Canadian Anesthesiologists' Society Presidential Interviews
Dr. Earl Wynands, interviewed by Archives & Artifacts Committee Chair Dr. Mike Wong
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Mike
Today I am fortunate to speak with Dr. Earl Wynands, who served as president of the Canadian Anesthesiologists' Society from 1974 to 1975. He has had a very remarkable career in cardiac anesthesiology, having worked at the Ottawa Civic Hospital and Ottawa Heart Institute since 1988, where he continues as Professor Emeritus. He previously also worked for 30 years in the Department of Anesthesiology at McGill. In addition to his service on the CAS, he has been involved in other professional organizations including the Society of Cardiovascular Anesthesiologists (for which he served as president from 1989 until 1991). He is an Officer of the Order of Canada, and has a number of awards, grants, and lectures named in his honour. Among some of his many honours are the Society of Cardiovascular Anesthesiologists Distinguished Service Award, Queen Elizabeth Golden and Diamond Jubilee Medals, the Harold R. Griffith Medal through the World Congress of Anesthesiologists, and the CAS Gold Medal. He has 80 scientific papers published between 1960 and 1999, amid numerous abstracts, editorials, and book chapters.

It is an honour to speak with you today, Dr. Wynands. Welcome!

Earl
Thank you for having me here today. It's a pleasure to be with you.

Mike
To start, can you tell us a little bit about your background in Montréal?

Earl
I was born in Montréal, at the Catherine-Booth Hospital in the West End of Montréal on December 10, 1929. My family: my father was born in Rotterdam, my mother, brother, and sister were born in Montréal, and we lived with my grandmother. My maternal grandfather built the house where we lived in Ville St. Pierre, but I never knew him – he died of the Spanish flu in 1920. My mother and father, brother, and sister, and I lived with my grandmother. I grew up there and we ended up moving to the Notre-Dame-de-Grâce neighbourhood in the West End of Montréal. I went to school at Loyola High School and then Loyola college.

Mike
What did you study at Loyola College?

Earl
I took the arts degree, but I even knew then that I had an interest in medicine. So, I didn't take Greek; they tried to talk me into it, but I didn't do it. I was on the mathematics end of an arts program, if that makes any sense to you. It was a superb education, that's for sure. I loved that school.

Mike
So, you had your sights set on medicine from your time in high school, was there any specific experience or inspiration for that interest?

Earl
Strange as it sounds, it was from Life magazine! I was in class with a fellow classmate, Milton Bider. He had a Life magazine with pictures that showed some of the heart operations that were going on in the '40s, such as PDAs [patent ductus arteriosus ligation] and what have you. That got me interested. I thought that sounded like an interesting career. I kept that in mind through graduation to college and continued down the pre-medical stream with biology and chemistry in college, whereas a pure arts degree wouldn't have had it.

Mike
Was it a smooth transition into medical school from the undergraduate arts degree, or did it take more effort to get in?

Earl
It was a very smooth one.

I have to go back a little bit and say that, from the time I was 12 years old, I started caddying at the Royal Montréal Golf Club – and it's the wartime in 1939 or 1940. I would be the caddy and one day the pro was cleaning the golf clubs. He said, "Kid, would you like to come and clean clubs?" I said "Yes, Sir." So, I went into the pro shop. The course of the next two years led me to having a permanent job in the pro shop doing all the things that a young boy would do at a pro shop to keep the clubs in good shape for the members. Because it was wartime, I was given a little more responsibility. There was another boy my age working with me in the pro shop, and we both became assistant pros at the age of 17. At the same time, the folks who were at war came back and it was a mixture of the older boys and the younger ones. It was a great mixture and was a great life. I loved it.

Anyway, I had made up my mind by the end of my third year of college, that I would either apply for medicine or stay in the golf business as a teaching pro. I knew I could do that, and I was looking into ways of making it happen.

I talked to my father. I met with Mary – my girlfriend then – and talked to her father about the prospects of opening up a driving range in the West Side of Montréal, where there weren't any at the time. That sounded pretty good. So, I'm really going into the golf business or will be accepted into medicine.

I only applied to one medical school, McGill. I mean, that's so different from what it is now, where people apply to look through three or more schools and travel all around the country and North America, looking for positions to get into. I just applied to one and I wasn't the only one who did so.

Fortunately, I was accepted.

Mike
Life could have been very different. You've previously talked about your experiences as a medical student at McGill, and that's when you first started to notice changes to your vision. What did you first notice, and what were the implications that you thought it would have for you?

Earl
Yes, when I got into medical school, I was feeling well. One day I was dissecting a cadaver, and my classmate who was co-dissecting with me said, "You're getting kind of close to the cadaver. You need your eyes examined." So, I went down to see an ophthalmologist and walked in expecting to be told that I was going to need glasses. Instead, he sat back and said, "You're going to lose your vision. You're going to become legally blind. That means you're not going to be able to read without the use of a magnifying

glass and, even then, you're going to lose your central vision, but you should have acceptable peripheral vision."

With that, I had to decide what to do. Here I am, in McGill Medical School with the diagnosis of impending blindness in a few years. So, what should I do? By that time, Mary and I had been seeing each other for about four years. We were thinking about eventually getting married when I finished school. I talked to her about it, and I talked to my parents about it.

I decided I would stay in medical school and see how far I could go. As long as my vision let me go, I would carry on. I also decided that I wasn't going to talk about it. I'd try and hide it as much as possible because I didn't know what was going to happen. I went through medical school year by year, losing more and more vision. At the end of my second year, I was having trouble reading without a magnifying glass to study. I was finding it difficult with some of the things those other students were doing, that I dared not deal with. For instance, they liked to go and assist on surgery or get involved in clinics during preclinical years, and I didn't want to do anything that drew attention to me.

I went through medical school getting good book knowledge, and I was doing well in my exams. I could still read the examination papers, but it was getting a little difficult. And I was doing well. I did not want to get involved in anything that would make it obvious that I had a visual difficulty, so I relied on book work. I didn't do many of the extra clinical activities that classmates did, like assisting with surgery or getting involved in the clinics.

