual dexterity, ability to follow instructions, exploration of veterinary as a career, empathy, awareness of animal welfare, ability to 'think on their feet' and ability to cope with stressful situations.

The School does not routinely admit transfer students. An exception was made in 2011 where 5 students from Antigua were accepted into the third year of the BVM&S programme. This was the result of hurricane damage to Antigua's Veterinary School.

Comments

The change in the admissions process with the incorporation of the multiple mini interviews has enhanced the admissions process.

Students are very positive about the admissions process which provides a positive impression of the School.
The admissions committee structure has recently been revised. This new organisational structure has been in place for approximately 18 months.

Suggestions

The School is encouraged to review the process of appointment to the admissions committee to ensure broad representation of faculty and develop a plan to provide to regular turnover of committee members.

8. Faculty

Faculty number and qualifications must be sufficient to deliver the educational programme and fulfil 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 utilises a well-defined and comprehensive programme 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 programme.

Background

Reflecting the range of clinical services, which offer both first opinion and referral services across all species, including wildlife and exotics, and all the major disciplines within these, the School has an extensive, highly qualified and experienced academic clinical staff. Certain disciplines have been strengthened by targeted recruitment in recent years, specifically oncology and neurology. The clinical services also have excellent administrative and technical support including 40 registered veterinary nurses. The clinical support services, imaging, anaesthesia, pharmacology and pathology are also staffed with highly qualified experienced staff. Although the pre-clinical area has seen the recent retirements of long serving staff members they have been replaced with well qualified individuals and the Veterinary Medical Education Division has also been strengthened by increasing staff numbers, many of whom are veterinarians capable of teaching across the curriculum. The Roslin Institute has expanded significantly in recent years and Roslin research academics contribute directly to the undergraduate taught programme, mainly in the pre-clinical courses. In addition, the research groups in the Roslin Institute also take on veterinary undergraduate students for summer research projects. Although the majority of the School academic staff are veterinarians, there are eight non veterinarians who supply specialist knowledge in the pre-clinical and animal welfare courses. The Roslin Institute has 19 non-veterinary academics that contribute to the pre-clinical undergraduate programme.

Current number of academic faculty
Non Veterinarians – R(D)SVS

Title	MS	PhD	Board Certified	Board Certified & MS	Board Certified & PhD
Administrator					
Professor*		1			
Associate Professor*		4			
Assistant Professor*		2			
Instructor/Lecturer		3			
Part-time Faculty (less than 75% time)					

*include clinical track

Non Veterinarians – Roslin Institute

Title	MS	PhD	Board Certified	Board Certified & MS	Board Certified & PhD
Administrator		1			
Professor*		18			2
Associate Professor*		19			
Assistant Professor*		23			
Instructor/Lecturer		78			
Part-time Faculty (less than 75% time)					

*include clinical track

Veterinarians – R(D)SVS

Title	DVM (only)	MS	PhD	Board Certified	Board Certified & MS	Board Certified & PhD
Administrator	2					1
Professor*			3			7
Associate Professor*	1		4	6	2	21
Assistant Professor*	11	3	5	12	3	4
Instructor/Lecturer	8		2			
Part-time Faculty (less than 75% time)						

*include clinical track

Veterinarians – Roslin Institute

Title	DVM (only)	MS	PhD	Board Certified	Board Certified & MS	Board Certified & PhD
Administrator						
Professor*	1		3			
Associate Professor*			4			
Assistant Professor*			3			
Instructor/Lecturer			9			
Part-time Faculty (less than 75% time)						

*include clinical track
Professor aligns with the title of Professor appointed at University Grade 10.
Associate Professor aligns with the title of Senior Lecturer, Reader, and Senior Research Fellow appointed at University Grade 9.
Assistant Professor aligns with the title of Lecturer or Research Fellow at a University Grade 8.
Lecturer and Instructor align with the title of Lecturer, Research Fellow or Research Scientist appointed at a University Grade 7.

Staff support for teaching and research

Area	FTE clerical	FTE technical	Other
Clinical teaching	19.5	66.3	n/a
Non-clinical teaching	45.7	20.9	n/a
Research*	28.4*	82.3*	n/a
Total	93.6	169.5	n/a

*These staff are all employed within the Roslin Institute.

As for many veterinary schools, retaining and attracting clinical specialists can be a challenge in the face of competing salaries from non-University practices and industry. The size and reputation of R(D)SVS, however, have meant that, with few exceptions in recent years, they have maintained and developed its staffing profile in line with the expansion of the education and clinical programs. The academic teaching staff has grown by 12 over the last five years. Academic research staff numbers have also grown. Maintaining staffing levels in anaesthesia has been challenging due to a shortage of well qualified, experienced veterinary anaesthetists available, however with recent restructuring and new appointments this is now resolved.

Interns and residents (and veterinary nurses) are involved in day-to-day teaching and support of veterinary students in the Hospitals and diagnostic services. All new residents/interns are required to attend specifically designed staff development sessions as part of the rolling programme of staff development. None of these groups formally assesses students other than having input into general discussions at the end of rotations for the purpose of providing constructive feedback.

Teaching, Research and Leadership and Management duties

are used to review promotion applications. The individual and the manager will agree and allocate weightings over these areas before the form is submitted to the promotion panel e.g. they will estimate how much time (via a percentage) is spent on research, teaching and management. For clinical veterinary staff there is also a "clinical track" to promotion and clinical work is also weighted during the process e.g. a veterinary staff member could be 60% clinical, 20% teaching and 20% research. The Head of School represents the School on the College promotion panel to ensure that clinical members are appropriately represented.

The School also has a workload model in place which takes into account all of the above, including outreach and pastoral activities. This ensures equal assessment and review of all aspects of workload. The workload model is part of the annual performance and development review and ensures that proactive planning and discussion takes place between managers and staff members in terms of workload. It is also an opportunity for managers to identify any support needs or CPD/CE, which may be of benefit for promotion.

The University has an annual promotion round for both academic and professional services staff. The Head of School together with Human Resources (HR) review a list of all staff ahead of the promotion round to ensure active encouragement and mentoring of those ready for promotion. Applications are considered at a local School panel before being sent to the College panel for final approval. All staff can be considered for promotion regardless of contract status.

The University's Institute for Academic Development (IAD) provides a range of courses in support of teaching and staff development including the option of studying for the Postgraduate Certificate (PgCert) in Academic Practice. In addition, the School runs an extensive series of in-house staff development workshops and events tailored to the needs of colleagues on-site.

The Campus also funds a Research Leadership Course every two years. This is a four-day programme for early career academics who wish to enhance their research portfolio. The course covers many areas from grant writing, managing a group to impact of research. The University offers a further Leadership Programme for senior managers and the School has supported the senior academic management team through this programme. The Head of School and HR also provide an annual promotions workshop on Campus. This was in response to a staff survey which indicated a low awareness of the University promotion criteria, since starting the workshop awareness and understanding of promotion has increased to 80% across the Campus.

Comments

Faculty have excellent collegiality and collaboration across disciplines including clinical and basic sciences. The review team received many comments about the positive change over recent years in faculty and staff satisfaction and work environment.

The annual appraisal and promotion process, together with a robust workload allocation model, support individual faculty and staff development. These processes are well understood and appreciated by different categories of faculty and staff.

Commendations

The School is commended for the way its comprehensive support for all faculty and staff has led to high morale throughout the organisation.

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 principals and mechanisms that underlie animal health and diseases 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 and 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 imagine, 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 emphasise problem solving that results in making and applying medical judgements.

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, influences of different cultures on the delivery of veterinary medical services, delivery of professional services to the public, personal and business finance and management skill; and gain an understanding of the breadth of veterinary medicine, career opportunities and other information about the profession.

g. knowledge, skills, values, attitudes and behaviours 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.

To meet RCVS and EU requirements, the Curriculum should also include the following:

- **entry level capability (to OIE standard) in preventative medicine/epidemiology**
- **zoonoses**
- **food safety and hygiene**
- **regulation of animals and animal products**
- **management of the interrelationship of animals and the environment**
- **training must include experience in abattoirs**

(*to meet RCVS and EU requirements, the course should normally cover five years of study)

Background

The BVM&S degree at the Royal (Dick) School of Veterinary Studies provides students with breadth and depth of knowledge in veterinary science. This allows appreciation of fundamental scientific principles and their integration with, and application to, the whole animal. This holistic education combines with the staged acquisition of specific clinical and generic skills to produce graduates trained to the core competencies identified by the accrediting bodies.

