#### Topical Medical Issues

# Pediatric Rheumatologist, Dr. Ross Petty, Retiring: A Tribute

r. Ross Petty's impending retirement prompts us to reflect with admiration and gratitude on his extraordinary career and invaluable contributions. Seldom do we have the privilege of encountering a colleague who so exquisitely blends expert, compassionate and empathetic patient care with scholarly and productive research and inspiring and exemplary teaching. Over the past three decades, Ross, among the earliest pediatricians to be formally trained as a rheumatologist, has played a vital role in nurturing and cajoling the subspecialty from its infancy to the mature, vibrant and essential discipline it is today.

After graduating from the University of Saskatchewan medical school in 1965 and completing his internship in Saskatoon, Ross moved to Ann Arbor, Michigan. He undertook his postgraduate pediatric training in Ann Arbor and then, under the tutelage of Jim Cassidy and Donita Sullivan, there completed his rheumatology training. He then traveled to London, England where he obtained his doctorate in immunology. In 1976, he returned to Canada and went to Winnipeg, Manitoba. There he established Canada's first formal pediatric rheumatology program. Since then, Ross has emerged as one of the world's most respected pediatric rheumatologists, renowned for his insight and clinical judgment, his highly relevant and prolific research and writings and his extraordinary gift as a teacher.

Canada's integral role in the development of pediatric rheumatology worldwide is due predominantly to Ross's influence. Almost all of Canada's pediatric rheumatologists have emanated directly or indirectly from Ross's training programs. Further, Ross has been among the most influential teachers of pediatric rheumatologists throughout the world. He is responsible for disseminating pediatric rheumatologists to establish programs in many North American centers, as well as in Australia, Austria, England, Germany, Kuwait and Saudi Arabia. Frequent invitations to visit and share his knowledge with colleagues worldwide attest to his international renown. He has a prolific publication record representing an eclectic expertise. His contribu-

tions to medical/scientific literature, which have had a huge impact on enhancing the care of children afflicted with rheumatic diseases, have included recognizing an association of antinuclear antibodies with uveitis in juvenile rheumatoid arthritis, highlighting the importance of enthesitis in juvenile spondyloarthropathies, documenting the efficacy of intra-articular corticosteroids in managing juvenile arthritis, demonstrating methylprednisolone's role in treating dermatomyositis and defining the clinical importance of juvenile psoriatic arthritis. Recently, he chaired the International League of Associations for Rheumatology (ILAR) Working Group to define a new classification system and nomenclature for chronic childhood arthritides. He co-authored, with Jim Cassidy, Textbook of Pediatric Rheumatology—the premier pediatric rheumatology reference book.

As a clinician, Ross's interaction with patients has consistently demonstrated a special gentleness and humor. His insight, decisiveness and thoroughness convey a confidence that is reassuring and comforting to patients and their families, as well as to colleagues who seek his advice.

Ross is a renowned educator. He has the inherent skill to convey not only the science of medicine but, by example, the art of medicine. He teaches students at all levels, including his professional colleagues, with precision, clarity, vigor and respect, such that learning from him is both inspiring and inevitable.

Throughout his career, Ross has served on numerous administrative committees, helping to shape, promote and advocate the pediatric component of rheumatology. While he may be retiring "officially," there is no doubt that Ross will continue to have a major impact on the field of pediatric rheumatology.

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### Ross Petty: Personal Impressions and Reflections

#### Why did you leave your hometown of Saskatoon, Saskatchewan for Ann Arbor, Michigan?

While I was doing my first year of pediatric residency at the university hospital in Saskatoon, Dr. John Gerrard, the professor of pediatrics, said, "If you really want to be a pediatrician you must go elsewhere to receive the best training." I thought this was a generous attitude since I was the only pediatric resident in the institution at the time and I was learning a tremendous amount. Had it not been for Dr. Gerrard's suggestion, I would probably have stayed in Saskatoon. Ann Arbor was selected for two reasons: two of my mentors in Saskatoon (Drs. Hardy and Ives) had trained there, and there was a program in pediatric rehabilitation—an area in which I was very interested and which, I found out later, included pediatric rheumatology.

#### What has given you the most satisfaction in your academic career?

I am a clinician at heart and never happier than when I am seeing patients. The satisfaction of working with fellows in pediatric rheumatology has also been extremely rewarding. We have been fortunate to have worked with more than 30 excellent trainees and we take great satisfaction in watching their careers develop and witnessing the impact they have in the development of the field of pediatric rheumatology.