So, it raises a problem – I was doing well but what was I going to do with internship? It was going to be a general internship because they all were at that time. I knew I was going to have to make up my mind about what I wanted to do after medical school, with interning and my medical life. I had no idea what to do. I knew I couldn't be a surgeon! I couldn't be an obstetrician. I couldn't drive a car, so I couldn't be a general practitioner…

Fortunately, I met two people at the Homeopathic Hospital, which was Dr. Harold Griffith's hospital, who were in their early 20s. One had been in private general practice and the other had been trained in Ireland and England as an anesthesiologist; Drs. David Power and Arthur Sheridan. These two chaps were residents with Harold Griffith, and I thought they were the coolest guys in the interns' and residents' room. When interns sat around and talked about what they were doing, they were the ones who knew the most physiology and internal medicine. I listened to them, and it sounded pretty good. They're anesthesiologists – called *anaesthetists* in those days. So, it was arranged that I would go up to the operating room and see what they were doing. I [went to meet] Harold Griffith, who was the chief of the anesthesia department and professor of anesthesia at McGill, and I let him know that I was thinking about anesthesia as a career.

I didn't tell him that it was because I wanted to find something I could do with the impending visual problems. He said that I should first get the experience of a general internship and see how I thought after doing that. I successfully graduated from Medicine at McGill. Three days later, Mary and I got married. Then, I went off to Bridgeport, Connecticut, at St. Vincent's Hospital and interned there. That was a whole new experience, because I did not have the experience on the wards like the other guys at Bridgeport did. There were four of us from McGill but the rest of the residents and interns, 12 of us in total, had been training in the States and had all kinds of experience. Some had been taking out appendixes in medical school. I had not been at the OR table. I had a difficult time in that year, doing the things you have to do as an intern, things that are clinically relevant to doing the job properly. That was somewhat difficult, but I found ways of getting around it. I successfully completed my internship.

My vision was, by then, down to needing a magnifying glass to do any charting. I was scrambling to find a place where I could read the charts and be alone to use my magnifying glass. The staff people, surgeons, medical people, obstetricians, fellow interns, and residents, they all sort of knew that something was wrong, but they also knew that I did a good job. Good histories and physicals. I did my work, and everything got done. When it came to going into surgery, I would assist with surgery, by holding things, but I didn't make any effort to do finer tasks, like cutting sutures, unless I had to. I would be able to do it, with some difficulty. I was doing the job that I had to do to get through, and I did get through.

But the big thing was that I had a very successful month in anesthesia! I could do all the skills of anesthesia with my peripheral vision: starting IVs, completing the chart, putting in the endotracheal tube. I could do all those things with the vision I had! So, I was very happy. The chief of anesthesia at St. Vincent's Hospital, Dr. Leonard DelVecchio, who I told early on in my rotation that I wanted to do anesthesia. I was convinced I had found something I could probably do all right. He went way out of his way to make sure I had a great month.

He had two anesthesiologists on staff there for four operating rooms, so they had four anesthesia nurses who gave all the anesthetics, with the two anesthesiologists supervising. I would be replacing one of the nurses, and the nurse anesthetists loved to be replaced by me! I got to do their work and I got supervised by one of the anesthesiologists, so it's a win-win situation for everybody. I told Dr. Delvecchio I was going to do anesthesia. He said that was great, he had a friend Dr. John Adriani in New Orleans, and he could arrange everything for me to go there for anesthesia residency. Adriani was one of the biggest names in anesthesia.

Then, I thought I'd better check with Dr. Griffith, so I called him and told him I had an opportunity to go through to Adriani's course. I was calling to check in and see what he thought. He said one question, "Where do you want to live?" I said, "In Montréal." He said, "Then, you better come and join my course!"

I decided to go to Montréal, to McGill's anesthesia residency with Harold Griffith.

Mike
That's a pretty compelling reason, all things considered.

At this point, present day, you have a fairly distinctive position in the country in terms of people who have worked closely with…Drs. Harold Griffith, Alan Noble, Wesley Bourne, among others. There are few living anesthesiologists, if any aside from you, who have had that experience nowadays of working with these esteemed figures.

What would you say are your recollections of Dr. Griffith and some of his other contemporaries at McGill?

Earl
It was a great learning experience. I'll tell you about the McGill anesthesia diploma course at that time. You rotated through six hospitals; in three of them, you got to give anesthesia for general surgery and other specialties. You went to the Neuro (Montréal Neurologic Institute) to get neuroanesthesia experience, to the Montréal Children's Hospital to work with children. You went to the Veterans to get experience in regional anesthesia. They were all great learning experiences. In the beginning of my second year, I was scheduled to go and work with Dr Harold Griffith and that was a big, big thing for me.

But, first, you have to get a feeling for what happened in the first year. My first six months were at Saint Mary's Hospital, with David Power and he was one of the residents I had talked about earlier. He took me

under his wing, to be my mentor. Once again, he didn't know about my eye problem. He just made sure that I knew how to do the things that one has to do to be a good anesthetist. In that first six months of training, he wanted to bring me up to scratch, to be confident to look after general surgical problems and what an anesthetist might do about those problems. I learned to give what you might call the "Montréal anaesthesia technique." There was a pre-medication, with Nembutal and morphine or Demerol, atropine, or scopolamine. Then, the patient is brought into the operating room, pre-oxygenated, induced with intravenous pentothal and given intravenous succinylcholine for intubation, at all times being in control of the patient's ventilation. They were given nitrous oxide with oxygen and intravenous increments of Demerol or morphine for maintenance of anaesthesia, and an intravenous succinylcholine drip for muscle relaxation, and controlled ventilation for the surgical procedure. That could get you through anything, you could manage that type of anesthetic for just about any kind of surgery.

In my second year, when I joined Dr. Griffith, I had some experience with cyclopropane anaesthesia in my rotations to St. Mary's Hospital and the Montréal General Hospital. I found it easy to use, potent and predictable but was not comfortable with it because it could explode. Dr. Griffith had been introduced to cyclopropane in the mid-30s by Dr. Ralph Waters from Madison Wisconsin who had pioneered cyclopropane anaesthesia and was the first professor of anaesthesia in a medical school. It's much more gentle but it was explosive, and we worried about it. Dr. Harold [Griffith] was a cyclo man when I joined him. He liked cyclopropane. It was a huge educational privilege to work with him. He was a quiet, easy-going individual, with a good sense of humor and magnificent judgment and skills. He taught me everything I needed to know about cyclopropane and ethylene anesthesia. He believed ethylene was a better anesthetic than nitrous oxide, but it was [also] explosive and could not compare with cyclopropane.

