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INNOVATIVE MEDICINES CANADA

PAAB

E-Rheumatology

By Philip A. Baer, MDCM, FRCPC, FACR

Work-life balance is elusive and requires boundaries to be established and safeguarded. Learning to say no was a key skill I was not taught in medical school or residency, but found important to acquire once I was my own boss in practice. I dabbled in everything from Phase 2/3 research to medico-legal work to on-call duties in internal medicine—at first. Over time, I distilled my work down to clinical rheumatology, medical education, and medical politics, a far more manageable blend. Even the boundaries of clinical rheumatology are flexible: I prefer inflammatory arthritis (IA) and connective tissue disease (CTD), but will see patients with osteoporosis, osteoarthritis (OA), and regional rheumatic conditions. Many of my colleagues, even in community settings, will not.

The arrival of electronic medical records (EMRs) posed a new threat. Now I can access my office from home, meetings, or even vacation settings. On the one hand, abnormal lab results and prescription renewals are handled in far more timely fashion. Returning to the office from a few weeks away no longer means facing a mountain of paper referrals and test reports. However, is it truly a vacation if you are checking in at the office daily?

The next challenge is looming: The e-consult. Ontario is piloting a setup where primary-care physicians can request advice through this route, sending a question and supporting patient data to a consultant. Both sides are paid for the service. Apparently, the pilot is quite a success, with 30% of interactions handled solely by e-consult, obviating the need for a face-to-face consultation.

I have not yet signed up. For-profit services have approached me to enlist, promising to handle everything through the required secure e-mail server, and funnelling e-consult requests to me if I let them take a cut of the fees. The thought of further encroaching on my evening and weekend free time is not appealing.

On the other hand, *pro bono* rheumatology e-consults are different. Being surrounded by physicians in my family and my professional life, it is sometimes hard to remember that many people do not number a doctor among their personal acquaintances, or perhaps only one. Working at insurance company head offices where I am the only physician leads to frequent requests to review coworkers' test results or provide advice. Of course, I am careful to provide general advice only, as these are not full clinical interactions, and often deal with aspects of medicine outside of rheumatology. The Canadian Medical Protective Association (CMPA) urges caution in this field, and I agree. As well, the regulatory College in Ontario frowns on treating or providing advice to family members and close friends, so those requests have to be tactfully redirected as well.

Social media has enlarged the circle of advice seekers. In the middle of a busy office recently, LinkedIn signalled I had a message from a familiar name, albeit someone I had last worked with years ago. The message concerned an elderly parent with spinal stenosis and chronic pain, inadequately relieved after visiting a surgeon and a pain clinic. What could I recommend? Well, I had a few ideas. I did not volunteer to see the patient, but my response received what seemed to be heartfelt thanks, which I found more gratifying than being paid a trivial amount for an e-consult. I also now know what work the advice seeker is currently performing, and perhaps we will renew our social acquaintance as a result.

Far more difficult was a recent request forwarded to me by one of our sons, regarding a former classmate, now in her mid-20s: "As you know, my back started hurting in high school when I was 17. I've had chronic pain ever

since that gets better and worse at times. What helps the most is moving, and staying in any single position for a while is difficult. What's been more concerning is the progression of pain in my upper body in the last year or so. I've tried chiropractic, acupuncture, physical therapy (that doctor only saw me once and gave me two exercises and said there wasn't anything he could do)."

Well, I thought I knew what this was: Inflammatory back pain.

I read further: "My father and some of his siblings have psoriatic arthritis, my sister was recently told she had an arthritic spine (which left her stuck in bed for a few weeks), and then there's me. Also, my niece, who is four, recently had surgery on her hip. It was very sudden, because they found inflammation, and out of fear of septic arthritis from a bacterial infection, they operated on her. "

Ah ha! Seronegative spondyloarthropathy, surely.

"I don't know if I should pursue this any further with doctors? I keep getting told things like, 'you're too young for back pain'. I'm at a point where trying to fold laundry or do dishes for more than 10 minutes can cause so much pain that I can't continue. I also have a lot of random pain which seems to 'move around' in my left knee, hip, and ankle, which will suddenly make it difficult to go up and down stairs. For about two weeks, I was leaving for work around 6:30am to avoid traffic because I wasn't able to sit in the car during normal rush hour without being in pain."

I could not resist getting involved. I wrote back saying "You almost certainly have axial spondyloarthritis (SpA). It fits with your pain description, family history, etc. Typical delay in diagnosis is five to seven years, more in women. You need to see a rheumatologist."

Denouement? She tested positive for HLA-B27, saw a rheumatologist, had an MRI of the sacroiliac (SI) joints which was negative, and was told she did not have SpA.

Now what? I have not examined her. I do not know if the MRI was properly read. Perhaps it is truly negative, but an MRI of the whole spine might show something (said to be true in 15% of cases). Nonsteroidal anti-inflammatory drugs (NSAIDs) apparently did not help.

I am still struggling with what to do, but the slippery slope of e-rheumatology is much clearer to me now.

