

UHN 'Oral History Project' - Dr. Bernard Langer

Interview Transcript

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C. Cote' This is the UHN an Oral History Project. Conversations with former leaders of the University Health Network, Canada's largest teaching and research hospital. I'm Christian Coté from UHN public affairs and today's guest - Dr. Bernie Langer. Dr. Langer is a renowned surgeon who helped transform the practice of surgery in Canada. He's the recipient of numerous awards including Canada's highest civilian honor - Officer of the Order of Canada, and he's a member of the Canadian Medical Hall of Fame. Dr. Bernie Langer - welcome to The UHN an Oral History Project.

Dr. Langer Thank you. I'm happy to be here.

C. Cote' I always like to start with our guests going back in time to what shaped them. So if we could start Bernie with your parents were Polish Jews who emigrated to Canada prior to World War 1. You were born in Toronto in 1932 and you grew up in the College Bathurst area during the Depression and in the shadow of World War Two. Give us a sense of how those events and times shaped you and your values and outlook on life.

Dr. Langer Well that is a long story but I'll try to be brief. The community I grew up in was predominantly immigrant Jewish community and there was a real sense of family and community. The people who came over had very little, often brought over by the first relative that arrived and got a job like my uncle who was the oldest of his siblings. And when he had enough money he began to bring the other siblings over and then their parents. Those communities were pretty close knit, and it wasn't until the next generation where people like me grew up and moved outside that community. There was also a serious work ethic, and a respect for learning and so I was never in doubt when I was a kid that I would go to university even though my oldest siblings did not because the family couldn't afford to send them they had to get work. I was the lucky one, being the youngest and I got to go to university.

C. Cote' Now some of my background research to prepare for this I understand actually your first career aspiration was as a mechanic?

Dr. Langer When I was a kid. I love to work with my hands so I liked drawing, I liked making cutouts. and I like taking things apart to see how they work and putting them back together again.

C. Coté Not far off I guess from the skills of surgery.

Dr. Langer That's true.

C Coté I also understand I guess as you got later into your teen years that pursuing a career in actuarial science was something that you were thinking of.

Dr. Langer Yes. In high school I loved mathematics and I was very good at it so I considered doing actuarial science in university. But on our final year I had a meeting with our guidance counselor and he pointed out to me that the good jobs for graduates of actuarial science were insurance companies and banks and neither of those institutions hired Jews so I looked around and...

C Cote' Really?

Dr. Langer Yes.

C. Cote' We're talking Toronto back in the 1950s.

Dr. Langer Well that was the culture then. And...

C. Cote' This was an open fact.

Dr. Langer It was not advertised but it was known well enough so that our guidance counselor who was not Jewish knew about it.

C. Coté Wow. Was that disappointing to you or just a fact of life.

Dr. Langer It was a fact of life.

C. Cote' Nothing you ruminated over or said woe is me.

Dr. Langer No I had no idea what an actuary was, I just knew it was a university career in mathematics and I liked it.

C. Coté Wow. So I understand you went to Harbord Collegiate.

Dr. Langer Yes.

C. Coté Then U of T med school with the idea of being a family doctor. But in your final year you again pivot in terms of your career direction and you turned to surgery - what was it about surgery.

Dr. Langer Well I liked the fact that surgery involved making a specific diagnosis and doing something definitive about it. And also it involved manual skills.

C. Cote' Using your hands.

Dr. Langer Yeah.

C. Coté The mechanics skills

Dr. Langer Which I really liked.

Christian Cote' Yeah.

Dr. Langer And also, I mean I met then for the first time a young surgeon who loved his work, was very good at it, and he was my role model at that time. That was Griff Pearson.

C. Cote' Who went on to establish the lung division here in terms of surgery at Toronto General.

Dr. Langer Absolutely.

C. Cote' So Bernie you complete your surgical training in 1962. What were your job prospects, after that graduation, at Toronto hospitals?

Dr. Langer Well during my training I had had a number of conversations with David Bohnen at the Mount Sinai who was keen to get me to commit to coming to the Sinai, but I really enjoyed working with the group at the General [*Ed.Note – Toronto General Hospital*]. So I made no decision. Actually after my first year of training at the Children's I loved children's surgery and I spoke to the head of surgery at the Children's to see whether there was an opportunity to train in children surgery at the end of it and he was not dismissive but promised nothing so I carried on with my training and I had an annual conversation with each of them, and when I in the middle of my final year, wrote the Royal College examinations and passed I was offered a job at the Children's Hospital.

And then by that time, after six years of training I was not keen to do more resident training. So I approached Fred Kergin who was Chief at the General and Chair of the Department and asked him if I had if there was an opportunity for me to come and work at the General and after some consultation with his staff he came back and told me yes. And so I turned down the Children's. And the condition was that I go to the States for six months and get some added training in cancer treatment by chemotherapy. This was something very new which surgeons knew nothing about and there were physicians who were then being trained with the use of chemotherapeutic drugs and solid tumors. So he wanted to have someone in surgery who was up to date. So that was it, I spent six months travelling around visiting cancer centers, spending three months at the M.D. Anderson in Texas learning about regional chemotherapy.

I then borrowed money to go to Boston for six more months to work in Francis Moore's lab at the Peter Bent Brigham Hospital. Francis Moore was a pioneer in the surgical physiology and basic underlying principles of the management of really sick patients and I wanted to go there. And it was a great experience except his major interest then was in being the first person to successfully transplant a liver in the human. So I was one of many people who was working in the lab with him on that and trying to keep his dogs alive at night. And that's what piqued my interest in surgery of the liver.

