Northern High(Lights)

Greetings from Our New President

Who is Michel Zummer when he is not at home?

I'll start with my academic life... I received my Bachelor of Science from McGill University, where the best things I learned were how to play bridge and squash! Then I went to Queen's University where I received my Masters in Science in virology. Having seen enough of the "wet lab" I went to medical school at Université Laval. The best things I learned there were how to speak French and understand the jokes! I specialized in internal medicine at Université de Montréal—best things I learned: not much... although, for some reason, I developed a keen interest in rheumatology. So, back to McGill University I went, where I specialized in rheumatology. And what were the best things I learned? How to study medicine in English! And that rheumatology is the best specialty, of course. Now I am at the Centre hospitalier Maisonneuve-Rosemont working with a seven-member team who are all a delight to work with. Together, we started and developed the rheumatology division at this centre. My time is divided as follows:

- 40% hospital (out-patient clinic, consults, seven rheumatology beds, teaching patients and students)
- 40% private office (attached to the hospital)
- 20% clinical research
- 10% administrative
- 20% CRA
- 20% family

Yes, I know that it adds up to more than 100%!

Who is Michel Zummer when he is at home?

I used to be a full-time chauffeur: hockey–soccer–hockey–soccer. But I lost part of my job and became a part-time chauffeur: soccer–soccer. Now I have some time to swim twice a week with a masters swim team (absolutely no reflection on my meager abilities, since I cannot play squash anymore [MSK problems]), do some skiing in the winter, travel and take pictures. Alas, not much time for anything else.

What do you see as the upcoming challenges for Canadian rheumatology?

Confirming the expertise of the rheumatologist in arthritis

care and taking a leadership role at the provincial levels. We must give direction to health policy in this very precarious climate.

What are the priorities of the Canadian Rheumatology Association (CRA) for the next two years?

1) Ensuring adequate human resources, 2) improving the practice environment for rheumatologists and 3) facilitating education and communication on various fronts.

Will the Canadian–Mexican joint conference be a template for further international collaborative meetings?

It's an "N of one trial." The membership has been very interested and this was confirmed by the last Needs Assessment. There are many challenges involved, especially when respecting the two associations. We shall see how it goes.

There is considerable growth and interest in regional Canadian meetings, particularly during warm-weather seasons. With the "greying" of the CRA membership, is there any consideration being given to a shift in the "ski meeting" format?

We are constantly exploring options. It's not easy to reformat a successful meeting that brings out the greatest percentage of the membership of any association, notwithstanding the challenges of growth. The last Needs Assessment confirmed the popularity of the venue, however, we are always open to suggestions. Please send them to us.

On a personal level, what are you looking forward to in your position as CRA president over the next two years?

Trying to choose the best tequila! And working with a great and well-motivated executive to improve the practice conditions of rheumatologists and to improve arthritis care in Canada.

— Michel Zummer, MD, FRCPC

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Up Close and Personal with Our 2004 Distinguished Investigator

ROBERT INMAN, MD

What other priorities/goals do you have at this time in your career?

Recently, my biggest priority was my work on the Frontiers in Inflammatory Joint Disease Conference, which took place May 2004. This was a great opportunity to build a national research strategic plan encompassing the broad Canadian Institutes of Health Research (CIHR) pillars, and to enhance funding for arthritis research in Canada. This also brought together key stakeholders, such as the CIHR, the Canadian Arthritis Network (CAN), The Arthritis Society (TAS) and the Canadian Rheumatology Association (CRA), to coordinate a national comprehensive approach to arthritis research.

What have you found satisfying about your career in rheumatology?

There are many aspects to this: the students, our lab team, the patients. But, certainly, one key element is my rheumatology colleagues in Toronto. I cannot imagine having a better group of coworkers. It has certainly been a privilege to be the director of the Rheumatic Disease Unit in Toronto for the past 11 years.

The Distinguished Investigator Award from the CRA is a real honour for me. The CRA has shown tremendous vitality and resilience as an organization over the past 10 years and it has enjoyed outstanding leadership. Of course, it will have to keep adapting to the changing scene in Canadian healthcare. Even if you are on the right track, you can still get run over if you just sit still!

What are the most important questions to be answered in the field of spondyloarthropathies (SpAs) today?