Aims	Integration
To provide an understanding of the normal biological function and welfare needs of the animal	Animal Body and Animal Life and Food Safety courses. The strong welfare ethos within the School ensures welfare aspects are addressed in every course that is taught.
To enable clinical disciplines to be learnt within the context of a firm foundation in basic science	The clinical skills themes run throughout the curriculum and evolve in tandem with the theoretical underpinnings of the related courses
To produce graduates for the practising arm of the profession and allied research, commercial and public health positions	Species based integrated clinical courses, Student Research Component, Veterinary Public Health, Research Track (optional)
To encourage responsible and professional behaviour encompassing legal and ethical considerations	Professional and Clinical Skills courses and portfolios from Year 1
To foster a spirit of enquiry and equip graduates with an appreciation of the importance of lifelong learning	Student Research Component (Foundation Skills), Student Research Component. Professional and Clinical Skills courses. Portrait lectures

The curriculum was last reviewed in 2013 by a curriculum development group reporting to the Learning and Teaching Committee (LTC). All recommendations of the group were approved. Curriculum content, design and review is the overall responsibility of the Learning and Teaching Committee (LTC; formerly the Curriculum Executive), which meets monthly (and 2 times a year is convened as a larger Board of Studies). In practice, working groups of LTC will deal with specific projects and report back to LTC for final discussion and approval. For example, the clinical skills committee recently carried out a mapping process resulting in introduction of additional practical classes in Year 3.

Outside of major course level changes, all suggestions for course content or assessment changes must receive approval from LTC. All aspects of quality assurance of the BVM&S programmes are carried out by the School's Quality Assurance Committee (VMQAC), which meets four times per year. Membership of this committee includes School academic staff, students and external college representation. VMQAC has a rigorous set of processes and procedures supported by a series of 7 Quality Assurance documents for completion annually. Documentation relating to individual courses is reviewed by a member of VMQAC who is not directly associated with the course to provide a degree of externality.

VMQAC coordinates for each course, the following portfolio of documents:

- Staff Student Liaison committee meeting minutes
- End of Course evaluation
- Post Course Review minutes
- Examination Board minutes
- External Examiners report
- Reflective Summary by the Course Organiser
- Independent review by member of the QA committee

With additional annual cross-curriculum documentation comprising:

- Summary of external examiners and course organisers' comments
- Year summary document from Director of Teaching, Admissions, Library Services and Student experience/ support

The School values student feedback and employs a number of means to ensure the student voice is heard. These include questionnaires/evaluations, Staff-Student Liaison Committee (SSLC) meetings and evaluation follow-up.

Veterinary Public Health (VPH) teaching at the R(D)SVS is integrated within the curriculum across all years of the programme of studies and every year it focuses on different aspects of the subject.

In the early years, students experience an introductory VPH lecture series which includes the role of vets in the food chain, principles of Hazard Analysis Critical Control Point (HACCP), waste management, zoonoses and emerging diseases. This material is supported by related biosecurity, evidence based medicine, animal husbandry, animal welfare, parasitology and microbiology material in tandem courses. In Year 3 they cover aspects of veterinary epidemiology and veterinary pathology that are propaedeutic for the VPH (Food Hygiene & Safety) course that is taught in Year 4. This course

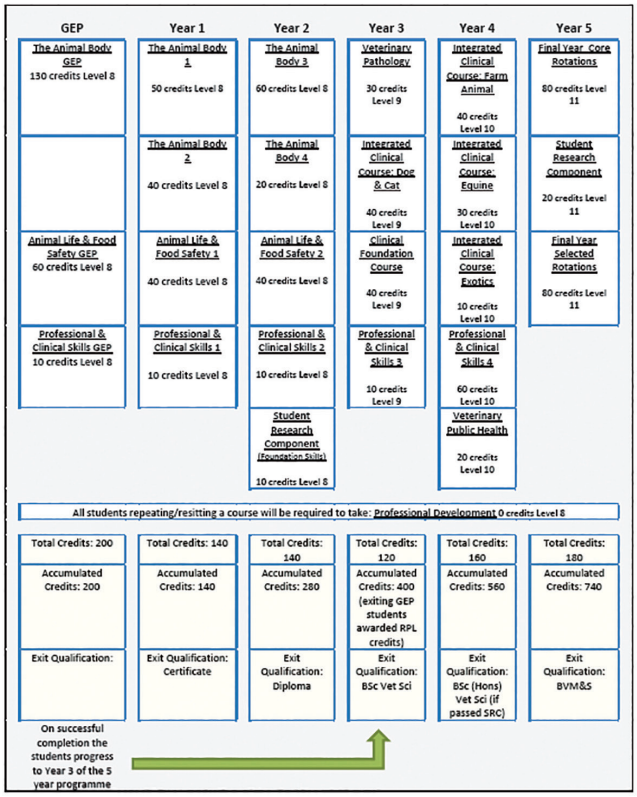
is designed not only to integrate theoretical and practical aspects of VPH during the course itself but also to bring together and integrate with the Farm Animal Course.

A core Final Year module comprises Farm Animal, VPH (including abattoir visits and State Veterinary Medicine tutorials), Epidemiology and Pathology (including Microbiology and Antimicrobial Resistance tutorials). Students wishing to specialise in VPH and veterinary epidemiology can attend an additional three week-long Selected Rotation. In addition several externship opportunities are available including Farm Animal Assurance Schemes, local Animal Health offices and the Veterinary Public Health Association (VPHA) EMS Masterclass. The VPH teaching team offers support to those students who have an interest in VPH-related topics and wish to carry out a research project as part of the Student Research Component.

Students can also benefit from the use of the Virtual Slaughterhouse simulator, an interactive computer based learning tool developed by faculty that allows students to explore a "state of the art" cattle abattoir with embedded problem-solving scenarios related to the most common practical issues observed in real time work.

Strengths of the BVM&S programme as viewed by the School include:

- Increasingly well-developed clinical and professional skills theme running throughout the programme with year on year increases in practical classes and tutorials supporting professional and clinical skills development. This is supported by small and large animal clinical skills teaching suites.
- A robust approach to assessment and standard setting and quality assurance in general.
- In-house staff development programme and CPD/CE opportunities aligned to the Higher Education Academy (HEA) framework.
- Opportunities afforded by the facilities at the Easter Bush Campus and co-location of Roslin Research Institute as the School's research arm (e.g. 'Portrait' lectures in Year 1).
- Since the last accreditation, the School has appointed a student experience officer, implemented a new personal tutor system and made study skills support and counselling much widely available both locally and centrally.
- A highly experienced and enthusiastic teaching faculty many of whom are actively engaged in education development and related CPD/CE.



Current challenges are seen as:

- Despite curriculum review reducing lecture content, an over-reliance on lecture based approaches for covering core material.
- EMS provides important experience for students; the School is working to further develop monitoring and QA processes related to its management.
- The NSS scores over the past 3 years have been steadily improving in the area of assessment and feedback but there is still work to be done in this area.
- The School is in a transition phase between 2 different virtual learning environments, which is challenging for staff and students.

Commendations

The School is commended for the quality of curricular assessment and effective cross-referencing of curricular outcomes to accreditation criteria.

Suggestions

The School is encouraged to allocate credits so that they reflect student effort.

10. Research

The college shall maintain substantial research activities of high quality that integrate with and strengthen the professional programme

Background

The University of Edinburgh is a research-led University and the Veterinary School is a research-led Veterinary School providing a research-led curriculum. The School has taken full advantage of its expansion in research (through incorporation of the Roslin Institute) to drive opportunities for research to be embedded and integrated into the professional programme. In 2008, the University of Edinburgh took the strategic decision to incorporate the Roslin institute within the Royal (Dick) School of Veterinary Studies to serve as the research arm of the School.

The R(D)SVS offers a variety of opportunities for veterinary students to become engaged in, and receive training in, research. Formal research programmes available to veterinary students include the Student Research Component (which is integrated into the curriculum), Summer Studentship Program, Intercalated Degree Programmes (BSc./MSc.). Students participating in research will usually follow one of the 5 research programmes described below:

1) Genetics and Genomics: The intellectual and practical challenge in both livestock production and animal and human health is to generate a predictive biology that links genetic and epigenetic variation with phenotype. The School aims to produce testable models at all possible scales of bioscience: molecular, cellular, organism, population as well as environmental interactions. They make major contributions to functional annotation of livestock and human genomes, sustainable breeding programmes and new breeding tools, capitalizing on new technologies such as Genotyping by Sequencing (GBS). Implementation of the outcomes is achieved through multiple strategic partnerships with major breeding companies and other industry partners.
2) Infection and Immunity: Infectious disease is the greatest single constraint on livestock production, especially with increasing intensification. The School aims to reduce the economic burden of diseases of livestock and to mitigate impacts on food safety and transmission to humans. The research is based on the genetics, genomics and cell biology of innate immunity in livestock, and includes research on livestock responses, host susceptibility, host-biome interactions and vaccine development to important bacterial zoonoses and emerging diseases. The programme includes pathogen genomics and discovery in livestock species, including an international dimension through the Centre for Tropical Veterinary Medicine. Alongside studies on host-pathogen interactions and pathogenesis, the School continues to expand its ability to utilise molecular diagnostic and mathematical tools to develop predictive epidemiology models.
3) Developmental Biology: The School investigates fundamental processes such as stem cell biology, control of somatic growth, embryonic patterning, organogenesis, musculoskeletal development, haematopoiesis, gonad function and sex determination that ultimately determine both reproductive success and productivity in livestock, companion animals and humans.
4) Neurobiology (including Welfare and Behaviour): Animal behaviour and welfare are major areas of public concern as production systems change and intensify. Underpinning this theme, the School continues to expand its focus on fundamental biology of the cells of the CNS of large animals, in part through investment in imaging infrastructure.
5) Translational Veterinary Science: The pathophysiology and management of disease are major aspects of their translational clinical research and capitalize on the co-location of veterinary hospitals with the research institute. Strategic areas include infectious diseases (including antibiotic and anthelmintic resistance), generic basis of disease in companion animals, healthy ageing, inflammation, cancer and stem cell biology. Collaborative research between veterinary and human medicine has benefits for all species. On this basis, the School continues to enhance their research in the area of “one medicine” through their strong collaborations, particularly focusing on genetics, infectious diseases and large animal models of human disease (e.g. cancer, lung disease).

