Canadian Anesthesiologists' Society Presidential Interviews

Dr. Crawford Walker, interviewed by Archives & Artifacts Committee Member Dr. Garrett Barry and Volunteer Amy Liu

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Archives & Artifacts Committee

Garrett

Hi Dr. Walker, thank you for joining me today. As an overview, I would like to ask you about your early life, education, and career, including your work as a past CAS president, and any aspects of your personal and post-retirement life you would like to share with CAS members.

We'll start out talking about early on in your life. The first question is if you'd be open to telling us a bit about your childhood, your family background and your upbringing.

Crawf

I was born in England; my parents were both Scottish. I went to a boys' school in England, one of those so-called public schools, until my family moved to Vancouver when I was fourteen years old. I had a pretty normal boyhood in South London. My mother had trained as a physiotherapist and so I was always slightly interested in medicine as a possible career. I didn't really have any serious career goals as a young person.

We came to Vancouver in 1959. My dad was a physicist, and he had a job at UBC [University of British Columbia] in the Department of Electrical Engineering. He was a research guy, and my mother didn't work outside the home. I did grades 10 to 12 at University Hill High, which is a school on the UBC Endowment lands. That's where I got my high school education and then I went to UBC.

Garrett

Can you tell us about your university education experience?

Crawf

At UBC, they put on a special session for people who were considering going into medicine. I went to that because I was moderately interested – mildly-to-moderately interested. They made such a production out of how good your marks had to be and how you had to have this and that, and I thought, "Oh Christ, I'll never meet those criteria." So, I forgot about it.

I carried on at UBC. I got an honors BSc degree in math, and then I went on and did a masters in math. I taught for a while at Capilano College, which at that time was just a junior college but has now been upgraded to a university. I was the head of the math department for a year or two there. And then I decided that I would like to be a doctor rather than a university professor. I had to pick up some courses to get into medical school, so I went to Simon Fraser and studied biology and organic chemistry, which I hadn't done before. I applied to UBC, University of Calgary, and University of Alberta medical schools, and I got into all three of them.

I had high grades in my math degree. I didn't have any trouble getting accepted to medical school. I chose to go to the University of Calgary because it was in its second year in operation, and I thought it would be exciting. I also knew that both the University of Alberta and UBC were very high bound old-style medical schools, so I thought Calgary would be a bit more fun. They also had a three-year instead of a four-year program. I was 25 years old at the time and I thought, "Jesus, I'm getting pretty old. I can't do that extra year." So, I went to Calgary. I have no regrets about that. I think I got a good medical education there, and while I didn't enjoy Calgary much, I enjoyed the education that I received there!

Garrett
It sounds like you had quite the adventurous spirit at the time. Can you tell us how and why you chose to become an anesthesiologist?

Crawf
After I finished medical school in Calgary, I went to Victoria General Hospital [British Columbia] to do a rotating internship. I had lived in Victoria before, so I knew I was interested in Victoria. When I did the internship, it was an old-fashioned rotating-style internship. I spent five weeks each on ten different rotations and the first one that they put me on was anesthesia. I spent it with this senior anesthetist, an older guy, and he became a mentor to me. He showed me what anesthesia was all about. He was a nice fellow, I really enjoyed being with him and I enjoyed what we did. I just traipsed around with him, helping out, and he showed me how to do the basic skills of anesthesia.

I enjoyed the life that he was living as an anesthetist. It struck me as not such a bad thing, although I'd never thought about being an anesthetist before that. Then I did all the other rotations and none of them attracted me as much so, when I finished my internship, I decided I would do further training in anesthesia. My plan at the time was to come back to BC [after residency] because I bought some land on Pender Island. I was intending to go back to BC to work there as a family doctor and do anesthesia on the side, but I needed to do a couple of years of anesthesia training first and I decided to do it in Halifax.

I'm not quite sure why I decided to do it in Halifax because it didn't have much of a reputation at the time. They had never ever had any of their trainees pass the final Royal College exams. The tradition of that time in Halifax was you did your training there and you got pretty good practical training, but then in your last year you would go to Toronto to sign up with Sick Kids Hospital and they got you through the exam.