#### What advice would you give a medical student interested in a career in pediatric rheumatology?

Do it! I think pediatric rheumatology is the most interesting area in pediatrics. It is at the beginning of a new era, both therapeutically and in terms of our understanding of the pathogenesis of disease. Pediatric rheumatology offers opportunities from the bedside to the bench. It challenges the best minds to harness the mediators that cause and control inflammation, and to provide comprehensive care to children and youth with chronic illnesses. It has changed from a specialty in which so little could be done to one in which so much can be done. Be part of it! The best is yet to come!



How will the field change over the next 10 years? If someone had asked you this question 10 years ago, what might you have said?

Ten years ago I think I would have said that the next decade would see discoveries of the etiology (*i.e.*, specific causes) of diseases. With the exception of Lyme disease, that has

not proven to be the case. Today I would say that the next 10 years will be characterized by recognition that the interplay of genes and environmental triggers is more important than specific etiologic agents. Exploiting the tools of genomics and proteomics will allow us to control pathogenic mechanisms, irrespective of specific causes. Of course, I was wrong 10 years ago!

## You have had the opportunity to travel the world in your career. Can you tell us about some of the most interesting places that you have seen?

All places are interesting. I can't think of one place to which I've been that I would not like to visit again. I have yet to see Antarctica. It is the impressions, rather than the places, that are most important, I think. My travels have provided tremendous learning opportunities. I have been impressed by both the differences and similarities of childhood rheumatic diseases throughout the world. I have been troubled by the inequalities that exist and the fact that "accidents" of geography are such important determinants of health outcome in children with rheumatic diseases. Those of us in North America and Europe have a great deal to learn from our colleagues in the developing world and the patients they see. I have been impressed by the need for North American and European pediatric rheumatology communities to be more active in training pediatricians from the

developing world and helping them study the problems of childhood rheumatic diseases in their own countries.

#### What have been the real breakthroughs that you have seen over your career?

It's hard to define "breakthrough." From the patient's point of view, I think the availability of trained and dedicated pediatric rheumatologists and pediatric rheumatology teams has been a development with a huge impact on patient care. To pick just a few therapeutic advances is a little more difficult. I think the use of intra-articular corticosteroids has revolutionized our management of oligoarthritis, and, to a lesser extent, polyarthritis.

Likewise, methotrexate has radically improved the outcome for children with polyarthritis. Biologics hold

the promise of enhancing our management of chronic arthritis to the point of complete disease control. The discovery of the cause and cure of Lyme disease is a modern medical triumph. Advances in the management of connective tissue diseases have largely been incremental, rather than "breakthroughs," although the marked improvements in morbidity and mortality with respect to systemic lupus erythematosus and the vasculitides have been dramatic.

Is there anything you might have done differently? Probably not. Serendipity has been my guide. I have been lucky to be in the right place at the right time, to have received excellent mentoring and to have worked with outstanding colleagues.

### The Summit is Coming

his Fall, arthritis stakeholders from across Canada will meet in Ottawa for "Rock This Joint 2005: Bringing Together Arthritis Knowledge and Action." There will be three high-level arthritis conferences: the international meeting of the Bone and Joint Decade, the Canadian Arthritis Network (CAN)'s Annual Scientific Conference, and the Summit on Standards for Arthritis Prevention and Care.

The Summit's objective is to establish concrete, clear and definitive recommendations for policy makers and policy implementers—standards that will be evidence-based, pragmatic and actionable; standards for people with arthritis wherever they are in Canada. Where standards are called for, but evidence is lacking, these will be prioritized for research so that the necessary evidence will be forthcoming.

The Alliance for the Canadian Arthritis Program (ACAP; see membership below) is organizing the Summit. The Summit will take place November 1-3, 2005 in Ottawa. It

will bring together 250 invited participants from Canada's arthritis community, including people with arthritis, physicians, allied health professionals, volunteer organizations, scientists, as well as government and industry.

A Planning Committee, with representatives from the entire arthritis community, is actively overseeing the development of teams that will do the work of developing draft standards for discussion at the Summit. More than ever before, people with arthritis will be strongly represented in planning, attending and promoting the Summit, and in helping to shape its recommendations and oversee their implementation.

So what is a "standard" and how can it help us? A standard is a definitive statement that lays out our expectations about an aspect of healthcare. For example, if an individual with osteoarthritis (OA) has no contraindications to exercise, then he/she should be recommended an exercise program since exercise has been shown to reduce pain and disability in OA. Benchmarks follow

from a standard as the tool by which physicians, patients, policymakers and others can measure or evaluate how well (and if) the standard is being achieved. Success in achieving benchmarks is increasingly being used by government to determine resource allocation and, in particular, funding.