There has been exciting progress made in the genetic area of SpAs and on therapeutic approaches to these diseases. The impact of the biologics in terms of treating these diseases has been great. However, there are likely 25% to 30% of ankylosing spondylitis (AS) patients who



Centre: Dr. Robert Inman, 2004 Distinguished Investigator

are nonresponders to anti-tumor necrosis factor (TNF) therapy and we need to be alert to new therapeutic options. We are still lacking important information on the basic mechanisms which underlie chronic inflammation in the spine. Indeed, even the mechanism whereby human leukocyte antigen (HLA) B27 confers genetic susceptibility to AS remains unresolved. And the role of environmental factors, illustrated by discordant twin pairs, needs further study. The prospect of developing a comprehensive database for SpAs, involving multiple centers, has been a vision for the Spondyloarthritis Research Consortium of Canada (SPARCC). SPARCC investigators recently presented an exciting symposium at the CRA meeting in Lake Louise, Alberta. They summarized the forefronts in genetics, immunology, imaging, clinical outcomes and therapeutics in SpAs. Canadian investigators are playing a leadership role in this field and the development of an SpA network is timely. The integration of well-defined patient cohorts with genetic profiling, microarray approaches, and clinical variables, such as radiographic severity, will be realized best through collaborative multicenter approaches, such as the one SPARCC is undertaking.

What do you think are prerequisites for success as a researcher?

First and foremost: a sense of curiosity. Second: a healthy skepticism. Clues to watch for in a student are an interest in probing beyond the generalized truths of the textbooks and a desire to see the evidence first-hand. And that holds true for residents that we might set our sights on for rheumatology training. A good resident has the right answers. A great resident has the right questions.

Of course, other factors come into play in the decision to pursue a research career. For today's students and residents, financial pressures can be significant factors, as debt load is an increasing factor for our trainees. In the United States, the differential earning potential between community rheumatology and research careers is even greater. There it seems like the price of academic failure is financial success.

Successful researchers also need to be "thick-skinned" enough to accept any intermittent setback that might accompany a manuscript or a grant proposal that is so far ahead of its time the reviewers could not appreciate it. It may sometimes seem that researchers use grants like a drunk uses a lamp-post—more for support than for illumination. This is actually not so. Successful investigators see the grant as a means to an end, the tools needed to get the job done.

Who most influenced your life in medicine?

Dr. Charles Christian was Chief of Rheumatology at the Hospital for Special Surgery, Cornell University where I did my fellowship. Chuck was a tremendous role model in terms of being an outstanding physician and researcher. His example proved to all of us who trained with him that seeking excellence in clinical medicine and in science could be integrated. I was fortunate to have had many other mentors at McMaster University, Vanderbilt, Cornell, Hammersmith and the University of Toronto.

Outside of rheumatology, what aspects of medicine intrigue you the most?

Rheumatology covers the spectrum of internal medicine. The old adage, "To know syphilis is to know medicine," has now been updated to the following: "To know rheumatology is to know medicine." But infectious disease has always had a great attraction for me as well. And the example of peptic ulcer disease being finally attributed to an infectious agent is challenging. The answer may not always come where you expect it to appear. Researchers of pernicious anemia might have

studied the bone marrow for eternity, without realizing that the real problem lay in the gastrointestinal tract.

If you hadn't entered medical school, what alternative career would you have considered?

Since I majored in English literature, I would have pursued English in some fashion. Judging from friends who have been writers, the relative pay scale may be lower than rheumatology. Writers and rheumatologists both have been under-appreciated and under-paid. Actually, that is not entirely true—many rheumatologists are greatly appreciated.

What advice do you have for the student considering a career in rheumatology?

It is an incredibly exciting time in rheumatology. There are therapeutic advances with the advent of biologics that are changing the landscape and restoring lives disrupted by rheumatic diseases. There are new forefronts in the molecular aspects of auto-immunity that are just opening up. The applications of micro-array technology and genetic profiling are rapidly expanding our understanding of the fundamental aspects of disease processes. Yet, as the high-tech aspect of rheumatology advances, there is an interesting paradox, which is reminiscent of the astronomers studying the physics of the "big bang." They have been scaling a mountain of the origins of the universe, and as they reach the crest of the mountain, they encounter a wise old theologian who is there waiting for them. We, too, are scaling some exciting and challenging peaks these days, using sophisticated molecular probes. But as we reach the peak, we may encounter the wise clinician who has been listening to and examining his patients carefully all the while. Technically, we need accurate clinical phenotyping to accurately interpret our genotyping. Practically, it means returning to the patient with eyes and ears. It means a synthesis of the science of medicine and the art of medicine. It is back to the future.