Anyway, I went to Halifax. As it turned out, the year I went to Halifax they had a new head of the department, a guy named Dr. Emerson Moffitt. Emerson Moffitt was a Nova Scotian, but he had spent most of his [professional] life working in cardiac anesthesia at the Mayo Clinic. He was a very academic guy. He came to Dalhousie in order to improve the department and make it more academic, and he did accomplish that. One of the things he did was institute one day a week when the residents didn't have to work in the OR and had lectures instead, which was a very smart move.

I did my four years of anesthesia training in Halifax and enjoyed it. I mean, the people there were good to me. I got a pretty good practical education, there's no doubt about that. I was fairly well prepared for the exam, so I didn't go to Toronto for the last year. When I did the exam, I was in the top two percentile. I had no trouble with the exams. I was the first Dalhousie graduate to pass their Royal College exams! That was a career high.

When I finished, I didn't want to be an academic. I was never interested in research. I always found research extremely boring. My wife was very keen to stay in Nova Scotia. She really liked Nova Scotia. I ended up taking a job in Kentville at the Valley Regional Hospital, which wasn't a regional hospital at the time. It was just a little community hospital, but they had recently attracted a number of surgeons to their medical staff.

These surgeons there were doing procedures that were beyond the skills of the local GPs who had previously been giving the anesthetics. That's why they wanted me to come there as a fully trained anesthetist and also hopefully to recruit more anesthetists so that they could have a fully specialist anesthesia department.

I went to Kentville and joined the hospital board. They had recently had a review done by Dr. Ian Purkis, who was a very senior anesthetist in Halifax at the time. He wrote a report of what he thought needed to be changed at the community hospital. It was a wonderful thing for me because I just had to say, “Listen, I've read his report. I think everything in his report is great and I will do my best to make it happen.” It was a huge help for me because at the time there was usually a conflict between the GPs who ran the hospital and the specialists who worked there.

Up until around the time I qualified, most of the anesthetics given outside Halifax were done by GPs. They also had a lot of control over how the hospitals ran. The first three or four years I was in Kentville, I was politically involved in implementing this Purkis report. Just to give you an idea of how it was when I arrived, if you were a surgeon and you wanted to do an operation, you had to phone the hospital, tell them the patient’s name, and they gave you a time. You then had to phone the referring doctor and ask if he wanted to give the anesthetic. And if he didn't, you asked him to be the assistant. Once that got worked out, the specialist anesthetist showed up at that time, did the operation, then went home. There was no list. Everything was totally disorganized. I said, “We can't run a specialist department like that. You have to have lists. The surgeon provides cases for the list, and the anesthetist does the list.” Making changes like that were huge changes and were not accomplished without a certain amount of discussion. Anyway, having the Purkis report made a huge difference to me, and it made me respect how the writing of those reports really makes a huge difference to the medical community.

Later in life, I was quite involved in the anesthetist society in Nova Scotia which developed a program called ASPENS [Anaesthetic Services Programme Encompassing Nova Scotia, implemented 1987]. ASPENS was an organization which would go to a small hospital and do a review of the Anesthesia Department to make recommendations about how things could be improved – basically, what Ian Purkis did in Kentville. I started that program because I thought it was really a good thing. I reviewed quite a few of the hospitals in Nova Scotia and other people took over the program after me. But from my point of view, it was a very important contribution to anesthesia care in Nova Scotia. In some of those hospitals the anesthesia care was really substandard. No question about it.

Garrett
It sounds like you played a huge role in raising those standards, and in unifying those standards, across a bunch of hospitals in Nova Scotia.

Crawf
They were doing things that were just clearly unsafe. All kinds of things that just didn't make any sense. Over the years, many of these hospitals have developed specialist anesthesia services or stopped doing surgery altogether. It used to be that every little hospital had their own surgeon, and their own GPs, and [some] GPs who gave anesthetics. Those GPs doing the anesthetics might have had no [formal] anesthetic training or might have done one month or something. They weren't really well educated in providing anesthesia. It was a miracle, really, that there weren’t more problems than there already were. The thing that spurred the Purkis report in Kentville was an anesthetic issue that led to a totally preventable, unnecessary death. There were a few of those back then and fortunately not very many anymore.

