Arthritis Society Endowed Research Chair in Rheumatic Diseases/ Rheumatology: Dr. Marvin Fritzler

What attracted you to the field of rheumatology? Were there any other fields of medicine that you considered?

It kind of begins when I was a graduate student. I am perhaps a little bit unusual in that I did my PhD degree before my MD, and so I was in a PhD program at the University of Calgary at about the time that the new medical school was starting. One of the graduate students in the lab where I was doing my PhD was an MD working on her Master's degree in genetics. As part of her genetics research, she was studying genetics of Hutterites in Alberta. One day she asked me whether I would like to go to one of the Hutterite colonies and help her out; I went along, and she had me doing the Snellen vision test on the little Hutterite kids, then doing their heights and weights and things like that. I would say that kind of then captured my interest in clinical medicine. Up until then, I just thought I would do medical research or teach and that was about it. In fact, on my office wall I have a picture of two Hutterite girls as a reminder of where I sort of started my adventure in clinical medicine.

Then, as I mentioned, the new medical school in Calgary was just starting. So I applied and was accepted into the second class at the new University of Calgary medical school. In those days it was basically a one-room classroom on the top floor of the Foothills Hospital. In my second year we moved to the brand-new medical school, which was immediately adjacent to the hospital. And the very, very first patient I saw in my first year was a patient with systemic lupus. Up until then all of my research interests had focused on DNA stability in cancer. When I saw this lupus patient and learned she had antibodies to DNA, that became the stimulus for my interest in rheumatology, I got much more interested in patients with antibodies to DNA than cancer patients, where their DNA was thought to be altered and "messed up." When I eventually went into practice that same patient became my first patient. She became the focal point for my interest in rheumatology and really a life-long interest in lupus and other autoimmune diseases that are part of rheumatology practice.

The person that took me to see that first lupus patient was Dr. Ian Watson; he was from McGill but had trained at the Scripps Research Institute in La Jolla, California. His primary clinical practice was clinical immunology, rheumatology, and allergy. He always had in mind that we would [work together] in Calgary, where he would continue to focus on allergy and I would do rheumatology and look after lupus patients. Later on, after I moved to the University of Colorado from Scripps, Dr. Watson was diagnosed with cancer and died within months; when I came on Faculty in Calgary in 1978, I basically inherited his entire clinical practice, which included allergy, clinical immunology and rheumatology. So it took me a few years to get focused on my real area of interest, which was rheumatology and looking after lupus and other patients with autoimmune diseases, such as rheumatoid arthritis (RA), scleroderma, and so on. Eventually, the allergy patients I looked after were referred to other specialists and that basically oriented my entire clinical practice to rheumatology.

In the late seventies, the number of rheumatologists in Calgary was small. I was the only rheumatologist at that time at the Foothills Medical Centre, which was the second major hospital in Calgary. At the time, the Division of Rheumatology was based at the Calgary General Hospital across town, which was basically led by three rheumatologists. When I began at the new University of

Calgary medical school, which was adjacent to the Foothills hospital, I was the only rheumatologist at this hospital. So I was on call 24/7, 365 days a year, which some people don't believe, but that's the way it was in those days. People now who have to be on call a few days a week think they're hard done by ...

What motivated you to establish an academic career in Canada? Was it a conscious choice or did you fall into it by accident?

As part of graduate studies, you are given the opportunity to teach undergrads in laboratory courses; I had taught laboratories in cell biology, comparative anatomy, and that sort of thing. Teaching as part of even your graduate PhD program was expected and considered normal, or at least it was then. Gradaute Research Allowances (GRAs) and Graduate Teaching Allowances (GTAs) was basically how you earned your keep. Because I had a PhD, I continued to do research all the way through medical school; the research I did as a medical student focused on lupus and diagnostic testing for lupus, with a focus on antibodies to DNA.

