Ethics in Veterinary Education: general *versus* professional skill?

Ana M Bravo del Moral
President of EAEVE

Ethics and the future Veterinary Professional
Vethics 2016
Utrecht, 19-20 May 2016

HISTORY OF EVALUATION OF VETERINARY ESTABLISHMENTS IN EUROPE

- **Until 1978** every country/Establishment offered a curriculum based on tradition, state regulations, etc.

- **1978:** Publication of *Directive 78/*1027*/EEC* and *Decision 78/1028/EEC* establishing the *Advisory Committee on Veterinary Training* (ACVT) that requires harmonization to guarantee a comparable level of veterinary training in the 9 EU members. Define minimum standards.

- **1985-1989***: Pilot evaluation* in 1 Establishment/ EU member.

- **1990:** adoption of a *permanent system of evaluation* under the umbrella of ACVT.

- **1994*:*** ACVT passes on the responsibility of evaluation to the *European Association of Establishments for Veterinary Education* (*EAEVE*).

- **1996:** ACTV create a Committee ACVT-EAEVE to revise the system.

- **2000:** The *Federation of Veterinarians of Europe* (*FVE*) joint EAEVE on the responsibility of running the ESEVT.

... 30 YEARS OF APPLICATION OF THE *EUROPEAN SYSTEM OF EVALUATION OF VETERINARY TRAINING* (ESEVT) IN 2015

EU REGULATED PROFESSIONS

- 78/1026/EEC: recognition of veterinary education

- 78/1027/EEC: minimum requirements of training

- 78/1028/EEC: Advisory Committee on Veterinary Training

- **2005/36/EC**: **Recognition of Professional Qualifications amended by 2013/55/EU**

  - Doctors
  - Nurses (general practice)
  - Dental practitioners
  - **Veterinary Surgeons**
  - Midwives
  - Pharmacists
  - Architects

1985 TO DATE

ESEVT
(EAEVE + FVE)

ETHICS IN DIRECTIVES
2005/36/EC & 2013/55/EU

L 354/132   EN   Official Journal of the European Union   28.12.2013

DIRECTIVE 2013/55/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 20 November 2013

amending Directive 2005/36/EC on the recognition of professional qualifications and Regulation (EU) No 1024/2012 on administrative cooperation through the Internal Market Information System ('the IMI Regulation')

(Text with EEA relevance)

'3.   Training as a veterinary surgeon shall provide an assurance that the professional in question has acquired the following knowledge and skills:

(b) adequate knowledge of the structure, functions, behaviour and physiological needs of animals, as well as the skills and competences needed for their husbandry, feeding, welfare, reproduction and hygiene in general;

(c) the clinical, epidemiological and analytical skills and competences required for the prevention, diagnosis and treatment of the diseases of animals, including anaesthesia, aseptic surgery and painless death, whether considered individually or in groups, including specific knowledge of the diseases which may be transmitted to humans;

(d) adequate knowledge, skills and competences for preventive medicine, including competences relating to inquiries and certification;

(e) adequate knowledge of the hygiene and technology involved in the production, manufacture and putting into circulation of animal feedstuffs or foodstuffs of animal origin intended for human consumption, including the skills and competences required to understand and explain good practice in this regard;

(f) the knowledge, skills and competences required for the responsible and sensible use of veterinary medicinal products, in order to treat the animals and to ensure the safety of the food chain and the protection of the environment.';

ETHICS IN DIRECTIVES
2005/36/EC & 2013/55/EU

L 255/120   EN   Official Journal of the European Union   30.9.2005

V.4. VETERINARY SURGEON

5.4.1. Study programme for veterinary surgeons

The programme of studies leading to the evidence of formal qualifications in veterinary medicine shall include at least the subjects listed below.

Instruction in one or more of these subjects may be given as part of, or in association with, other courses.

A. Basic subjects

— Physics

— Chemistry

— Animal biology

— Plant biology

— Biomathematics

NEW CURRICULUM IN 2017?
2018?