When I was involved with ASPENS, I [was also] a member of the Canadian Anesthesiologists’ Society. The local Nova Scotia division recommended that I become council representative for Nova Scotia on the CAS Council. So, I did.

When I was on the Council at the CAS, somebody suggested that I should take on the role of chairman of the Standards of Practice committee. The main role of that committee at the time was to review the Guidelines for the Practice of anesthesia. That was a huge part of that committee’s work. Some of the

recommendations in the guidelines were controversial. I was the chairman of that committee for a few years and the thing that I remember most was the addition of the requirement that an operating room would have a pulse oximeter during the course of an anesthetic. That was probably my biggest contribution to Canadian anesthesia because I approved that on the committee. It went to the CAS Council, and it was very controversial because it wasn't required in any other jurisdictions.

The pulse oximeter at that time cost over five thousand dollars, which was a lot of money in 1989. People said, “Oh Jesus, they're going to close half the operating rooms in the country because they don't have pulse oximeters”. But I remember speaking to the CMPA about it, who said, “If you think this is necessary, you ought to go for it and we're quite prepared to defend people who use one. If they don't use one, we will accept that they weren't acting up to the standards.” So, the long and short of it was that the Council did accept it and put it in the guidelines. All the people who were so worried that their operating rooms were going to be shut down didn't have to worry. Somehow the hospitals came up with pulse oximeters.

Garrett
Wow, what a monumental contribution. So how did things change compared to before?

Crawf
It was a huge thing – my annual CMPA dues went from about $8000 down to $3000 within a year of the change. We can't imagine doing anesthesia without a pulse oximeter nowadays but that's what we did. We never had pulse oximeters. You had to rely on your own judgment as to whether somebody was hypoxic, which is not always easy. It saved a lot of lives.

We followed that up with requiring capnography. The idea of the capnography was it would help detect an oesophageal intubation. But everybody was so pleased with the results of the oximeter standards that they had no problem with the capnograph. So that got approved too.

Garrett
Well, that’s just fascinating! Now pulse oximetry is absolutely indispensable of course. And cheap.

Crawf
You can buy them in the drug store! I paid $25 for one of them. But it wasn't like that in the 1980s; they were over $5000.

Garrett
That’s incredible. It sounds like you were very future-minded, thinking about where the future was going with anesthesia – I would go so far to say, a maverick in our specialty. How did it feel, having to deal with push-back when trying to bring in new, controversial standards?

Crawf
I was okay with that. I don't like being unpopular. I don't like people being angry with me, but I was so sure that this was the right thing to do. And when I'm sure it's the right thing to do, I'm quite prepared to fight over it. I was quite prepared to fight over this one. If you worked as an anesthetist without a pulse oximeter, you know. Then, when you encounter a pulse oximeter it’s really pretty special.

Garrett
I certainly wouldn't want to go without one.

Crawf
No, you'd be in trouble for sure.

Garrett
What was it like practicing before some of these new innovations and standards? What would it look like normally practicing anesthesia back in the '70s or '80s?

Crawf
I was an intern in '74 to '75, I think. That was where I first started practicing anesthesia. It wasn't a hell of a lot different than it probably is today. The big difference was when they went from using ether, when you had to worry about exploding the operating room and all that stuff. Ether was pretty well gone by about 1970, so I'd never worked in the ether era, but the ones who trained me had. They made it clear it wasn't easy.

Sodium thiopental came along, and after the time of the Second World War it was pretty widely used. So, for a typical anesthetic, you would put the person to sleep with an intravenous injection of thiopental, usually just through a needle in their arm. You wouldn't start an IV catheter. That was something I wasn't comfortable with when I started because my skills were somewhat less than they later became. I worried that if the patient moved and the needle went interstitial and I'd only injected half the pentothal, it would be a bit of a nightmare. I didn't like the idea. I said to my staff, "Would you mind if I started an IV catheter before we put this person to sleep?" Nobody ever gave me grief about that. That was something I did myself from the very start. Most anesthetists were so skilled they didn't care, if it just went interstitial then they'd just stick it somewhere else. But I wasn't comfortable with that.

