

Care of laboratory animals – not your typical EMS placement

By Laura M. Wilant (4th year, Edinburgh)

My morning began bright and early. I got to the office reception, received my 'all access' swipe pass and went through three security doors before meeting up with the vet I was to shadow for the week. We went down to the underground kennels after donning bright red boiler suits (a lovely change from our vet school blue ones). We stood in the middle of a long hallway when suddenly the barks of joyous beagles met my ears and the floor disappeared among a wiggling sea of black, white and tan.

This was not your typical EMS placement.

LAVA: at the heart of a hot topic

I had heard of the Laboratory Animal Veterinary Association (LAVA) during a Friday seminar in my second year.

The association was formed in 1988 with the purpose of promoting veterinary knowledge regarding the breeding, health, welfare, transport, ethics and use of laboratory animals, in addition to exchanging and disseminating information concerning laboratory animals throughout the veterinary community and public at large (so says the LAVA website www.lava.uk.net/).

Members include veterinary surgeons and students who are interested in laboratory animal medicine and science.

Acting as an information and personal network, LAVA allows for the collaboration necessary to ensure best practice in the biomedical research realm. The majority of LAVA's veterinary surgeons act as named veterinary surgeons (NVSS) under the Animals (Scientific Procedures) Act 1986, which dictates the specific and fundamental role of the veterinary surgeon in terms of the husbandry, welfare,



veterinary and humane termination (when applicable) of the animals involved.

I will admit my previous experience with laboratory animals was working as a teaching assistant and helping prepare homebred African clawed frogs (*Xenopus laevis*) for anatomy and physiology practicals. I knew that the university had some sort of ethics review committee that looked at every scientific experiment involving the use of vertebrates on campus, yet that was about it. I didn't know about rules. I didn't know about regulations. I didn't know how protected laboratory animals are, and I certainly didn't know how carefully Home Office applications are scrutinised and critiqued before any scientific procedure is approved.

Specific purposes

All of the animals I saw on my LAVA placements were born and bred for specific purposes: their physiology and how their cognitive function contributes to understanding drug pharmacology and learning and memory exercises in psychology, and for the creation of specific genetic lines. There was such a diversity of animals that we worked

with. Looking back, even if much of it seemed like just small furry work, I am reminded that each colony strain of mouse or rat had some pretty specific differences to any other mouse or rat I had worked with in practice.

Some of the husbandry needed to be modified because of genetic predisposition to certain conditions, such as individual housing with the stroke-model rats to decrease stress. Ventilation systems needed constant monitoring and environmental control, especially for the nude mice, which lacked a normal immune system. Everything that was done, from housing and feeding to social interactions and behavioural enrichment, had sound and specific requirements for the individual animal colony involved.

In clinical practice, we don't seem to ask ourselves or try to justify the term 'working animal' whenever a shepherd's collie dog or a police dog comes in for treatment. Even in our conversation with horse owners, we include the questions, 'What kind of work does your horse do?' and 'How long has it been out of work?' Perhaps because laboratory animals fall outside our traditional understanding of 'working animals'

we focus on what work they're not doing rather than the work they do, but our role as a veterinarian is fundamental to keeping them healthy for work, just the same as for any guide dog that walks through our door.

Variety

The LAVA EMS scheme got me connected with two different laboratory animal organisations. Through the course of my two weeks, I shadowed four incredible veterinary surgeons, each of whom had their own specific areas of responsibility and expertise. Because of the Home Office regulation with regard to who can do what to the animals, I spent much of my time

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watching procedures, yet these veterinary surgeons were more than willing to get me involved by discussing scenarios, talking through procedures, and kept getting me to think like a laboratory animal veterinary surgeon.

I was allowed to watch sophisticated telemetry implantation sur-

geries, assist with the clean-up and care for a dog-fight victim (yes, just like in practice), assist in the monitoring of anaesthesia, observe postmortems on unexplained mouse deaths, investigate a respiratory disease outbreak in an aviary collection, transport crab-eating macaques (*Macaca fascicularis*) to their swimming/play area, meet four fistulated Holstein cows (all over 10 years old), discuss the set up of behavioural enrichment areas for dogs, and social housing for mice, rats and guinea pigs, and work through a mite eradication scheme for a mouse colony.

My LAVA placement also gave me a collection of case studies that got me thinking about the role of named veterinary surgeons within the Animals (Scientific Procedures) Act 1986 and the ethical, moral, and scientific questions they are faced with on a daily basis.

Delicate balance

I found the work at my placements to be a delicate and complex balance between what the Home Office license dictated in terms of the animals involved (daily care, 'cut off' parameters for the experiments involved, and experiment end points), diplomatic relationships between the scientific/research group/client, and the veterinary surgeon in an advisory role and as a practitioner.

Don't we owe it to our profession to understand how the scientific studies that bring us the drugs we use in practice come about? Don't we owe it to the named veterinary surgeons to understand their role when it comes to laboratory animals? Don't we owe it to ourselves to form sound opinions through seeing things first hand and engaging in a dialogue to get as much information as we can?

If you would be interested in being part of the LAVA EMS scheme, please contact the LAVA EMS coordinator, Dr Helmut Ehall (ehallhe@ukorg.huntingdon.com) or check out the LAVA website for more information (www.lava.uk.net/home/ems.html).



Extramural Study Award Scheme

Applications are now invited from veterinary undergraduates to see practice in **Laboratory Animal Science and Medicine**. Students in pre-clinical years may count the time spent on the Scheme towards animal husbandry experience. For students in clinical years, the time spent on the Scheme is eligible to count towards the six-month RCVS extramural study requirement, but is considered to be "non-general" practice.

Placements are made at scientific establishments designated under the Animals (Scientific Procedures) Act 1986, which carry out research and development using animals. The Scheme is intended to provide insight into the husbandry, health and welfare of laboratory animals, their use in research and the role of the veterinary profession in this field.

Awards are up to a maximum of **£300 per week** to cover reasonable daily expenses, e.g. travel, accommodation and food. Placements are for one or two weeks.

Scheme administered by the Laboratory Animals Veterinary Association

For further details and an application form, please write, enclosing your name and address to:

Helmut Ehall, Dept. of Veterinary Services,
HLS, Woolley Road, Alconbury, PE28 4HS, Cambs.

Tel: (0)1480 892000 : Fax: (0)1480 892206 : E-mail: ehallhe@ukorg.huntingdon.com