Dean: Fred, thank you very much for joining me for this interview. It’s a great pleasure to meet with you and hear the story of your career. Obviously, you are a champion of the management of women with breast cancer and we’re all very grateful for the work that you do here at the Miller School and UHealth. I’d like to help the world understand how you got to do what you do and maybe go a little bit deeper than usual into your personal history so that we can better understand how you managed to take the steps that took you to such a success. Can you tell us a little about how you grew up and how that passion for saving the lives of women with breast cancer came about in your career?

Fred: Thank you for having me here. I was delivered by my paternal grandfather, an old-time general surgeon, in Port Colborne, Ontario, about 15 miles from the Peace Bridge and the U.S. border. My mother is American and my father Canadian. I grew up in Toronto. My grandfather’s four sons (the second of whom is my father) were all surgeons, and I was my parents’ firstborn. I just found myself gravitating towards medicine from the examples set by my family as I grew up; there was no coercion whatsoever. I chose to attend a different medical school, but that was about as far as I strayed from their path. General surgery appealed to me on its own merits as the broadest, most versatile and gratifying field in medicine I could go into.

I did my residency at the University of Toronto, and was lucky enough to spend both my fourth and fifth years as a chief resident because they ran out of warm bodies in the year ahead of me. I spent the first chief year at St. Joseph’s Hospital in the west end of Toronto, situated along the main east-west artery into the city, so there was a tremendous amount of trauma surgery there. There were only two of us chief residents, and one of us had to be in the hospital at all times. It was a very busy 12 months, but that was the year that made me a surgeon.

My second chief year was at the Toronto General Hospital, during which I met my wife Jenny Simpson, who was interning in Medicine. I arrived at TGH with every intention of going into community practice upon finishing. However, having interned there myself four years previously, I was reminded of the great opportunities in academia, and I became increasingly unsure I could walk away from all this without at least exploring the possibilities. As I was only...
29 years old and there was an obligatory six-month time period after residency during which we had to pass the examinations of the Royal College of Surgeons before we could practice surgery, I decided to sign up for a two-year Surgical Oncology research fellowship under Dr. Rudy Falk, one of my mentors at TGH. This was an absolutely superlative experience and completely re-oriented my career.

In the second of those two years, I got a phone call out of the blue from Miami from Dr. Alfred Ketcham, whom I’d never previously met. Dr. Ketcham was Steven Rosenberg’s immediate predecessor as Chief of the Surgery Branch at the National Cancer Institute. He is a truly outstanding, wonderful human being. When you talk with him over the phone, his sunny disposition and irrepressible affinity for people just shine through. His call came on an October morning when I was drowning my sorrows in coffee over a failed experiment. He asked “we’re looking for a surgical oncology fellow and wonder if you might be interested,” and that changed the tenor of the day considerably! If you’re a general surgeon at heart but have academic aspirations, there are four subspecialties which keep one reasonably “general” – trauma/critical care, pediatrics, transplantation surgery and my chosen field, surgical oncology. My parents had been living in Sarasota for the past six years, and I was traveling there for Christmas. On the day after Christmas, in 30° weather, I took a commuter flight from Sarasota to Miami, and interviewed for the day. I began my fellowship with him at UM/JMH six months later.

Dean: What year was this?

Fred: That was December 1983, and I started my clinical fellowship in July, 1984. They were two fabulous years, and Dr. Ketcham actually offered me a job in my last six months. I was truly torn between staying in Miami and rejoining Rudy Falk in Toronto. I ultimately went back to Toronto, but it became increasingly clear over the first year or so because of some internal tensions there that I had erred in leaving Miami. Dr. Ketcham and I had kept in touch, and he let me know that “we have a place for you.” So Jenny, our two sons and I were back in Miami in January 1988, immensely grateful to be back.

Dean: Great, and tell me why do you think they called you? There must have been many chief resident surgeons who were at the same level at that specific time. So why do you think they called you first? There’s quite a bit of distance between Miami and Toronto.
Fred: It was purely fortuitous. Dr. David Robinson, who was one of Dr. Ketcham’s associates here, had trained at Memorial Sloan-Kettering with Dr. Lorne Rotstein who had trained four years ahead of me in Toronto. Miami was looking for a fellow, I was looking for further clinical training, and through a conversation between David and Lorne, my name got back to Dr. Ketcham and he called me.