Once induced, you kept them asleep with nitrous oxide and maybe halothane, which came in and out of favor depending on whether halothane hepatitis was regarded as a reality. There was also a fair amount of methoxyflurane used in those days; it was a nephrotoxic anesthetic. These were the two inhalational agents that were most available at that time. At some point towards the end of my training, enflurane came along and that was a big change.

Then, isoflurane came along and there were some problems with isoflurane, because it had caused cancer in some rats, so they withdrew it. They [later] settled the question about that and found that it didn't cause cancer, but by this time they'd introduced enflurane and they wanted anesthetists to keep using enflurane until it got off patent. So, they withheld isoflurane until enflurane went off patent. That really pissed me off. I thought that if there are advantages to isoflurane, we should be using it now, not in another five years. When they started pushing isoflurane, I was resistant to that, and I did everything I could to slow the adoption of isoflurane because enflurane was pretty good.

There was a bit of a change in the inhalational agents because you don't see any of those now. It's all desflurane and sevoflurane. Those came along towards the end of my career. My career was isoflurane and enflurane.

And there was quite a bit of change in muscle relaxants. When the patient was unconscious from the induction, you gave them succinylcholine. Then, if it was going to be a longer case, you might give them a longer muscle relaxant, which in those days would have been curare.

Early on in my education, pancuronium came out which was a big advantage over curare. A lot of people didn't do well with curare. When pancuronium came out it was a problem in a way because it's a very potent muscle relaxant and people would tend to give too much of it, then they couldn't get them reversed

at the end. But it was a very benign agent. There weren't a lot of allergic reactions to it the way there was with the others.

So that would be the typical anesthetic. Over the years, people started using more and more narcotics.

Garrett
Like, a balanced anesthetic with a mix of opioid and hypnotics?

Crawf
Right, so you didn't have to use as much inhalational, and made it easier to wake people up at the end. There was a general trend by the time I was retiring to do a lot of just purely intravenous anesthesia. Propofol is a wonderful agent. Once propofol was available, you could give a propofol drip – everything could be drips. But that was really towards the end of my career; that sort of technique would be used on shorter cases. I don't know what people do now. I have been retired for 16 years, so you have to bear that in mind.

Garrett
Can you tell us more about when you retired and how you made that decision?

Crawf
I retired in 2006 at the age of 61. I've been retired for a while [so] my knowledge of current anesthesia is woefully deficient. I'm glad that I retired when I was relatively young. I don't think anesthesia is a good specialty for old guys. The last case that I did was my last night on call. At 7:30 in the morning, I got called out to do a ruptured aortic aneurysm, and I loved doing those cases. I liked the excitement. But I thought, this is not the sort of case that old guys should be doing. You really need to keep warm. It was good in a way. I was still at the top of my game, but I had seen a lot of people have their privileges removed because they were clearly not what they had been, and I certainly didn't want to go there. So, I just retired.

I know it was the smartest thing I did. I had enough money. As it turned out I had five years of retirement and then my wife got cancer. She lived with cancer for seven years. It was wonderful for me to have those five years together and then seven more years together before she died. If I had carried on, I could have worked until the day she died. I'm really glad that didn't happen. I'm really glad I retired when I did.

One of the reasons I retired when I did was because I could afford to. Most people couldn't. Somebody told me at that time that the average age of retirement of a Nova Scotia physician was 76. And the reason is because they don't have enough money to retire. It's not because they want to work until they're 76. One of the things I would recommend to young people in anesthesia is that you make sure that you save your money, especially if you don't have a pension associated with your job.

[Among] my colleagues in anesthesia and surgery, none of us had pensions. I went into the OR the other day and there was some guy still working, seemed like 80 years old. So, avoid that. Save your money so you can get out while you're still at the top of your game.