Research leaders are actively engaged and teach on the professional programme. This provides the most leading edge information given to students and a basis for driving inquiry. In addition, the School provides “portrait” lectures in the professional programme that are delivered by key research and opinion leaders in the School.

The core skills of searching and critically appraising the scientific literature are introduced in first year in the Professional and Clinical Skills course and developed in Animal Life & Food Safety (ALFS) (1), Student Research Component (SRC) (Foundation Skills) and ALFS 2 and the Clinical Foundation Course (CFC) in Year 3. Study design, research

data management and statistical analysis principles are also introduced in the early years ALFS courses, and expanded upon in CFC. These principles are then developed and used as applied subjects in the context of a student led research component in SRC, which begins in Year 2 and runs through Year 4 for completion in Final Year. Statistical, epidemiological and research skills are explored in Year 4 in the Final Year Preparation phase and are integrated in the Final Year in the context of evidence based veterinary medicine where they form the foundation of students' critical appraisal of support for evidence based decision topics.

Other choice based opportunities include:

1. The School runs a summer research project programme. Each year individual staff and researchers offer between 12-18 laboratory-based projects, which are then advertised to the students. Projects run for a minimum of 6 weeks and projects are funded from a variety of sources including the BBSRC, Zoetis, MSD Connect and Medical Research Scotland.
2. Part of a student exchange programme with Colorado State University (CSU) provides the opportunity for 1-2 Edinburgh students to undertake summer research projects with researchers at CSU and similarly 1-2 CSU students will conduct summer research projects with researchers in Edinburgh.
3. A number of students have been successful in applying for and completing the Cornell Leadership Programme, which also provides an opportunity to design and run a research project.
4. Intercalation opportunities. Undergraduate students can take up the opportunity to take an additional year and gain an intercalated degree (either a BSc or MSc depending on the stage of the programme at which they wish to intercalate and their existing qualifications). There is a large range of opportunities within the University of Edinburgh and at other UK Institutions.

Comments

The integration of Roslin Institute into the College of Medicine and Veterinary Medicine has provided excellent opportunities for clinical and basic science faculty, graduate students and residents to interact and develop collaborations. It has also enhanced the student experience and their understanding of the importance of scholarship to advance the profession. Students have opportunities to contribute to research projects at both Roslin and R(D)SVS. There is integration and opportunities for research experiences over multiple years of the curriculum (the Student Research component – SRC) and the opportunity for intense summer research experience. Generally all students that express interest in the summer programme are accommodated during their tenure at the school.

The incorporation into the curriculum of portrait lectures about ongoing research has provided opportunity for students to hear from scientists and faculty engaged in addressing contemporary biomedical issues.

Commendations

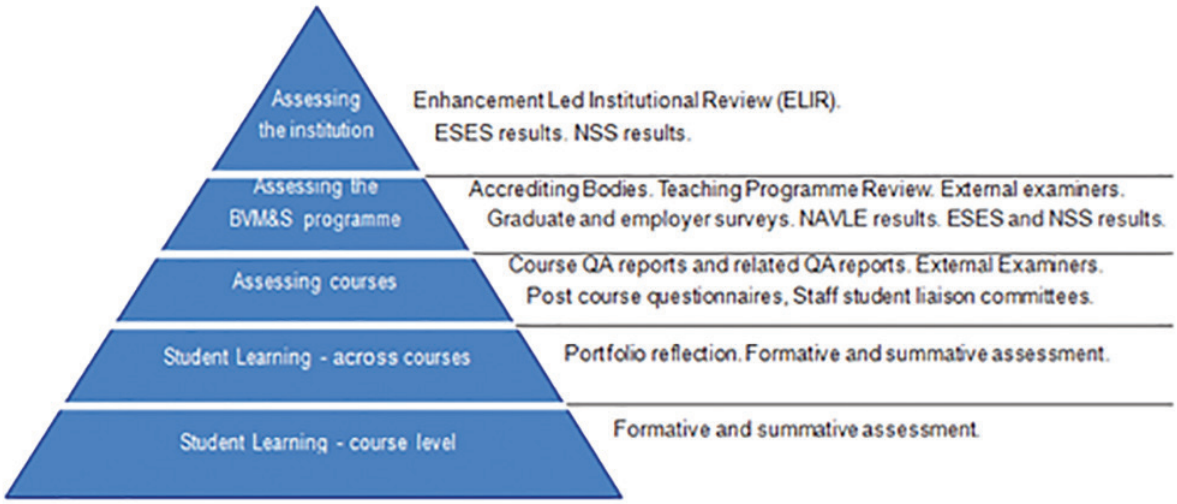
The University and College are commended for the successful integration of the Roslin and School faculty which creates a robust research environment for faculty, veterinary students, and graduate students.

11. Outcomes assessment

Outcomes assessment measures that address the college mission must be developed and implemented. Outcomes assessment results must be used to improve the college programmes.

Background

The School prides itself on robust Outcomes Assessment and Quality Assurance (QA) procedures. An overview of their mechanisms aligned to relevant levels of assessment is shown below.



NSS: National Student Survey
ESES: Edinburgh Student Experience Survey

Student attrition in both programmes has been increasing however a significant number of these students have left due to financial issues. The other relatively common reason is family situations changing or a need to be closer to home; several of these students have managed to transfer onto other veterinary degree programmes so are not 'lost' to the profession.

NAVLE school score report data and passage rates over the past five years

Academic Year	Students taking exam(s)	Students passing exam(s)	Average score	Criterion group average	Percent passing
2010/11	36	36	512	517	100
2011/12	49	46	510	532	94
2012/13	51	47	495	519	92
2013/14	61	56	499	515	92
2014/15	60	56	513	494	93

The pass rate for NAVLE is variable but with increasing numbers of students (both North American and non) electing to sit the exam, the School is increasing the support in terms of additional lectures and resources to assist. The students have established an AVMA club and the School is exploring sponsorship of student membership of AVMA in order for this to become a recognised Chapter.

Student attrition rates with reasons

5 Year programme		Reason for Relative Attrition		Absolute Attrition ** (withdrawal)	
Entering Class	Attrition * (relative and absolute)	Academic – repeat year (or intercalate)	Personal (interrupted year)	Number	Percentage (of entering class)
2006/07	32	19 (+ 4§)	7	6	6.7
2007/08	23	7 (+ 5§)	8	8	8.6
2008/09	23	12 (+ 12§)	5	6	6.1
2009/10	21	5 (+ 8§)	9	7	6.6
2010/11	29	13 (+ 9§)	5	11	9.6

§ Intercalating Students

4 Year programme		Reason for Relative Attrition		Absolute Attrition ** (withdrawal)	
Entering Class	Attrition * (relative and absolute)	Academic – year repeat	Personal (interrupted year)	Number	Percentage (of entering class)
2007/08	5	3	1	1	2.7
2008/09	11	5	2	4	8.1
2009/10	15	6	3	6	9
2010/11	19	8	3	8	13.3
2011/12	14	8	1	5	8.3

* Students that are either withdrawing from the programme or moving to a different (earlier) class. (Excluding intercalating students)
** Students who leave and never return

As explained earlier, QA processes require each course to survey students and report back to VMQAC and LTC. Final Year students are surveyed at the end of each module (4 week block) and again with a holistic assessment at the end of Final Year. This supplements the data gained through the National Student Survey (NSS) to provide information from course to programme level.

Graduates are surveyed 18 months and 5 years after graduation. The 18-month survey is currently facilitated by the Veterinary Defence Society (VDS) annual graduate reunion which regularly attracts a high percentage of graduates. This is being supplemented by electronic contact particularly for those overseas graduates who are less likely to attend the VDS event.