C. Cote' That's right. That would come back in the '80's wouldn't it. We'll get to that, but let's not let this moment go - when you finally do return from these stints in '63 to take your position at Toronto General. There's a special significance to that hiring - you're hiring, correct?

Dr. Langer Yes, I was the first Jew to be hired as full-time surgical staff at the Toronto General Hospital. It was a time of change. It was waiting to happen and I was lucky enough to be the person who arrived when they were prepared for it to happen.

C. Coté Were you aware of these circumstances, this situation at the time.

Dr. Langer Yes.

C. Coté How does it affect your outlook and you know, where you looked for job opportunities.

Dr. Langer Well I didn't expect that I would have a job opportunity at the General [Ed. Note – Toronto General Hospital] I went there to get the training, and I had no problem in fitting in with the rest of the residents and with the staff and it wasn't actually until the end of my training that I thought there might be an opportunity for to get that job.

C. Coté When I look at the research on your career when you were entered into the Canadian Medical Hall of Fame the dedication about your career that struck me was, quote a turning point in breaking down some of the anti-Semitic barriers in surgery that existed at the time. What do you think of that as part of your dedication.

Dr. Langer Well I think it's true. It was something that was waiting to happen. The general culture in the city of Toronto was changing after the Second World War. Barnett Berris had been appointed in medicine [Ed. Note – Dr. Berris' appointment at Toronto General Hospital came in 1951] so I mean it was obvious that this was going to happen at some point in time.

C. Cote' You're listening to the UHN Oral History Project - conversations with former leaders of the University Health Network, Canada's largest teaching and research hospital. I'm Christian Coté from UHN Public Affairs and today we're joined by

Dr. Bernie Langer. OK so we're in 1963, you've just returned from your training in Boston where you worked partially in liver transplantation - and when you return there is essentially no liver surgery let alone transplantation going on in Toronto. Why was that?

Dr. Langer Well liver surgery is very difficult stuff, and dangerous stuff to operate on the liver. And it was being done in a few other centers but in most places there was no liver surgery. It wasn't unique for Toronto. There were tremendous advances in anesthesia, and in the understanding of managing patients who were unstable in the operating room. So the time, the times had allowed more complex technical surgery to evolve.

C. Coté But my understanding is when you returned and you found this situation - you set out to change that.

Dr. Langer Well I knew it was being done differently elsewhere, and we had one kind of operation on the liver that was being done. It wasn't directly on the liver itself. but patients with chronic liver disease and a lot of scarring in the liver would develop a problem because blood couldn't get through the liver because of the dense scar. And they would end up with bleeding from large veins inside their stomach and esophagus, and the general surgeons looked after these patients.

If they survived their hemorrhage, then there was an operation that could be done on the veins going into the liver. But general surgeons weren't trained in vein surgery. So the cardiovascular surgeons would operate on the veins and if they lived fine but many of them died because of their chronic liver disease. But the point was that general surgeons were very much involved in trying to keep these people alive so that they could have an operation done by somebody else. So when I came back I decided that general surgeons should be doing that operation and I had one of the Cardiac surgeons Jimmy Key show me how to do one and then I began doing the shunt operations. And I had also obtained a grant to do a study of liver transplantation in the dog, and so I developed the technical skills in the dog lab to be able to transplant a liver and that involved sewing veins, and so I had the skills to sew veins in people.

C. Coté So this learning you undertook upon your return in '63' 64' - what did that mean for patients?

Dr. Langer Well at the at the beginning it didn't mean much because the shunt surgery was already being done and it just switched over to general surgeons who did it. But the other complex operations on the biliary tract and on the liver itself were things that were not done before by anybody. And I started to do those. And I started doing the simpler things [*i.e. operations*] and then moved on to the more complicated things and basically taught myself with the aid of reading papers and visiting other centers where people did that.

C. Cote' So essentially establishing a specialty in liver surgery.

Dr. Langer Well it was a subspecialty of general surgery.

C. Cote' Right.

Dr. Langer Concentrating on surgery of the liver and the pancreas.

C. Coté Right. I understand that while you were pushing towards or pushing forward on this kind of specialization you developed a nickname.

Dr. Langer No my nickname actually arose earlier than my career as a staff member.

C. Cote' What was the nickname?

Dr. Langer The nickname was the hawk. That's actually, it started out as Hawkeye as in Hawkeye Pierce.

C. Coté Oh yes. From MASH.

Dr. Langer The surgeon in MASH.

C. Cote' What did that derive from do you know? How did you get the Hawk?

Dr. Langer I was a surgeon and I was serious about work that I got involved in especially competitive stuff.

C. Cote' And you became...

Dr. Langer I'll spare you the details.

C. Coté Okay. You became widely recognized though in that time when after your return though as a 'surgeon's surgeon' - what did that mean?

Dr. Langer Well listen, it's the biggest compliment you could give to a surgeon. And it meant that I was doing my job well and that I was a surgeon that other surgeons respected.

C. Coté I'm going to assume that you can draw a straight line then after nine years in terms of that reputation because in 1972 you are appointed head of the Division of General Surgery at Toronto General and one of your first moves is to implement something called an Income sharing agreement. What is that?