DIRECTIVE 2013/55/EU

(29) Article 38 is amended as follows:

(a) paragraph 1 is replaced by the following:

'1. The training of veterinary surgeons shall comprise a total of at least five years of full-time theoretical and practical study, which may in addition be expressed with the equivalent ECTS credits, at a university or at a higher institute providing training recognised as being of an equivalent level, or under the supervision of a university, covering at least the study programme referred to in point 5.4.1 of Annex V.

The Commission shall be empowered to adopt delegated acts in accordance with Article 57c concerning the amendment of the list set out in point 5.4.1 of Annex V with a view to adapting it to scientific and technical progress.

ETHICS IN DIRECTIVES
2005/36/EC & 2013/55/EU

B. Specific subjects

a. Basic sciences:

— Anatomy (including histology and embryology)

— Physiology

— Biochemistry

— Genetics

— Pharmacology

— Pharmacy

— Toxicology

— Microbiology

— Immunology

— Epidemiology

— Professional ethics

ESEVT IS A COMPETENCE-BASED EVALUATION PROCESS

ESEVT 'Uppsala' SOP May 2016

Table of contents

ECCVT

□ **13ᵗʰ October 2015, Brussels (21ˢᵗ meeting)**

- **Update on revision of Directive on professional qualifications**
  - ESEVT: the way forward (ENQA, National Accreditation Bodies, FVO DG Sante as observer)

- **ECCVT Objectives for next year (2016)**
  - Promotion Day-1 competences in the secondary EU legislation *(Annex 2 of ESEVT Uppsala SOP 2016)*

ECCVT POSITION PAPER ON ESEVT

European Coordinating Committee on Veterinary Training

ECCVT Newsletter, Special edition
January 2015

ECCVT FOCUS 2015

All members of the European Coordinating Committee on Veterinary Training (ECCVT) worked intensively during the last year on all matters related to veterinary education, including assurance of the quality of veterinary training. The "European Association of Establishments for Veterinary Education" (EAEVE), the "European Board of Veterinary Specialisation" (EBVS) and the "Federation of Veterinarians of Europe" (FVE) have put together their views on veterinary education and at the beginning of 2015 they urge policy makers and all stakeholders to support harmonisation of veterinary education in Europe, as a prerequisite to guaranteeing the same level of veterinary services across the whole of our continent.

ECCVT Statement on Veterinary Education

**Harmonisation of veterinary education:
fundamental for establishing EU citizens' trust in veterinary services**

*EAEVE and FVE provide the Standard for undergraduate veterinary education
The European System for the Evaluation of Veterinary Training is the tool*

ECCVT POSITION PAPER ON DAY ONE COMPETENCIES

European Coordination Committee for Veterinary Training (ECCVT)
Day One Competences

Forewords

A. Competence is a concept that integrates knowledge, skills and attitudes. Competence requires acquisition of technical skills but further involves applying relevant knowledge, and having the confidence and ability to transfer what has been learnt to a variety of contexts.

B. In order to facilitate for educational establishments to meet the requirements of the overall basic veterinary competence that the EU has established (Directive 2013/55/EU, Article 38, a-f) it needs to be broken down to more specific "Day One Competencies" which ought to be included in the Directive.

C. 'Day One Competence' is the minimum standard required and is the starting point for a variety of roles in the veterinary profession (e.g. as Practitioner, Hygienist, Scientist, National Veterinary Services Officer, Animal Welfare Officer, Designated Veterinarian, ..). After graduation, ongoing professional development will be needed in whichever field the new graduate decides to enter, and some roles may require postgraduate training and further formal qualifications (e.g. Diplomate of a European College, PhD).

D. A new graduate who has achieved day one competence should be capable to independently perform appropriate entry-level tasks and duties of the veterinary profession and confident enough to practise veterinary medicine at a primary care level on their own, while knowing when it is appropriate to seek direction from more experienced colleagues. New graduates are likely to need more time to perform some procedures. Support and direction from more senior colleagues should be available.