Garrett
That's a good reminder. Those years that you spent with your wife were important. It's a reminder to cherish and prioritize time spent with family. It sounds like you've had a very rewarding career, made many contributions and pioneered in the specialty. But I think that was really wise of you, and a good lesson for us young folks to remember not to neglect family and aspects of life outside of anesthesia.

Crawf
Well, I wasn't a poster child in that regard because I worked way too hard when I was working. I missed out on a lot of family stuff because I was busy working. But I would recommend that people not do that.

By the way, there's one other thing that I did introduce to the operating room where I worked, and I think may have made some difference elsewhere too: the use of laryngeal mask airways (LMAs). When I first encountered an LMA I was really impressed with it, and I started using them a lot, though anesthetists at that time were really tied to intubating people, which isn't usually necessary. I really promoted the use of LMAs. And I think it was a bit of a hard sell, because I know the guy who owned the company that was selling them. When I went to meetings, I would see him, and he was always pleased to see me because I was promoting them. A lot of people wouldn't promote them. There was a certain resistance to taking them up. But I think their place has been found.

Garrett
Were a lot of these things that you were involved in - the Standards Committee, bringing in the use of pulse oximetry, promoting LMAs - was this all while you were working in Kentville?

Crawf
Yeah, I was always working in Kentville. The people at the CAS and on the Royal College committees were almost all academics, they were all working in teaching hospitals. That wasn't really a problem for me, but I think my presence was sometimes requested because there weren't that many people who had experience working in a small hospital. I could sort of help out in terms of letting them know what happened in small hospitals.

There was one other, Dr. Andy Davies, who was the president of CAS before me. He [worked] in North Bay and he worked with a lot of GPs there. Other than Andy, I can't think of many people who were heavily involved with the society who worked in a GP anesthesia environment. Most did nothing except complex cardiac cases, so their vision of the spectrum of the specialty was somewhat limited.

Garrett
It seems like the topic's come back full circle in a way now, with a lot of shortages of anesthesiologists in Canada and with different groups wanting to bring in more GP anesthetists, and even out in BC they're talking about bringing in nurse anesthetists. Do you have any thoughts on that and how it applies to our current times?

Crawf
Yeah, I do. When I was on the Standards of Practice committee, one of the really big issues was that if you were the anesthetist you had to stay in the room for the whole case, and you couldn't be wandering off. The other thing was that only anesthetists should be doing cases, not GPs or nurse anesthetists. And that was a view that was very strongly held by most members of the committee at that time. There was a lot of discussion about whether or not you could have an anesthetist supervising two people.

I'm not sure whether it's been resolved. I think it obviously hasn't been resolved because it's a big deal that they're going to have nurse anesthetists in BC. My personal guess, for what it's worth, is that it will become widespread that either nurse anesthetists or some other non-physician anesthetist will give the majority of anesthetics under supervision of anesthetists. My advice to young people wanting to train in anesthesia is to get used to that idea. They should be trained not just in how you give an anesthetic, but how you supervise a bunch of people giving anesthetics – what the issues are, what the problems are – and become comfortable with that.

There's not going to be enough anesthetists or doctors. I mean, they're short of GPs too. Why waste a whole bunch of people just giving anesthetics that you could be giving [that task] to a lesser trained person?

Garrett
I wonder if they bring that in, whether some of the non-physician anesthesia providers would be taking care of basic, low complexity patients and easy cases under supervision, while more of the challenging, complex cases are done solely by anesthesiologists.

Crawf
Well, that's another thing that the young people will have to be trained in. There should be more emphasis on preoperative evaluation. When I started out as an anesthetist, I worked in the OR all day, doing one case after another. But I think now, and, in the future, anesthetists divide their time between acute and chronic pain management, doing pre-operative assessments, and supervising in the OR. What used to be one job is now four jobs. I think as a specialty anesthesia is going to be able to maintain its status by being good at *all* those things.

Right now, we have a reputation for being good in the OR. But in terms of preoperative assessment, an awful lot of that is still done by internists and cardiologists and others who are not very well equipped to judge the health of a person if that person is going through the operating room. So that's an area where we really have to be seriously involved.