Dr. Langer The practice that was in place, pretty widespread, and it was the practice model before the 60s was independent practice, independent competitive private practice. There was virtually no insurance plan. Patients were responsible for paying their own fees and doctors were independent practitioners. And when I returned I was provided with a small office, a shared office with two other young surgeons in the building that was called the private patients pavilion. Public patients who could not afford it were in the College Wing, and people who could afford it were in the Private Patients Pavilion. And Griff Pearson and I who were sharing this office decided that we would cover one another in practice so that we

didn't have to come down at the emergency department every time a referring physician called rather than letting the surgeon on call look after their patients. I remember seeing nights when there were four general surgeons hanging around the emergency department at 11 o'clock at night waiting for OR [Ed. Note – OR = Operating Room] time. So Griff and I - we weren't partners - but we shared patients and we consulted one another frequently and on really difficult cases we would help one another in the operating room and that was the beginning of my sense that we can do this in a better way.

C. Coté How so?

Dr. Langer My experience was that I had a very small salary from the University and I was on my own as far as income was concerned and the expectation was that I would do research in the lab which took time, that I would do my teaching, and as I soon learned the most junior of the staff people was given the biggest load of clinical teaching and I'd recognized that it was difficult to do all those things at the same time. So when I became the division head I was able to convince Bruce Tovee who was division head to join with me in an income sharing arrangement with our newest recruit. So that that young surgeon would have time to go to the lab. And by sharing our income we would be supporting him to do the research that we didn't have time to do. So the concept in my mind was evolving of the shared responsibility just for clinical care in the hospital, but for the other academic expectations - research and teaching. And I became convinced that the only way to do that was to form such a group. I offered that to all the other members of the division of general surgery but they politely declined.

C. Coté Why the resistance do you think?

Dr. Langer I think that they were happy with the situation they were in, and also a chair of the Department, two steps back, had attempted to impose a full-time system with pooled income that he would have some control over. So there was a lot of uneasiness about the whole concept. Now I shouldn't say that I *didn't invent* [Ed. Note – Dr. Langer indicates he meant to say 'invented', not *didn't invent*] that independently. Griff Pearson formed a division of thoracic surgery and when he did, that group shared their income. And Alan Hudson at St. Michael's when he became head of the Division of Neurosurgery that group at St. Mike's also pooled their income. So as far as we were concerned it was a basic underlying necessity in order to fulfill the three things that are required of an academic surgical division and that is clinical care at the highest level, cutting edge research, and the best teaching you can find.

C. Coté I guess we should set some context maybe Bernie - in the early 70s when you take on this position as head of division of surgery, that approach in terms of the three pillars that you're talking about wasn't really the norm at that time was it?

Dr. Langer Well it was the expectation and it was the name of the game. It was widely understood to be the name of the game. But it was played differently in different places.

- C. Coté OK.
- Dr. Langer And I think the Toronto General was well ahead of the other Toronto hospitals in picking that up. I think Charlie Hollenberg who was chair of the Department of Surgery [*Ed. Note – Dr. Langer indicates he meant to say Medicine, not Surgery*] and physician in chief at the General before I became chair, just before I became chair, had done that in the Department of Medicine so it wasn't something mysterious from another planet.
- C. Coté All right. So what did this income sharing agreement mean for patients as this plan unfolded?
- Dr. Langer Well the group practice concept meant that there was a physician available to look after them at any time. So I think that the quality of care improved in the group practice. And in our own group there was group learning as well especially in the beginning. The two people who I first recruited were Bob Stone and Bryce Taylor and we often operated together because there was so much to learn and that carried on throughout our careers.
- C. Cote' And was that a new direction in terms of this sharing of knowledge?
- Dr. Langer It definitely, was not commonly done. In those early days of competitive private practice.
- C. Cote' So I'm guessing this had a ripple effect on the practice of surgery.
- Dr. Langer I think it improved the practice of surgery, sharing information. Absolutely.
- C. Cote At the time of your appointment in 1972 as head of division of surgery. What was your vision for the department as a whole?
- Dr. Langer Well the department was an outstanding place for clinical training, and a very good place for teaching. And there were a small number of people who did really important research. But the way one did research and the dedication to research that had evolved in other centers - Boston being one of them, was a way ahead of what we were doing in Toronto. And I understood that a bit by reading what was coming out of Boston, but I didn't appreciate it - really appreciate it, until I went down there and attended their conferences and ward rounds. Research was the basic underlying lifeblood of that department. Now from a practical point of view clinical care and resident training of general surgeons was better in Toronto than it was at the Brigham. So what I was looking for is to combine the existing outstanding clinical training in Toronto with the culture of research doing research and integrating research with clinical practice that I saw in Boston.
- C. Cote' So you begin again steps towards a transformation to try and inculcate research into the division of surgery.
- Dr. Langer Yes.