From his early days in medical school, from the very beginning, he was fascinated with anesthesia. It absolutely fascinated him so much that, in his first year of medical school, he wrote a paper on guidelines for the practice of safe anesthesia. Then, he got interested as a medical student in ethylene, which he thought was a better anesthetic than nitrous oxide. He learned to use ethylene and he was writing papers on it, which attracted the attention of people in this country and in the United States, like Dr. Francis McMechan, who was the founder of IARS [International Anesthesia Research Society] and Dr. Wesley Bourne in Montréal. Bourne was the first professor of anesthesia at McGill. Dr. Griffith also met the individual who pioneered the use of cyclopropane as an anesthetic agent, Ralph Waters in Madison, Wisconsin. In particular, McMechan and Waters were very impressed by Griffith. They came up to visit him in-person to exchange views. It was because of all these interactions that Griffith decided to take up cyclopropane.

So, I went to the Montréal Homeopathic Hospital, and I learned cyclopropane anesthesia there. It was strictly closed-circuit, and you were tested to make sure you were electrically grounded properly. All precautions were taken to avoid an explosion. It was a great learning experience. Griffith would be able to use cyclopropane for a surgery such as an appendectomy and he would let the surgeons use cautery under some conditions! When he knew that the system was perfectly airtight – he would check to make sure nothing was escaping into the operating room – he would allow the risk of cautery…I wouldn't dare to use the cautery. So, he taught me how to use cyclopropane and he used relaxants with it. I had my [training] with Dr. Griffith, who taught me everything I knew about cyclopropane. He even had me use ethylene. We still had a small amount left. This was 1956, and they were using ethylene in 1923. Griffith had experience and he brought out the ethylene tanks. It was great working with him. He was completely different, very understanding, and a wonderful person to work with.

It's interesting how he came to use muscle relaxants. Dr. Lewis Wright, from E.R. Squibbs & Sons, had some intocostrin curare extract in 1940. And he was trying to get people to try it out, to produce muscle relaxation. He pointed out that psychiatrists were using it to soften the convulsions that occur during ECT [electroconvulsive therapy] and they were not getting in trouble using it. Griffith had it for two years and didn't use it. [Eventually] he decided, if the psychiatrists could use it, then it's got to be safe for an anesthesiologist. He did this with Dr. Enid Johnson, who was his resident. They gave it to a 25-year-old male having an appendectomy and he was able to decrease the amount of cyclopropane used. The relaxation was satisfactory for removal of the appendix. He then went on and gave it to 24 more people – that's 25 patients in total – he then published it in a period of less than six months.

There was controversy when it first came out. It was felt at the Massachusetts General Hospital to increase morbidity and mortality. They showed figures that there were more deaths in people who got curare than those who did not. Dr. Griffith and many others felt it didn't increase morbidity and mortality. To them, the fact that there were more people getting muscle relaxant who were dying probably reflected patients who were higher risk, the [same] type of patients who might benefit from getting a lower concentration of anesthetic, with equal or better conditions for the surgeons operating. It increased the scope of surgery. It reduced anesthetic requirements. Dr. Griffith believed that, and that's what we learned at McGill.

He had a great influence on me in other respects, too.

Mike
How so?

Earl
I knew with my visual problem that I would not be able to complete a year of internal medicine, which was a requirement for Royal College fellowship at that time. I knew that I would only be able to go for certification. Until the Royal College of Physicians and Surgeons of Canada's 1971 adoption of a single standard of training and single qualification for Anaesthesia, it was previously possible to have a specialty certificate in Anaesthesia without having attained full fellowship status. That was a bit of a bummer because all my colleagues were going through the fellowship, which helped for an academic career. So, I was working with Dr. Griffith one day. He said to me, "Earl, for your final year – It was my second year, and I had another two and a half years to finish [residency] – you should spend a year with Dr. Alan Noble." He was highly respected, the chief of anesthesia at the [Royal Victoria Hospital (RVH)]. He had come from Kingston to take on the job of improving the RVH program, which was badly in need of rebuilding.

I hadn't told Dr. Griffith about my eye problem. I didn't tell [him]. I didn't know what I was going to do, but he pointed out a way for me to get another year of very good training, in a very good department with very good people. I had to be content with that. I felt second class because of the fellowship issue but I had to be content with it, and that's what I did.

I had the opportunity to spend six months with Dr. Richard Gilbert who was the chief of anesthesia at the Montréal Neurological Institute [MNI]. He was working in the house that Dr. Wilder Penfield built. They were doing resections on the brain to combat epilepsy. So, I went there, and I had a great six months working with the great man Gilbert and the great surgeon Penfield. That was a huge experience.

Then, I went to the Children's Hospital. Lo and behold, when I was starting there, they were doing open heart surgery. They had just done about four cases, [but] the patients all died. They had to change the cardiopulmonary bypass pump because the pump was a big problem. I got there when they were into this

new phase. It was still brand new, experimental surgery, that was for sure. By now, I was a senior resident, and I was keen to be working in places like that.

You should remember that I didn't, and never did, have trouble with the skills of anesthesia. I had trouble with filling in the blinking charts. Those were the things that gave me trouble in the beginning. I got away with it because the anesthetic chart was so simple. One page where you put in lots of ticks and that's all there was to it. But, with the new modern-day charts we now all use and know so well, I think I'd need help. When I was working with somebody else, I could induce, and the other person could work with the chart while I was doing that.

Anyway, at the Children's, I learned how to do cardiac anesthesia. I got to assist Dr. José Rosales who was a friend of mine and one of the staff people at the Children's. He recognized that I had a problem with my vision, and he went out of his way to make sure that I got good training. I left the Montréal Children's Hospital with a fairly strong beginning in the requisite techniques.

It was simple because anesthesia in those days was simple: you put people to sleep with an induction drug – maybe a little bit of Pentothal – and maintain them on oxygen and nitrous oxide, or ether – still available in the operating room at that time! There was nothing electrical in the operating room. All you did was take your blood pressure, feel the pulse, and manually ventilate the patient; we didn't even have a ventilator in the operating room then.

Afterward, I ended up going to the Royal Victoria Hospital for a year as a clinical fellow.