Standards should be distinguished from practice guidelines, which are recommendations for patient management designed to assist practitioners and patients reach decisions about appropriate healthcare for the specific clinical circumstances addressed by the guideline. For example, the Canadian Medical Association has recently come up with standards for joint replacement surgery. These define maximum waiting times for surgery but do not recommend who should have surgery. The latter would require a practice guideline.

The Planning Committee has identified nine key areas for the development of standards. These areas include two Prevention domains (physical activity and injury prevention); four Management domains (access to a diagnosis, models of care and manpower, access to medication, access to surgery); and three Awareness domains (participation [including work, school and leisure], general public and consumer awareness, and healthcare professional education). Each of these nine areas will be headed by two co-leaders. They are responsible for establishing the teams that will assemble and review the evidence, draft the standard(s) and develop an implementation plan for consideration and discussion at the Summit.

As a founding member of the ACAP, the Canadian Rheumatology Association (CRA) has been a strong proponent of the need for the Summit and is taking a leading role in its development. The four co-chairs of the summit are Dr. John Esdaile, Dr. Gillian Hawker, Ms. Cheryl Koehn and Dr. Dianne Mosher. Members of the CRA serve on the Planning Committee and many more have volunteered their time to lead or be involved in the standard development teams. The CRA executive has not only demanded that the Summit move forward, but is supporting the conference with in-kind and financial support to the tune of \$100,000.

#### SUMMIT STAKEHOLDERS ALLIED HEALTH PROFESSIONS ASSOCIATION

Arthritis Community Research & Evaluation Unit **Arthritis Consumer Experts** 

Arthritis Research Centre of Canada

Bone and Joint Decade

Canadian Arthritis Network

Canadian Arthritis Patient Alliance

Canadian Orthopedic Association

Canadian Pediatric Rheumatology Association

Canadian Rheumatology Association

Cochrane Collaboration

Health Canada

Institute of Musculoskeletal Health and Arthritis

National Health Council

Patient Partners® in Arthritis

The Arthritis Society (and others to join)

#### **INDUSTRY STAKEHOLDERS INCLUDE:**

Abbott Laboratories, Ltd.

Amgen Canada Inc.

Bristol-Myers Squibb Canada Co.

Merck Frosst Canada Ltd.

Pfizer Canada Inc.

Proctor & Gamble Pharmaceuticals Inc.

Wyeth Pharmaceuticals (and others to join)

There is tremendous excitement about the Summit from across the arthritis community; government, physicians, surgeons, allied health professionals, scientists, industry and people with arthritis are helping. Everyone believes the time is right for action!

To obtain more information about the Summit, visit the ACAP website at www.arthritisalliance.ca.

- Cheryl Koehn

- Gillian Hawker, MD, FRCPC

- Dianne Mosher, MD, FRCPC

- John Esdaile, MD, FRCPC

# The Research on Arthritis in Canadian Children (REACCH) Initiative

'he juvenile idiopathic arthritis (JIA) classification represents an international effort to unify what has previously been referred to as juvenile rheumatoid arthritis (JRA) in North America and juvenile chronic arthritis (JCA) in Europe into a single classification of all chronic childhood arthritis. JIA affects approximately 10,000 Canadian children and adolescents at any given time and recent data suggest that active disease persists into adulthood in more than 50% of cases, resulting in significant life-long disability. This represents a significant healthcare burden. While there are outcome studies focusing on disease remission, disability and healthrelated quality of life (HRQOL) in JRA and JCA, the published data vary widely and there are no such studies that focus on new-onset disease in a clearly defined, prospectively assembled, large cohort of JIA. Being cognizant of these facts, the Canadian Pediatric Rheumatology Association (CPRA), decided to develop a research initiative that we have now entitled the REsearch on Arthritis in Canadian CHildren (REACCH) initiative.

In Vancouver in August 2003, a meeting, organized by this author, brought together most Canadian pediatric rheumatologists and others interested in research in IIA, as well as representatives from the Canadian Rheumatology Association (CRA), The Arthritis Society (TAS), the Canadian Arthritis Network (CAN), the Canadian Institutes of Health Research (CIHR) and consumers for a two-day brainstorming session. The meeting was highly successful and led to the formation of a Steering Committee whose mandate was to drive the REACCH initiative forward. The first undertaking was to submit a grant application to the CIHR New Emerging Team (NET) competition at the Institute of Musculoskeletal Health and Arthritis (IMHA), which focuses on impact on QOL of individuals with arthritis and related disorders. The grant application was successful and will fund a total of \$1 million over five years (2004-2009). The principal investigators of the REACCH initiative are Ciarán Duffy, Kiem Oen, Rae Yeung and Lori Tucker, however, its success depends on the contribution and collaboration of some 37 individuals from across Canada in a huge effort that

includes all Canadian pediatric rheumatologists, some adult rheumatologists and a number of clinical epidemiologists and biostatisticians.