- C. Coté How did that go?
- Dr. Langer Well I started by, with recruitment. The people that were recruited had to have an interest and commitment in research. And we mostly sent them elsewhere to get training in research and then come back. And one of my objectives was to bring them back and to develop a much stronger research presence and also to make research one of the important qualities of our department.
- C. Cote' You also begin another transformation if I have this correctly - in terms of specialized surgical expertise can you tell us about that?
- Dr. Langer Yes, again when I arrived general surgeons were truly general. They did abdominal surgery which is the majority of general surgery but they also did traumatic orthopedic surgery, they did head and neck surgery, they did a little bit of plastic surgery, and my feeling was that in order to be a leading department of surgery we had to be a tertiary care center that did the most difficult of the difficult surgery and did it best. And we had to do the innovative surgery in these specialty areas and to do that I thought we had to have people who focused on specific areas. Again Griff had...
- C. Cote' This is Griff Pearson
- Dr. Langer ...a focus on thoracic surgery. And he made thoracic surgery into a separate division. It was part of general surgery when I joined the staff. So we had people trained in vascular surgery - that was Wayne Johnson and Paul Walker and eventually they split off and formed a separate division. Zane Cohen and then Robin McCloud trained in colorectal surgery and they formed a group that eventually moved to the Mount Sinai, but one of the leading training programs in colorectal surgery. And we developed specialists in surgical oncology and critical care. And that's the way I felt we had to do it.
- C. Coté So the 70s are quite a moment then in terms of this kind of specialty, special expertise in surgery - hadn't taken hold before that?
- Dr. Langer It had but it was on an ad hoc basis. There were surgeons who, general surgeons who became interested in this specific area and then they became the local expert but there was no group formed with specific training in that area. Something like that had started to develop in Boston where there might be a hospital that had people who were expert in surgery of the pancreas for example or colon surgery. I think the private clinics in the United States were more likely to do this than the university centers.
- C. Cote' So over the 70s how did this plan unfold? Was there a beginning middle and end in terms of the specialties being established?
- Dr. Langer No they're not specialties. These are, well, two of them have become sub-specialties officially recognized by the Royal College, and that's vascular

surgery and colorectal surgery. But it was initiatives like ours that led to that developing.

C. Cote' Again what was the impact then for patients, this change?

Dr. Langer The impact was that they received better care. People who are doing a complex operation on the blood vessels is better served by a surgeon who does that all the time and does a lot of them, than by a surgeon who does a lot of other things and very few of them.

C. Cote This position as head of the Division of General Surgery is, it was '72 to '82 if I'm not mistaken. Were there any other initiatives during that period that stand out for you?

Dr. Langer Well, as I, always trying to find ways to do things better. But I think that my opportunity for implementing things arose when I became chair of the department. And then there were things that I was able to do that changed the way surgery in Toronto was practiced.

C. Coté This is, you're referring to Chair of the Department of Surgery at U of T.

Dr. Langer Yes.

C. Coté Well let's move into that then. So, again in this position this is now in 1982 you have a very clear vision in mind correct? It's shaped a lot I guess by your observations over the almost two decades at Toronto General. So tell us about what was your vision going into this new position. This new appointment as chair of Department of Surgery at U of T?

Dr. Langer Well my vision was to develop a full-time system, this shared income system, across the whole department. And to increase, to improve the level of training of residents who want to do research, and to increase the interest in research and the number of faculty members who are seriously involved in research. That happen to be the objective of our Dean as well, so it was a good place for me to be.

C. Cote' And if I, again have this correct in the chronology, one of your first moves and likely one of your most enduring legacies over your career is the creation of the Surgeon Scientist Program in around '84. Let's start with that - what does that mean - the Surgeon Scientist Program?

Dr. Langer Well I didn't start out imagining that anything would happen like what has happened from that, but what I was looking for is a way to improve the quality of the training in research of our surgical residents. The situation was that there were a small number of surgeons who had good research labs for people to train in - like Bill Bigelow and Bob Salter at the Children's Hospital, and a few others. But there were a lot of people including myself when I was doing research in the lab that did not have the qualifications to train people, and the quality of training that was provided was not great. And there was substantial money being spent to train people who were not going to become surgical investigators.

C. Cote' And that training was elsewhere, not Toronto?

Dr. Langer No. That was training in the Toronto system.

C. Coté I see.

Dr. Langer So I thought we had to find a way to do better. And I put together a group of young people who were, or two people, who were really good surgeon scientist - Steve Strasberg who had just come back from Boston a general surgeon, Charles Tator- neurosurgeon who did his research training with a pathologist in Toronto and was a very serious scientist. And I asked them along with Bryce Taylor who was director of the surgery, the whole department of surgery training program, to see if they can put together a draft of a program for training surgeons in research.

And it happened at that time that the Faculty of Medicine had created the Institute of Medical Science which is a branch of the school of graduate studies that provided PhD's, or master's degrees and PhD's in science - but the Department of Surgery had no faculty members who were part of that institute. So they drafted a program using the vehicle of the Institute of Medical Science for surgical trainees to do a master's program or PhD program as their research training. And one of the requirements was that people had to be members of the Institute. So our faculty members who qualified became members of the Institute.

Three people were registered in the first year which I think was 1983, and it took off. It was just what we needed. They were in a formal program where they learn the fundamentals of how to do research. Of how to be scientists. And they were working with surgeons in a field of their interest. So from three people who entered in 1983 we had somewhere around 40 people in the program a decade later and the program has grown somewhat since then. And most of the brightest lights in our department are graduates of that program.

C. Cote' What was – I don't know if you can capture all of it - but give us a sense of the impact then it had, this Surgeon Scientist Program had - on the surgical profession.

Dr. Langer Well I think that it was a key piece in research becoming part of the fabric of our Department of Surgery citywide. I think it's understood that this is something that we do and it's something that's important. I mean I would not have believed when we started this that someone in surgical training would take five years out in the middle of their training to complete a PhD - but a few of them do and they're amazing people.

C. Cote' What's been, is there, again trying to bring this back to patients Bernie - is there a way to quantify how it's impacted patients?

Dr. Langer Well the productivity of these people is amazing. We look at transplantation, Shaf Keshavjee is a graduate of the Surgeon Scientist Program and the work that he has

done in perfusing organs in preparation for donation, being able to turn poor quality organs into good quality organs is fantastic.

C. Coté This is his ex vivo technique which he developed I imagine through the ability of having this research expertise?

Dr. Langer Well he's a graduate of our program and he had first class research training, and he, I'd like to say that the program had something to do with it.