In 1940, Dr. Griffith and some of the Francophone doctors had formed a society of anaesthetists that lasted about three years, but in 1943 it collapsed. Then, Dr. Griffith formed the Canadian Anaesthetists' Society in 1943. He remained the President of it for three years. There he is, a communicator, involved in teaching, he's got an international reputation already as a teacher, and he gets involved in forming CAS. Why? Because he foresaw the importance of education and training in becoming anesthesiologists. He was president for three years, which was enough to get the CAS started.

I have to tell you about Dr. Wesley Bourne. I also had the opportunity of working with him. He was the first professor of anesthesia at McGill. By the time I encountered him he was semi-retired, but he would go over and do a list once a week at the Shriners Hospital for orthopedic surgery for children. And the Children's Hospital backed him up. They sent one of their residents over to help Dr Bourne, who wanted somebody to help him. At one point, I fell into that position, where I got the call. "You're going to go over and help Dr. Bourne." He would call up and say, "Who's coming to help me?" They'd say, "Wynands is coming to help you," and I'd be working with the great man. Wesley Bourne, one of the best-known anesthesiologists in the world. Eccentric, great scholar, innovative. All the great things you could possibly think of, that was Wesley Bourne. So, I had the opportunity of working with one of the greatest people in Canadian history and anesthesia. I don't think there's anyone around now who worked with both of those great anesthesiologists, Griffith and Bourne.

I should say, I don't know how many attempts I've been involved in – there must have been six attempts to nominate Griffith for the Canadian Medical Hall of Fame [CMHF], for what he did with curare and many other things. But he's been turned down time and time again, in spite of many applications to CMHF. It's unbelievable that Dr. Griffith, with his stature and contributions, is not in the Canadian Medical Hall of Fame. And there are ***no*** other anesthesiologists!

Mike
It's definitely a missed opportunity. I'm certain one of these days it will happen [Dr. Griffith's posthumous induction into the Canadian Medical Hall of Fame]. As you allude, it's certainly a long time coming.

Now, at this point, Harold Griffith, had such a prominent international and national profile. He had such an instrumental role in organizing anesthesiology, in the form of CAS and the World Federation of Societies of Anesthesia. Was it him specifically that got you interested in becoming involved in professional service yourself? For instance, with the Association of Anaesthetists in Québec, with CAS, and some of those other things? Or were some of your other mentors or coworkers influential in that respect?

Earl
One more thing on that note, Dr Griffith was so driven to improve education and communication in anesthesia, across the specialty, that he had the idea of forming the World Federation of Societies of Anesthesia [WFSA] from 1951 to 1955. He was named the first President of that society in the Netherlands in 1955 and then he was named permanent Founder-President of WFSA in 1959, when the meeting was held in Toronto.

When I met Dr. Griffith, he was such a communicator for what was happening in Canada and elsewhere in the world of anesthesia. He received all sorts of recognition for his accomplishments, like the Feltrinelli Prize in 1956, from Italy's Accademia Nazionale dei Lincei, which was akin to winning a Nobel prize. Or the Distinguished Service Award at the ASA in 1959; the only non-American to receive this distinction. He was elected the vice president of the ASA in 1946 – unheard of! Nobody from Canada ever held that position. He was president for six years for the International Anesthesia Research Society. He also received the Gold Medal from CAS, in 1962.

When he said to me to go over to work with Alan Noble, I think he had in mind that I would be involved in academic anesthesia. This was what I wanted to do, but I didn't know whether I'd be able to. So, I went and joined Alan Noble. I got through my exams with no problem. My wife, Mary, was doing all kinds of reading for me.

Anyway, I hoped I would be offered a position at St. Mary's Hospital when I finished my training and mentioned it to Dr. Power. It would be three years before I would qualify for the position. I brought the question up with Dr. Power because I was very comfortable working there. I guess I felt that, because things were going to get tougher, it would be best for me if I could organize a future appointment [earlier]. As I recall, I said to him, "Do you think you will have room for me here when I finish my training?" I felt comfortable working in that smallish hospital, in a protective environment. He said yes. As I got closer to the end of my training, I contacted Dr. Power and heard that they had another person who was probably going to come and work for them at the same time, so it might have been my job. By then, I had been given the opportunity to do open heart surgery anesthesia, at the Royal Victoria Hospital – that's unheard of. It happened because, when I went there, I had good training to be able to assist in an operating room looking after someone having open heart surgery.

It so happened, that two people who had been trained to do the first two open heart cases at the Royal Victoria Hospital were away on vacation. The surgeon was Dr. [Arthur] Vineberg, and I had assisted in surgeries with Dr. Sheridan early in July before these open-heart cases popped up. I was able to tell the surgeon that I could do the cases for him, after the acting chief asked me if I could.

I did two cases, one was for subaortic stenosis on an 11-year-old boy, [where] the surgeon was trying to go down through the aortic valve with a biting instrument and take a bite off the ring of muscle around the valve. It's a blind procedure, I don't think it had ever been done before. There was inadvertently a hole cut into the mitral valve and the patient died the next day of heart failure. The second case was an atrial septal defect, straightforward. I had no problem with that, and he didn't have trouble repairing it. It was easy, everything went well.

When Dr. Noble came back and found out I had done two open heart surgeries and another case with hypothermia, which I had experience with while training at the Neuro [MNI]. It was a case where they had to do some work on the arch of the aorta. So, he came back, and I had done this, right? They offered me a position on the cardiac team. After I got my exam, I did more and more cardiac, and it became my main interest although I did all the other kinds of surgery as well.

It led to me having a job at the Royal Victoria Hospital. And, when Dr. Noble said it was time for him to step down as a representative on the Québec division of the Canadian Anaesthetists' Society. He said here, "You're a Québecker. It would be a good idea if you could get on it." I didn't want to do that, but I thought that I had to because he wanted me to do it. It seemed like the right thing to do. Actually, it led to a 10-year appointment with what became the AAQ, Association of Anaesthetists of Québec. There were a number of discussions at board meetings about the name of the society. We wanted to get "réanimation" in there, because we wanted anesthesia to become more involved in resuscitation. We were getting closer and closer to [the development of] intensive care, which at that time didn't exist. Griffith had the great sense in 1943 as chief at the Homeopathic Hospital to start a recovery room. There's a sign at the hospital, commemorating this distinction. In 1961, he was the first one in Montréal to have an intensive care unit in his hospital.

