

## Additional information

### **Residency Training Programme in Veterinary Behavioural Medicine – Residency ECAWBM (BM)**

The Faculty of Veterinary Medicine of Ghent University offers a position for a residency for 3 years of the European College of Animal Welfare and Behavioural Medicine (ECAWBM) sub-specialty Behavioural Medicine.

**Start: April 2022**

#### **STANDARD RESIDENCY TRAINING PROGRAMME (SRTP) WITH THE ECAWBM (BM)**

The SRTP will be conducted under the supervision and close support of Prof. Dr. Anouck Haverbeke, EBVS© European Veterinary Specialist in Behavioural Medicine.

The resident will assist behavioural consultations at UGent led by the supervisor, before handling consultations by himself. The training program will include multiple externships (UK, Scotland, France) allowing the resident to gain experience with highly experienced specialists in the field of veterinary behavioural medicine.

This SRTP will focus on two research projects during the residency:

(1) the effect of Transcranial Magnetic Stimulation (TMS) on neuronal functions in canine anxiety. The results of neuronal functions and dopamine concentrations will be analyzed before and after treatment with TMS.

(2) potential plasma biomarkers of canine anxiety. After having conducted a literature review of the different canine anxiety biomarkers, the most promising biomarkers will be tested on dogs participating at the TMS study.

Results of the projects arising from this area of research will be presented at the annual ECAWBM congresses and should lead to at least two publications in peer-reviewed journals.

#### **Background information about the institution or practice**

The SRTP will take place at the Veterinary Faculty of Ghent University (UGent). The Veterinary Behavioural Medicine Specialty is led by Prof. Haverbeke, under supervision of Prof. Jimmy Saunders, head of the Department of Morphology, Medical Imaging, Orthopaedics, Physiotherapy and Nutrition. The Department hosts the Specialty of Behavioural Veterinary Medicine within UGent, with emphasis on the multi-disciplinarity aspect, where behaviour will be closely collaborating with radiology, neuroimaging, pain clinic, nutrition, neurology as well as internal medicine.

UGent provides the great opportunity to have behavioural cases in all species (dogs, cats, exotics and horses). Additionally, the resident will also have the possibility to collaborate with some external specialists, in order to have a full view of the different species and the behavioural clinical possibilities and reach easily 100 clinical behavioural cases per year.

The consultation room of the behavioural consultations allows the presence of maximum 3 additional students (resident included). In this consultation room, a special window has been built, inter-connected to an adjacent room through microphones and a flat screen. This allows the students to assist the more difficult behavioural consultations (e.g. aggressive animal behaviour) in all security,

without disturbing the owners or the animals. After each behavioural consultation, the supervisor takes time to resume the consultations with the resident and the students. The resident will be able to experience clinical teaching by organizing specific workshops to a small number of last year students. The topic will be decided together with the resident, in function of his own interests, and the clinical relevance for the students. The resident will collaborate on research projects, actually being conducted at the department, as described in the brief overview above.

### **Taught components**

Depending on the resident's background, the resident will receive the opportunity to attend different courses at the Veterinary Faculty of Ghent University on various topics.

The resident will teach workshops on specific topics about behavioural medicine to small groups of veterinary students. The specific topics will be further established with the resident.

Veterinary master theses and research projects are regularly supervised by the department. The resident will be requested to collaborate in the supervision and follow-up of these master theses.

The supervisor will monthly teach postgraduate veterinary courses in animal behaviour and veterinary behavioural medicine for dogs, cats and horses ([www.formavet.be](http://www.formavet.be)). The resident will be invited to participate at these teaching days.

The resident will attend the ECAWBM annual congresses during the time of the residency (<https://www.evcbmaw.org/>: 2022 - Mallorca; 2023 - Pisa; 2024 - Paris) and at least one other congress about animal behaviour and welfare per year.

Finally, the American College of Veterinary Behaviorists is regularly organizing ACVB webinars on behavioural medicine. The resident will be encouraged to follow these webinar series on a regular basis.

### **Clinical training**

The resident will assist at least 30 behavioural consultations as an observer of its supervisor, before handling consultations by himself. The resident will write up the case histories after each behavioural consultation.