C. Coté It had quite an impact also I think in terms of it rippled across the country right? Because in 1994, the Royal College of Physicians and Surgeons of Canada's clinician investigator program if I have that correct was established and it was modeled after your surgeon scientist program. So from that point on, the program becomes the standard for clinician scientists training and faculties of medicine across the country. What does that mean to you?

Dr. Langer Well I think that's a good thing.

C. Coté You're so understated!

Dr. Langer Well I had quite a bit to do with that. I was on the Council of the College and it took a fair amount of hard work to get that accepted by the College and implemented by the College. But it has been and I think that it's been a value to those schools who've really taken it up. There is no medical school in Canada that's taken up the clinician investigator program as enthusiastically as Toronto.

C. Coté Again in reading about you, some of the accounts called your creation of the Surgeon Scientist Program back in the early 80s - revolutionary, visionary, and now decades later what's, when you reflect on this. What's your assessment of the impact of your creation?

Dr. Langer I think it's been fantastic. Beyond my wildest dreams.

C. Cote' It's quite an achievement. It's something that's going to live on forever it sounds like.

Dr. Langer It will be incorporated into how people do things in different ways. It's you know I don't think anything that is great in the early years is going to stay that way. But I think it was very important initiative.

C. Cote Bernie talk to us about another change that you brought in when you were at the University of Toronto in terms of hiring practice at the hospitals.

Dr. Langer The practice of recruitment and hiring of surgeons at the teaching hospitals was pretty much something that was done by the hospital and the appointments were appointments for life, that is - one had great difficulty in getting a surgeon or any physician who is appointed at a hospital to leave other than for cause. So, I felt we could do better, and what I did was introduce a system whereby the expectations of the hospital and the division head and department chair were made clear to the

person being recruited and that the expectations of that individual were made clear by the hospital and by the department.

For example if an individual was recruited to do 50 percent of his time in the laboratory then the hospital had to have a laboratory ready and the funds ready for him to do so. And if an individual was unable to fulfill their responsibilities or turned out to be lazy or for whatever reason, there had to be a way to end the appointment. So what I did was propose that at the time of hiring we have a memorandum of agreement between the hospital and the Department of Surgery and the individual which outlined all of these things. And there would be a review at the end of three years to see whether things were going well, and if they weren't there could be an extension. But the original appointment would be a temporary appointment not a full appointment to staff, so that if at the end of review - with or without an extension, and it was determined that the individual was just not fulfilling the job that they were expected to - then the appointment could be terminated. That didn't happen very often. I think during my term there were only three people who did not have their appointment, their final appointment confirmed. But I think it was a major incentive for both the institution and the department and the individual to get on with their job and do it.

C. Coté And there was another, I guess, administrative effect that you perhaps want to talk to us about in terms of communicating with CEOs at the hospitals when you were department chair at U of T.

Dr. Langer Yes. The hospitals are tremendously important in the delivering the academic mission within their institutions. And I thought that it is very important that I get to know the CEOs of the hospitals so that they'd have a good idea of what the university department was planning or doing or what it in fact it did in the first place. And it was important for me to understand what the hospital issues were that might be making it hard for the academic mission to be delivered. So I arranged to meet at least once a year with the CEO of each of the major teaching hospitals along with the Surgeon in Chief of the hospital to discuss these things, these issues.

And that turned out to be very valuable when we had our retreat that dealt with the regionalization or centralization of tertiary care practices like trauma and transplantation. The fact that we understood one another was I think instrumental in them being able to accept the concept of regionalization of those services. The other important thing that I needed to do was to deal with the fact that all of the senior leadership appointments in surgery across the city were appointments that were made locally and with no time limit - they were virtually appointments for life. The chair of the Department of Surgery was appointed for - and I was appointed for - a five year term after a search, a formal search, and at the end of five years there was another review and a reappointment for a limited term of five years.

When I became chair and looked carefully at the leadership across the department there were people in senior positions who had been in those positions for more

than 20 years, and, not all of them were doing a bad job but most of the people with that long tenure were marking time and were being bypassed by change. So I proposed a new system for making appointments and for accountability in leadership positions and renewal. And again I had to get the agreement of the CEOs across the city, the dean of the faculty in order to proceed with this and I did get it.

And what we ended up with was an appointment process for chiefs of surgery, university division heads, and hospital division heads that required a formal search, and an appointment that was initially for five years, and that had a formal review at the end of five years, and then a reappointment for five years. And at the end of that second five years another search for which the incumbent could be a candidate. I think that the introduction of this system has changed profoundly the nature of our department. The opportunities for really bright young people to be given positions of leadership improved remarkably and that cadre of bright young people who were very good at their jobs now provide the candidates for the very top positions in our department and beyond our department. So I think this is one of the really really important things that happened to our department during my chairmanship.

C. Coté So I imagine the effect is, or one of the effects is the ability to retain, or sorry to attract and retain the best is strengthened because of that hiring practice?

Dr. Langer Absolutely.

C. Coté And it's obviously something that has gone over well it's still in place today.

Dr. Langer Yes.

C. Coté Let's stick with the mid-'80's, this 80s period, when you're the department chair at U of T department of surgery. You're also besides pioneering the surgeons scientists program in medical academic practice at U of T you're establishing a liver transplant program at TGH, at Toronto General? Talk to us about that.

Dr. Langer Well I was, I was going to say I fell in love with the liver in Boston. It wasn't quite as dramatic as that.

