# Extra-mural studies with the VLA – a guide for students



The VLA and co-ordinators of university extra-mural studies (EMS) are keen that veterinary students should attend VLA Regional Laboratories (RLs) and develop their knowledge and understanding of the processes of disease investigation in a variety of mainly farm animal species.

Veterinary students from UK vet schools are encouraged to contact a RL to arrange a visit for one week as part of their EMS. Contact details can be found on the VLA website.

It is understood that there are no specific learning objectives designated by EMS co-ordinators and that students should be consulted to establish their specific principal learning objectives - given that students may visit the RLs at different stages of their training and with varying levels of knowledge and experience.

Students are encouraged to visit during the latter part of their clinical training but this will inevitably vary from student to student. Usually up to two vet students may attend at any one time.

The workload is seasonal and variable. Students are encouraged to apply well ahead to organise the various administrative procedures that are required.

# Primary learning objectives

- To provide students with information about the role of VLA and its relationship with private veterinary surgeons, the agricultural industry and government. In particular the surveillance functions of VLA and how they are likely to engage with the Agency after qualification.
- To provide students with practical experience in post mortem technique, gross pathology and descriptive terminology.

In covering the primary objectives the following points will be considered:

- The role of VLA with special reference to surveillance (e.g. what form does active, scanning and targeted surveillance take and why it is important), zoonotic disease, animal welfare, notifiable disease, and food safety.
- Funding of VLA, and an explanation of its Agency status and who represents our main customer. The vital role of the veterinary practitioner in surveillance.
- Examples of our liaison with Trading Standards and Animal Health and our role in welfare prosecutions.
- The VIDA database and its role in surveillance.
- The concept of VISIs and VISIONS with examples.
- UKAS Accreditation and its vital role in maintaining customer credibility, together with other ISO Standards.

# **Outline of EMS activities at VLA**

On arrival at the RL, students will meet veterinary staff (usually Veterinary Investigation Officers, (VIOs)) who will act as their extra-mural teacher(s) and co-ordinate and lead activities relating to their EMS placement.

EMS teachers at the RLs will carry out an initial briefing which will include:

✓Identity check.

- Health and safety briefing with information about First Aid points, First Aid Officers and fire precautions including fire exits and assembly point. The briefing will emphasise specific and detailed procedures relevant to the work in which they will be engaged.
- Signature of the 'VLA Risk Assessment for Veterinary Students Attending Extra-Mural Study (EMS) Placements at VLA Regional Laboratories' and the 'VLA EMS H&S Consent' forms.
- Discussion of the specific principal learning objectives for the student for the week.

At the end of the attachment the EMS teacher will complete the relevant paperwork including the student EMS report form after due consideration of the criteria for evaluation and discussion with staff as appropriate. The EMS teacher will also discuss the outcome of the learning objectives.

### Experience with veterinary staff

The time spent on activities carried out by veterinary and laboratory staff can vary at the RLs, but in general most of the following activities will be carried out at each RL on a daily or regular basis.

#### Postal submissions & booking-in

Students should be present during the unpacking of postal submissions each morning to observe: the nature of material submitted, the type of packaging used to highlight inappropriate packaging when this occurs, the submission forms which accompany such material to highlight both those filled in appropriately and those providing insufficient/inadequate data.

Students should accompany the duty vet while test allocation is carried out. The VIO may discuss the need to contact the private veterinary surgeon (PVS) either for more data or to discuss the nature and/or cost of the tests required or requested. The discussion of test allocation could extend to the differential diagnoses for common presenting conditions.



**Bovine lungworm infection** 

# Safeguarding public and animal health

By the end of the week students should understand the importance of providing accurate detailed data through the submissions forms; that the data supports VLA in delivering surveillance data through the VIDA system and that Defra underpin this delivery through subsidised costs, for the benefit of the PVS and VLA.

Examples of how the data is used in disease reports and how information is disseminated to the local practices will help to underline the importance of the process.

#### History taking & post-mortem examination

Students are encouraged to accompany the duty vet and appreciate the importance of history taking at the time of sample (usually carcass) submission. The duty vet may highlight the various categories on the submission sheets and the importance of an accurate and full history.

Students will be expected to spend time in the post-mortem room and protective clothing will be provided.

Students should be given a brief explanation of the terms used for recording gross pathological findings. There should be consideration of the differential diagnoses appropriate to each case. The reasons for sample selection and test choice should be discussed with the student, to include reference to cost issues. Under close supervision students may carry out a post-mortem examination if time allows.

Students can use carcass and postal submissions as prompts to consult textbooks, journal articles and student notes etc. Students may be asked to fill out the post-mortem forms and to become acquainted with gross pathological descriptive terminology.



Fly strike in a sheep carcase



#### **Clostridial enteritis in a lamb**

#### Test results and interpretation

It is important that students follow-up cases (postal and post-mortem) and discuss the significance of the results obtained and the logical progression of each case towards a final diagnosis.

If students wish some follow-up on cases after they have finished their attachment, then they will be given information on how to arrange this.

#### Report writing

This is a skill that can be learned only with practice and examples of the correct layout and content of a report may be shown.

#### Farm visits

If time and staffing allow, the student could accompany a VIO on a farm visit if it is felt the benefit gained would justify several hours away from the laboratory and where such experience could not be gained from seeing private practice. This would need to be determined at the time. This could include visits for a new and emerging disease, a zoonosis, a disease with an unusual presentation. Or it could be a more routine case where it was felt appropriate to include detailed investigative technique including history taking, sample selection and observation of farm environment. e.g. calf pneumonia, mastitis.

## Role of the laboratory staff

Students are encouraged to follow postal submissions through to laboratory testing and also to do the same for samples from post-mortem examinations, particularly those in which they have been involved.

Students should ask when is a good time to return to observe a particular procedure (as some tests are only undertaken on certain days). Where feasible this should include gaining experience of various techniques including bacteriology, histology, mycology, parasitology and virology.

Consideration should also be given to spending time learning about the facilities of the speciality that some RLs may offer such as the Clinical Chemistry Unit at Shrewsbury.