Results of the graduate survey (18 months after graduation)

		Year of graduation				
Subject Areas – General Subjects	**Amount of Teaching**	**2009**	**2010**	**2011**	**2012**	**2013**
Normal Structure and Function	About Right	91	86	77	95	90
	Too Little	0	0	7	0	3
	Too Much	9	14	16	5	7
Animal Welfare	About Right	89	77	72	85	86
	Too Little	0	8	21	5	9
	Too Much	11	15	7	10	5
Veterinary Ethics	About Right		67	69	88	86
	Too Little		26	29	10	7
	Too Much		7	2	2	7
Infectious disease and pathology	About Right	74	85	83	93	85
	Too Little	4	12	12	2	5
	Too Much	22	3	5	5	10
Veterinary Public Health	About Right	23	41	45	61	46
	Too Little	4	4	2	5	5
	Too Much	73	55	53	34	49
Animal handling	About Right	64	65	75	60	75
	Too Little	36	31	23	40	21
	Too Much	0	4	2	0	4
Communication skills	About Right	64	74	70	78	70
	Too Little	34	11	19	17	14
	Too Much	2	15	11	5	16
Basic clinical skills	About Right	42	48	60	54	55
	Too Little	58	52	40	46	38
	Too Much	0	0	0	0	7
Pricing and economics of veterinary medicine	About Right	5	16	16	37	24
	Too Little	93	84	77	63	74
	Too Much	2	0	7	0	2

Subject Areas – Species Specific	**Amount of Teaching**	**2009**	**2010**	**2011**	**2012**	**2013**
Dog and Cat	About Right		81	81	81	83
	Too Little		19	14	17	17
	Too Much		0	5	2	0
Farm Animal	About Right		59	69	68	67
	Too Little		33	31	32	30
	Too Much		8	0	0	3
Equine	About Right		81	88	75	70
	Too Little		19	12	25	25
	Too Much		0	0	0	5
Exotics	About Right		58	69	78	66
	Too Little		23	19	15	20
	Too Much		19	12	7	14

The Veterinary Medicine Quality Assurance Committee (VMQAC) collects annually a range of information from course organizers and their teams which includes adequacy of facilities and equipment. The results are reported to the Learning and Teaching Committee for action as well as to the College Quality Assurance Committee (CQAC) and Senatus Quality Assurance and Enhancement Committee (SQAEC) to comply with University of Edinburgh Quality Assurance and Enhancement procedures. Line managers for academic staff carry out regular job appraisals to identify areas for personal development relating to teaching, research and administrative duties supported by the University's Human Resources department. Teaching faculty opinion is also collected annually at post-course review meetings which are mandatory as part of the VMQAC processes.

As part of routine QA processes, external examiners are asked to comment on the overall standards of education provided by R(D)SVS as well as in comparison with their other institutions.

Areas of concern identified by VMQAC are passed to the School LTC for action and are monitored at the end of the academic year. VMQAC produces an annual QA action list at the start of the academic year with a review of progress at the end of the academic year.

Comments

There is a robust suite of outcomes assessments in place that assess the program at all levels. The School regularly publishes the methods and results of the outcomes assessment measures they have in place.

The Quality Assessment group performs an ongoing review of the programme and courses, and uses the information gathered to make changes and improvements to the programme and curriculum where necessary.

The response rate for the survey asking for employer feedback on the skills of the graduates is very low.

Commendations

Use of assessment data to modify and improve the curriculum and student learning experience is a strength of the School.

The School is commended for their contribution to the pedagogical literature on outcomes assessment.

Suggestions

The School is encouraged to continue to look at creative ways or methods to gather employer feedback on the competence of graduates.

12. Continuing and Postgraduate Education

Continuing education

The institution must co-operate with other professional organisations and competent authorities in the design, implementation and quality control of continuing education programmes.

It should strive to provide well-designed continuing education programmes in specific areas of practical veterinary medicine.

Postgraduate education

Towards a qualification in a specific area.

The institution must co-operate with other professional organisations and competent authoritites in the design, implementation and quality control of continuing education programmes leading to qualifications in the clinical and paraclinical fields, including the achievement of national specialist recognition.

Where appropriate, institutions should aim their programmes to meet the standards and regulations of the respective European specialist colleges and of the European Board of Veterinary Specialisation or equivalent bodies.

Background

Postgraduate Clinical Training Courses (2014/15)

Clinical discipline		Number enrolled		
	Duration of training	Full time	Part time	Diploma or title anticipated
1. Anaesthesia	48 months	2		ECVAA
2. Anaesthesia	36 months	1		ECVAA
3. Cardiology	48 months	1		ECVIM-CA
4. Cardiology	36 months	1		ECVIM-CA
5. Oncology	48 months	2		ECVIM-CA
6. Internal Medicine	48 months	4		ECVIM-CA
7. Diagnostic Imaging	48 months	4		ECVDI
8. Equine Internal Medicine	48 months	1		ECEIM
9. Surgery (Equine)	48 months	2		ECVS
10. Surgery (Small Animal)	48 months	4		ECVS
11. Equine Medicine	48 months	1		CertAVP (Equine Medicine)
12. Clinical Pathology	36 months	1		ECVCP
13. Dermatology	36 months	1		ECVD
14. Farm Animal (Cattle)	36 months	1		ECBHM
15. Farm Animal (Sheep)	36 months	1		ECSRHM
16. Anatomic Pathology	36 months	3		ECVP, ACVP or RCPath
17. Equine Practice	24 months	1		CertAVP (Equine Practice)
18. Small Animal Medicine	12 months	3		Rotating internship
Total		**34**		

All except one externally funded scholar, receive a stipend that is paid either by the Vet School or through an external funding body.

Taught postgraduate courses (2014/15)

	Duration of training	Number enrolled	
		Full time	Part time
(a) Diploma level (discipline)			
1. International Animal Welfare, Ethics & Law (DL)	48 months		4
2. One Health (DL)	48 months		3
3. Equine Science (DL)	48 months		3
4. Conservation Medicine (DL)	48 months		3
(b) Masters level (discipline)			
1. International Animal Welfare, Ethics & Law (DL)	72 months		78
2. One Health (DL)	72 months		7
3. Equine Science (DL)	72 months		53
4. Conservation Medicine (DL)	72 months		41
5. Animal Biosciences	12 months		10
6. Applied Animal Behaviour & Animal Welfare	12 months		36
Total			**238**

(DL) = Distance learning
Part time students (72 months) may be in full-time work. Full-time students (12 months) do not receive a grant or salary.
The diploma level courses are not combined with clinical training.

Postgraduate research training programs (2014/15)

	Duration of training	Number enrolled	
		Full time	Part time
(a) Masters level- Indicate discipline and/or department			
1. Clinical Veterinary Sciences	12 months	2	
2. Clinical Veterinary Sciences	24 months		3
3. Infection and Immunity	12 months	6	
4. Infection and Immunity	24 months		1
5. Neurobiology	24 months		1
6. Animal Genomics & Disease Resistance	24 months		2
7. Master of Veterinary Science	12 months	2	
8. Master of Veterinary Science	24 months		1
9. MPhil Clinical Sciences	36 months	1	
Total		**11**	**8**
(b) PhD level - Indicate discipline and/or department			
1. Clinical Veterinary Sciences	36 months	32	
2. Clinical Veterinary Sciences	72 months		1
3. Developmental Biology	36 months	32	
4. Developmental Biology	72 months		1
5. Genetics and Genomics	36 months	41	
6. Genetics and Genomics	72 months		7
7. Infection and Immunity	36 months	55	
8. Infection and Immunity	72 months		1
9. Neurobiology	36 months	13	
Total		**173**	**10**
(c) Other doctorate level - Degree and discipline and/or department			
1. DVM&S Veterinary Medicine	60 months		1

The percentage of Masters students holding a veterinary degree is 47%. The percentage of PhD students holding a veterinary degree is 17%.

Continuing education courses held at the school

Courses organised by the School itself in 2014/15

Title of course	Number of participants	Total number of hours of the course
Foot & Farriery	29	Full day
Rabbit Study Day	44	Full day
Abdominal Surgery	3	6hrs
Rabbit & Rodent Anesthesia & Analgesia	3	6hrs
Rabbit & Rodent Critical Care	2	6hrs
Boehringer XL Vets – 6/7 November 2014	10	Full day
Clinical Club	50 per month	2hrs per month

Courses organised at the School by outside bodies in 2014/15

Title of course	Number of participants	Total number of hours of the course
BCVA	16	Full day
Ethicon	22	Full day
VDS Graduation reunion	90	Full day

Comments

The School delivers courses to the surrounding referral practices although not all of these were recorded in the SER. Courses are organised with outside bodies and the School provides a range of modules for the RCVS Certificate in Advanced Practice. The School has increased the number of PhD students to over 160.

13. EMS

EMS must be an integral and structured part of the education and training of veterinary students. Veterinary schools will need to be able to demonstrate how it is built into the overall curriculum. Students must undertake a total of 38 weeks of EMS before they graduate.

Twelve weeks should normally be devoted to animal-husbandry-related EMS so that students gain experience of the behaviour of normal animals in their own environments.

Clinical EMS must comprise at least 26 weeks across a broad range of areas.

Students must keep a log of their learning and experience throughout their EMS.

There must be a system in place to enable EMS providers to report back to the school on their assessment of the performance of students during EMS.

The student's experience log and the feedback from EMS providers must form part of the student's formative assessment against the RCVS's Day One Competences.

There must be a member of the academic, or academically-related staff, responsible for the overall supervision of all types of EMS, including liaison with EMS providers.

There must be a mechanism to enable students to formally report on the quality of the instruction and experience of EMS placements.

Students must have access to a suitable database of EMS placements, and must be able to seek and obtain advice and guidance on the suitability of EMS placements.

Background

Lectures and information sessions on EMS are given yearly to update students on regulations, advice and good practice.