Dean: I’m sure that your talent at the time was already formidable -- to be chief resident is already recognition of an individual’s talent. But you must have been particularly recognizable among your peers that a place that was not exactly next door would call you to recruit you.

Fred: Well, that’s for others to say. I would say that word of mouth is how I got here. You know, the most interesting things in life are often unplanned.

Dean: That’s exactly right. So here you come, a Canadian from Toronto and you arrived in Miami in the mid ’80s. It must have been a pretty big change for you.

Fred: It was a bigger change than you might imagine. We moved from Toronto where it was 70 degrees and 40% humidity to Miami, Florida, where those numbers were both 95, and we moved into an un-air-conditioned house six miles inland, on Lisbon Street just off of S.W. 8th Street. Given that my maternal grandparents and parents had lived in Sarasota for many years, I had a pretty good idea of what Florida summers are like. It was just one of these unbelievably stupid moves on my part, and we spent six months in that house. That said, this turned out to be a huge blessing in disguise. We were the only Anglos in a Cuban neighborhood, but our neighbors immediately took us under their wings and treated us like long lost friends. It was an incredible experience. Cubans are absolutely the most wonderful, warm-hearted, family-oriented people, and we were overwhelmed by their welcome and hospitality. We moved into air-conditioned digs after six months because we couldn’t take another summer, but our time on Lisbon Street couldn’t have been a better introduction to Miami, and we kept in touch with our neighbors long after we had moved.

Dean: That’s phenomenal. And tell me, I understand that your family was spending some time in Florida, I guess for vacation or something…
Fred: My parents left Toronto permanently in 1977 for Sarasota, and my maternal grandparents had lived in Sarasota since the ’40s.

Dean: So that was your entire family, or did you have more family than that?

Fred: Yes, three younger siblings. I have two sisters who are still in Canada, one of them a school teacher, the other who with her husband, a mining engineer, has raised two sons, and my brother is an engineer at the National Institute of Standards and Technology in Gaithersburg, MD. He and his wife (who works in biotech) have two teenage boys, one of whom is considering medicine as a career. Our two sons are now grown, one a newly minted lawyer and the other a business major pursuing a career in accounting and finance. Evidently, being raised by parents who are both firstborns and MDs (Jenny has an RN, to boot!) forecloses on medicine as a career choice!

Dean: Amazing. And so, tell us a little bit about how your interest in surgical oncology evolved towards breast cancer.

Fred: That was by evolution as much or more than intent. Because of the prevalence of this disease, breast cancer has always constituted 40% to 50% of our Divisional clinical case volumes. I came here intending to be broadly based in my surgical oncology scope of practice. I gradually and inevitably narrowed down because our Division, never more than three or four surgeons strong for most of its existence, now has eight faculty members. As you get up in the ranks, at some point you’ve got to make room for younger faculty to pursue their interests and grow as clinical and academic surgeons.

I’ve never had a particularly high profile in upper GI cancer surgery. Under Alan Livingstone’s tutelage, several of my Divisional colleagues have taken these cases on as their focus of interest. I have done a lot of pelvic and colorectal surgery in my career, including perhaps 50 or 60 pelvic exenterations between my short time in Toronto and here with Dr. Ketcham. Thankfully, we are not doing as much radical surgery of this kind as malignant disease is being diagnosed earlier nowadays, but I will still do whatever comes my way. I also do melanoma, sarcoma and some head and neck surgery.
The general surgeon in me believes that, unless you have or are part of an ocean-going major research complex which complements and supports a narrowly based clinical interest, to supersubspecialize is to risk complacency and boredom, either of which is lethal to a career. Breadth of practice keeps you on your toes, interested and engaged, and avoids this problem.

**Dean:** Yes, and so the majority of your patients are women who have had a mammogram and something suspicious has been identified, or they’ve found a mass. They were initially seen by an internist, their regular physician, or gynecologist for that matter. After the mammogram has taken place and something was found, then the patient comes to you very anxious. That’s some of the toughest news that anybody can imagine, so how do you deal with that? How do you manage both the procedure to be done, and the anxiety of the patient at the time they come to see you?