E. Veterinary educational establishments are responsible for developing the day one competence of their students and ensuring that they have met the competences by the time they graduate. They are greatly assisted in this by the practising arm of the veterinary profession, which provides extra-mural work placements so that students can practise applying these competences in the workplace.

ECCVT POSITION PAPER ON DAY ONE COMPETENCIES

F.   These day one competences are in agreement with the EU Directives, Regulations and Proposals related to veterinary professional qualifications, i.e.:

- Directive 2005/36/EC amended by Directive 2013/55/EU (on the recognition of professional qualifications);[i]

- Directive 2010/63/EU (on the protection of animals used for scientific purposes);

- Regulation 852/2004/EC (on the hygiene of foodstuffs);[ii]

- Regulation 853/2004/EC (on specific hygiene rules for food of animal origin);[iii]

- Regulation 854/2004/EC (on specific rules for the organisation of official controls on products of animal origin intended for human consumption);[iv]

- Regulation 1099/2009/EU (on the protection of animals at the time of killing);[v]

- Proposals on Regulation on Animal Health[vi] and Regulation on Official Controls[vii].

- OIE recommendations on the Competencies of graduating veterinarians ('Day 1 graduates') to assure National Veterinary Services of quality;[viii]

- Standards and Guidelines for Quality Assurance in the European Higher Education Area (2015)[ix]

ESEVT DAY ONE COMPETENCIES
Annex 2, ESEVT Uppsala SOP 2016

1. Day One Competences

1.1   Understand the ethical and legal responsibilities of the veterinary surgeon in relation to patients, clients, society and the environment.

1.2   Demonstrate a knowledge of the organisation, management and legislation related to a veterinary business.

1.3   Promote, monitor and maintain health and safety in the veterinary setting; demonstrate knowledge of systems of quality assurance; apply principles of risk management to their practice.

1.4   Communicate effectively with clients, the public, professional colleagues and responsible authorities, using language appropriate to the audience concerned.

1.5   Prepare accurate clinical and client records, and case reports when necessary, in a form satisfactory to colleagues and understandable by the public.

1.6   Work effectively as a member of a multi-disciplinary team in the delivery of services.

1.7   Understand the economic and emotional context in which the veterinary surgeon operates.

1.8   Be able to review and evaluate literature and presentations critically.

ESEVT DAY ONE COMPETENCIES
Annex 2, ESEVT Uppsala SOP 2016

1.9 Understand and apply principles of clinical governance, and practise evidence-based veterinary medicine.

1.10 Use their professional capabilities to contribute to the advancement of veterinary knowledge, in order to improve the quality of animal care and veterinary public health.

1.11 Demonstrate ability to cope with incomplete information, deal with contingencies, and adapt to change.

1.12 Demonstrate that they recognise personal and professional limits, and know how to seek professional advice, assistance and support when necessary.

1.13 Demonstrate an ability of lifelong learning and a commitment to learning and professional development. This includes recording and reflecting on professional experience and taking measures to improve performance and competence.

1.14 Take part in self-audit and peer-group review processes in order to improve performance.

1.15 Obtain an accurate and relevant history of the individual animal or animal group, and its/their environment.

1.16 Handle and restrain animal patients safely and with respect of the animal, and instruct others in helping the veterinary surgeon perform these techniques.

ESEVT DAY ONE COMPETENCIES
Annex 2, ESEVT Uppsala SOP 2016

1.17   Perform a complete clinical examination and demonstrate ability in clinical decision-making.

1.18   Develop appropriate treatment plans and administer treatment in the interests of the patients and with regard to the resources available.

1.19   Attend all species in an emergency and perform first aid.

1.20   Assess the physical condition, welfare and nutritional status of an animal or group of animals and advise the client on principles of husbandry and feeding.