Animal Husbandry (AH) EMS is central to the core Year 1 and 2 courses, Animal Life and Food Safety 1, 2 & GEP. AH EMS is also integrated into Student Research Component (Foundation Skills), a new 10-credit Year 2 course. Students develop a group project which has as its starting point the Enterprise Reports which each student generates from every animal husbandry placement. The group work then develops themes and issues into a broader context which investigates issues such as economics, sustainability and global one health in relation to animal enterprises across any or all domestic species. The course is designed to allow considerable flexibility, choice and creative thinking in relation to given themes, but EMS reports are the starting point.

In Year 3, students receive small group practical teaching which is geared to practical and 'behavioural' techniques for successful clinical EMS. Classes give students a repertoire of commonly performed clinical skills which can be used as a platform from which to exploit further learning opportunities on placement. The sessions also involve general discussion of the possibilities and challenges of workplace learning, setting learning objectives and reflection upon these post-placement, and the importance of this in the context of reflective professional practice.

Some specific EMS providers (PDSA and Inglis practice) are also involved in taught elements of the course, thereby blurring the extra-/intra-mural divide.

Students are expected to work the normal full time working week of the unit.

Observational clinical EMS can be started as soon as Animal Husbandry EMS has been signed off. Students can log 6 weeks of observational clinical EMS before the start of third year (they can do more than this, but only 6 weeks will count towards the clinical EMS total of 26 weeks). Thirteen weeks of EMS are embedded and integrated into the Final Year as externships.

As long as students satisfy the core requirements to ensure adequate breadth, they are free (and encouraged) to develop their EMS in line with their own interests. Core requirements are:

- A minimum of two weeks in each of companion animal, farm and horse practice.
- A minimum of one week of veterinary public health/meat inspection EMS or participation in a structured Veterinary

Public Health (VPH) visit run by R(D)SVS staff, and this must take place after VPH course teaching in Year 4.

Animal Husbandry EMS
Placement providers complete a Certificate of Attendance for each student, which includes feedback on various aspects of the student's performance. Submission of both the Certificate of Attendance and the Enterprise Report is required before a placement is counted towards EMS.

Clinical EMS
Providers return a paper or electronic assessment form for each student which is required before the placement can be logged as counting towards EMS. These are accessible to students and staff through the EMS intranet pages on EEVeC. Paper copies are scanned in; electronic copies are uploaded directly.

Periodic reports are generated whereby every student scoring less than 'Satisfactory' on any element of an EMS assessment is identified. These are individually followed up by the Clinical EMS coordinator, in coordination with Personal Tutors, and actions set in place to help remedy issues where appropriate.

Any written (by letter or email) or telephone feedback on students from placement providers (animal husbandry or clinical) is followed up, usually with a face to face meeting with the student.

Two members of academic staff have oversight of animal husbandry and clinical EMS respectively. The senior clinical lecturer in charge of clinical EMS sits on the national EMS coordinators group. Both roles are supported by a full time administrative position.

Databases of EMS placements are available in print form in the Library, electronically on EEVeC, and on an EMS notice-board.

Comments
There are a number of databases for the students to use to find farms and practices for EMS placements. Students have access to a flow chart of contacts when out on placements should they need it. They can email or contact staff directly as well as use the student helpline. They do not have access to a staff member 24 hours a day.

Students record tasks done and signed off while on placements through Pebblepad.

In practices that undertake EMS and IMR placement, the students are kept separate and each is assessed by different personnel.

Students nominate and give EMS Awards to supportive practices. No specific training is given to providers.

Suggestions
It is suggested that a students have a contact number for a staff member in the School for advice being available 24/7 in case of emergency.

Annex 1 – EAEVE indicators

				Recommended value
R1	no. undergraduate veterinary students	778	7.84	Maximum
	no. total academic FTE in veterinary training	99.2		8.381
R2	no. undergraduate students at Faculty	778	3.09	Maximum
	no. FTE total Faculty	251.5		9.377
R3	no. undergraduate students at Faculty	778	8.55	Maximum
	no. VS FTE in veterinary training	90.95		11.057
R4	no. of students graduating annually	155	1.70	Maximum
	no. VS FTE in veterinary training	90.95		2.070
R5	no. total FTE support staff in veterinary training	152.4	1.53	Recommended range
	no. total FTE academic staff in veterinary training	99.2		0.505-1.907
R6	Supervised practical training	621	0.675	Minimum
	Theoretical training	920		0.602
R7	Laboratory and desk based work + non clinical animal work	450.4	0.34	Maximum
	Clinical Work	1319.5		1.809
R8	Teaching load	2691	24.46	Recommended range
	Self directed learning	110		2.59-46.60
R9	Total no. hours vet. curriculum	2691	21.52	Recommended range
	Total no. curriculum-hours Food Hygiene/Public Health	125		8.86-31.77
R10	Hours obligatory extramural work in veterinary inspection*	8	0.064	Recommended range
	Total no. curriculum-hours Food Hygiene/Public Health	125		0.074-0.556
R11	no. of food-producing animals seen at Faculty	174	1.12	Minimum
	no. of students graduating annually	155		0.758
R12	no. of individual food-animals consultations outside the Faculty	4488	28.95	Minimum
	no. of students graduating annually	155		8.325
R13	no. of herd health visits	144	0.92	Minimum
	no. of students graduating annually	155		0.326
R14	no. of equine cases	4672	30.14	Minimum
	no. of students graduating annually	155		2.700
R15	no. of poultry/rabbit cases	1950	12.58	Minimum
	no. of students graduating annually	155		0.407
R16	no. of companion animals seen at Faculty	15623	100.79	Minimum
	no. of students graduating annually	155		48.061
R17	Poultry (flocks)/rabbits (production units) seen **	30	0.19	Minimum
	no. of students graduating annually	155		0.035
R18	no. necropsies food producing animals + equines	330	2.12	Minimum
	no. of students graduating annually	155		1.036
R19	no. poultry/rabbits necropsies***	510	3.29	Minimum
	no. of students graduating annually	155		0.601
R20	Necropsies companion animals	327	2.10	Minimum
	no. of students graduating annually	155		1.589

* Our approach to abattoir involvement and all the related activities by students is described fully in Chapter B7.
** Students doing the poultry selected rotation will visit at least 20-30 flocks from a selection of 300 flocks.
*** Poultry only, rabbits counted in companion animals.

Annex 2 – Visit Timetable

Joint international visitation by the RCVS, AVMA, AVBC and EAEVE to the University of Edinburgh, The Royal (Dick) School of Veterinary Studies

9 – 13 November 2015

Timetable

Visitors arrive in Edinburgh and take taxis to the hotel (approximately 20 minutes):

Best Western Braid Hills Hotel
134 Braid Road, Edinburgh, EH10 6JD, Scotland
Tel: +44 (0) 131 447 8888 | Fax: +44 (0) 131 452 8477
Check-in is at 15:00 and check-out on the Friday is by 11:00 (unless visitors have made arrangements to extend their stay).

Royal (Dick) School of Veterinary Studies, University of Edinburgh, Easter Bush Veterinary Centre, Bush Farm, Edinburgh EH25 9RG
Tel: +44 (0) 131 6551 7300

Contact numbers:

Head of School:	Professor David Argyle	
Head of School's PA:	Mrs Marianne Watson	+44 (0)131 650 6241
Deputy Head of School – Teaching:	Professor Susan Rhind	+44 (0)131 650 6219
Deputy Head of School – Operations:	Mr Tim King	+44 (0)131 651 7450

Day 1 – Sunday 8th November 2015 Day 1 – Sunday 8th November 2015

Time	Location	Activity	Participants
Afternoon	Hotel	Arrive at hotel	Visiting team
16:30	Hotel	Private meeting of visitors	Visiting team

Day 2 – Monday 9th November 2015

Time	Location	Activity	Participants
07:30	Hotel	Leave to travel to R(D)SVS	Visiting team
08:00	R(D)SVS Boardroom	Arrive at R(D)SVS – orientation/registration	Visiting team, Deputy Head of School
08:30	R(D)SVS Room 1.30	Welcome meeting and discussion regarding Structure and Finance.	Head of College, Dean, Deputy Heads of School and Campus Operating Officer
09:15	R(D)SVS Room 1.30	Meet to discuss Standard 11 – Outcomes Assessment	Chair of Veterinary Education, Director of QA and year directors
10:15	R(D)SVS F Block	Tour of facilities at Easter Bush Campus – Exotic Animal Teaching Facility and Large Animal Clinical Skills	Heads of relevant sections
11:15	R(D)SVS Boardroom	Coffee	Visiting team
11:30	R(D)SVS Teaching Building	Tour of facilities at Easter Bush Campus – Teaching Building – Anatomy, Pathology, . Teaching Laboratories, Small Animal Clinical Skills, Teaching spaces and Library	Heads of relevant sections
13:00	R(D)SVS Boardroom	Lunch	Visiting team
13:40	R(D)SVS Hospital for Small Animals	Tour of facilities at Easter Bush l Campus Small Animal Hospital	Heads of relevant sections
15:10	R(D)SVS Boardroom	Coffee	Visiting team
15:30	R(D)SVS Large Animal Hospital	Tour of facilities at Easter Bush Campus Equine and Farm Animal Hospital	Heads of relevant sections
17:00	R(D)SVS	Depart for hotel	Visiting team
19:00	Hotel	Dinner	Visiting team