The other thing is pain management. I ran a pain clinic in Kentville for most of my life and the main reason I did it was because there were a lot of people who wanted to refer people to have injections of one sort or another. And I was the only one who could do those injections. But most anesthetists then and, I suspect even now, didn't like doing that kind of work. They didn't like talking to people about their chronic pain problems.

But I think this is an area of medicine that is extremely under-resourced at the moment and it's something that lends itself well to anesthetists. It's not just a matter of injections but the narcotic drugs and all kinds of things in pain management that anesthetists could do or learn to do very quickly. I think we should really put more emphasis on making that a part of mainstream anesthesia practice. Everybody basically ought to be able to do that.

Acute pain management is easier, most anesthetists are more comfortable with it. But it's certainly important we continue being involved in that regard. There's an awful lot more to seeing somebody in a chronic pain management facility than in seeing somebody post-op after a hip replacement determining how fast their drip ought to be running. That's pretty low-level, but *I really do think that anesthesia is going to have to spread its wings a bit*. It's not just operating room anesthesia. That's obviously a big part of it, but it's only one part of it.

Garrett
Absolutely, there's definitely a trend now towards promoting that idea of anesthesia having a lot to offer branching out into perioperative medicine, the preoperative assessment, consultations, and optimization of complex patients, and then not only dealing with acute pain but looking at the transitional period going into the long-term phase. Like, what can we do perioperatively to help prevent long-term issues, [improve] long term pain control and outcomes?

Crawf
It's always struck me that anesthetists are overrepresented in the management of hospitals. Like if you go into a hospital, there's a high likelihood that the chief of staff or other member of senior management will be an anesthetist. I think there's a reason for that. When you practice as an anesthetist, you're working with a surgeon, a bunch of nurses in the OR, and a bunch of our managers, and you have credibility with all three groups that nobody else really does.

You learn quite early in your career how to manage that. You know how to deal with that if you are going to be a successful anesthetist. If you can't manage that, you're going to be really unhappy with your career because you're always going to be in fights. But most anesthetists learn how to manage those groups. A little bit of attention in the educational process to management issues would be very helpful for anesthetists because they are hospital-based people. The job that they do is one that involves interactions with many different groups.

Some management skills you develop anyway as an anesthetist, but I think some of that could be taught. Certainly, it should be recognized that this is part of the job. You know you're not just here to give the anesthetic. You're here to make sure that the patient survives, that the whole experience is satisfactory to everybody, and that the surgeon is able to do their work. I think that has to be emphasized.

Garrett
So just to recap some of the takeaways I'm identifying: thinking about the [entire] perioperative time – not just the operating room – as our place of expertise, our ability to be leaders in our field and leaders in managing the many groups that we work closely with in the hospital. And [all] are so important.

Some of the things that strike me from your story is you picked up on some things that were just emerging in anesthesia practice. You were able to stick to your gut and know when to fight for advances that you knew were right to adopt, and now these are just commonplace. Now, we never place a needle and just give a single injection for induction. It's interesting to me how you went with what you thought was the safest management to do, what I think is the best thing for the patient. I think that's a good lesson for us all: to do what we think is the best thing for our patients, our practice, our community and our specialty as a whole. Not just in our own practice but being advocates on a larger scale.

Crawf
My requirement that the patient have an intravenous was because I was insecure. But at that stage in my career, the technology of intravenous catheters had improved a lot. Before that, they were really a nightmare to start because the materials they were made of didn't slide into the vein very well. And there was a thing called a Jelco. I don't know if they still have Jelcos, but it is a sort of silicone line. When they became available, it made starting IVs a lot easier. That was when I was pretty early in the game. It wasn't just people like me. It was also the technology that was changing, and once you put the person to sleep, the veins dilated up and you could start the IV without hurting them too much.

Garrett
Did you have any other takeaways or some advice that you wanted to give to the newer generation of anesthesiologists, people like myself?

