

An Interview with this Year's Distinguished Rheumatologist: Manfred Harth

1. Congratulations on your well-deserved nomination as the 2009 CRA Distinguished Rheumatologist. You were the president of the CRA from 1982 – 1984. The Distinguished Rheumatologist Awards began in 1990. What do you think of the awarding of such honors on an annual basis?

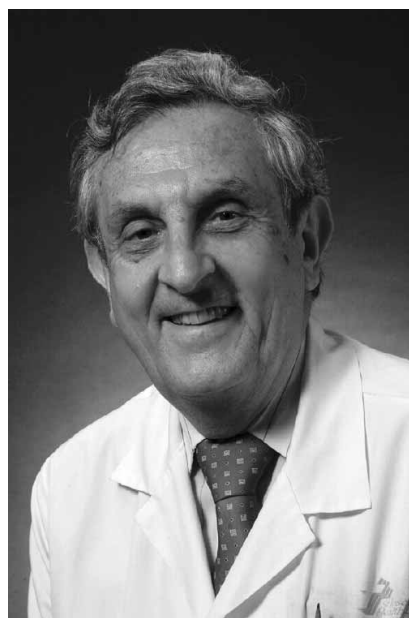
I think it's an excellent idea. I think that sometimes they make mistakes when handing out these awards, such as in my case, but I think that otherwise the recipients are well deserving.

2. There are now awards for the Distinguished Investigator, Young Investigator, and Educator of the Year. There is no award for community rheumatology. Are there too many awards or are there still insufficient ways to honor all those in the various aspects of the profession?

I don't think there should exclusively be an award for community rheumatology, but perhaps an additional award for someone who has excelled in their clinical work, as well as an award for a contribution to the community within which you live and function. Perhaps "Master Clinician Award" or "Master Rheumatologist Award." I think that an academic rheumatologist could be honored with such an award as well. He or she otherwise might have been overlooked or would not have had as good of a chance to get the Distinguished Investigator award or Educator award.

3. As a long time observer of the Canadian Rheumatology Association and former president, what had been seen as the positives and negatives in the evolution of the organization over time?

I think so far the positives far outweigh the negatives. There are not many negatives to mention. The organization is larger; it attracts people from all over Canada, young and old, and it also has managed to get large sums of money available for worthwhile endeavors, such as for education and research; the awards are nice as they give people the recognition that they deserve.



4. The CRA has recently purchased *The Journal of Rheumatology*. What are your thoughts on this new direction for the CRA?

I think it's a wonderful challenge for the CRA. I'm old enough to remember that the founding Editor of *The Journal of Rheumatology*, Metro Ogryzlo very much wished that the CRA would be the sponsor for *The Journal*. The CRA in those days was a much smaller organization, with very little money, and I don't think we could have afforded the Journal back then—I also think there were other reasons at that time. As it turns out we were wrong and Dr. Ogryzlo's vision was fulfilled. I think the purchase of *The Journal* by the CRA is exactly what he would have wished for .

5. You had the opportunity to see many changes in rheumatology over the course of your career. What have been the most profound changes?

I think there have been great changes. When I started my career for instance, allopurinol had just been introduced. That had radically changed the treatment of gout for the

better. Then, also early in my career, we saw the first Charnley arthroplasties being performed and the subsequent improvements in orthopedic surgery for patients with arthritis were a great advance. There followed the introduction of methotrexate and other immunosuppressive agents which I believe, were very important milestones in treatment options. Then more recently in the last 10 years, biological agents have allowed us to take big strides in controlling inflammatory arthritis. Diagnostic changes have occurred, particularly in the area of imaging, which is now much more sophisticated with imaging of joints, and of changes in the brain that affect the group

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of patients with fibromyalgia. This progress also has allowed us to attract more people into the area of rheumatology. Since the time that I started there has been a tremendous growth in the number of doctors choosing this specialty, though we still need more!

6. You are well-known for your teaching and investigation at the University of Western Ontario. What have been the highlights of your academic career?

One highlight of my career was the development of the Rheumatic Diseases Unit. This allowed us to form a group/network of health professionals who were dedicated to treating patients with arthritis and doing research. Not just physicians, but also Allied Health Professionals, physiotherapists, occupational therapists and nurses. This has been a very gratifying

experience for me. The other highlight has been to witness the intellectual and career development of various health professionals who joined me at various times in the Division of Rheumatology at Western, many of whom have achieved national and international recognition.