1.21   Collect, preserve and transport samples, select appropriate diagnostic tests, interpret and understand the limitations of the test results.

1.22   Communicate clearly and collaborate with referral and diagnostic services, including providing an appropriate history.

1.23   Understand the contribution that imaging and other diagnostic techniques can make in achieving a diagnosis. Use basic imaging equipment and carry out an examination effectively as appropriate to the case, in accordance with good health and safety practice and current regulations.

ESEVT DAY ONE COMPETENCIES
Annex 2, ESEVT Uppsala SOP 2016

1.24   Recognise suspicious signs of possible notifiable, reportable and zoonotic diseases and take appropriate action, including notifying the relevant authorities.

1.25   Access the appropriate sources of data on licensed medicines.

1.26   Prescribe and dispense medicines correctly and responsibly in accordance with legislation and latest guidance.

1.27   Report suspected adverse reactions.

1.28   Apply principles of bio-security correctly, including sterilisation of equipment and disinfection of clothing.

1.29   Perform aseptic surgery correctly.

1.30   Safely perform sedation, and general and regional anaesthesia; implement chemical methods of restraint.

1.31   Assess and manage pain.

ESEVT DAY ONE COMPETENCIES
Annex 2, ESEVT Uppsala SOP 2016

1.32   Recognise when euthanasia is appropriate and perform it with respect of the animal, using an appropriate method, whilst showing sensitivity to the feelings of owners and others, with due regard to the safety of those present; advise on disposal of the carcase.

1.33   Perform a systematic gross post-mortem examination, record observations, sample tissues, store and transport them.

1.34   Perform ante-mortem inspection of animals destined for the food-chain, including paying attention to welfare aspects; correctly identify conditions affecting the quality and safety of products of animal origin, to exclude those animals whose condition means their products are unsuitable for the food-chain.

1.35   Perform inspection of food and feed including post-mortem inspection of food producing animals and inspection in the field of food technology.

1.36   Advise on, and implement, preventative programmes appropriate to the species and in line with accepted animal health, welfare and public health standards.

ESEVT DAY ONE COMPETENCIES
Annex 2, ESEVT Uppsala SOP 2016

2. Underpinning knowledge and understanding

In order to be able to undertake their professional duties effectively, new veterinary graduates will need a breadth of underpinning knowledge and understanding of the biological, animal and social sciences and laws related to the animal industries. This will include, but is not restricted to, the following:

2.1 Understanding of, and competence in, the logical approaches to both scientific and clinical reasoning, the distinction between the two, and the strengths and limitations of each.

2.2 Research methods and the contribution of basic and applied research to veterinary science.

2.3 The structure, function and behaviour of animals and their physiological and welfare needs, including healthy domestic animals, captive wildlife and laboratory-housed animals.

ESEVT DAY ONE COMPETENCIES
Annex 2, ESEVT Uppsala SOP 2016

2.4 A knowledge of the businesses related to animal breeding, production and keeping.

2.5 The aetiology, pathogenesis, clinical signs, diagnosis and treatment of the common diseases and disorders that occur in the common domestic species.

2.6 Awareness of other diseases of international importance that pose a risk to national and international biosecurity and trade.

2.7 Legislation relating to animal care and welfare, animal movement, and notifiable and reportable diseases.

2.8 Medicines legislation and guidelines on responsible use of medicines, including responsible use of antimicrobials and anthelmintics.

2.9   The principles of disease prevention and ==the promotion of== health and ==welfare.==

2.10   Veterinary public health issues, including epidemiology, transboundary epizootic diseases, zoonotic and food-borne diseases, emerging and re-emerging diseases, food hygiene and technology.

2.11   Principles of effective interpersonal interaction, including communication, leadership, management and team working.

2.12   ==The ethical framework within which veterinary surgeons should work, including important ethical theories that inform decision-making in professional and animal welfare-related ethics.==

PRINCIPLES OF THE ESEVT

- Focuses on undergraduate veterinary education to ensure a comparably high standard throughout the EU making the mutual recognition of qualifications possible (**EU Directives 36/2005 & 55/2013**).