Crawf
No, I think I've said my piece, really. My advice to you as an individual would be, to pay attention to your practice environment in terms of the money. You want to be able to make enough money to be able to retire at a reasonable age with a reasonable lifestyle. But you also want, presumably, to have a life outside

the hospital, which takes time and money. Resolving those pressures is very important for somebody at your phase of life and it isn't always taken into account.

Everybody assumes that when you're young, you want to work as hard as you can to make as much money as you can. But I think having a balanced approach to that is very important. I don't like seeing those 80-year-old guys still working. It doesn't seem to me to be a good thing, but maybe one day doctors will all be on salary and have adequate pensions, in which case that advice is pretty much unnecessary. At least it wasn't like this in my lifetime.

Garrett
So, speaking of retirement, what have you been up to since retirement and how do you spend your time now?

Crawf
Well, I retired and then I didn't do any locums or anything. When I gave my last anesthetic, that was it. I never went back. I used to dream that I'd gone back, but I never did. I missed it a bit at first, but not too bad.

And since then, I maintain an interest in medicine. I read the abstracts of all the papers in the New England Journal, JAMA, and the British Medical Journal every week. That's something I just do every week. I keep up on what's happening in medicine. I don't read the anesthetic journals. I force myself to look through the CAS journal, but there's really nothing in it that interests me. It's all about some fancy new drug or some fancy intubating instrument or something which is of no relevance to me. I'm more interested in keeping up with medicine, so I read these three major journals.

In terms of how I spend my days, the first year I was retired I went fishing almost every day. Then, I got tired of fishing. I do quite a lot to keep fit. If you're going to live to any sort of advanced age, you really have to keep your strength up, so I try to do some aerobic exercise pretty much every day. I lift weights which is pretty good for a person my age and size. A big part of my life is maintaining myself. It's almost a full-time job staying alive when you get to my age.

I joined a trail running group in Victoria and I did ultramarathons – fifty-kilometer races in the woods – and I really enjoyed that. I'm getting a bit old for that now, so I'd have trouble making the cut-offs. I was always interested in that kind of thing. I also did triathlons; I did Ironman Canada a few times. Long distance has always been attractive to me. I don't have very good psychomotor skills, but I can sure keep on going, which probably helped me with my job too. I would come to work in the morning at 8:00 o'clock on Friday and I would work through until 5:00 o'clock on Monday without a break. The only breaks would be between cases. You have to have a fair amount of stamina for that.

Garrett
How did you find time to exercise on the side? Did you exercise in the morning or after work?

Crawf
When I was working, I couldn't exercise every day, but I would on weekends when I was off. I found time for it. Again, I'm not sure that it was wise, because it was cutting into the time that I had available for my family. If you're going to have a well-rounded career as an anesthetist, you need to have time not only for work, but also for yourself, your hobbies and interests, and for your family. But balance is not something that I would be the right one to give you advice on because I was hopeless. I could never find that. I always went overboard.

Garrett
Yeah, I know that my wife would probably say the same is true about me, but I'm working on it. I always find it to be a dilemma as well.

Crawf
When you're a resident you're trying to learn as much as you can. The more involved you are, the more you're going to learn. There's an argument to be made for that. But, once you're qualified, once you've got a job, then pressure should be off. Then, you can take more time.

Garrett
I know what you mean, in residency, you really just have to buckle down and put in the hard work to get through.

Crawf
And that's how you get through. The more cases you've done, the more [experience] you have to support whatever you're being asked about on the exams. I remember being told before I went for my orals that the examiners really asked you one question. And that was: would I be prepared to have this candidate anesthetize me or my loved ones? And if you pass that, yeah, you're okat. I think it's important to bear that in mind that that's what the examiners are looking for. You don't need to be doing anything too fancy, but you do need to be sensible.

I worked for about six months in Kentville as an anesthetist before I took my exams and I think that really helped me. I had to make a lot of decisions about what I was going to do alone. I didn't have anybody, [not] a staff to run things by. I just had to make the decision. That was helpful to me in exams because in the exams you don't have anybody to advise you either. If you can get a little independent practice in, where the buck stops with you, that's really quite helpful.