7. Even before the economic crisis of 2008, Canadian medicine and rheumatology in particular were facing challenges in the future. Do you think that the economic downturn of the next few years will significantly alter recruitment and training of new Rheumatologists? What can be done to mitigate this possibility?

I'm not sure that it will have a great effect on recruitment in rheumatology. It is not a good thing, but I don't think it will affect us rheumatologists that much. One thing that works against us, relatively speaking, is the fact that rheumatology is one of the lower-paid specialties and a number of young people will be attracted to higher-paying specialties. The economic downturn will, unfortunately, affect many of our patients who will lose their jobs and healthcare insurance which will present us with considerable treatment challenges.

8. What do you foresee as the challenges to Canadian Rheumatology in the future and what can individual Rheumatologists and the CRA do to meet these challenges?

The challenges are looking after our patients as well as we are able to do. That means that our patients should have the best treatment we can give them. I think that the CRA will have to be strong advocates for our patients. I think that the CRA will also need to continue advocating for research and make sure that the Federal Budget includes appropriate allocations for funding research.

9. Do have any final comments for your colleagues?

Thank you once more for the honor you have awarded me. Keep up with the good work. The CRA has become, thanks to all of you, an admirable professional organization.

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Sitting Down with Claire Bombardier: The 2009 Distinguished Investigator

1. What first prompted you to become a physician and later a rheumatologist? Where did you complete your undergraduate degrees and postgraduate degrees?

I know I was young. It didn't take me long to decide that I wanted to do something in the sciences. At first I thought maybe a physicist. My father was a physician (a pediatrician) and when I sat down to really think about what I wanted to do, I wasn't aware of all of the choices I had, but when it came time to make the final decision, I chose medicine—probably due to the mentorship of my father, and his dedication to his work.

The rheumatology side of it wasn't something that I sat down and actually thought about. I finished medical school very young. I was only 21 and I felt like I wasn't ready to start a specialty right away, so I applied for a new program called the "Clinical Scholar Program" at Stanford University to study medical economics. The person in charge of this program happened to be a rheumatologist: Dr. Jim Fries. He was in the process of creating the ARAMIS database, a longitudinal cohort of patients with rheumatic disease (an innovative concept in those days). He also had just created a new patient-based outcome measure, the Health Assessment Questionnaire (HAQ), which is now standard in all clinical studies. In the division of rheumatology, his colleagues were innovators in immunology, including Dr. Halstead Holman, who first described the LE cell and contributed to the description of the rheumatoid factor, and Dr. Hugh McDevitt, who described the genetic control of the immune response. Surrounded by these visionary individuals, I was sold to the new specialty of rheumatology.

2. When did you determine that you wished to work in the field of epidemiology? Were there specific individuals who were mentors or role models?

When I came to Toronto there was the Public Health Program but no clinical epidemiology programs. At McMaster, in Hamilton, they were just starting to develop a clinical epidemiology program that was founded by John Evans and David Sackett, and I decided that I wanted to learn more about research design to tie into my other education in economics at Stanford. There were no role models at that time in this field; no females and no clinical epidemiologists. So I built a strong collaboration with Dr. Peter Tugwell at McMaster. He was the clinical epidemiologist and I was the Rheumatologist and we had a sort of "buddy-system" and learned from each other. Some mentors don't know how important they are in your career, and Dr. John Evans was one of these in mine. He was the founding dean of McMaster University Medical School, President of the University of Toronto and the founding



The Bomb Squad

Director of the Health Department of the World Bank. It was in that later role that I first met him. Shortly after I arrived in Toronto, he called me and said that he would like to speak with me. Of course I was ecstatic about meeting him. We met and he invited me to take part in a World Bank project in China. The project was to introduce the concept of clinical research to the deans of the 12 key medical schools in China. During that mission in China, I worked closely with some of the leaders in clinical epidemiology in North America. This experience was the beginning of the road that eventually led me to start a clinical epidemiology program at the University of Toronto.

