# Standard ECVS Residency Programme LA - general Ghent University

(adapted May 2021)

	page
Content	1
General Information	1
Element 1: Duration of training Element 2: Supervision by ECVS Diplomate Element 3: Case load of adequate size, standard and variety Element 4: Supervised training in Anaesthesia Element 5: Supervised training in Diagnostic Imaging Element 6: Supervised training in Pathology Element 7: Supervised training in Internal Medicine Element 8: Presentation and Publication of Clinical Research Element 9: Participate in Continuing Education meetings	2 3 4 4 5 5 6 6 6
Facilities, services and equipment	7

#### **GENERAL INFORMATION**

#### Adress:

Department of Surgery and Anaesthesiology of Domestic Animals Faculty of Veterinary Medicine Ghent University Salisburylaan 133 B-9820 Merelbeke

Belgium

Tel: \*32 9 2647618 Fax: \*32 9 2647794

Contact person: Ann Martens (ann.martens@ugent.be)

The department of Surgery and Anaesthesiology of Domestic Animals of Ghent University runs a large animal clinic (90% equine, 10% ruminants) and organises a Large Animal (general) ECVS residency program offering the 13 training elements as described in the ECVS training brochure.

Under normal circumstances, a new residency position will be declared open once every 2 to 3 years.

Prospective residents can be admitted to the Standard LA Residency Programme of Ghent University if they:

- are a graduate veterinarian of a veterinary college recognised by ECVS and licensed to practise in a European country
- have completed a one-year standard rotating internship or have at least two years of clinical training in a well equipped multiperson large animal practice.
- Have a good command of the English language
- A basic command of the Dutch language at the start of the program is an advantage, and this should evolve into a good written and spoken command of the Dutch language after the first year of residency training.

A basic command of the French language is advised as large part of the clientele of the clinic is French-speaking.

### TRAINING ELEMENT 1: DURATION OF TRAINING

FIRST YEAR OF RESIDENCY

The standard residency program starts on August 1st and includes 156 weeks (3 years or 52 weeks) of training (including vacations).

The ECVS resident is inscribed as a student of Ghent University and receives a grant (monthly payment of 1550 euro, tax-free). As the academic year only starts around the 20<sup>th</sup> of September, there will be no payment for the period preceding this date.

Surgical service & lameness rotations Anaesthesiology Diagnostic imaging Pathology Research Vacation	36 4 2 2 4 4
SECOND YEAR OF RESIDENCY	WEEKS
Surgical service & lameness rotations Diagnostic imaging Pathology Internal medicine External rotation Research	36 2 2 2 2 2 4

**WEEKS** 

Vacation	•
THIRD YEAR OF RESIDENCY	WEEKS
Surgical service & lameness rotations Internal medicine External rotation Research Vacation	36 2 4 6 4

Limited alterations to the above mentioned program are possible External rotations can be performed in private surgical institutions or at Universities. Supervision by and ECVA or ACVS boarded surgeon are mandatory. Travel and accommodation costs are reimbursed up to a reasonable limit.

4

### TRAINING ELEMENT 2: SUPERVISION BY ECVS DIPLOMATES

Vacation

The ECVS resident will be supervised by 4 ECVS Diplomates:

Ann Martens, DVM, PhD, Dip ECVS Frederik Pille, DVM, PhD, Dip ECVS Lieven Vlaminck, DVM, PhD, Dip ECVS, Dip EVDC Maarten Oosterlinck, DVM, PhD, Dip ECVS, Dip ECVSMR

There will be ample interaction between the diplomates and the trainee in the diagnosis and the treatment of patients. During the first year of training, the diplomate will be primary surgeon for nearly all surgical procedures (with the exception of minor surgeries such as castrations, small wounds or tumour excisions). The trainee will be involved as an assistant secondary surgeon. Over the second and third year of training the resident will gradually become primary surgeon for more and more surgical procedures, depending on the type of intervention and the individual progression of the trainee.

# TRAINING ELEMENT 3: CASE LOAD OF ADEQUATE SIZE, STANDARD AND VARIETY

The department of Surgery and Anaesthesiology is a busy clinical department and guarantees exposure of each trainee to at least 100 new surgical procedures and 20 in-depth lameness investigations each year. The case-load of the department is however much higher and has a good variety of specialist orthopaedic and soft tissue procedures. Besides this, the resident will also be exposed to many non-specialist procedures (Total number of specialist and non-specialist procedures ca. 900/year)

3

Large animal residents are mainly exposed to equine surgeries but there is still an adequate case-load of bovine surgeries (ca. 100-150 /year). The resident is involved in all aspects related to the surgery, including the examination of the patient, the communication with the client, the decision to perform surgery, the surgical procedure and the postoperative care during the hospitalisation period.