**Fred:** Well, that’s where Alfred Ketcham excelled as a mentor, he was absolutely phenomenal in this regard. Between 8:00 am and 8:00 pm on Fridays, we would see 60 to 70 patients in his clinic, and on Tuesdays another 50 or so from 10:00 am through 8:00 pm. Every patient left his office believing sincerely that Dr. K had spent 20 to 30 minutes with him or her. This of course is mathematically impossible, but the ability to leave cancer patients with that perception epitomizes the art of medicine. I’ve been very fortunate in having worked with a lot of superb clinicians, but he was without peer in this respect. I’ve tried in my own way to emulate him in this regard. He had an uncanny ability to strike exactly the right interpersonal tone in his doctor-patient relationships, and was a past master at framing the complexities of malignant disease in a way that patients from all different backgrounds and walks of life could understand and relate to.

**Dean:** Because really, you have a spectrum of possibilities from a totally benign cyst to a very aggressive tumor. And that finding, that process of discovering what is really going on is in your hands. You are with the pathologists, the rain maker of life for your patient at that point. You identify the tumor, you essentially self conscribed it, you remove it and you pass it to your colleague pathologist to come up with a series of tests that they do ex vivo to try to characterize the tumor as well as possible.

**Fred:** Correct.
Dean: How do you go to the next step of letting the patient know what it is? Obviously if it’s benign, that’s very easy but if it’s a malignant tumor then it’s much more challenging. So how do you go about communicating that?

Fred: Well, the only way to approach that, I think, is from an honestly realistic, but also a hopeful, optimistic perspective. For the first time in history, breast cancer mortality is falling! That’s a function primarily of early detection and much more powerful, much better tolerated chemotherapy. Oncologists are now able to match the treatment to the characteristics of the tumor to optimize the prospects for cure in a way which was not possible only a short time ago. We see a lot of Stage III breast cancer on this campus which makes breast cancer management very interesting because of the formidable challenges posed by these tumors. When I was a resident and fellow, a woman diagnosed with inflammatory breast cancer had a 90% probability of dying within two years of diagnosis. We’re now achieving 5-year survival rates approaching 50%! It is still a very serious disease, no question about it, but what a huge difference just in terms of hope and future possibilities! The important thing in these situations is not only to prepare patients for what can be a very difficult ordeal, but to reassure them that they have every reason to be hopeful and looking to their futures, and that their treatment is something very like a long-distance run; it simply has to be endured and outlasted. And they do just that; they face it down very well. It’s amazing how cancer patients with no prior experience of or knowledge about malignant disease summon the personal fortitude and emotional stamina to see their way through to a successful outcome. The human spirit prevails!

Dean: Do you think that the outcome depends a lot on the attitude of the woman and on their decision to beat that disease?

Fred: Absolutely. Dr. Ketcham noted this time and time again. There is no way to prove this, but there is also no question that if you can get someone through the initial shock of a cancer diagnosis and appeal to the better angels of their nature, they will almost always fare better in the long run. Even when the disease gains the upper hand and runs its course, patients who refuse to surrender their hope and resilience, and remain engaged with life, always live better and maybe even longer.
Dean: Tell us about the story of a patient who really was particularly meaningful to you for any reason, can you think of that?

Fred: Boy, there are a lot of them! I recall a lady with a cancer of unknown origin who presented with metastatic cancer under her right arm. We could not find the primary cancer from which this came. It didn’t look like breast or lung cancer under the microscope. Ten months after radical surgery, chemotherapy and radiotherapy it metastasized to the lymph nodes in the right side of her neck. We put her through a radical neck dissection and more chemoradiation. She’s alive and well ten years later. Two other ladies who had bad breast cancers – one of whom went on to get a post-radiation angiosarcoma - who ultimately died of their disease but every step of the way they looked it square in the eye and did not let it beat them. It may have carried them off ultimately, but it never got the best of them. It’s is impressive how people facing these mortal challenges step up to the plate through their native strength of character and will to live. It’s up to us as physicians and surgeons to frame discussions with our patients in a way which elicits and brings this response to the fore. Patients with cancer should never have to contend with their disease without a sense of hope.