- The only Europe-wide profession specific evaluation system.

- Carried out by the **EAEVE** in co-operation with the **FVE**.

- Final decision taken by an independent body: **ECOVE** (**E**uropean **C**ommittee on **V**eterinary **E**ducation).

- Evaluations should be carried out periodically at 7 year intervals.

- Based on the application of Standard Operating Procedures (SOPs) previously approved and regularly updated.

STRUCTURE OF THE ESEVT
SOP Uppsala 2016

☐ **EVALUATION OF QUALITY OF TRAINING and QUALITY ASSURANCE**

- *Accreditation* in case of no Major Deficiency
- *Conditional Accreditation* in case of 1 single Major Deficiency
- *Non Accreditation* in case of several Major Deficiencies

Four types of evaluation are organised by the ESEVT
- Full Visitation
- Re-visitation
- Consultative Visitation
- Interim Report

SELF EVALUATION REPORT

ESEVT's principal aim in **setting standards**, and evaluating the Establishment against them, is **to ensure** that the Establishment:

- is well managed

- has adequate financing to sustain its educational, research and social commitments

- has appropriate resources of staff, facilities and animals

- provides an up to date professional curriculum

- provides an appropriate learning environment

- operates a fair and reliable assessment system

- operates *ad hoc* QA and quality enhancement mechanisms

SELF EVALUATION REPORT

1. OBJECTIVES & ORGANISATION

- Strategic Plan & SWOT analysis (list of objectives, plan, timeframe, indicators)
- Reference to Day-one competencies
- Responsible for veterinary curriculum and responsible for Veterinary Teaching Hospital (VTH) must hold a veterinary degree.
- Organisational structure must allow input from staff, students and stakeholders

2. FINANCES

- Transparent business plan
- Expenditure and Revenues: administration, research, services ...
- Enough budget to meet the objectives and guarantee the teaching, equipment and facilities update
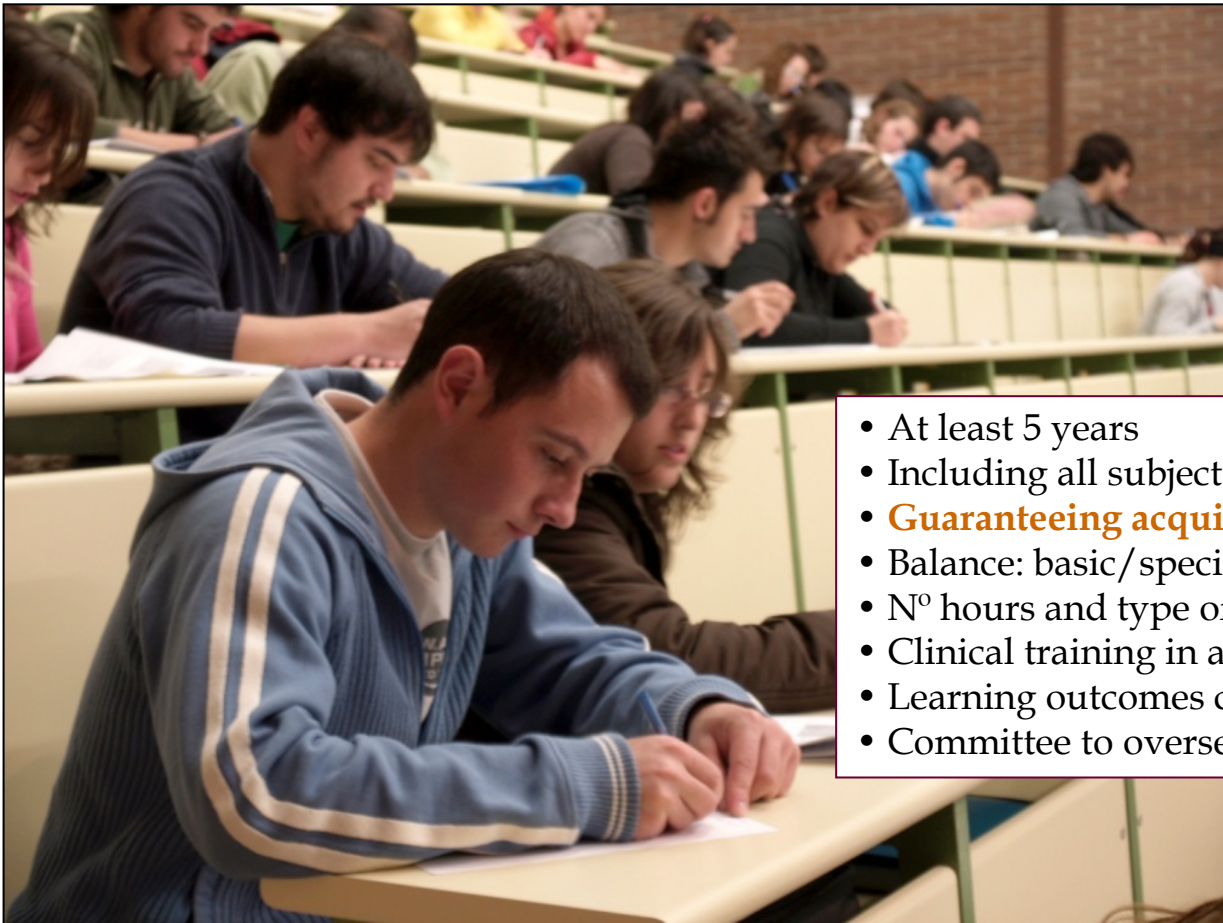
Self Evaluation Report