So, we were thinking in the AAQ, intensive care and its relation to anesthesia… we really are intensivists. Anyway, I stayed there for 11 years. In 1959, changes were going on in Québec about the importance of French as the major spoken language. At the annual meeting, I was approached by a friend of mine also on the executive. I was vice president, scheduled to be the president which I was not particularly excited about given the vision troubles. They said, "You can't go through. You can't take the AAQ presidency in the next election, because there will be a huge opposition to a unilingual Anglophone becoming the president of the AAQ. I said, "That's OK, I'll step aside! I'll be the 2nd vice president." I was too happy to step aside!

At the next executive meeting, this was made known. Everybody was happy. I had very limited French understanding but they made it work, made room for me to understand things when I asked for clarifications. There were three English people from McGill on the board including myself, but quickly two left and I was still working on the board. The fellow executives of the AAQ had something else in mind for me, they wanted me to be representative on the Council of the CAS for the AAQ. That sounded OK. I was quite happy to go. After I got to Council, Dr. Norman McMillen contacted me, "Can I meet with you?" I said, "Sure." McMillen said, "We'd like you to be the 2nd vice president for the CAS." I said, "I'm not so sure about that."

I had turned down another position that would have made me president of the Association of Cardiac Anesthesiologists, because of reservations with my decreasing vision. My vision was going down all the time and I was reading with my magnifying glass. How could I possibly do the things that were required of somebody in that position? I mean it was tough enough with the Council. People think that you're reading what's before you, when what's happened is you've reviewed the reports with your wife in the hotel room before you go into the meeting and marked it with a black marker, so it means something.

Norm McMillen said, "No, we understand. You can do it. You'll have lots of help." So, I guess people knew I was having this problem, but I was still not talking about it yet. When I talked to Mary about it, she said that she thought the same, that it would be fine. So, I took the 2nd vice president position. It was a great learning experience.

It's all part of the Griffith movement to promote education and everything to make anesthesia safer in Canada. When you look at what goes on, we go through med school, internship, we see a specialty we

like, and then we look around for organizations that help you. [We have] the Royal College, which decides now about the examination process that we have to go through to become specialized. We have the Association of Canadian University Departments of Anesthesia, which looks collectively at what the universities involved in medical education are doing to meet the requirements of the Royal College. Then, there's the CAS. Say now, what is the role of the CAS? The CAS is there to promote safety in anesthesia, for patients having surgery or requiring pain relief and, at the same time, to look after the health and welfare of the people who are providing this safe anesthesia. That's a big, big job, but it has little areas within it.

On the other hand, I didn't want to get involved with the Royal College because I felt like a second-class citizen with only Certificate status in the 1960s. I got in as everybody else did in 1972 after certificate-holding members were recognized as fully-fledged fellows.

So, I became involved with CAS, and I liked working on committees. One that was very active – that I was very involved with – was on anesthesia technicians, a hot topic in the 1960s. In Québec, we started it before anywhere else in the country. Because I was involved in cardiac anesthesia a lot of the time, technicians were coming my way. We discussed it endlessly. The bottom line in discussions were worries about technicians; critics believed the first thing that's going to happen is you're going to find that they're being trained to give anesthesia. We had to say no, they're for technical preparation, preparing for things required to give anesthesia, looking at our gas machines and all the other things that were coming along. When you think going from just taking a pulse and blood pressure, then adding an oscilloscope ECG machine in the OR, to having a new gas machine is different than any of the other ones you ever saw in your life. All those things were gradually coming on board and anesthesia was changing big time, so we needed technicians. We debated back and forth.

They took off big time in Québec, for me anyway. It was my salvation, with getting charting done and technicians loved working in the cardiac OR because they got to do a lot of technical things. Yes, they did learn to start an IV. Yes, over the years they could learn to put in arterial lines. Why? Because it was a way of getting things done quickly and safely. Somebody could be putting in the arterial line, somebody is getting the gas machine ready. It was a beehive of activity. They weren't doing things that they weren't easily trainable for, and they did things that they could be qualified to do.

It was an interesting time. Then, guidelines came along. There were no guidelines yet, other than what Harold Griffith wrote in the 1920s when he was a medical student. There was a bad need for guidelines.

Very interesting place to be, at the Council table of the CAS. It was clear that there were a bunch of provincial representatives, and we're acting as a national board or a national Council. A little bit like our government, isn't it? So, we were just taking what was going on in government and duplicating it. As the government would discuss what was best for Canada, we at the Council would discuss what was the best thing for anesthesia. We found ourselves talking about the administrative divisions in Canada, Québec and Ontario, the Maritimes, and the West; two divisions of the west, actually. We had many discussions.

Mike
It sounds like a very interesting time, a convergence of a lot of social and political factors, also increasing sophistication of anesthesiology as a specialty. As you alluded to, [there was the emergence of] equipment standards and guidelines for the practice of anesthesia. In the 1970s, there were also efforts to standardize the quality of anesthesia training across the country as well, correct?

Earl
Yes, it was a big effort because things were changing so rapidly, something had to be done to standardize. That was an effort that the Council discussed and worked on, and it came down to CAS Council members

going back to their provinces and their universities to put in place changes that were really significant at this important time.

One of the things goes back to 1955, when I started at St Mary's Hospital. I told you about the Montréal anesthetic technique that we did almost everything with. I didn't yet speak about obstetrical anesthesia, which I was very interested in. I felt after going to St Mary's that I could really do something to help moms who were having babies, helping with relief for their contractions when they're getting close to delivery. Residents at the time in a small hospital had to learn how to give anesthesia for obstetrical purposes because they would be responsible for it as soon as they were trained up to do it. It was felt to be an easy thing to do. That's quite an idea, but still you found yourself doing anesthetics very shortly in the obstetric patient after being supervised in how to do it.

Mike
And what was the technique?

Earl
We gave Trilene [trichloroethylene] with a little nitrous oxide and oxygen for relief of the pains. There's a way of giving Trilene by a little handheld inhaler or by gas machine. Trilene was the thing in the late 1950s. We all became very proficient at that. When it came time for delivery, you would quickly induce with higher concentrations of Trilene and it'd work…most of them vomited on the way out, then you'd tilt the table down and they would vomit up whatever was in their stomach. It was something. Strange as it may seem, all that time and then subsequently at the Royal Victoria Hospital for quite a few years after, using general anesthetics with Trilene, I never had to intubate one patient. Never one, not one. We didn't get in trouble. You learned how to tilt the table and the mom would cough up something. Then, home free.