C. Cote' But an early influence.

Dr. Langer Yes. And then I saw the opportunity. I think doing new things doesn't necessarily mean having them spring into your mind in a dream in the middle of the night. It's having an opportunity appear somewhere in your line of vision and recognizing that it's an opportunity. So I started in clinical practice doing shunt surgery, and that evolved into doing more complex surgery. And in the back of my mind was liver transplantation surgery. And it's not possible to go from nothing to the liver transplants, but the road to liver transplants was through the development of the HPB program.

C. Coté What was that? HPB?

Dr. Langer HPB - hepatic pancreatic and biliary - it means the liver and pancreas surgery program. So when I became busier, Bob Stone and later Bryce Taylor became part of the group that did the complex surgery of the pancreas and liver. And Steve Strasberg not long after that at the Western. And before the Western and the General became the same hospital [*Ed. Note – TWH and TGH were amalgamated in 1986 to become University Health Network (UHN)*] I was going over to the Western to help Steve learn how to do liver surgery. And it was that that put us on track, and when transplant liver transplantation became established and transplant centers were being set up across the United States we determined that this is what we were going to do. And then I sent Rudy Falk away to train in immunology in Sweden, with the idea that he would come back and be part of the group that started liver transplants. And then I sent other people away also to train [*Ed. Note – including Dr. Paul Greig*] and what we're looking for was to have a complete team. We had great anaesthesia, we had great pathology involved in the liver surgery and liver pathology, we had good hepatologists but they weren't interested in transplantation. So we spent a lot of time hiring, trying to hire Gary Levy to encourage him to come down from Sunnybrook where they were also interested in starting a liver transplant program. So we finally did get Gary to make up his mind and come down. And by then we were doing operations in the pig lab and we got the approval of the Ministry of Health to get started. And we did our first transplant I think in 1985.

C. Coté Correct. Walk us through how that particular 'first' came about at Toronto General.

Dr. Langer Well we were....

C. Coté You were ready.

Dr. Langer ...we were ready, we were looking for the ideal patient. At times when experimenting with new surgical operations - especially a high risk operation like transplantation - one selects patients with advanced disease, and I mean it is a problem because the more advanced the disease the higher the risk of complications. So we hoped to avoid that. And we found a patient with a cancer that was not removable by any other means but transplantation. But he didn't have advanced liver disease, so it made him a good candidate. And to do the operation we had Leonard Makowka. He was a brilliant young surgeon who we had sent down to Pittsburgh to work in his transplant program with Tom Starzl. Tom Starzl so was the father of liver transplantation. So he went down there and got his training and Tom kept him. Well...

C. Cote' ...it happens.

Dr. Langer ...no hard feelings. So we got Leonard to come up and just to coach us through the first liver transplant and that actually went beautifully. And unfortunately the patient developed complications of his immunosuppression and died of the complications, but we knew we could do it. And the nursing team was terrific. Anesthesia was great. So we knew we could do it. We waited, I think we waited

another year before we did the next one. And that went well and so we just picked it up from there.

C. Cote' And I would then hazard a guess - that sets the groundwork for the establishment of what we now call the Multi Organ Transplant Program at Toronto General. But I understand there was a crucial step before that could happen. It was this retreat in 1987. Can you tell us about the significance of this?

Dr. Langer Well the background, when I became chair in 1982 we had a departmental retreat where we discussed the issues of full time practice and the various other issues that I thought we needed to address - the importance of education and research. At the time of that retreat we hadn't come up with the Surgeon Scientist Program yet but the emphasis on research was something that I wanted to be clear. And the communication with the department as a whole was important. So there was an opportunity there for feedback on what was coming.

C. Cote' You're talking about the '82 retreat?

Dr. Langer Yeah. That was for the first term. The beginning of my second term we had another retreat...

C. Cote OK

Dr. Langerand this was based on my observation that, the, some of the most difficult surgical problems like massive trauma and transplantation were being done in multiple hospitals and our resources, our intellectual and physical resources were being stretched and that we can do much better if we centralized these and made them into real centers of excellence within our university family of hospitals.

So we had a retreat and among the things that we talked about there were trauma and transplantation. Kidney transplantation was being done at about four or five different hospitals, cardiac transplantation which was in its infancy had already been attempted at three hospitals, liver transplantation had been done at the General but they were gearing up to do it at Sunnybrook so it didn't make sense. So we had a retreat, but in addition to Department of Surgery members we invited the heads of Medicine and Pathology and anesthesia. We asked the administration of the hospitals to send representatives. And we asked the Ministry of Health to send representatives and we talked about regionalization.

And we developed the consensus that trauma and transplantation should be regionalized that we should have two level one trauma centers in the city, and one multi organ transplantation center in the city. And then the most interesting thing was that we were able to develop standards for what the hospitals would have to provide and what they needed in order to create those centers. In general terms. And then the ministry set up groups to put out RFP's, requests for proposals from the hospitals so the hospitals were in a competition. And Sunnybrook and St. Mike's were selected as the trauma centers for Toronto for the GTA, and TGH which was selected as the multi organ transplant center.