I know people who spent their whole life in an academic environment, and then they find themselves in a small hospital where there's no other anesthetist around, and they're a little bit nervous. When I was in my third year of residency I used to go to PEI [Prince Edward Island] and do locums there. There was no other anesthetist even in town.

Garrett
That would be pretty nerve-wracking!

Crawf
It was! And we were even doing neurosurgery! It was pretty stressful, but it helped me in the long run because it allowed me to make decisions by myself. I don't think they encourage residents to do that enough now. But it's not such a bad thing.

That's one thing I liked about having residents come. They would tell you, "We don't do this anymore. This is what we do." That's very helpful when you're in a peripheral hospital.

Garrett
Residents are kind of like the pollinators. They work with everybody and spread around all the different techniques they learn from everyone.

Crawf
When I was a resident, pretty much every hospital that I worked in, I was the one that showed them how to put in a Swan-Ganz [pulmonary artery] catheter. Those catheters were just coming in at the time. And

putting one in was a major hassle. You had two transducers that you had to calibrate. You had to make the transducer work, which was somewhat time consuming, and then you had to actually put in the Swan-Ganz. I put in the first Swan-Ganz in the Halifax Infirmary, the first one in PEI, and the first one in Kentville. Now of course they've gone away from Swans, but we used to use them a lot. We used to put one in every aorta case.

Garrett
These were the days before ECHO [echocardiography/ultrasonography], before TEE [trans-esophageal echocardiography], and POCUS [point-of-care ultrasound], and all that. Was anyone using ultrasound then?

Crawf
No, they were just starting to use ECHO to locate veins. I remember when I was in medical school, I had a subscription to the New England Journal. I remember reading this article by [Dr. Jeremy] Swan about the Swan-Ganz catheter, he was somewhere in the States [Cedars Sinai Hospital, Los Angeles CA]. I remember reading it and thinking "Holy Jesus, they're putting this catheter through a person's heart". I couldn't imagine doing something like that. Three or four years later, *I* was doing it!

I was very lucky. I think my career came at a good time, because they were just developing good IVs, inhalational agents, monitoring devices, the LMA, and also pulse oximetry came into practice. A ton of things came in during my time in anesthesia. At one time, all anesthesia was, was inhalation of ether.

Garrett
The heydays of anesthesia. I just thought of another interesting question, how would you describe yourself as an anesthesiologist? I find there are different personality types in anesthesia. Most anesthesiologists are pretty calm, able to keep cool under pressure, and get along with a lot of different people like we mentioned. Did you have any kinds of personality qualities or practice qualities that in retrospect you find kind of interesting or stood out?

Crawf
I didn't get excited in the OR. Some anesthetists are always saying to the surgeon, "Hurry up and finish." They say the patient's not doing that well. They're on the surgeon's case all the time. I never did that. I stayed away from interfering in what the surgeon was doing, unless I thought he really needed to know something. That was a good thing to do because when I did say anything, everybody listened.

If you're complaining all the time, people tune it out – you don't have any credibility. Whereas if you only raise your voice when there's something seriously wrong, they listen. So that would be one quality that I had that I think was helpful.

And, I always had the feeling that anesthesia was a service. We are providing a service to a patient, but also to the surgeon, and to the operating team, and to the hospital, and to society at large. I think it's important to realize that the patient doesn't come to the OR just to have an anesthetic. It's important to maintain a degree of modesty about your role. You are providing a service, and so it behooves you to provide a good service and to do it in a respectful and congenial way. I think that takes you a long way in anesthesia.

I remember one of the senior anesthetists in Halifax, the surgeon came into the room and said to him, "Dr. So-and-so, this patient didn't come here just to get an anesthetic!" Because the anesthetist was acting like his concerns were really all that mattered.

Garrett
It's a good reminder not to get too caught up in ourselves and what we do.

Crawf
A little humility goes a long way.

Garrett
On that note, I really want to thank you so much for sharing all about your history, advice and perspectives. As I said at the beginning, it’s very interesting and inspiring to hear your story, and we’re really grateful that you were willing to share it with us.

References:

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