When did we start to get into trouble? We started to get into trouble in 1957 when halothane came over. Halothane was very easy to use. A couple breaths to get to sleep, a couple breaths more and it's deep anesthesia, couple more and their uterus is relaxed – next thing you know, they're bleeding! And they'd also wonder why babies were coming out depressed. The babies had some of the halothane from the mothers.

So, we learned how to deal with postpartum bleeding, depressed babies. The whole practice in the operating room had changed. On that background, I went over to the Royal Victoria Hospital. We had Trilene, we had cyclopropane. I used the Trilene. Then, halothane becomes available, and we start to see the problems coming up in obstetrics.

Then, Dr. Philip Bromage comes in. He talks to the obstetricians and says he's relieving pain with epidurals. Very few people in the department were doing it. He says to the obstetricians that we should be using epidural anesthesia at the Royal Victoria Hospital, but there's resistance. Bromage eventually convinced the obstetricians and he convinced all of us that it was the thing to do.

Mike
I believe it was shortly after your residency training that Dr. Bromage came over. I think he was hot off his first book on epidural anesthesia.

Earl
That's right, yeah. Soon he was to start working on a second textbook. And here he was, with Dr. Noble before I joined the Department of Anesthesia. So, I learned how to do epidurals from Bromage. That was a very good experience. Because we're trying to promote the epidurals for labour and delivery, we ended up all having to be on call for labour epidurals and troubleshooting. Everybody in the department became

proficient and we became a center of expertise in no time flat for epidural anesthesia in Canada. That changed the whole atmosphere. We didn't see the depressed babies anymore. We didn't see the atonies of the uterus and the bleeding.

There was lots of research. I said to Philip Bromage as I was setting up research for the heart patients, "We should be doing blood levels on all the newborns. Get a piece of cord from the obstetricians, take some blood and we'll see the amount of Xylocaine lidocaine that is being transferred." We could see in an epidural anesthetic whether or not there's an amount in there that could lead to fetal depression. He thought that was a great idea. He said, "Do you want to do that, to carry that out with me?" I said I had my hands full with cardiac anesthesia research so I said I couldn't. So, he got Dr. Gordon Fox and Dr. Germaine Houle to do it. That's a classic paper, showing that there was an amount of local anesthetic that travels to the baby, but not anywhere near the amount to cause problems. It was interesting research. That changed obstetric anesthesia for the better, for everybody.

Mike
Now, one important area of work that you had was the building up of the anesthesia review course. Would you speak a little bit to that?

Earl
That was an interesting opportunity for me, too. When I was at the Neuro, Gilbert was the chairman. I was the senior resident with him and did a lot of kind of work with him. He said to me one day, "I think we should have a course with lectures for you people who are writing the examinations for certification and fellowship." I said that would be a great idea and agreed to sit down and talk about planning it. A couple of us sat down and talked about things in the fall of 1957. A year later, we had lectures being given by the anesthesia department at McGill that are preparing people for exams. A few years later we called it the McGill Review Course in Anesthesia. The people who gave the lectures were people that Dr. Gilbert picked out. We initially had basic scientists give the basic science lectures that would blend in with the idea of the fellowship theme. The course content changed in the first four, five, or six years. The people giving it changed. It became, more or less, that most of the course was given by McGill anesthesia department faculty, like the anesthesiologists at the Children's or the Neuro.

They put together a pretty good program. I gave lectures on blood coagulation and hemostasis. Where did the basic scientific understanding come from? It came from postpartum bleeding, you know, abnormalities of the clotting system, fibrinogen, etc. I gave a lecture on myocardial function. I gave about 8 different lectures at the course over the years, after I was on staff at the Royal Victoria Hospital.

Then, in 1979, Dr. John Sandison was the chairman of the McGill Department. He called me in one day and said the person who ran the course the year before was not going to do it this year. He asked, "Would you run it for us?" I had been giving lectures every year, now I was being asked to run it. By that time, the chairman had decided that one guest speaker would come and talk at the McGill review course, which is a 5 half-day course. I thought about it. I said, "I've got to think about this," because I was involved in the heart cases. I had no non-clinical time. Some people had time out of the OR for research. I didn't have any. I created my own nonclinical time. Finally, I decided to do it, but I wanted to invite more guest speakers. I wanted to go and get people who were anesthesiologists who would come and talk at the review course.] [Dr Sandison] said, "Okay, how many?" I said, "Maybe 10 lecturers." He said, "No, we can't do that." I said, "It's too late, I can't do this otherwise. So, I got 10 guest speakers in here, each one doing 2 lectures, so I got 20 built-in lectures. Now, I go to the rest of my colleagues to take a bigger load on, to come and help out. They agreed to it, and it worked.

I was the chairman of the course for 10 years. Five years into that, we were getting big numbers of attendees coming. One year, we had 600 people registered. Of course, some of them were from McGill,

but a lot were from outside of Montréal, elsewhere in Canada, and even in the United States. With time, the reputation of the course grew, and I got to meet more and more people. I'd contacted all these people who I wanted to come and talk. I was inviting and they were inviting me to give talks at their institutions. I was giving talks at more and more places and doing more and more research.

The McGill course blossomed.

Mike
You later moved to Ottawa [in 1988]. It sounded like an interesting journey to get there, involving discussions with Dr. Joel Kaplan wanting to work with you in New York instead. Would you speak to that?

Earl
It was 1983, and I'm feeling comfortable and secure in my job. You have to remember that I always had the eye problem, and it was always getting worse. My vision was still decreasing.

I had always worried about my job. Twice previously I was called into the anesthesia chief's office. The first time was to identify that I did have a vision problem. It's an interesting story. I was called in one day by Dr. Noble after a meeting. He said to me, "Earl, read the minutes." I thought, I'm in trouble now! I couldn't read the minutes. I don't know how long I hesitated, but I just hesitated long enough for him to say that I couldn't read the minutes. "How come?" asked Dr. Noble. I said, "Because my vision is bad. I can't read this without a magnifying glass." I offered to take the copy of the minutes to my office and put them in better shape. That was just my way of trying out some way of getting out of the problem." Noble said "No, no, read them now." I said that I couldn't. He said, "How come?" So, I told him what the problem was.

There I am, with three young children, a job I loved – doing cardiac stuff, research, teaching, residents wanted to work with me, surgeons were happy. It was going great; except I couldn't fill out the damned charts. Now I thought, I'm done. I'm toast! I have children and a family, what's going to happen now?