Day 3 – Monday 10th November 2015

Time	Location	Activity	Participants
8.30am	Hotel	Leave to travel to R(D)SVS	Visiting Group Only
9.00am	R(D)SVS Boardroom	Questions regarding previous day or additional information	Heads of relevant sections

9.30am	Abattoir	Sub group travel to Abattoir	Visiting sub group A
10.30am	Abattoir	Sub Group tour abattoir	Visiting sub Group A
11.30am		Sub Group Travel to R(D)SVS	Visiting sub group A
9.30am	Langhill	Travel to Langhill (10 minutes)	Visiting sub group B
9.40am	Langhill	Tour Langhill including demonstration of virtual Farm and FAVS	Visiting sub group B
11.00am		Return to R(D)SVS	Visiting sub group B
11.10am	R(D)SVS Boardroom	Coffee	Visiting sub group B only
11.30am	Sheep Facility	Tour Sheep Facility	Visiting Sub Group B
12.00pm	R(D)SVS	Finish sub group B tours return to R(D)SVS	Visiting Sub Group B
9.30am	Inglis	Travel to Inglis Veterinary Practice (45 mins)	Visiting Sub Group C
10.15am	Inglis	Tour of Facility and discussion	Visiting sub group C
11.15am		Travel to R(D)SVS	Visiting Sub Group C
12.30pm	R(D)SVS Room G.01	Lunch with 1st and 2nd year students and 1st year Graduate Entry students	1st and 2nd Year Students - Introduced by Director of Studen Affairs
1.30pm	R(D)SVS Room 1.30	Meet to discuss Standard 9, Curriculum Years 1-4	Deputy Head of School for Teaching and members of Learning and Teaching Committee
2.30pm	R(D)SVS Room 1.30	Meet to discuss Standards 3 and 4, Physical Facilities and Equipment and Clinical resources	Deputy Heads of school and relevant senior staff
3.15pm	R(D)SVS Boardroom	Coffee	Visiting Group Only
3.45pm	R(D)SVS Room 1.30	Meet to discuss Standards 6 and 7, Students and Admissions	Director of Admissions and relevant senior staff
4.45pm		Depart for hotel	Visiting Group Only
5.15pm	Hotel	Private meeting of visitors	
6.30pm		Depart for R(D)SVS	
7.00pm	R(D)SVS Atrium	Drinks followed by dinner	

Day 4 – Wednesday 11th November 2015

Time	Location	Activity	Participants
08:30	Hotel	Leave to travel to R(D)SVS	Visiting team
09:00	R(D)SVS Boardroom	Questions regarding previous day or additional information	All senior staff and heads of relevant sections
09:30	R(D)SVS Room 1.30	Meet to discuss Standard 9 – Final Year Curriculum	Deputy Head of School for Teaching and Final Year Learning and Teaching Committee
10:00	R(D)SVS Room 1.30	Meet to discuss Curriculum – Veterinary Public Health (Demonstration of Virtual Abattoir – 5 mins)	Deputy Head of School for Teaching and VPH teaching team
10:30	R(D)SVS Boardroom	Coffee	Visiting team
11:00	R(D)SVS Room 1.30	Meet to discuss EMS and RCVS Chapter 12	Deputy Head of School for Teaching plus EMS directors – pre-clinical and clinical
11:30	R(D)SVS Boardroom	Private meeting of visitor/ Opportunity for revisits if needed	Visiting team
12:30	R(D)SVS Room G.01	Lunch with 3rd – 5th year students	Students – introduced by Director of Student Affairs
13:30	R(D)SVS Room 1.30	Meet to discuss Standard 10 – Research, postgraduate training and continuing education	Director of Roslin, Dean, Director of PGT, Student Research Component Director, Director of CE
14:00	Roslin Institute	Tour of Roslin Facility	Director of Roslin
14:45	R(D)SVS Room 1.30	Meet to discuss Standard 5, Information Resources	Veterinary librarian, head of digital education, chair of IT liaison group and Director of Teaching
15:30	R(D)SVS Boardroom	Coffee	Visiting team
16:00	R(D)SVS Room 1.30	Meet to discuss Standard 8 – Faculty	Dean and Deputy Heads of School
16:45		Depart for Hotel	Visiting team
17:00	Hotel	Private meeting at hotel	Visiting team
19:00	Hotel	Dinner	Visiting team

Day 5 – Thursday 12th November 2015

Time	Location	Activity	Participants
08:00	Hotel	Depart hotel for R(D)SVS	Visiting team
08:30	R(D)SVS Room G.01	Breakfast with Alumni and EMS providers	To be invited
09:30	R(D)SVS Boardroom	Questions regarding previous day or additional information	All senior staff and heads of relevant sections
09:45	R(D)SVS Room 1.01/1.01A	Confidential meetings with students	To be invited
10:45	R(D)SVS Boardroom	Coffee	
11.00		Group to PDSA	Visiting team
11:15	R(D)SVS Room 1.01/1.01A	Confidential meetings with staff	To be invited
12:00	R(D)SVS Room 1.30	Meet with selected faculty (Support Staff)	To be invited
12:30	R(D)SVS Room 1.30	Meet with Department Heads	Department Heads
13:30	R(D)SVS Room G.01	Lunch with PG students and interns	To be invited
14:30	R(D)SVS Boardroom	Visitors private meeting – supporting documentation	Visiting team
17:00		Depart for hotel	Visiting team
17:30	Hotel	Visitors private meeting	Visiting team
19:00	Hotel	Dinner	Visiting team

Day 6 – Friday 13th November 2015

Time	Location	Activity	Participants
08:30	Hotel	Depart for R(D)SVS	Visiting team
09:00	R(D)SVS Room 1.30	Exit meeting with Dean/Head of School	Dean and Head of School
09:30	R(D)SVS Room 1.30	Exit meeting with University Senior Vice Principal	Professor Charlie Jeffery
10:00	R(D)SVS Room 1.30	Visitor depart	
10.00	R(D)SVS Boardroom	Visitation group only – follow on meeting	

Annex 3 – Staff List

R(D)SVS Staff List			
MRCVS	First Name	Last Name	Personal Job Title
	Catherine	Aitchison	Lecturer
	Archie	Aitchison	Animal Technician/Stockperson
	Sheila	Aitken	Veterinary Nurse
MRCVS	Pablo	Amengual Batle	DVSAP Clinician
MRCVS	Neil	Anderson	Programme Coordinator/Lecturer
	Aileen	Anderson	Stabel Hand
	Robert	Archibald	Technical Officer
MRCVS	David	Argyle	William Dick Chair of Veterinary Clinical Studies
MRCVS	Sally	Argyle	Senior Lecturer
	Lindsey	Ashburner	Veterinary Nurse (Day Rotation)
MRCVS	Heather	Bacon	Welfare Education & Outreach Manager
MRCVS	Johanna	Baily	Lecturer in Anatomic Pathology
	Drew	Baker	Stockperson/groom
	Martha	Ball	Support Veterinary Nurse (Twilight)
	Wendy	Bament	Veterinary Nurse
	Lana	Barclay	Small Animal Practice Veterinary Nurse
MRCVS	Spela	Bavcar	Oncology Clinician
MRCVS	Catriona	Bell	Senior Lecturer in Veterinary Education
	Andrew	Bell	Veterinary Nurse Trainee
MRCVS	Guraa	Bergkvist	Lecturer in Veterinary Anatomy
MRCVS	Thalia	Blacking	Lecturer in Applied Vet Physiology
MRCVS	Karen	Blissitt	Senior Lecturer
MRCVS	Nicholas	Bommer	Veterinary Surgeon (Small Animal Practice)/Senior Lecturer
	Emma	Bone	Stablehand
	Willem	Bosma	Farm Manager
	Sharon	Boyd	Associate Lecturer
MRCVS	Deborah	Brown	Veterinary Surgeon for General, First Opinion Work
MRCVS	Andrew	Brown	Senior Lecturer in Internal MEdicine (Emergency and Critical
	Renay	Brown	VPU Secretary
MRCVS	Aileen	Brown	Deputy Head of School (Clinical Services)
	Gemma	Bruce	Veterinary Nurse
	Veronica	Buchan	VTO Clerical Assistant
MRCVS	Elizabeth	Burrough	Research Associate
	Steven	Burton	Grieve
	Karen	Cairney	Veterinary Nurse (Medical)
	Douglas	Callaghan	Equine Veterinary Nurse
	Jamie	Cameron	Dairy Herdsman