- C. Coté Pretty significant retreat because that's a setup that still exists today.
- Dr. Langer It was. I couldn't have dreamed that that would all happen but it did.
- C. Coté How, you know, pulling all these - I don't know that they're all necessarily like-minded people - but I imagine very strong willed people together to get that kind of consensus. How do you do that?
- Dr. Langer Well if the concept is good. Then people who are serious about what they're doing like CEOs of the hospitals, I think, will support it.
- C. Coté So two years later the Multi Organ Transplant Program at Toronto General is approved. You're the interim director. What did this mean for transplant patients in Ontario?
- Dr. Langer Well what it meant was that the quality of the work being done in this multi organ transplant center would be better than it could be at three or four different places in the city. And that it had the potential to be one of the leading transplant centers in the world. And I wasn't going to be around to do that because I was getting near the end of my term as chairman of the department and I was just about burnt out. And so I retired from transplantation at that time and we had an international search and Gary Levy was appointed as the director of the Multi Organ Transplantation Program and he's done a fantastic job.
- C. Coté So it's eighty nine, so that's thirty years since this multi organ transplant unit is established and it now has a worldwide reputation like you just mentioned, like in terms of the number of transplant it performs, the living donor program is second to none, the amazing breakthroughs such as Dr. Keshavjee's ex vivo technique. Could you ever have envisioned this outcome when you first got it established?
- Dr. Langer No I certainly didn't. I saw the potential and it's the people who were recruited after we set up the multi organ transplantation that really did it. This liver transplantation program was not an internationally known program. When we set up the MOTP [*Ed. Note – Multi Organ Transplant Unit at UHN*] with David Grant as the head of surgical liver transplantation program has done a fantastic job. And the other surgeons in the lung transplant program - I mean Joel Cooper was the person who started the lung transplant program and he really put Toronto on the map for lung transplant. [*Ed. Note – Dr. Cooper led the TGH team that performed the world's first successful lung transplant in 1983*].
- C. Coté That's right.
- Dr. Langer And Shaf [*Ed. Note – Dr. Shaf Keshavjee*] has done an unbelievable job since then.
- C. Coté You're listening to the UHN Oral History Project - conversations with former leaders of the University Health Network, Canada's largest teaching and research hospital. I'm Christian Coté from UHN Public Affairs and we're speaking today with Dr. Bernie Langer. So Bernie we're moving into the 1990s. In 1992 you're as

you mentioned before the, your stint, your 10 year stint in U of T department of surgery ends. So you're 60 and you take your first sabbatical leave to recharge your batteries I imagine - and I understand you also go back to school?

Dr. Langer Yes. I had become aware of the importance of a new field of research in clinical epidemiology. Clinical studies - and there have been probably millions of them by now - purely clinical studies where one observes what happens when you do this or that have serious limitation in adding to actual knowledge that can help you advance clinical practice. The field of clinical epidemiology involves applying the scientific medicine to the clinical studies of patients and it involves a lot of mathematics especially statistics, and rules of setting up clinical studies, and this is something that was born during my, at the end of my undergraduate career and graduate training.

So I recognized its importance and I didn't know enough about it, and one of the centers, one of the leading centers in clinical epidemiology was McMaster University which is handy - just down the road from Toronto, and so I did the preliminary program in clinical epidemiology and biostatistics at Mac for six months and it was great being a student again...

C. Cote'at age 60!

Dr. Langer ...and not having to be awakened in the middle of the night because of a sick patient. But this was also something, I'd been aware of this obviously during my term as chairman and I encouraged people to get training in clinical epidemiology if they wanted to do clinical research. Robin McLeod was the first of these people and she's had a wonderful career and has been very productive, clinical trials and various clinical studies and guideline development.

C. Coté So in '93, I'm guessing 1993, you return to Toronto General and you establish or you're instrumental in establishing the oncology surgical cancer specialty there. Can you talk to us about that?

Dr. Langer Uh no, while I was chair I thought that we needed to have surgeons trained in cancer surgery. In the United States they were far ahead of us, in fact they had hospitals dedicated to cancer surgery that were basically surgical hospitals. It's interesting that in Toronto we had a hospital dedicated to cancer treatment but it started out as a radiation therapy hospital - the Princess Margaret. That started as a unit at the TGH, and then moved to Wellesley St when it became too large for TGH. So at that time I thought we needed people trained in cancer surgery.

I'd been to the M.D. Anderson before I came back to the General [*Ed. Note – in 1963*] and I could see what they could do, what people dedicated to cancer could do and I thought we needed to have people like that in our division too. So we started with Lorne Rotstein as the first, and Ulo Ambus as the second one, and so forth. It was during my term as chair that we set up an oncology program and Hartley Stern was the first head of our surgical oncology program, and there was an oncology committee involving all of our hospitals, a surgical oncology

committee, and then eventually we developed a training program in surgical oncology. Bob Bell was the head of that program for some time, and Carol Swallow became head of the program and I'm not sure who is now.

C. Coté How did you finally come to retire?

Dr. Langer Pardon?

C. Coté How did you finally come to retire?

Dr. Langer I was tired. Well it's interesting. I watched quite a few people who had difficulty retiring and who hung around the hospital basically. And I think it was because they had committed their lives so completely to surgery that they didn't have the tools to do something different.

C. Coté Outside of work.

Dr. Langer Outside of surgery. So I promised myself that I was going to retire when I was still at the top of my game and do something else.

C. Coté And you did - you establish again, an institute that is still here today. The Canadian Patient Safety Institute in 2000.

Dr. Langer Well I....

C. Coté What was behind that?

Dr. Lange ...I would hesitate to say that I established the Canadian Patient Safety Institute. When I was president of the college [*Ed. Note – Royal College of Physicians and Surgeons*] from 2000 to 2002 I organized a mini conference at our Annual Meeting on patient safety. I was convinced by one of my colleagues who was from the United States [*Ed. Note – Dr. Langer indicates this was Dr. Martin McKneally*], who was very interested in patient safety, that this was something that we should somehow increase awareness of in Canada. And he knew all the people in the game.

