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What was a typical workday like for you? Are there any daily tasks that you started out doing that over the years went away or completely changed as practices changed?

Many things have changed in the 40+ years I’ve been doing histology. In the early years, we had knives we had to sharpen when they became too dull to cut sections. Feather blades were a Godsend in the early 1980’s when we first got them. The famous Lee Luna came from the US to Melbourne, Australia for a Scientific conference and visited our laboratory at the Royal Children’s Hospital and he had a packet of blades with a blade holder for us to try. My boss at the time, showed a great deal of faith in asking me to trial them and give my opinion! I was a trainee scientist at the time and may have been the first person in Australia to try them. My assessment was that it was God’s gift to histology and we purchased them as soon as we could. Goodbye to manual sharpening knives on a machine and polishing on a leather strop! This saves a lot of time, trust me. Now you just reach for the packet of knives, do a quick change, and you can keep on cutting sections.

Technology is one of the biggest changes in the last few decades, inside and out of the lab. What were some of the big technology changes that had the biggest impact on your work?

Hand writing blocks and labels are a thing of the past, thank goodness. It saves a lot of time, and makes things easier to read. Immunohistochemistry was not even taught at University when I went through. A couple years after I finished my degree, I found myself working at the University of Melbourne, where I was asked to introduce it to third year science students. We purchased a kit with 3 antibodies: insulin, glucagon and somatostatin and had students cut serial sections of pancreas. Then we stained them up and they could see which cells in the islets of Langerhans were staining up for the 3 hormones. Of course, we did them manually. A great change came with automation which saves a lot of time and has you being able to do other things whilst the slides are being stained. Molecular work is one of the more recent changes to histology. Our laboratory does not do it, but we send slides to a sister laboratory that does.

How did you stay up on new techniques and share information with others in the field before the instantaneous answer age where you can google or email a friend for the answer?

I used to use the telephone. I mean a landline, not a cell phone, and speak to people who I either knew from university or those I had met and kept in contact with at conferences.

How have the educational requirements changed since the time you first entered the field? What recommendations would you have for those who are interested in histology now and in the future?

In Australia, when I went through, it was the first time the course had been upgraded to a degree course. Prior to that, it was a Diploma. Once you got into the course, you had to work for at least 12 months as a trainee scientist, for which you were paid. Upon passing your exams, you were then upgraded to a scientist. Nowadays, a person goes through university and then has to find a job to fulfill a bursary year, which up until recently, was partially funded by the government. This funding has now been discontinued, so it’s going to be difficult for students to find work to be trained as places would have to find the money elsewhere, or not pay the students at all.
What is something that was common practice at one point in your careers that now would be almost comical to today’s techs?

I remember working at a hospital in the mid 1980’s where the person who came in to embed each morning would light up a cigarette on the Bunsen burner and smoke whilst she was embedding! They used to allow smoking in the tea room back then as well.

Where do you see the profession heading in the future? What predictions would you like to make or, if you had a crystal ball, what would you see?

I expect the liquid biopsy to cut down the need for histology in the future. Diagnosing tumors from blood samples before they become macroscopically visible means they can be treated early and never require surgery.

Is there anything in your career that stayed the same for you throughout the years?

Good practice is essential throughout each step in histology. It makes it easy for everyone involved down the track if everything is done to a high standard. Clear blocks, perfect grossing, good tissue processing and embedding, good section cutting showing a full face of the tissue, followed by good staining makes it easier for the pathologist looking at the slides at the end of the process. This then should give the patient the right diagnosis and help them in receiving the right treatment and put them on the road to recovery.