Pathology in perspective

The veterinary degree is a great starting point for a variety of career options.

Cheryl Scudamore, of the Royal Veterinary College, discusses the role of veterinary pathologists

If you ask members of the general public what a pathologist does, most people immediately think of forensic pathology as depicted in television programmes like ‘CSI’ or ‘Silent Witness’. However, in the veterinary field, as in human medical pathology, only a small minority of pathologists are actually engaged in crime-related forensic pathology, and even fewer do this as a full-time job (perhaps one or two in the whole of the UK).

If you ask vets what they think pathologists do, I suspect the majority will think of the person to whom they send their biopsy samples. While diagnostic veterinary pathologists are much more numerous than veterinary forensic pathologists, they still do not represent the majority of working pathologists – there are a lot of other options.

Options in veterinary pathology

A veterinary degree provides a fantastic training in comparative anatomy, physiology, pathology and medicine, and this grounding is highly valued in many sectors outside veterinary practice. In fact, the majority of qualified vets who work as pathologists are found working in industry – in pharmaceutical or agrochemical companies and their associated contract research organisations.

In the pharmaceutical industry, the veterinary pathologist’s ability not only to recognise lesions, but to understand how they relate to possible toxicity of new medicines and to determine what, if any, risk this poses to animals or human patients, is highly prized, and this is reflected in excellent salaries and conditions.

The ability of vets to be able to integrate information from the genomic to the whole animal level is also extremely valuable in biomedical research.

Veterinary pathologists play an important role in evaluating pathology endpoints from the many animal models used in research. They are found in a wide range of government and research council-funded labs investigating the whole range of biological processes involved in human and animal health through to bioterrorism. They may also be researchers in their own right, holding their own grants and managing their own research programmes.

Many pathologists work principally as diagnosticians, often specialising as anatomical pathologists (involved in tissue-based pathology – biopsies and postmortem examination) or clinical pathologists (involved in fluid-based pathology – haematology, biochemistry and cytology). These roles may be found in commercial diagnostic labs or in the VLA, where pathology forms an important part of the UK’s animal health surveillance.

In the vet schools, academic pathologists often have multiple roles, providing diagnostic services to the vet school hospitals, doing their own research, or supporting research, as well as teaching. In the diagnostic arena, there are a small number of opportunities to develop sub-specialities, for example in zoo or wildlife pathology.

The career options are more varied and more interesting than you might at first think. Currently, a global shortage of veterinary pathologists, particularly laboratory animal pathologists, ensures that career prospects are good. In addition to the intrinsic interest and variety of the job, a pathology career also has lifestyle benefits, for example, good pay and conditions, and a general lack of ‘on-call’ rotas.
The path to specialising in pathology is not as clearly defined as it is for many of the veterinary clinical disciplines. Although most vet schools offer residencies in veterinary pathology, there is no equivalent to the clinical internship.

While a pathology residency offers a great opportunity to concentrate on learning the discipline and preparing for postgraduate exams, it is not the only route into pathology. There are opportunities to train on the job in the diagnostic and industrial sectors, although it will probably take you longer to develop the skills and experience to attempt a qualification in pathology.

Unlike the clinical specialities there is no RCVS certificate or diploma in pathology, but recognised specialist qualifications can be gained via the Royal College of Pathologists (FRCPath), the European College of Veterinary Pathology (DipECVP, DipECVCP) or the American College of Veterinary Pathology (DipACVP), and it is possible to become an RCVS recognised specialist in veterinary pathology.

A postgraduate pathology qualification is not required to be a diagnostic pathologist by the Veterinary Surgeons Act, or currently by any of the regulatory agencies, but employers are increasingly looking for qualifications as part of quality assurance mechanisms. Specialist qualifications are also useful for international mobility. In general, pathologists also do not require a PhD, although having one will confer career advantages in some sectors, particularly academia.

While few pathologists are directly involved in fighting crime, they do spend their careers solving problems by integrating visual pathology information with previous knowledge and experience in trying to understand the underlying cause of a lesion or disease. So, if you are interested in using all your skills to help make quality diagnoses or enable research development, perhaps pathology is the career for you. You can find out more from the websites listed below or by e-mailing me, csoundmore@rvc.ac.uk

Ten-minute chat

Robert Huey qualified from Dublin vet school in 1983. He is Deputy Chief Veterinary Officer in the Department of Agriculture and Rural Development Northern Ireland (DARDNI) veterinary service.

What made you decide to start working in public health?
I spent five years in a mixed general practice living the Herriot dream – happy farmers, happy animals; sector in decline, no money. Partnership didn’t seem like a sound investment to me. My father had been a government vet for 43 years and enjoyed his career, so why not?

How did you get to where you are today?
Soon after becoming a government vet, I was asked to take on a teaching job at a DARDNI agricultural college. I spent many happy days imparting knowledge and skills to farmers of all ages. After a couple of years it became repetitive and I needed a change.

The Veterinary Service in Northern Ireland provides policy advice and delivers animal health, welfare and meat hygiene. This made the move from animal health to meat hygiene as an Official Veterinarian easy. I loved the work. The autonomy an OV has to manage a team of inspectors, the personal responsibility to maintain or improve standards, and working with the industry can give job satisfaction hard to find elsewhere. I had to know more about it, so I completed the RCVS certificate, then the diploma, and after talking about meat hygiene, writing about meat hygiene, examining others in meat hygiene, it seems I knew too much, so I was promoted, and promoted . . .

How do you spend a typical day?
My job is about making sure other people know what they have to do and have what they need to do it. It’s also about trying to ensure that the policy and politics side asks us to do the right things to protect animal and public health and animal welfare.

What do you like about your job?
The people who do things better than you had even dared anticipate. Enthusiastic people, people who try their hardest and do their best.

What do you not like?
The other people.

Further information
British Society of Veterinary Pathology
www.bsvp.org
British Society of Toxicological Pathologists
www.bbstp.org.uk
European College of Veterinary Pathologists
www.evcpath.org
Careers in veterinary pathology
www.vetpathcareers.com
American College of Veterinary Pathologists
www.acvp.org
The Royal College of Pathologists
www.rcpath.org

Why is your job important?
The livestock and meat industry is important to the Northern Ireland economy. An effective veterinary service supports and adds value to that industry. An ineffective service has the potential to damage it.

What advice would you give to someone considering a similar career?
I have found the government veterinary service, and in particular meat hygiene policy and delivery, to be a fulfilling career. Like a lot of jobs, you get out what you put in.

What’s the best piece of advice you were ever given?
My first boss told me to ‘always remember that people like their animals to be killed by nice people’. What he meant was that if a client feels that you care about what you are doing and trying your best, they are more understanding if things don’t work out the way you both hoped. It applies no matter what you trying to achieve.

What is your proudest moment?
Professionally, being elected to hold the post of president of the North of Ireland Veterinary Association. Although I have led the Veterinary Public Health Association in the UK, and the Union of European Veterinary Hygienists in Europe, there is something special about being selected by the people who know you best.

What was your most embarrassing moment?
I’m not good at remembering faces, and increasingly I’m getting worse with names. When in practice I had spent most of one day on a farm with a farmer. At the end of the visit I asked him to follow me into the practice to collect some medicines. I made my way back to the office, went round to the public counter and confidently asked the person on the other side if I could I help him. He’d changed his clothes; I didn’t recognise him.