3. CURRICULUM

- At least 5 years
- Including all subjects listed in Directive 36/2005/EU
- **Guaranteeing acquisition of Day-one competencies**
- Balance: basic/specific subjects, lectures/practicals
- Nº hours and type of practicals (intramural, extramural)
- Clinical training in all domestic species
- Learning outcomes communication to staff & students
- Committee to oversee (QA) and manage the curriculum

Self Evaluation Report

4. FACILITIES & EQUIPMENT

- Buildings, facilities and equipment well maintained and updated.
- Running Hospital 24/7 whole year round: pharmacy, diagnostic imaging, anaesthesia, internal medicine, intensive/critical care, surgeries, ambulatory services, isolation units and necropsy facilities.
- Mobile clinic.
- Access to the main food producing animals (teaching farm or agreement with external farm/s)
- High standard in biosecurity, breeding and animal welfare of faculty and external facilities (slaughterhouses, farms, industries..)
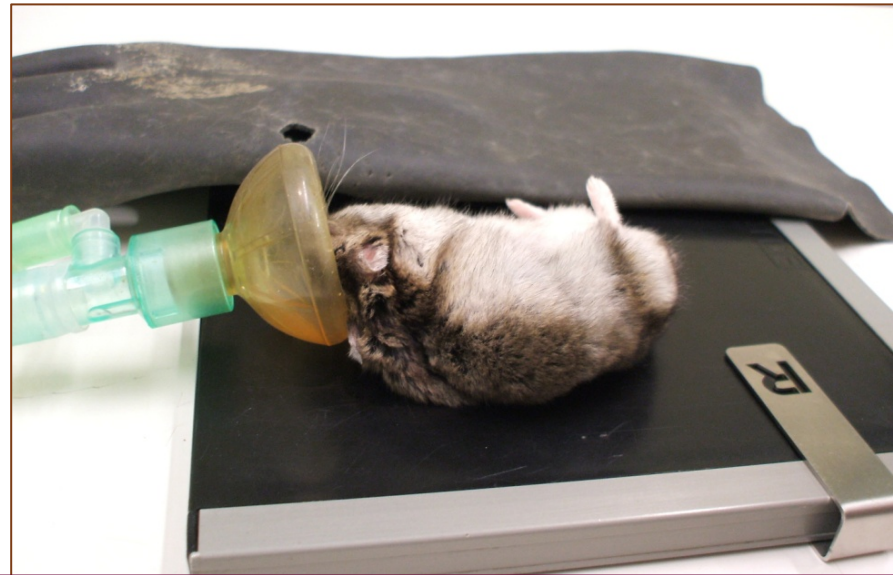
5. ANIMAL RESOURCES & TEACHING MATERIAL OF ANIMAL ORIGIN