Dean: Yes.

Fred: These folks desperately need perspective amidst the avalanche of information currently available to them on the internet and elsewhere. We’re often asked, “What’s the percentage of survival of this or survival of that?” I usually reply with something like, “You’re suggesting that there’s such a thing as being 20% or 70% pregnant?” Diseases and their related events either happen or they don’t. Cancer recurs or it doesn’t. What we’re doing in our treatment is stacking the deck as far in favor of the patient as we can to achieve the very best outcome.

Dean: Yes.

Fred: If you approach cancer from that point of view, things become clearer and people sort of settle down. They look at this thing and realize that “I’m going to get through this.”

Dean: At UM, you and your colleagues have built what is probably one of the premiere centers for women with breast cancer. You have a team of physicians who actually look at each individual case and determine the approach that will be taken for each patient. Some tumors you
cannot do a surgery on; the chemotherapy, the radiation therapy, etc. Please explain a little bit how that works in terms of the team approach to the disease.

**Fred:** There are many different ways of doing multidisciplinary care. I think the very best among us have always done it, certainly in my time in medicine. We haven’t always called it that, but the fact of the matter is that none of us can function successfully in isolation. The medical oncologists, radiation oncologists and we have had an excellent working relationship, and we do have meetings at which multidisciplinary discussions of patients are held. The important thing is not so much the formal meetings themselves, but the backroom discussions leading to decisions in patient management which can then be effected immediately and seamlessly. It’s the question of doing what’s right for the patient. With all the new information about BRCA- and HER2/neu-related breast cancer, more and more we are starting with the medical treatment up front rather than the traditional surgery-first approach. The advantage of this is that if you have a measurable tumor, you can confirm through observation and measurement whether the cancer responds to the treatment being given. If the tumor fails to respond, you have the opportunity to switch to an alternative treatment regimen which can retrieve the situation. Medical treatment after the tumor has been removed leaves the oncologist with no objective way of knowing whether the treatment being given is effective for the tumor being treated, and is therefore deprived of the opportunity to effect a change in course when it might be indicated. We’re increasingly using preoperative chemotherapy, hormonal therapy and radiation therapy for soft tissue sarcomas, advanced abdominal or pelvic cancers and breast cancer. There is also an advantage to giving radiation adjuvant therapy preoperatively for both patient and surgeon. There’s long been a myth that the surgical complication rate is increased in patients who have previously been irradiated. That’s true if the radiation was given in the remote past. If you’ve irradiated a sarcoma over the past five or six weeks, and operate four weeks from now, not only can the surgery occasionally be reduced in scope, but the wound heals just fine.

**Dean:** Interesting.

**Fred:** The radiation biology is totally different at those two time points.

**Dean:** Fascinating. There’s another dimension of you which is extremely important, your reputation as an outstanding surgeon and role model that you represent for your young
colleagues who are entering the field. I’m amazed to see the number of students at the Miller School who decide to go into surgery, and obviously you have a big impact on them. You provide them with a role model that will help build the next generation of great oncologic surgeons. What do you think is the most important message you can deliver to them at the beginning of their career, at the dawn of their career?

Fred: My overarching message is a counterintuitive one, and that is that lifestyle is vastly overrated as a criterion on which to base a career choice. I have seen too many people emphasize lifestyle at the expense of pursuing their real passion in professional life. Too many back away from a career in surgery or other high personal investment specialties in favor of a less demanding one, largely on this basis. People whose career choice has been influenced unduly by lifestyle considerations often have very real, painful regrets about this ten years afterwards; they discounted what was really their heart’s desire. No matter what you do in medicine, you’re going to spend a very large proportion of your life doing it, so make your career choice your number one choice. If you get that right, more often than not the rest will sort itself out.

Dean: Do you have any regret of things that you would have liked to do that you didn’t?

Fred: I’ve had sort of around the edges, yes, but no really big regrets. Coming back to Miami was among the best things I’ve done.