He said to me, "Earl, you're doing a good job. Carry on." I thought, "Oh my God. What a break." He understood. He assessed me. He didn't make that decision easily. He assessed what the surgeons were saying. He assessed what my colleagues were allowing me to do, to have the control of the open-heart room.

Speaking of cardiac, people were coming in and saying, "I want to do some of the open hearts," and I was saying, "If you're going to do some of the open hearts, you're going to have to do some of the Vineberg cases. They hated working with Vineberg. I did all the Vineberg cases, pretty well. They didn't work with Vineberg. They said they would say, no. I said, "Well, if, you don't do the Vinebergs, you can't do the others." I had a team of cardiac anesthesiologists. If somebody on the team wasn't on call that night and we had an emergency we had to start, someone on the cardiac team had to stay. If it wasn't one of those already on another case, I did it. I came in for emergency cases and stayed on for late cases if nobody else was already put on.

So, I carried on with the heart cases. Everything was going well and quieted down. About six to eight years later now, the 1970s, Dr. Bromage was the chief. He called me in, and he said, "Earl, you're going to be hard to replace. How much longer are you going to continue working?" I said, "Oh my God, not again." I knew I was doing my good work there. It was fine. I was giving talks, I was publishing, doing the difficult cases. But he wanted to know how long I was going to keep working. I said, " I don't know. If you think I'm not doing a good job…" And, he interjected, "Oh, no, no, no, no. You're going to be hard to replace. You carry on. Just let me know. Give us some notice." I said, "Okay. As long as I continue the

way I am now, I'm fine." The vision's going down but, every time it goes down a bit I'm accommodating, and nobody is saying I'm not doing a good job. They're all saying, "Where you gonna be? Because we want you to come do this case."

I got to do the first heart transplant in the Vic.

I got to do the first lung transplant in Canada.

I got to do lots of big stuff. Between doing the hard stuff, publishing, and being involved with the review course, inviting people from all over the United States, Canada, and in some cases all over the world, I got to meet a lot of people. I got invited to a lot of places.

One day at a lecture I had just given, the person who was in charge of anesthesia for neurosurgery at the University of Texas came up to me and said they were starting a cardiac program. They asked if I'd be interested in coming down and running the program. I just had never thought of leaving McGill. I had been there for, like, 20 years. But I had been passed over to be the chief. When that happened, the chief of cardiac surgery called me and said, "How come you weren't taking over as the chief of anesthesia at the Royal Victoria Hospital?" I said I didn't know. He made an inquiry. Next thing I knew, I was pulled in and asked if I could work with Dr. John Sandison, who was going to be the chief. I said, "Of course. I'll work on my cardiac stuff."

But it made me start to think.

So, when I was asked to go down to the States, I thought I should go look at it anyway. When the chief of surgery [in Texas] wanted to meet who the new chief of cardiac anesthesia might be, I told him about my vision. He had heard of my work from others who had spoken to him about me. However, I didn't hear any more from them.

I ran into Kaplan, and I knew him well. He was asking me to be associate editor on his new textbook of surgery and Journal of Cardiovascular Anaesthesiology. I said I'd do it - this took a lot from my wife Mary! He also asked why I wanted to go to Texas. I said, "Well, it's the only place that's spoken to me." He said, "I'll give you a job. Do you want to work with me? You could be doing cardiac anesthesia at Mount Sinai in New York. I said I could look at it, so I went down and liked what I saw. I could do the job and I'd be working in cardiac, doing the political stuff, that's all fine. Kaplan knew my problem. He had talked to his executive about my vision. I was surprised when they called in an ophthalmologist to see me. He looks at my record, didn't even examine my eyes or anything. He said, "You're legally blind?" I said, "I know. Everybody knows. Anybody who asks me, I tell them what the situation is. You know my work record." He said, "Yeah, I don't know how you do it. You can't work clinically. We cover the malpractice insurance, and we can't cover you."

So, I talk to Kaplan again. He's in charge at the Bronx as well as Mount Sinai. He said I could run his research for him over at the Bronx. I said "No, my expertise is in the clinical expertise of looking after sick people. If I can't do that, I can't help.

So, I came back to Montréal and I'm sitting in the OR. We're having a Royal College evaluation, where they check out how well you're performing. The person doing it is a person who I had done some cardiac cases with. He heard this story and found out that I was movable. He went back and he told Dr. Wilbert Keon from the Ottawa Heart Institute that I might be movable. This is the mid-to late-'80s. I got called by Dr. Keon, who asked if I would be interested in coming in, looking at their cardiac anesthesia program with the thought of coming and taking it over. I said, "Yes, I would. " He said, "Would you also come and give a lecture to the staff? Everybody, cardiology, cardiac surgery, and medicine." I said yes. I talked

about myocardial ischemia and surgery. I came away from there, saying I was interested in the job if they form a business group for me. You see, when I went to the Vic I became a member of a business group where we all got paid the same at first, and you paid a stipend for five years to get a full membership into the business group. At the Ottawa Heart Institute, I said I wanted a group practice, and we would all be at the same level in the group, and you'd get paid for the days' work no matter what you're doing, whether it's looking after the most difficult case, looking after the ICU, or doing administration or research or teaching, we would all get the same. They bought it. I [had] said I wouldn't go if they didn't do it.

Then, I told this to the Ottawa Civic Hospital before I accepted the position at the Heart Institute because, if I went over to the Heart Institute, I'd also have to take over at the Civic Hospital. The Heart Institute was really part of the Civic; it's a strange relationship. I said, "Oh, well, okay. They wanted me to be the chairman at the university anesthesia department…they're really asking me to do three jobs! I've already got an editorial job at a major journal and a textbook. I'll need a medical chief at the Civic Hospital. Anyway, okay now. For the Civic Hospital, they're going to have to fall into the business group. It was a big deal; all these people were billing for what they did. They had fought to get the difficult, big-paying cases. For vascular cases, you had to break the door down to get in the room to do them! I said, "No, I'm not coming unless you form a business group. The university was told that, and the Civic Hospital was told that. They told their guys there, "You're going to have a business group." I told them that I didn't want anybody to leave. "You're welcome to stay, but you've got to work under the new terms." They bought it. It took about a year to get the program up and working. It worked.