- Adequate number and variety of animals (healthy, diseased, cadavers, materials) to meet the objectives
- Guarantee clinical hands-on training of students in all domestic species

  INDICATORS: animals/students, hospitalizations/students, consultations/students, necropsies/students, etc.

- Supportive medical record system (teaching, research, services)

6. LEARNING RESOURCES

- State-of-the-art information resources (teaching, research, services, continuing education)
- Library with qualified librarian and IT unit
- Timely resources of information (print, Emedia, Elearning platform) easily available for staff and students (Wi-Fi)

SELF EVALUATION REPORT

7. STUDENT ADMISSION, PROGRESSION & WELFARE

- Number of students consistent with resources (buildings, facilities, equipment, staff, clinical caseload….)
- Objectives, curriculum, admission requirements, criteria and procedures public and clear.
- Admission procedure consistent, fair and free of discrimination.
- Monitoring of progression and drop-out of students.
- Support to students needs (physical, emotional, welfare)
- Possibility of student feed-back

8. STUDENT ASSESSMENT

- Assessment tasks and grading criteria: clear, public and timely available to students
- Explicit mechanism to pass based on learning outcomes
- Explicit mechanism to appeal
- Valid and reliable methods of formative and summative assessment
- Significant value of direct assessment and control of clinical skills and **Day One Competences**

9. ACADEMIC & SUPPORT STAFF

- Appropriate number of qualified and prepared staff to deliver the educational programme
   Indicators: Full Time Equivalents of teaching staff/ students, Academic/Support Staff
- Training and qualification (good teaching and evaluation practices, learning & e-learning resources, biosecurity & QA procedures)
- Most teachers must be veterinarians
- Academic positions must offer stability, continuity, and competence of the academic staff
- Balanced workload of teaching, research and services
- Well-defined, comprehensive and publicised programme for the professional growth and development of academic and support staff
- Promotion criteria for academic and support staff must be clear and explicit

10. RESEARCH PROGRAMMES, CONTINUING AND POSTGRADUATE EDUCATION

- Significant and broad research activities of staff (research-based teaching)
- All students must be trained in scientific method and research techniques relevant to evidence-based veterinary medicine
- All students must have opportunities to participate in research programmes
- Establishment must provide advanced postgraduate degree programmes (PhD, internships, residencies and continuing education programmes

SELF EVALUATION REPORT

11. OUTCOME ASSESSMENT AND QUALITY ASSURANCE

THE ESTABLISHMENT MUST:
- Have a <u>policy for quality assurance</u>, public and part of their strategic management.
- Deliver programmes to encourage <u>students' active role in the learning process</u>.
- <u>Apply pre-defined and published regulations covering student "life cycle"</u>(admission, progression, recognition and certification).
- Assure of <u>the competence of their teachers</u> and apply fair and transparent processes for the recruitment and development of the staff.
- Collect, analyse and use relevant information for the <u>effective management of their programmes</u>.
- <u>Publish information about their activities</u>, including programmes, which is clear, accurate, objective, up-to date and readily accessible
- <u>Monitor and periodically review their programmes</u> to ensure that they achieve the objectives (continuous improvement).
- <u>Undergo external quality assurance</u> in line with the ESG on a cyclical basis.