	Susan	Campbell	Veterinary Nurse (Pharmacy)
	Michelle	Campbell	Equine Yard Supervisor
	Alasdair	Cannon	Technical Officer
	Theodora	Christidou	BVM&S Year 4 Administrator
MRCVS	Eugenio	Cillan-Garcia	Lecturer in Equine Surgery/Practice
	Eoghan	Clarkson	e-Learning Resource Developer and Web...
	Moira	Clayton	Senior Clerical Officer (Accounts)
MRCVS	Jennifer	Clements	Veterinary Clinical Lecturer in Equine Practice
MRCVS	Dylan	Clements	Senior Lecturer Small Animal Orthopaedics
MRCVS	Richard	Clutton	Personal Chair in Veterinary Anaesthesiology
	Helen	Cobb	Veterinary Dermatology Nurse
	Nicola	Cochrane	Veterinary Nurse (Day Rotation)
MRCVS	Alexander	Corbishley	Lecturer in Farm Animal Practice
MRCVS	Brendan	Corcoran	Personal Chair in Veterinary Cardiopulmonary Medicine
MRCVS	Louise	Cornish	Lecturer in Equine Practice
	Jennifer	Cowan	General Veterinary Nurse
	Yvonne	Crawford	Laboratory Manager
MRCVS	Geoffrey	Culshaw	Senior Lecturer
	Lindsay	Dalziel	VTO Administrator
MRCVS	Catherine	Davidson	Edinburgh Clinical Academic Track Veterinary Clinical Lectur
MRCVS	Ana	de Castro Marques Loureiro	Lecturer in small Animal Surgery (General Surgery)
MRCVS	Jorge	Del-Pozo	Lecturer in Veterinary Pathology
	Sara-Ann	Dickson	Veterinary Nurse (DAY ROTATION)
MRCVS	Julie	Dickson	Teaching Fellow (Veterinary Anatomy and Physiology
MRCVS	Padraic	Dixon	Personal Chair in Equine Surgery
	Fraser	Drummond	Dairy Herdsman
MRCVS	Juliet	Duncan	Veterinary Clinical Lecturer in Anaesthesia
MRCVS	Kevin	Eatwell	Senior Lecturer
	Nicholas	Edmonstone	Pharmacy Assistant
	Laura	Edwards	Animal Care Assistant
MRCVS	Richard	Elders	Senior Lecturer in Veterinary Oncology
	Jennifer	Erskine	Veterinary Night Nurse
	Sheila	Ewing	Administrative/Clerical Assistant
	Helen	Fairbairn	Clerical Assistant (Accounts)
	Angela	Ferrier	Veterinary Nurse (Day Rotation)
	Paula	Finnie	Imaging Technician - Equine
	Garry	Firth	Technical Officer
MRCVS	Claire	Fisher	Veterinary Clinician
	Claire	Fleming	Clerical Officer (Accounts)
MRCVS	Julie	Forrest	Lecturer in Farm Animal Health

MRCVS	Mairi	Frame	Lecturer
	Nicola	Fraser	Technician in Veterinary Pathology Unit
	Penny	Fraser	Head Receptionist
	Amy	Garden	Theatre Technician
MRCVS	Andrew	Gardiner	Senior Lecturer
	Donna	Gaylor	Hills Nutrition Nurse
	Mark	Gerrard	Animal Care Assistant
	Geraldine	Giannopoulos	Undergraduate Admissions Officer
	Eilidh	Gibson	Animal Care Assistant
	Frederica	Gilbert	Veterinary Nurse (Nights)
	Caroline	Gilroy	Undergraduate Admissions Secretary
	Martyna	Godniak	Veterinary Nurse (Support)
	Catherine	Gordon	Undergraduate Senior Class Technician
MRCVS	Adam	Gow	Lecturer/Senior Lecturer in Small Animal Medicine
	Hayley	Gowan	Medicine Veterinary Nurse
	Aleta	Graham	Exotic Animal Auxiliary
	Laura	Gray	Veterinary Nurse Trainee
	Gurpreet	Grewal-Kang	Student Recruitment Manager
	Michael	Grieve	Student Experience Officer
	Leanne	Gulisano	Receptionist
MRCVS	Danielle	Gunn-Moore	Personal Chair in Feline Medicine
MRCVS	Caroline	Hahn	Senior Lecturer in Veterinary Clinical Neurosciences
	Faith	Halliday	Animal Care Assistant
	Emily	Hancock	Stablehand
MRCVS	Ian	Handel	Senior Lecturer
MRCVS	Hulda	Hardardottir	Veterinary Anaesthetist
	Angela	Harding	Curriculum Administrator (Year 4)
	Louise	Harley	Senior Accounts Assistant
	Kirsty	Harley	Small Animal Practice Veterinary Nurse
	Irene	Harris	CPD Programme Administrator
	Jennifer	Harris	Technical Officer
	Lyndsey	Hayes	Administrative Assistant
	Jennifer	Hayward	Animal Care Assistant
	Laura	Henderson	Undergraduate Admissions Administrator
	Lisa	Henderson	Equine Veterinary Nurse
MRCVS	Tracy	Hill	Senior Lecturer in Small Animal Medicine
	Stephen	Hooker	Facilities Assistant
MRCVS	Andrew	Hopker	Lecturer in Farm Animal Practice
	Marie	Howie	Scottish Modern Apprentice- Stablehand x2
MRCVS	Neil	Hudson	Senior Lecturer
	Amanda	Huggan	Year 1 Administrator
MRCVS	Kirsty	Hughes	Research Assistant (Veterinary Medical Education)

	Roshni	Hume	Student Experience Officer
	Carolyn	Ingham	Senior Lecturer
	Catriona	Irvine	Exotic Animal Veterinary Nurse
MRCVS	Deborah	Jack	DVSAP Veterinary Clinician
	Fergus	Jack	Undergraduate Admissions Assistant
	Gillian	Jackson	Senior Accounts Assistant
MRCVS	Amy	Jennings	Lecturer in Farm Animal Practice
MRCVS	Kieri	Jermyn	Lecturer in Small Animal Surgery (Soft Tissue)
	Craig	Johnstone	Anatomy and Parasitology Technician
MRCVS	Anna Eleonora	Karagianni	Post-Doctoral Scientist
	Elaine	Kay	Therapeutic Radiographer
MRCVS	Emma	Keeble	Exotic Animal & Wildlife Clinician
MRCVS	John	Keen	Senior Lecturer
	Marianne	Keith	Teaching Technician
	Poppy	Kemp	Assistant HR Advisor
	Debra	Kennedy	Veterinary Nurse
	Lauren	Kenwright	Centre Administrator
	Morven	Kerr	Senior Secretary
MRCVS	Laura	Kidd	Clinical Skills Teaching Fellow
MRCVS	Jenna	Kiddie	Teaching Fellow
MRCVS	Timothy	King	Deputy Head of School (Operations)
MRCVS	Raphael	Labens	Lecturer in Equine Surgery
	Bryony	Lancaster	Master Programme Co-Ordinator and Teaching Fellow
MRCVS	Jessica	Lawrence Rausch	Veterinary Clinical Oncologist
	Rachel	Lay-Flurrie	Veterinary Nurse (Surgery)
	Wilson	Lee	Research Technician ITI Project
	Annaka	Lee	Veterinary Nurse (Surgical)
	Kerry	Leech	BVM&S Year 3 Administrator
	Erica	Liddle	Accounts Assistant
MRCVS	Tiziana	Liuti	Lecturer in Diagnostic Imaging
	Chandra	Logie	Necropsy/Anatomy Technican
MRCVS	Brigitte	Lord	Lecturer in Rabbit Medicine & Surgery
	Walter	Lowe	Campus Health and Safety Assistant
	Diane	Macdonald	Veterinary Nursing Administrator
	Neil	Macintyre	Laboratory Manager
	Cheryl	Mackay	Assistant HR Advisor
	Ailidh	Mackay	Recruitment Assistant
MRCVS	Victoria	Macklin	Veterinary Surgeon
	Gordon	MacPherson	Website and Graphic Designer
MRCVS	Alastair	Macrae	Senior Lecturer
	Andrew	Macrae	Technician
MRCVS	Filipe	Madruga	Internship in Small Animal Anaesthesia