So I organized this symposium at the Royal College meeting and we invited the leaders in patient safety from the United States and one from Australia. And the more I got into this, planning this, the more important I realized this was. And so I got to know Bruce Barraclough from Australia pretty well, and he had retired from surgery and become head of the Australian Patient Safety Institute funded by the federal government, which developed guidelines, provided funds for research grants, and provided education programs for people in patient safety.

I thought that it might be interesting to bring together the people involved in health care general to this symposium we were having and then organise a meeting afterwards to discuss the creation of a Canadian Patient Safety Institute. So we invited the CMA, and Canadian Nursing Association, all the provincial Ministries of Health, the Federal Minister of Health, Ministry of Health, we

managed to get fifty thousand dollars from the federal ministry to help fund this symposium, and I asked John Wade who was an anaesthetist and somebody who had done research in the early days in patient safety to chair a subcommittee after our meeting. So we had the symposium, we had the meeting with all these representatives including ministries of health, and they agreed that this was a good idea and we should set up a group to specifically plan the detail. And John Wade agreed to chair that group and they went on and got a substantial grant from the federal government and they created the Canadian Patient Safety Institute.

C. Coté What was the gap or what was the need for such a body?

Dr. Langer Well the need was not noticeable by physicians in individual practice, but it was demonstrated by studies that showed how errors and faulty processes were creating harm - and much more harm than the individual physician was aware of.

C. Coté And the effect was it would bring attention to these issues to correct and perhaps change practice?

Dr. Langer Yes. Absolutely. Change practice and change processes of practice too.

C. Coté It strikes me brain wherever you went during your career - at each position, a new challenge - you were a change agent.

Dr. Langer Well change was going to take place no matter what. Life is not static. Practice is not static. Change is going to take place and sometimes it's for the good. And sometimes it's for the not so good. And I think that people in positions of leadership should not resist change. They shouldn't embrace change for changes sake - but they should look for how to steer change in a way that's going to be beneficial.

C. Coté Change is also I think for many people disruptive, unnerving. What was your strategy then in terms of how to harness whatever goodwill, practicality, but how did you bring people along to support your initiatives?

Dr. Langer Well I've never tried to force something on people. And in an organization I always made sure that I had, I was able to convince a small group of people, and if I couldn't convince a small group I sure as hell was not going to impose it on the big group. And I think a mistake is made by some people when they try to exclude those who honestly oppose their views. So when I was working on a guideline for pancreatic cancer surgery that involved regionalization of that sort of surgery - on this planning committee I made sure to have the OMA head of General Surgery who was a practitioner in a small town on the committee because I knew that the largest opposition was going to come from small communities and I wanted a voice on the committee for those communities. And also when all was said and done and the complaints came in - I could certainly direct them to....

C. Coté You could count on his support?

Dr. Langer I could count on his support.

C. Coté It's kind of ingenious. Make sure they're inside the tent as opposed to outside.

Dr. Langer Well it isn't genius, it's common sense.

C. Coté You worked in a very high stakes profession - surgery and transplant. How did you handle the pressure?

Dr. Langer Well I was able to get out. I had, I tried to limit the time that I was under pressure. I had a farm. I had a family. I had a very supportive wife and I had other interests. But it was, I would say, it was the family and my wife who I relied on most.

C. Cote They help clear your head of...thinking?

00;08;57;15 Yeah...bring me down to earth sometimes. When I got too high and pick me up when I was too low.

C. Cote' It's a high stakes situation, I mean and you were in this career for decades in terms of surgery - and I imagine failure also is a part of daily life. And it's not something we're really taught how to deal with. So I'm wondering how, what was your approach to failure?

Dr. Langer A failure was hard. I mean the worst failures were losing patients you thought you shouldn't have lost. And I certainly had some of those. And I think the successes helped to balance it out.

C. Cote' And how do you get past those things to become, you know good for your patients, moving forward?

Dr. Langer I think you have to just recognize that you're not perfect, and apologize to yourself, and move on.

C. Coté Be kind to yourself.

Dr. Langer Yeah.

C. Coté What was your approach to mentoring people?

Dr. Langer I loved mentoring people. I got the same kind of satisfaction of seeing my residents succeed, my colleagues my junior colleagues who I hired to see succeed as I got from seeing my children succeed. I loved it.

C. Coté And was there a particular approach of how you treated them? How you talk to them? How you critique them?

Dr. Langer I treated them as adults. I found that that worked with my kids. And so I tried it on my colleagues.

C. Coté One of your legacies is I understand - 70, you correct me if I'm wrong - 70 plus fellows you trained to practice liver and transplant surgery throughout the world, is that correct?

Dr. Langer Yes. Well not in every country of the world.

C. Coté But all over.

Dr. Langer But yeah North America and Europe.

C. Coté What's that mean to you?

Dr. Langer Big family. Means a lot.

C. Coté I don't know if you're familiar - I think you are - Ed Shorter's book.

Dr. Langer Yes.

C. Cote' "Partnership for Excellence". It describes you as one of the great builders of the division of surgery in the late 20th century. What would you like to be remembered for?

Dr. Langer Well a good husband and father. For starters. And a contributor. A contributor.

C. Coté I think there's no question you achieved that. Dr. Bernie Langer, thank you for your service to UHN and we appreciate your time today to share your experiences while leading UHN.

Dr. Langer Thank you. It's a pleasure.

C. Coté This is Christian Coté for the UHN Oral History Project. Thanks for listening.

End