I didn't go to New York, because of my vision. I went to the Ottawa Heart Institute, in spite of my vision. Dr. Keon was listening to what people were saying about my capability.

Mike
And, for how long did you continue to practice before retirement?

Earl
I practiced until I was in my 65th year. And, in 1994, I had heard about the simulation center that the Massachusetts General Hospital, where they were putting on a demonstration at an ASA meeting. I signed up to see it, and I was really impressed by it. I went back and said to my executive, "We have to get this in Ottawa." They said, "Anesthesia can't afford it, it has to be university run. Everybody said it was not going to work. Too expensive." I decided I had to put on demonstrations in Ottawa and go forward on a university basis, involving surgeons, anesthesiologists, cardiologists, medical people, emergency people, obstetrics, nurses, administrators, everybody. We had to put on a demonstration to garner support for a simulation center.

To make a long story short, it was a tough, ten-year grind to get it up to shape. It involved the bio-engineering department, all kinds of backbreaking endeavors, sleepless nights, worrying that it may not work. Eventually it did come together. We had one classroom for the first three years, then a renovated area in the Heart Institute for about 6 years, then an area renovated over in the Civic Hospital for about 10 years. Now, it's in a 10,000 square foot building. It's a roaring success.

In the early days, we were having trouble getting it staffed, since many programs wanted to have a date for their residents or medical students. We had to provide trainers, which cost money. About 10 years ago, some people were starting to complain about the extra cost of the simulation center. I spoke to the dean, and I spoke to Dr. Jack Kits, the CEO at the Ottawa Hospital – a friend of mine who I met when he was a resident attending the McGill Review Course, and who helped me when I came to Ottawa." I spoke to him, saying that if the university is going to be competitive in medical education (undergraduate, postgraduate, nursing), you're going to need a multidisciplinary simulation center. Otherwise, you're not going to compete. They bought it, and we turned it into the program it is now. I was wildly happy. We

[later] hired Dr. Viren Naik to be the medical director of the simulation center; I would say that I was acting medical director from 1996 to 2015. No charge, that was my volunteer work, I started this simulation center and it's hugely successful.

Mike
That's a tremendous legacy. I'll leave you with one more question of a somewhat different note. Through the early years in particular you had mentioned the important role that Mary your spouse had played, with supporting you through this whole journey.

How would you describe your partnership with her and also the role of family through the years?

Earl
When you look at a medical career: you can have problems at work or you have problems at home, and still be successful. But you can't have problems in both places at the same time because then you won't be successful. You've got to cure one problem to make any of it work. When I was diagnosed with my visual problems, Mary and I discussed what the outcome might be. We got married three days after graduation. Both of us had met when we were 17. We got married when we were 24. She lived at home until we got married. I lived at home with my parents. We went to Bridgeport for our honeymoon year and for my intern year. Bridgeport was a tremendous experience in every way. I was able to do the work that I had to do. Mary found out that she was going to get a job…which was reading for me! I already had to use a magnifying glass at that time to do a little bit of reading. I couldn't read for a long time; it was so hard on the eyes with the magnifying glass. She did the reading for me when I went through my exams. She must have read most of Harrison's textbook for me! She audio taped it.

You want to follow the history of cassette tape technology? Just follow the number of tape recorders I bought over the years. I ended up first with a 7-inch reel tape recorder. I had that thing at home. When I'd ask Mary to read something for me, we taped it. I didn't want her to have to read something twice. We had all kinds of tapes going. When I was going to be on call, I could take the tape recorder and to listen to the tapes that Mary prepared for me. This isn't just preparing for exams, there were all kinds of tapes. There was an audio digest where you could buy commercially prepared tapes from people giving courses. The McGill review course ended up having tapes made. I could hear myself giving talks at my own course…

Then, we got down to smaller tape recorders. Better, newer tape recorders. When you look at President Richard Nixon's tape recorder in his office, that's the same tape recorder I had in my living room. Nixon used to tape all these things that were going on illegally in his office. My stuff was all legal! As the tape recorders got smaller and smaller, they became more and more portable. I'd never go on call without a tape recorder in my pocket. To this day, I still walk around with digital recorders.

Mary read an awful lot.

We had six children, in eight years. First was born in '56 and the last one in '64. Four boys, two girls. None of them are in medicine, that's all okay. The future for them was always open to discussion. They worked great because I let them do what they wanted to do. I kept an eye on them and tried to help them in any way I could. It's a great relationship. They all have wonderful families. We're starting to run into our problems as we all get older. Everything changes.

Mary and I had a wonderful relationship. She died three years ago, left a big hole in my life. She was incredible. When I was given the Order of Canada, I was interviewed, and I told him in that interview that Mary deserved the Order of Canada before me. I meant it! To bring up six children, read for a blind husband, and – until the kids could drive the car – did all the driving.

Mike
She sounds superhuman.

Earl
One more thing, in case you were wondering if I did anything outside of work, in 1969 my cousin's uncle's farm came up for sale. I thought, boy, a hobby farm! Maybe that's where we have to go and live with the kids when I can't practice medicine anymore. Out in the country. So, I bought a hobby farm. Of course, it's a fallacy, thinking that we would live there…but, well, we did! It turned out to be a place where I would go to escape and have something non-medical to do in my off time. It was a place where the kids would grow up and have horses and motorbikes, a swimming pool, where everything would be harmonious, and friends would come and visit us. I'm either at work or at the farm, or I'm traveling and giving lectures somewhere. That was our life. I think the children benefited from the hobby farm. They learned how to pick apples when it wasn't the thing to do. They learned to make maple syrup. We had a tractor and, in the fall, apple trees with lots of apples; imagine that it's starting to snow, and we'd have to get those apples off the tree before they fell on the ground. All part of a healthy survival. We were very happy there.

Mike
What a remarkable situation and life it has been. I think that's probably a good place to end this off today. My condolences for the loss of Mary, the two of you sounded like an unbeatable team, with a wonderful partnership.

Thank you so much for taking the time to speak with us about a most outstanding career, and some aspects of how you coped under challenging circumstances. With some perseverance, you really made the most out of what could have been a very difficult and potentially career ending set of circumstances very early on. Instead, you seemed to thrive with legal blindness.

Once again, Dr. Wynands, thank you very much for speaking. The pleasure has been all mine today.

Earl
Thank you for inviting me. It's a real pleasure.