Kyoto Gyoen – KYOTO - JAPAN

MAIN STEPS OF THE ESEVT
Full visitation

EAEVE

❑ **VISIT TO THE FACULTY (FACULTY AND EXPERTS) – 5 DAYS**

- **Group of 8**: **1** expert in Basic Sciences, **1** expert in Food Safety and Quality, **2** experts in Clinical Sciences (SA & LA), **1** practitioner, **1** expert in QA, **1** student + **1** ESEVT coordinator
- **Objective**: verify and complete on the spot the SER
- **5 days visitation**   Monday: arrival of experts, 1st meeting, Dean's dinner
  Tuesday to Thursday: visit to Faculty and external facilities, meeting with staff and students
  Friday: *Chairperson* informs orally the conclusions
  Evaluation of the process and team (Post-visit feedback) by the Faculty

MAIN STEPS OF THE ESEVT
Consultative visitation

- Opportunity for non European countries
- <u>Pre-requisite for new members</u>
- Advisory/audit visit
- Team: 2 experts
- Visit: 2 days
  - Day 1: facilities, equipment
  - Day 2: meetings

official, not public but useful report

MEMBERS OF EAEVE

May 2016

Group 1. Ireland **1**, The Netherlands **1**, UK **7**

Group 2. Portugal **6**, Spain **11**

Group 3. *Albania 1*, Greece **2**, *Israel 1*, Italy **13**, Romania **4**

Group 4. Belgium **2**, France **4**

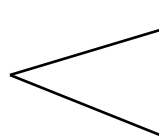**Group 5.** Austria **1**, Germany **5**, *Switzerland 1*

Group 6. Denmark **1**, Estonia **1**, Finland **1**, Latvia **1**, Lithuania **1**, *Norway 1*, Sweden **1**

Group 7. Croacia **1**, Czech Republic **2**, Hungary **1**, Poland **4**, Slovak Republic **1**, Slovenia **1**

Group 8: *Bosnia-Herzegovina 1*, Bulgaria **2**, *FYROM 1*, *Turkey 13*, *Serbia 1, Jordan 1*

Italics: non EU members

ESTABLISHMENTS
96 in 34 countries
75 in EU

ESTABLISHMENTS' STATUS

May 2016

- **MEMBERS: 96**
  - **Non evaluated (yet) by the ESEVT: 7 (7.3%)**
  - **Evaluated by the ESEVT: 89 (92.7%)**
    - **Approved: 62 (64.6%)**
    - **Conditionally approved: 6 (6.25%)**
    - **Non approved: 21 (21.8%)**

APPROVED ESTABLISMENTS IN EU

November 2015

|			
Austria	1 / 1	Belgium	2 / 2
Bulgaria	2 / 1	Croatia	1 / 1
Denmark	1 / 1	Czech Republic	2 / 2
Finland	1 / 1	Estonia	1 / 1
Germany	5 / 5	France	4 / 2 (1)
Hungary	1 / 1	Greece	2 / 1
Italy	13 / 13	Ireland	1 / 1
Lithuania	1 / (1)	Latvia	1 / 0
Portugal	6 / 1	Poland	4 / 3
Slovak Republic	1 / 0	Romania	4 / 1 (1)
Sweden	1 / 1	Slovenia	1 / 1
The Netherlands	1 / 1	Spain	11 / 8
		UK	7 / 7

Establishments: Total / Approved + (Conditionally Approved)

75 /   56   +   (3)   =   59   **78.7%**

Future of the Evaluation System

- **AVMA & COE** (*American Veterinary Medical Association and its Committee on Education*)

- **AVBC** (*Australasian Veterinary Boards Council*)

- **SAVC** (*South African Veterinary Council*)

- **RCVS** (Royal College of Veterinary Surgeons)

- **ESEVT** (*EAEVE/FVE*)
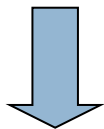
Development of a GLOBAL ACCREDITATION SYSTEM

Thanks for the attention

Roman Wall in Lugo, I century a.C., Heritage of Humanity