Dean: One thing that’s so extraordinary is that your life is a phenomenal window to the progression of the management of tumors. In this case many different tumors but one in particular that you have followed the closest is the breast tumor and as you say, it’s such an amazing progression from a story of failure to a story of success. I can tell you that from the patient side having had a very close family member who had a breast cancer crisis in the late ’80’s. I remember looking at my textbook, Harrison’s textbook of medicine, as a good internist at the time, and seeing the prognosis pretty dismal for that specific condition. It turned out to be completely different from what was in the book because the science had advanced so rapidly that it was not really in the last edition yet, and that’s an extraordinary opportunity to witness such progress.
**Fred:** Well, now that you mention it, I’d like to go back to what you asked before about patient vignettes. When I was halfway through my fellowship, an old patient of Dr. Ketcham’s came into clinic without an appointment. He’d had melanoma of the cheek which had previously recurred five times. He was now covered from head to toe with black spots and subcutaneous nodules; the melanoma had metastasized. At that time, all we had was DTIC which is very toxic chemotherapy, and this man was a rather frail 76-year-old with all the usual co-morbidities. He heard what we had to say and replied, “Thank you; I think I’m going to get myself a six-pack and find a dock in the Keys,” which he did. We didn’t see him again until two weeks before I went back to Toronto, when he once again walked in without an appointment. Wherever there had been a black nodule was now only vitiligo, small skin spots about as white as the coat you’re wearing. He was much healthier than the last time we saw him, so we really had only two questions for him: “Where the hell is that dock and what kind of beer were you drinking?” It just shows you how capricious cancer can be. And I can juxtapose that story to a melanoma tragedy. This was a lovely 35-year-old registered nurse in our surgical intensive care unit, and we get to know those folks very well because, of course, we interrelate with them all the time, particularly the Trauma service. She had a tiny mole on her thigh which turned out to be a 0.7 mm early melanoma with an expected survival rate of 96 - 98%. Within 18 months she was dead of widely metastatic disease. So it shows you the range and polar extremes we contend with in this and other malignant diseases.

**Dean:** I was fascinated by the work of Tan Ince in our Department of Pathology, where he takes a breast tissue that he expands in a Petri dish and then provides the cells with two different environments and then transforms them with a consistent oncogene, and then looks at the tumors that are being formed, and depending on the two conditions he ends up with two completely different tumors – one that is very aggressive and the other one that is a tumor that is essentially very controllable. That is so amazing, the development in the understanding of breast cancer -- to figure out what determined the difference in aggressiveness exactly as you described for melanoma.

**Fred:** Yes.

**Dean:** And that’s going be huge progress.
Fred: Well, it’s evidence of what my first mentor in Toronto, Rudy Falk, always said. He believed it is highly likely that we are ultimately going to fight cancer to a Mexican stand-off, that many cancer patients will live out their normal life spans in a normal way, their tumors held at bay by biological response modification therapy which is durable over the long term. He may well prove to be right, that’s where we may very well find ourselves in a substantial proportion of what we do as oncologists.

Dean: Do you think that one day we are going to be able to address all forms of breast cancer in a way that will be successful in 99% of the cases?

Fred: Well, look what was achieved with polio! Einstein’s moment of brilliance was in his theories of general and special relativity. Such seminal insights occur as a result of the convergence of hard work, intuition, insight, circumstance and serendipity. Paradigm-changing insights are rare by definition, but it’s just a matter of time before someone hits upon a solution which takes much of the current mortality and morbidity of cancer out of play, permanently. Of that I have no doubt; it won’t happen tomorrow, but it will happen.

Dean: Wonderful. Well listen, you are an extraordinary surgeon and a beautiful human being who has done so much for your human fellows. One of the privileges that I have as the Dean of the Miller School of Medicine and the head of our Health System, is the opportunity to say thank you for what you do for your patients, for all of us, and also for the reputation of our School and our University. Your career is an illustrious career that will impact your field, our lives, and the future of medicine forever. So, on behalf of the Miller School of Medicine, I thank you for what you do. It’s extraordinary to have you as a master of surgery in our University, as a master of oncology in our University, and I hope that you will continue to do what you do for many, many more years because it’s tough work. Thank you for what you do.

Fred: Thank you, it’s been a pleasure.

Dean: Great to see you.