

Exploring Careers: Janet Patterson-Krane, BVSC, PHD, MRCVS

When I was at vet school in New Zealand, the only thing I wanted to be was an equine surgeon. A copy of "Adams' Lameness in Horses" was just about glued into my hand (necessitating some very quick studying of small animal medicine at the end of final year). I didn't enjoy pathology at all. I remember someone telling me a woman a few years ahead of us was going off to the US to do a pathology residency and I said "who the @\$ \$#! would want to do that!" â€” or something to that effect. As it turned out that was prophetic, as that would be me.

After I graduated, I wanted to do a surgery internship, but Elwyn Firth (the head of equine at Massey University at that time) told me to "go out and work in practice and grow up a bit". He is always quite forthright with his advice, in typical kiwi style, but he was right. I worked in the UK in mixed practice, and then in a charity-run small animal practice. If you have not read the "All Creatures Great and Small" books by James Herriot (or seen the old TV series), give them a go. I had many of those experiences, perhaps not so funny in person in the middle of the night (!), and I even looked at some dogs belonging to one of his old clients. I have never regretted my time in practice, particularly the charity practice, where every injury seemed to be ten times worse than it would usually have been, and diseases like canine distemper were commonplace. Being kicked across a yard by an Arab horse and sailing through the air past a large group of children with a syringe in my hand - I probably could have given a miss. The clients were an "interesting" lot and I have plenty of stories to tell vet students. It was a great education, and when I write diagnostic reports as a pathologist I know the pressures the referring veterinarians are likely to be under and what they may need to know. I did also "grow up" quite a lot.

After a couple of years I applied for a surgery internship in the US through the Internship and Residency Matching Program. I missed out. At the time I thought this was the worst thing that could possibly happen in my career and I was devastated, but in retrospect it was the best thing. Elwyn Firth appeared again, and offered me the chance to do a PhD program in equine tendon injury. I thought tendons sounded a bit boring, but I was told it would probably be a good idea to take an opportunity when offered, particularly with funding in place, so I did. Anyone who knows me now will be very familiar with my fascination with tendons, which I can talk about for hours on end â€” turned out to be an incredibly interesting topic after all!. Many things are when you look at them in depth. I really enjoyed the PhD work, which in the New Zealand/UK system is almost entirely research. I spent a lot of time cutting sections, performing electron microscopy, and working really long hours without even noticing it getting dark outside (which does happen a lot anyway in that area of NZ). My interests changed and the surgery did not seem so appealing any more. I decided research was something I would like to continue with and that pathology would be a better specialist area to help that along. At the time, Jim MacLachlan from UC Davis was visiting, and he generously sat down with me and went through the various programs that I might apply to. One that he recommended was the University of Florida, which I would not have thought of. I visited Cornell, hoping to get in there, but they were obviously so thoroughly impressed I didn't get an offer from them. Florida did offer however, and it turned out to be a perfect match. Arriving in Gainesville from NZ was like stepping onto another planet, and the culture in the US including the way people spoke was surprisingly different. No-one could understand a thing I said, not surprisingly. The residency program was the most grueling experience in my life, but also the best education I had, and I cannot speak highly enough of it including the mentoring I received there. After 2 years I decided I wanted a bit less supervision, so I wrote to the University of Kentucky to see if they had anything available. As it turned out they were short a Faculty member so they employed me temporarily while I studied for boards. Needless to say there were a lot of horses coming through the necropsy facility â€” in fact, generally about 1 minute before the cut-off time for submissions in the afternoon, about 4-5 Thoroughbreds would be winched in. A snowstorm at certain times of the year always resulted in 10-15 placentas/foals in black plastic bags on the PM room floor by the morning (but I was laughing when "cystic adenomatous hyperplasia of the equine allantois" came up as a photo in the boards gross pathology examination). Kentucky did contain all the things it is famous for; living there was an eye-opener but also probably the most welcoming work environment I

have been in, and I again have very fond memories of that time, aside from half-killing myself studying for boards.

After the usual traumatic experience in Iowa (I always say a silent prayer for the exam-takers on that day every year – literally), I passed the ACVP exam in anatomic pathology in 1999. That meant a lot more to me than either of my degrees. Since then I have worked in England, Australia and Scotland in various Faculty positions. It hasn't just been about the research, because the diagnostic work has also been fascinating, and teaching both of those areas to students is also a pleasure (most, but not all of the time). Veterinary pathologists are some of the only true generalists left, and few days have been boring. I have done a lot of horse work (from the microscope rather than the surgery), continued my tendon research, chased and necropsied dugongs and sea turtles in Australia (see photo), been bitten by a meerkat, looked at everything diagnostically from snails and cockroaches to elephants, travelled to many different parts of the world, and worked with people in many, many different areas of science and veterinary practice. In retrospect I would say it is important not to keep rigid ideas about what you think you are going to do in your career. Finding and keeping good mentors and taking their advice is very important (I still work with Elwyn Firth), and taking opportunities when they come up is vital because they really don't come along all that often. Some of you may think you will not know what to do if you don't get into a pathology residency program, but like me, you may end up working in a field even more suited to your abilities.



Are field necropsies glamorous – no, they are back-breaking! This is a dugong we examined in rather hot and humid conditions near a beach in Brisbane, Australia. Dugongs are in the order Sirenia, along with manatees. Here I am telling Mark Chalkley (ACVP-certified last year) what to do, and he is (quite wisely) probably not even pretending to listen. We looked at this carcass in great detail and never worked out why it died - a lot of wild animals contain lesions consistent with multiple diseases and it is often difficult to work out what the exact cause of death is.