The resident is expected to fully contribute to the emergency service provided by the clinic. This includes the care of the hospitalized patients, the examination and treatment or surgery of emergency cases in the evening, at night and on weekend and holidays. The first year of residency emergency surgeries are always performed under the supervision of a diplomate. The second year of residency some surgeries can be performed independently and the third year of residency the resident assumes full responsibility for the emergency service. There will be no financial compensation for participation in the emergency service.

Besides his/her education in surgery, the resident is also involved in the education of the veterinary medicine students during the examination and treatment of clinical patients. This also includes participation to the practical classes and case discussions for the final year veterinary students.

### TRAINING ELEMENT 4: SUPERVISED TRAINING IN ANAESTHESIA

A total of 4 weeks (160 hours) is devoted to large animal anaesthesiology (first year of residency). During the anaesthesiology rotation the resident participates in:

- the daily pre-operative clinical assessment of the patients for general anaesthesia
- the sedation, local and regional analgesia in patients undergoing standing surgical procedures (e.g. laparoscopies,...)
- the premedication, induction of anaesthesia, maintenance of intravenous and gas anaesthesia (including the use of anaesthetic monitoring equipment) and the recovery of patients undergoing recumbent surgical procedures.
- the management of anaesthetic accidents and emergencies
- the postoperative pain management of hospitalised patients
- the journal clubs, book readings and case-presentations organised by the anaesthesia staff members.

The anaesthesia rotation is accomplished within the department of surgery and anaesthesiology and is supervised by two Diplomates:

- Frank Gasthuys, DVM, PhD, Dip ECVA
- Stijn Schauvliege, DVM, Dip ECVA

### TRAINING ELEMENT 5: SUPERVISED TRAINING IN DIAGNOSTIC IMAGING

A total of 4 weeks (160 hours) are exclusively devoted to the study of diagnostic imaging. During the first year of residency, 2 weeks will be spent at the

department of Diagnostic Imaging of the Faculty. The resident will participate in:

- routine and more specialised diagnostic procedures (radiography, contrast radiography, fluoroscopy, ultrasonography, CT, ...) of the cases presented at the clinic. Both the imaging techniques and the interpretation of the images will be covered.
- weekly film reading sessions of orthopaedic cases.
- the sessions on radiation safety (if the resident did not attend these as a student).

These two weeks are supervised by three diplomates:

- Jimmy Saunders, DVM, PhD, Dip ECVDI
- Els Raes, DVM, PhD, Dip ECVDI
- Katrien Vanderperren, DVM, PhD, Dip ECVDI

Large animal MRI facilities are also available at the department but the case load is rather limited (only recumbent MRI). Therefore two additional weeks will be devoted to the study of MRI at another centre with MRI facilities abroad.

# TRAINING ELEMENT 6: SUPERVISED TRAINING IN PATHOLOGY

A total of 4 weeks are devoted to gross pathology, microscopic pathology and cytology (2 weeks in the 1° year and 2 weeks in the 2° year of training). This training will be performed in the department of Veterinary pathology of the Faculty of Veterinary Medicine of Ghent University, under the direct supervision of 2 diplomates:

- Koen Chiers, DVM, PhD, Dip ECVP
- Leen Van Brantegem, DVM, PhD, Dip ECVP

## TRAINING ELEMENT 7: SUPERVISED TRAINING IN INTERNAL MEDICINE

A total of 4 weeks will be devoted exclusively to the study of internal medicine: 2 in the second and 2 in the third year of training. These weeks will be spent at the department of internal medicine of the Faculty, where the trainee will actively participate in the examination and treatment of all routine and emergency cases.

Moreover, the trainee is expected to follow the internal medicine examinations of his/her patients over the entire residency period.

The internal medicine training is directly supervised by two diplomates:

- Gunther Van Loon, DVM, PhD, Dip ECVEIM
- Ellen Paulussen, DVM, Dip ECVEIM

- Zoe Neuckermans, DVM, Dip ECVEIM

### TRAINING ELEMENT 8: PRESENTATION AND PUBLICATION OF CLINICAL RESEARCH

The resident will be involved in at least one research project that contributes to the advancement of veterinary surgery. The subject will be discussed with the trainee at the start of the residency program and sufficient time will be allowed to accomplish the experimental work, prepare the presentations and write the articles for peer reviewed scientific journals. In the first 2 residency years, 4 weeks are reserved exclusively for research, but more hours can certainly be devoted to the research work during the other training weeks of the program. During the last residency year, 6 weeks can be devoted to research to complete the publications/

Depending on the subject, the original research will result in either one or two first authored publications in double peer reviewed scientific journals. In case only one publication can be made from the project, either a case-report should be written or the resident can become second author of an article from a colleague when there is active participation in his/her research.