After approval of the supervisor, the resident will be allowed to conduct behavioural consultations at UGent by himself (Stage 2).

The resident will spend at least 60% of the time engaged in clinical activities and will see a minimum of 100 new consultations a year and conduct follow-up with these cases as required. The resident will make sure to gather a balanced number of behavioural evaluations in all required species throughout the residency.

The supervisor has concurrently developed her own private referral behavioural practice (dogs, cats and horses) in Belgium and offers the resident the opportunity to join in and conduct part of her SRTP in it. Additionally, the resident will have the possibility to assist behavioural consultations for dogs and cats at ENVA (Ecole Nationale Veterinaire Alfort, Paris, France) and at IVC Evidensia (the Netherlands). Clinical behavioural consultations on exotic pets will be followed at the Exotics Medicine Service at ENVA (Ecole Nationale Vétérinaire Alfort, Paris, France).

During the last year, the resident will be hosted during 2 months at Lincoln University, where he/she will have the opportunity to assist behavioural consultations.

Finally, to ensure an adequate number of equine cases, Horse Trust, has agreed to support the resident throughout the residency during 2 months. The resident will also be able to assist behavioural cases at a French horse clinic (<https://chve-livet.com/>).

### **Research**

The department is conducting research on SPECT brain imaging and TMS in canine anxiety since 2001, under supervision of Dr. Peremans. First studies are showing positive results of the use of neuromodulator techniques in dogs with anxiety disorders that do not respond sufficiently to conventional treatments.

Firstly, the resident will be part of the team and collaborate in research where the effects of Transcranial Magnetic Stimulation (TMS) on neuronal functions and dopamine concentrations are assessed on dogs before and after treatment with TMS. The resident will conduct, together with master theses students, the data analyses of the collected results. This way, the resident will learn about conducting research protocols as well as how to appropriately handle data.

The resident will additionally conduct a comparative literature research regarding advantages, disadvantages and field possibilities of TMS, tDCS (Transcranial Direct Current Stimulation) or other available neuromodulator techniques.

Secondly, the resident will focus on potential plasma biomarkers of canine anxiety. As literature shows discrepancies and divergent results concerning the potential use of biomarkers of canine anxiety, we aim to verify whether some biomarkers might be applicable and useful on the field for veterinary specialists in order to follow-up of anxious canine patients. The resident will firstly conduct a thorough literature review. Based upon this review, the most promising biomarkers will be tested on dogs participating at the TMS study.

Results of the projects arising from this area of research will be presented at the annual ECAWBM congresses and should lead to at least two publications in peer-reviewed journals.

The supervising diplomate and the other veterinary specialists who have agreed to support the resident throughout the residency have the required expertise to supervise and offer the resident additional support in larger-scale research projects. UGent has a library which can provide the necessary access to peer-reviewed articles.

### **Teaching and presentation**

Clinical teaching experience will mainly take place at UGent, where the resident will have the possibility to teach lectures and workshops to small groups of veterinary students. Punctual discussions with the students occurring during behavioural medicine consultations are part of their training as well. The resident will be expected to help supervising veterinary thesis in the fields of behavioural medicine.

The resident will have the possibility to participate in the resident activities (study days, summer camp, annual congress) organised by the ECAWBM.

The resident will also be invited to give a presentation/year at the small animals resident meeting that is organised every week.

### **Other activities available for residents**

An interesting topic to be further developed is the practical application of Animal Friendly Practice for dogs, cats, exotics and horses. Workshops can be developed for small groups of veterinary students, as well as for veterinary practitioners and animal owners, in order to decrease the stress of the animals during the consultation and hence improve welfare of animals and humans (One Welfare Project).

The resident is welcome to update informative leaflets about chosen aspects on behaviour in dogs, cats, horses and exotic pets, intended for pet owners with the aim to help them understand and meet their pets' behavioural needs.

A weekly follow-up of the behavioural consultations with the supervisor will be foreseen. No other requirements are expected from the resident (no providing out of hours service).

### **Library access**

Full text internet access to all the journals of the veterinary sciences and most human medical journals is available on site. The veterinary faculty library has a large collection of textbooks and veterinary journals. The resident will have access to these libraries.