3. What are your most important contributions to the science of rheumatology? What do you see as your seminal work?

I spent time and effort developing, validating and promoting patient-based outcomes. Rheumatology is a field that has been a forefront of patient-based outcome measures. We do not have sophisticated techniques as other specialties do and most of our outcome measures are patient-reported, such as pain, fatigue, physical activities or work capacity. I also developed, in collaboration with my lupus colleagues, the SLEDAI, a popular measure of disease activity in lupus. I started the "clinical measurement" course in the clinical epidemiology program. Through this course we promoted the application of formal testing of outcome measures for accuracy, reliability and validity. More recently, I became interested in the use of technology to administer these patient-reported measures in a clinical setting and created a web-based data entry for our rheumatology patient called the "e-rheum." Scoring of these measures is time consuming, if done manually, so they are rarely done in busy practice. The e-rheum questionnaire is entered on a touch screen by the patient in the clinic, then the score is automatically calculated and a printed report is produced with a copy for the

patient and one for the doctor. This streamlines the whole process. These questionnaires can also be done on the computer in the comfort of the patient's home. My current research focuses on post-marketing surveillance of drugs and I have now started to incorporate the e-rheum as a post-marketing monitoring tool.

But over and above all, my most important contribution is the generation of talented individuals who have been my students over the years. Most of the graduate students I supervised are still active in academic research, and many are now leaders in the field. Just to name a few, these include: Sherine Gabriel, who is now the President of the American College of Rheumatology and won the ACR Henry Kunkel Young Investigator award; Gillian Hawker, who is the Physician in Chief at Women's College Hospital in Toronto, holds an Arthritis Society Distinguished Investigator award, and is the recipient of the Goldie Price Award and a Royal College Medalist; Rachelle Buchbinder, who is a professor of rheumatology in Australia and won the Volvo Award for the best worldwide research in Low Back Pain; and Linda Li, who holds the Harold Robinson Chair in Vancouver and won the 2008 New Investigator award from the ACR. I cannot do justice in this short paragraph to the 38 Masters or Phd students who gave me so much joy over the years.

4. You have contributed much to the development of new therapies through your interaction with the pharmaceutical industry over your career. Have these activities been complementary to your other scientific pursuits?

Throughout my career I've reflected a lot on the relationship with the industry. We have several stakeholders in society: those who make and sell drugs (the industry), those who pay for drugs (insurance and formularies) and finally those who take drugs (the patients). Over the years I have done research with all three stakeholders. Our relationship with industry is definitely key, as those stakeholders have brought great innovation. But sometimes the medical community seems too close to industry, and this is particularly true nowadays in the eyes of the public. There are similar potential conflicts of interest in our relationships with those who pay for the drugs (e.g., government formularies), so we need to find the right balance between being effective in our role as the neutral advocate for our patients and remember that we must earn the trust of our patients as well.

5. What have been the highlights of your career?

I was fortunate to have five major highlights in my career. The first one was opportunity to work in developing countries through the World Bank health initiative and through the Rockefeller Foundation International Clinical Epidemiology Network (INCLEN). This led to my second highlight: the creation of the clinical epidemiology program at the University of Toronto, which exposed me to talented trainees from different specialties. Developing with my colleagues the courses and the

teaching material, and interacting with the next generation, was most rewarding, especially working with the talented students with whom I did research. The third highlight was the creation of the Institute for Work and Health. New funding of \$5 million per year was made available by the Worker's Compensation Institute to create an independent research institute to study work-related health and disability problems. With two other researchers, we built the organizations, created a research agenda and hired new researchers and students. I learned the value of working with an international research advisory committee and with our Institute's Board. The fourth highlight was becoming Division Director of Rheumatology at the University of Toronto. The sustained excellence of my colleagues, their hard work and incredible talent have made this division a magical place to work. The final highlight, which is still very recent, is sharing the co-leadership of the Canadian Arthritis Network with my colleague Monique Gignac. I can certainly say that I have been particularly fortunate.

6. As the Head of Rheumatology at the University of Toronto you have had the opportunity to influence the evolution of rheumatology both locally as well as nationally. What do you see as the priorities for Canadian rheumatology in the next decade and what must be done to achieve these goals?

We are at a turning point. We have an increasing aging population, we have a shortage of rheumatologists, we have a lot of innovative therapies that people don't have access to, and we have a healthcare system that does not allow us to maximize what we can do.

We need to regain our leadership role in thinking and developing innovative ways to deal with the challenges facing us. We need to think outside the box. We need to find new ways of delivering care that includes regionalization and care teams with other providers. We need to start a discussion with not only our rheumatologists, but also healthcare sectors such as the government and the industry. We need to figure out how to better organize care and incorporate alternative options. We also need to better organize our research to maximize efficiencies across research teams and reduce the cost of research. We have lots of thought leaders in this field; we just need to get organized.

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