MRCVS	Katia	Marioni-Henry	Senior Lecturer in Veterinary Neurology
MRCVS	Yolanda	Martinez-Pereira	Lecturer / SNR Lecturer in Vet Cardiology
	Kerry	Massa	Hospital Administrator (Clinical Services)
	Brian	Mather	E-Learning Developer
	Brian	May	Veterinary Support Nurse
	Fiona	McDowall	Veterinary Nurse - Oncology
MRCVS	Bruce	McGorum	Personal Chair of Equine Medicine
	Laurie	McGowan	Stable Hand
MRCVS	Sandra	Mclaughlin	Client Services Manager
	Jennifer	Mclellan	Stablehand
MRCVS	Richard	Mellanby	Reader
MRCVS	Katie	Mellanby	Client Services Advisor
	Kerry	Melville	Veterinary Nurse
MRCVS	Anna	Meredith	Personal Chair of Zoological and Conservation Medicine
	Elizabeth	Miller	Veterinary Nurse Trainee
MRCVS	Elspeth	Milne	Personal Chair in Veterinary Clinical Pathology
MRCVS	Ruth	Morgan	Clinician in Equine Practice
	Debra	Morland	Senior Medical Nurse
MRCVS	Linda	Morrison	Lecturer in Veterinary Pathology
	Richard	Morse	Postgraduate Taught Programmes Administrative Assistant
	Thomas	Mortimer	Marketing and Social Media Officer
MRCVS	Carolyn	Morton	Lecturer in Professional Studies
MRCVS	John	Mosley	Senior Lecturer
	Caroline	Mosley	Clinical Skills Education Manager
	Sharon	Moss	Technical Officer
MRCVS	Elizabeth	Munro	Lecturer in Veterinary Ophthalmology & Imaging
MRCVS	Pamela	Murison	Senior Lecturer in Veterinary Anaesthesia
MRCVS	Timothy	Nuttall	Senior Lecturer in Small Animal Veterinary Dermatology
	Patricia	O'Donnell	Senior Secretary
MRCVS	Bridget	O'Farrell	Lecturer in Small Animal Shelter Medicine
	Fiona	Oliver	Laboratory Supervisor - Teaching
	Susan	Orr	VTO Administrative Officer
	Jessica	Ott	Veterinary Nurse (Surgery)
MRCVS	Ambra	Panti	Lecturer in Veterinary Anaesthesia
MRCVS	Jasmin	Paris	ECAT Linked CRUK-Funded Clinical Lecturer
	Laura	Parker	Veterinary Nurse (Anaesthesia)
	Jessie	Paterson	Lecturer in Student Learning
	Lindsey	Paton	Receptionist
	David	Pearce	Hospital Yard Manager
	Geoffrey	Pearson	Senior Lecturer
	Craig	Pennycook	Technical Officer - PM room
MRCVS	David	Perpinan	Lecturer in Exotic Animal and Wildlife Medicine

MRCVS	Adrian	Philbey	Senior Lecturer in Veterinary Pathology
MRCVS	Claire	Phillips	Senior Lecturer
	Melanie	Pineau	Post Graduate Clerical Assistant
MRCVS	Robert	Pirie	Senior Lecturer
	Rona	Rae	Senior Radiographer
	David	Ramage	Dairy Herdsman
MRCVS	Richard	Reardon	Senior Lecturer in Equine Surgery
	Nicola	Redpath	Animal Care Assistant
MRCVS	Nicola	Reed	Senior Lecturer
MRCVS	Susan	Rhind	Chair of Veterinary Education
MRCVS	Jenna	Richardson	Rabbit, Exotic Animal Wildlife Clinician
	Antonia	Robb	VTO Administrative Assistant
	Anne	Robb	Receptionist
	Laura	Robson	Veterinary Nurse (Medical)
	Valerie	Robson	Animal Care Assistant
	Erica	Rose	Secretary - Dogslife Research Project
	Geraldine	Russell	Part-time Secretary
	Olivia	Salazar Gonzalez	Veterinary Nurse (Surgical)
	Sarah	Salmond	Laboratory Technician
MRCVS	Neil	Sargison	Personal Chair of Farm Animal Practice
MRCVS	Gudrun	Schoeffmann	Lecturer in Veterinary Anaesthesia
MRCVS	Tobias	Schwarz	Senior Lecturer in Diagnostic Imaging
MRCVS	Philip	Scott	Reader
	Heather	Scott	Classroom Technician
	Carol	Scott	Receptionist
MRCVS	Alessandro	Seguino	Vet Clinical Lecturer (An. Health, Welfare and Food Safety)
	Karen	Sharpe	Veterinary Nurse (Nights)
	Darren	Shaw	Senior Lecturer
	Carolyne	Sheridan	Equine Veterinary Nurse
	Shirley	Simpson	Senior Surgical Nurse
	Beth	Singer	Veterinary Nurse Trainee
	Suzanne	Small	Veterinary Nurse - Day Rotation
	Emma	Smith	Teaching Support Technician - Exotics
	Elaine	Smith	PGR Clerical Assistant
	Alison	Smith	Receptionist
MRCVS	Sionagh	Smith	Senior Lecturer
	Joanne	Smith	Senior Receptionist
MRCVS	Cristina	Soare	Teaching Fellow (Veterinary Public Health)
MRCVS	Jennifer	Spielman	Teaching Fellow (Clinical Skills)
	Sopita	Sritawan	BVM&S GEP Administrator
MRCVS	Brittainy	Stebbing	Internship in Cardiopulmonary Medicine
	Sarah	Stewart	Veterinary Nurse

MRCVS	Fiona	Strachan	Lecturer in Anaesthesia
	Hannah	Streeter	Receptionist
	Glynis	Summers	Manager of Accounts
MRCVS	Victoria	Swift	Vet Clinician for Small Animal Practice
	Sally	Tait	Senior Secretary
	Lucy	Tait	Scottish Modern Apprentice- Stablehand x2
MRCVS	Sarah	Taylor	Senior Lecturer in Equine Orthopaedics
	Paula	Thompson	Equine Head Nurse
	Heather	Thomson	Curriculum Secretary (Years 2 and 3)
	Fiona	Thomson	Stable Hand
	Michelle	Thomson	Scottish Modern Apprentice - Receptionist
MRCVS	Michael	Thrusfield	Personal Chair of Veterinary Epidemiology
MRCVS	Isabelle	Truyers	Lecturer in Farm Animal Practice
	Willemijntje	Van-Wijde	Course Secretary
	Rosalie	Waller	Veterinary Nurse (Support)
	Hayley	Walters	Welfare & Anaesthesia Veterinary Nurse
	Natalie	Waran	Jeanne Marchig Chair of Animal Welfare Education
	Marianne	Watson	PA to Head of School
MRCVS	Rachel	Whittington	lecturer in Professional Studies
	Naomi	Wilcox	Centre Administrator
	Aislinn	Williams	Veterinary Nurse Trainee
	Erin	Williams	Senior Lecturer in Applied Veterinary Anatomy
	Neil	Wilson	Marketing Manager
	Kathleen	Wither	Accounts Assistant
	Alexandra	Wood	Veterinary Nurse (Medical)
	Colin	Wood	Laboratory Technician
MRCVS	Kerry	Woodhouse	Lecturer in Veterinary Anaesthesia
MRCVS	Samantha	Woods	Small Animal Surgeon
	Elizabeth	Wright	PG Administration Assistant
	Elizabeth	Wright	Pharmacist
	Lynne	Wylie	Sterile Services Assistant
MRCVS	Donald	Yool	Senior Lecturer
	Linda	Young	Administrative Secretary (Accounts)

ROYAL (DICK) SCHOOL OF VETERINARY STUDIES,
AND ROSLIN INSTITUTE
The University of Edinburgh
Easter Bush,
Roslin, Midlothian.
EH25 9RG

Tel: +44 (0) 131 6506241
Fax: +44 (0) 131 6507652
e-mail: david.argyle@ed.ac.uk

Mrs Christine Warman
Head of Education
Royal College of Veterinary Surgeons
Belgravia House
62-64 Horseferry Road
London
SW1P 2AF

25th January 2016

Edinburgh Accreditation Visitation November 2015

Dear Ms. Warman,

Thank you for your letter and report of the 14th of January. The senior management team have had time to consider the report and this letter represents our formal response.

First of all, we would like to thank the RCVS administration and the visitation team for the professional way this site visit was conducted. We would also like to thank the visitation panel for the many positive comments and commendations within the report, especially those that relate to quality of our staff and students.

We are in full agreement with the conclusions and comments within the report, but would like to highlight a number of recommendations that the visitation team made and our response to these:

Standard 1 – Organization

- As the School develops it is ***suggested*** that Management looks at clearer policies for membership and turnover of committee appointments, to further

enhance both the managerial and governance functions and assure inclusivity of all its processes.

- ***School Response***: We thank the committee for this valuable suggestion. In response we have now instructed HR and all chairs of committees to draw up clearer guidelines and policies for committee appointments and turnover. There will also be a clearer policy for appointment and turnover for Heads of Division.

Standard 7 – Admissions

- The School is ***encouraged*** to review the process of appointment to the admissions committee to ensure broad representation of faculty and develop a plan to provide regular turnover of committee members.

- ***School Response***: We thank the committee for this valuable suggestion and the dean of admissions is developing such a plan in line with the response above (under standard 1)

Standard 11 – Outcomes Assessment

- The School is ***encouraged*** to continue to look at creative ways or methods to gather employer feedback on the competence of graduates.

- ***School response***: As the committee will be aware, this is hugely challenging. Through the Veterinary Schools Council Education Committee, a national approach to this challenge is being explored. In addition, the appointment of a new administrator focussing on alumni relations and engagement with practitioners should also assist with this challenge.

Standard 13 – EMS

- Staff can be contacted from placements but there is no 24/7 cover. It is ***suggested*** that the School looks into the provision of a 24/7 contact number in case of emergency.

- ***School Response***: This is an excellent suggestion and we are no working with the University to identify how we implement such a system.

Again, we would like to thank the visitation team for their valuable comments.

Yours sincerely

David. J. Argyle

Head of School and Dean of Veterinary Medicine
Professor David J. Argyle BVMS PhD DECVIM-CA (Oncology) MRCVS

Royal College of Veterinary Surgeons Belgravia House 62-64 Horseferry Road London SW1P 2AF
T 020 7222 2001 **F** 020 7222 2004 **E** info@rcvs.org.uk **www.rcvs.org.uk**