It is up to us to effectively communicate the excitement and the challenge of a career in rheumatology, and we can do so in all sorts of ways. The CRA studentships are one such example. There has been an expression going around, referring to a not-so-difficult task, that "it doesn't take a rocket scientist to figure it out." The brain surgeon is, on occasion, the profession substituted. In any case, we have an opportunity. Faced with such a situation, the correct comment is, "Well, it doesn't take a rheumatologist to figure it out."

Fickle Finger of Fame Hward

Are you still taking Swedish lessons in the fading hope that the Nobel Committee may have misplaced your address? Are you now well past the cut-off age for the Canadian Rheumatology Association (CRA) Young Investigator Award and well short of the 500 publications for the CRA Ancient Investigator status? Are you more in the running for the CRA Extinguished—not Distinguished—Rheumatologist of the Year? **Do not panic!** The CRAJ wants to create hope for all its readers by announcing the Fickle Finger of Fame award. Your 10 minutes of glory are nigh if you are, well, "interesting"—yes, that's all—interesting. We want to find 10 Canadian rheumatologists who do more than just count joints, draw graphs, pipette cells and write long diatribes. The CRAJ is searching for the 10 rheumatologists with the most interesting pastimes, hobbies, locations, aspirations, vacations, facial hair, tattoos, children, you name it, etc. to be featured in interviews for our Holiday 2004 issue. Tell us about yourself or nominate a colleague in a brief note (photos are a bonus!). The CRAJ Editorial Board will then decide on this year's group of most interesting arthritis specialists. The usual evanescent paraphernalia for such a prestigious and fleeting accomplishment will be presented at an appropriately effervescent time. Please send your message today. Applicants must be at least 18 years old and do not need a working knowledge of any Scandinavian language!

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2004 Young Investigator: A "Rae" of Hope

RAE YEUNG, MD

What attracted you to rheumatology as a specialty?

I guess one of the most important things that attracted me were the colleagues and the people who worked in rheumatology. In my case, it was the pediatric rheumatologists who served as my mentors and teachers when I was a trainee. And they were really just a fantastic bunch of people dealing with very interesting diseases. With the specialty itself, when dealing with children with rheumatic diseases, one of the things you learn very quickly is that kids really bounce back and are real troopers when they deal with chronic disease. It's really a pleasure dealing with chronic disease where you can watch children grow and be fantastic little champions and do well, despite their illness.

What are the challenges and rewards of your pursuit of arthritis research?

One challenge is that it is difficult to see children, when they are so vibrant, being affected with diseases that are going to affect their whole life.

The particular aspect of research that I deal with is vascular inflammation or vasculitis, and the disease that I deal with is Kawasaki Disease, of which arthritis is one component but not the major component. So I see a lot of children affected by inflammation of the blood vessels, and the blood vessels involved are the coronary arteries. The challenge here is because it's the coronary arteries that are involved. In order to understand what causes a disease of the coronary artery, you can't just remove a piece of the artery for analysis—unlike a joint where we can actually take some fluid, etc. You can't just go biopsy a coronary artery in a child. So understanding a blood vessel disease is a great challenge in the absence of having the actual affected blood vessel to look at. Part of that challenge is trying to understand the disease. The way that we've done that in my research program is to develop an animal model that accurately reflects the human disease so we can look at the affected blood vessel.

In terms of the rewards, when you do have a further understanding of something, the fact that you can apply it, affect the treatment and, ultimately, affect the outcome in each case, is a great reward. And I think the families of the kids affected with this disease that I look after are



Centre: Dr. Rae Yeung, 2004 Young Investigator

unbelievably grateful for any kind of improvement in our knowledge. I think understanding what causes many of the diseases that we look after is really in its infancy: understanding what causes it, why it's happening in children and what we can do better. So it's rewarding to see the potential in the research that we do and how it may ultimately affect the lives of our patients.

Other than rheumatology, what are your other interests (academic or otherwise)?

I think learning is a real interest of mine and I think that's part of the reason I went into research. Reading and learning and just being kind of a lifelong student is an interest of mine. I'm also very interested in some of the activities that my kids are into. I have taken more of an interest in skiing and skating since my children have taken it up. If I had a hobby I would say those are the hobbies I enjoy.

What do you hope to be doing in 10 years? Where?

I hope to still be doing research and understanding what causes Kawasaki Disease. But I hope that we will have some more answers and that the research I'm learning in the lab will be translated into something that we can actually do in children with Kawasaki Disease. Where will I be doing it? Hopefully in a university/academic setting, wherever that may be—Toronto or elsewhere—so that I can teach other people and hopefully inspire students to go on to this area of research.