Children with new-onset JIA will be studied to assay the clinical determinants of disease outcome and HRQOL and, more specifically:

- to determine short-term (two-year) and medium-term (five-year) outcomes (*i.e.*, remission rates, physical function, pain and HRQOL) and to determine whether early disease suppression is an independent predictor of time to remission;
- to study four specific measures of HRQOL to ascertain their relative discriminant validity and responsiveness, and to evaluate their ability to predict the above-noted outcomes.

This research will entail assembling a cohort of 2,000 patients over five years to have sufficient power to be able to study the various onset types of JIA. Since this study has a specific focus on outcomes, it is referred to as the REsearch on Arthritis in Canadian CHildren—Focusing on Outcomes (REACCH OUT) study. Demonstration of earlier and better remission rates together with improved outcomes, especially HRQOL outcomes, may justify a more aggressive treatment approach. Identification of the best measure of HRQOL will facilitate future outcome studies. The current proposal represents an important stepping stone with the formation of a new research team and research network, as well as the fact that the established JIA cohort will be the basis for future studies of this REACCH initiative.

A clear opportunity exists to build on this initial cohort study and to incorporate some mechanistic studies. To understand, precisely diagnose, treat and prevent JIA, a more thorough understanding of the distinctive biological basis of the various subtypes of JIA is necessary. Microarray technology for monitoring gene expression has proven useful in some forms of cancer; distinctive gene expression profiles correlate with underlying pathophysiology and predict disease outcome in B-cell tumours. Thus, by discovering distinctive JIA-subtype specific gene expression profiles, deoxyribonucleic acid (DNA) micro-

array technology will permit precise categorization of JIA subsets and help to identify pathogenetically important molecular pathways. Our cohort study situates us ideally to pursue this work, given our potential to obtain biologic specimens on treatment-naïve patients. Rae Yeung, Earl Silverman, Alan Rosenberg and Kiem Oen will now lead the way on a series of studies that we have called the REsearch on Arthritis in Canadian CHildren–Focusing on Mechanisms (REACCH ME) study. A grant on this issue is in the process of being written to be submitted to the TAS National Research Initiative (TAS NRI), for a deadline of November 2005. If successful, this grant has the potential to be funded up to \$1.5 million over five years, and will include some 40-50 co-investigators and collaborators.

Finally, this whole initiative has created the opportunity to build research capacity within JIA with the establishment of a research training program. Rae Yeung has led the way here by bringing together a broad array of investigators/mentors from across Canada and from a variety of backgrounds (e.g., clinical, fundamental, epi-

demiologic) with the express purpose of attracting trainees to conduct research in JIA. A training grant was submitted to CIHR and is currently under review. If successful, this will fund \$1.8 million over six years with the potential to be expanded by the CAN.

The success of this work depends on a highly organized infrastructure comprising a steering committee, a scientific committee, a training committee and a patient advocacy/knowledge transfer and exchange committee. Several of the individuals already mentioned above are very active on these committees. Three individuals who also deserve special mention are: Brian Feldman for his contribution to the REACCH OUT grant, Ron Laxer for moving the process along with patient advocacy and Ross Petty for his contribution to the education/training component.

This series of initiatives has the potential to dramatically change the lives of children with JIA and we are very excited about the prospect of being able to do so.

- Ciarán M. Duffy, MD, FRCPC

## Fickle Finger of Fame Hward



*Alphonso Verdejo* 2004 Awardee

Due to the outstanding feedback received, the CRAJ is pleased to announce the Fickle Finger of Fame award is up and running for 2005! As before, your 10 minutes of glory are nigh if you are, well, "interesting"—yes, that's all—interesting. We want to find Canadian rheumatologists who do more than just count joints, draw graphs, pipette cells and write long diatribes. The CRAJ is searching for rheumatologists with the most interesting pastimes, hobbies, locations, aspirations, vacations, facial hair, tattoos, children, you name it, etc. to be featured in our Holiday 2005 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 most interesting arthritis specialist. The usual evanescent paraphernalia for such a prestigious and fleeting accomplishment will be presented at an appropriately effervescent time.

Please send your message and/or nomination today to <a href="stephc@sta.ca">stephc@sta.ca</a>.

Once again, we extend our congratulations to the 2004 Fickle Finger of Fame Awardee: Alphonso Verdejo!