The resident will present the results of his/her research at the ECVS meeting of his/her second or third year of residency. The resident is also encouraged to present his/her work at other scientific meetings. Over the 3 years of training, the resident will complete a total of 5 presentations. Each year, a resident seminar is organised and the resident can also present at continuing education meetings for graduated veterinarians.

## TRAINING ELEMENT 9: PARTICIPATION IN CONTINUING EDUCATION MEETINGS

The resident is expected to:

- Actively participate in the journal clubs / book readings / case presentations that are held at the department throughout the year (weekly basis).
- Participate in at least 4 continuing education meetings. The following courses are advised:
  - Basic and advanced AO courses
  - One arthroscopy course
  - One laparoscopy or upper respiratory course

The costs of a maximum of 4 continuing courses will be paid by the department on condition that the resident reduces travel and accommodation expenses as much as possible

 Participate to 2 or 3 ECVS annual scientific meetings. Costs for the ECVS meetings will be paid by the department on condition that the resident reduces travel and accommodation expenses as much as possible - Perform external rotations: a minimum of 4 and a maximum of 8 weeks should be spent on external rotations. The external rotations should preferably be performed in the second and third year of residency training. They should have an international character and should include supervision by ECVS or ACVS recognised diplomates. The travel and accommodation costs will be paid by the department on condition that the resident reduces travel and accommodation expenses as much as possible

#### **FACILITIES, SERVICES AND EQUIPMENT**

The entire large animal clinic (Department of Surgery and Anaesthesia of Domestic Animals, Department of Obstetrics, Reproduction and Herd Health, Department of Internal Medicine and Clinical Biology of Large Animals) has approximately 120 horse boxes and 60 places for cattle (large boxes and standing slots).

#### Surgery and Anaesthesia facilities

The clinic of the department of surgery and anaesthesiology of domestic animals has a mixed equine and bovine clientele (90% horses, 10% ruminants). Surgeries are performed in 3 surgical theatres (2 equine - 1 ruminants) equipped with 2 tilting operating tables and a stock for standing surgical procedures. There are three padded recovery boxes. The surgical section also has a separate room for patient preparation, a central facility for cleaning, autoclaving and storing of surgical instruments and equipment, and a scrub room.

The following equipment is available:

- 5 general anaesthetic apparatus with respirator for large animals + 3
   general anaesthetic apparatus with respirator for foals & small ruminants
- 4 Datex S/5 multiparameter anaesthetic monitors (incl ECG, invasive and noninvasive blood pressure, pulse oximetry, capnography, temperature and respiratory gas analysis)
- 1 Radiometer ABL5 for blood gas analysis
- 1 LiDCO-Plus monitor for measurement of cardiac output
- 1 digital radiographic unit (SoundEklin) and 1 C-scope.
- 2 electrocoagulation units and 1 coblation device
- All necessary equipment for fracture repair, arthroscopy and laparoscopy, including battery-driven power-drilling, shaver, Ligasure, Locking plates,.... All arthroscopy and laparoscopy images are digitally recorded.
- A laser and 2 cryosurgical unit
- All basic and specialised dental equipment

#### Imaging services

Imaging services are provided by the Department of Medical Imaging of Domestic Animals equipped with appropriate equipment for comprehensive diagnostic imaging, including Digital radiography, Ultrasonography, Computed Tomography (standing and recumbent) and MRI (recumbent).

#### Pathology services

Anatomo-pathology and cytology services are provided by the Department of Pathology. Clinical pathology services are available in the different large animal clinics. Each clinic operates a biochemical laboratory and a haematological laboratory.

#### Internal Medicine services

The department of internal medicine has several separate examination rooms with up-to date equipment including:

- Several endoscopes and digital image recording
- Treadmill and overground endoscopy
- Electromyography
- Magnetic stimulator for transcranial magnetic stimulation (examination of neurological patients)
- High quality Doppler ultrasound machines for abdominal, thoracic and cardiac ultrasonography

#### Library

The libraries of the different clinics and the library of the faculty contain all commonly used surgical textbooks and periodicals. The residents have free access to this library and to the complete electronic data services for on-line retrieval of scientific publications (access to Internet and Central University Library).

#### Medical records

Medical records are maintained of all cases. These records are stored in a digital archive which is open to all residents.