Eventually, I finished my internal medical training and started rheumatology training, and then in the fall of 1976 transferred to the Scripps Research Institute in La Jolla, California, to work more closely with experts in the field of lupus and autoimmune disease diagnostics. There I hooked up with Dr. Eng Tan, who was and still is a world-famous, researcher in cell and molecular immunology. He had a very active lab and many of the people I worked with in his lab are still my collaborators today. His lab included people from all around the world: Japan, China, Australia, Mexico, Germany — we had a very international lab. After starting with Dr. Tan in La Jolla, he moved to the University of Colarado Medical Center in Denver, Colorado, and I moved with him, but then about one year later I was recruited to the University of Calgary. And I guess the rest is history. After my training with a world-class leader like Dr. Tan, I was able to establish my own research lab and my own research interests, and that is what I have been doing basically for the past 30-40 years.

I was not exactly attracted back to Calgary, I was pushed; my wife thought Calgary was the epicenter of the world. I did want to come back; my family was here in Canada, my wife is from Alberta, and I would suggest that she had a stronger desire to come back than I did. The University of Calgary basically made it easy to come back: they gave me a nice lab that had some of the basic equipment that I needed for my research. I applied and got a research grant from what was then called the Medical Research Council. My job profile was basically 50% research, 20% teaching and the rest was clinical activity. I was involved in clinical activity from the beginning, although the weight of the clinical load that inherited was unexpected because of the death of Dr. Watson. He was only 40-years-old at the time, so his passing was quite unexpected. I have had several offers elsewhere, primarily in the U.S., some of them quite attractive. But my wife wanted to stay in Calgary and I was, let me say, pliable. I was able to be convinced to stay, and I have not regretted it.

The teaching load I had at the University was eventaully split between other clinical rheumatologists in private practice and at the university; there was a group of very good clinician teachers in Calgary.

With the prevalence of arthritis on the rise among Canada's aging population, how do you think the roughly 375 rheumatologists scattered across this country can do a better job meeting the growing need for their expertise?

Well, that is a long, long, long discussion. I think first of all, obviously we have to keep training young people to become rheumatologists. I doubt that the practice of rheumatology is saturated anywhere in this country. Gratefully, in the last five years or so there has been an upswing in the number of trainees who are showing an interest in rheumatology. We have to make sure we are focused on giving them a quality learning experience and preparing them to be competent rheumatologists.

Secondly, I think clinical rheumatologists have to work within a system that is not always efficient in our country. We tend to be trapped in healthcare systems, and that is in part due to lack of infrastructure, meaning hospitals and appropriate healthcare facilities. Some of the regulations we have to work under, for one thing, the Canada Health Act, need serious revisions and re-examination to be more appropriate for our times, so that we are not engulfed in a system where we really cannot efficiently and effectively deliver quality care to rheumatic disease patients. We need to collectively sit down and have a vision for what the ideal care of a rheumatic patient is, and then move toward that ideal, rather than trying to readjust the current system. I think it requires an examination

of what we have, re-evaluating the rules and regulations that we operate under. It also requires a much clearer vision of the future and the desired future of clinical care for rheumatic diseases patients.

How are educators in the field of rheumatology learning from each other? What can be done to encourage an even more open, collaborative atmosphere among rheumatology training programs across the country?
I think the biggest challenge for educators is keeping abreast of the changes; when I look back 30 years ago to when I started, the dynamics of rheumatology and the change in information was much different then than it is now. Now there is so much new information and if you're teaching young people, who are going to be the leaders of rheumatology in the future, you need to keep abreast of these changes. That is where the dynamic of learning from others in rheumatology becomes important. One person on their own just cannot keep up with the entire field; you end up being more and more and more focused on what you claim is your area of expertise. When you are teaching, however, you have to have a very broad and strong foundation, and that is where you rely on other educators to educate you. Not only do you educate the trainees, but we also have to educate each other.

The challenge now is that rheumatology educators, and we are not unique in that way, have what I call a virtual smorgasbord of opportunities as to how we can maintain our level of expertise and competence. It ranges from virtually daily internet sessions to meetings all over the world (probably too many meetings), but certainly online educational opportunities have opened this up. You do not have to be there at the time, you can go online and tap into a lecture that somebody gave two weeks or two months ago, and update your information; the quality of that information is so much better than it was 30 years ago. So the challenge there is management of your opportunities and your time, to access this panoply of wonderful things you could be doing. I am learning to manage through trial and error. Some of it is very, very good; most of it is excellent. Then the problem again becomes finding the time to pick from that extensive menu.

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