Philip A. Baer, MDCM, FRCPC, FACR
Editor-in-chief, CRAJ
Scarborough, Ontario

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AWARDS, APPOINTMENTS, ACCOLADES

It is with great pleasure that we announce the appointment of Dr. Heather McDonald-Blumer as the new Departmental Division Director (DDD) of Rheumatology. She will take over from Dr. Claire Bombardier on July 1, 2016.

Dr. McDonald-Blumer is a University of Toronto alumna. For the past 12 years, she has been a member of the Division of Rheumatology at Mt. Sinai Hospital/University Health Network. Her clinical interests include osteoporosis and inflammatory joint diseases. Dr. McDonald-Blumer is an active member of the rheumatology community locally and nationally having served as the University of Toronto Program Director for Rheumatology, Chair of the Specialty Committee in Rheumatology, Chair of the Examination Board for Rheumatology for the Royal College of Physicians and Surgeons of Canada, Associate Director of the Osteoporosis Program at University Health Network, and as a member of the Scientific Advisory Committee and Chair of the Guidelines Committee for Osteoporosis Canada. Heather is widely recognized for her collaborative leadership style and for her interest and ability to support and mentor students, residents and faculty colleagues. She will bring these outstanding attributes to her new role as DDD Rheumatology.

Dr. Paul Davis was recently inducted as a *Master of Rheumatology* by the Pan American League of Associations for Rheumatology (PANLAR) at their 2016 annual meeting in Panama City. This award was an acknowledgement of 36 years of service to rheumatology on both a national and international level. Dr. Davis has provided clinical, educational, and research contributions to the division of rheumatology at the University of Alberta since 1975. At the national level he has been recognised with the *Distinguished Rheumatologist Award* from the CRA and an *Award of Merit* by The Arthritis Society of Canada. On the international scene, Dr. Davis has been the scientific program chair for PANLAR and the World Congress of Rheumatology of the International League of Associations for Rheumatology (ILAR). He was previously the treasurer for ILAR and, more recently, the Editor-in-Chief of the ILAR-sponsored journal, *Clinical Rheumatology*. Along with his Edmonton colleagues, he has been involved in training numerous international fellows and students and was, until recently, the external examiner for the University of Nairobi Medical School.

Dr. Davis admits that "the involvement with international colleagues has been one of the highlights of his career, and he is honoured to receive this peer-reviewed award for doing what he likes doing best."

AWARDS, APPOINTMENTS, AND ACCOLADES

The *CRAJ* would like to recognize the contributions of its readers to the medical field and their local communities.

To have any such awards, appointments, or accolades announced in an upcoming issue, please send recipient names, pertinent details, and a brief account of these honours to *katiao@sta.ca*. Picture submissions are greatly encouraged.

WELCOME TO THE RHEUM & FAREWELL AS YOU LEAVE

Leaves are falling all around / It's time I was on my way / Thanks to you, I'm much obliged / For such a pleasant stay

For the past five years it has been my pleasure to serve the Canadian rheumatology community as Managing Editor of the *CRAJ*. I offer sincere thanks to all past and present members of the CRA; your continued contributions make the *CRAJ* possible. Most importantly, a heartfelt thank you to Dr. Philip Baer, under whose guidance this journal has thrived. Best wishes!

- Katia

Spotlight on Lake Louise

CRA: Call for Abstracts

You are invited to submit abstracts for presentation during the 2017 CRA Annual Scientific Meeting and AHPA Annual Meeting!

Deadline for submissions is **October 17th, 2016**. Details will be available at *www.rheum.ca*.

CRA Abstract Awards: 2016 CRA Annual Scientific Meeting

Philip Rosen Award for Best Abstract for Clinical or Epidemiology Research by a Trainee
Dr. Nicolas Richard
McGill University
Supervisors: Dr. Ariel Masetto and Dr. Marie Hudson

Ian Watson Award for Best Abstract for SLE Research by a Trainee
Stephanie Nantes
University of Toronto
Supervisor: Dr. Zahi Touma

Best Abstract for Basic Science Research by a Trainee
Dr. Liam O'Neil
University of Manitoba
Supervisor: Dr. Hani El-Gabalawy

Best Abstract for Research by a Rheumatology Resident
Dr. Valérie Leclair
McGill University
Supervisor: Dr. Marie Hudson

Best Abstract by a Medical Student
Matthew Jessome
McMaster University
Supervisor: Dr. Jonathan Adachi

Best Abstract by a Post-Graduate Resident
Dr. Hyein Kim
Western University
Supervisor: Dr. Lillian Barra

CRA/ARF Young Faculty Award for Excellence in Research: 2016 CRA Annual Scientific Meeting

CRA/ARF Epidemiology/Health Services Research Award
Dr. Cheryl Barnabe
University of Calgary

CRA/ARF Best Clinical Research Award
Dr. Zahi Touma
University of Toronto

CRA/ARF Best Basic Science Award
Dr. Nigil Haroon
University of Toronto

CRA/ARF Best Pediatric Award
Dr. Lily Lim
University of Manitoba
Supervisors: Dr. Earl Silverman and Dr. Brian Feldman

Happy 10th Birthday CIORA!

By Janet Pope, MD, MPH, FRCPC

CIORA stands for Canadian Initiative for Outcomes in Rheumatology cAre. CIORA is a unique granting organization committed to being a catalyst for improving the care of Canadians living with all rheumatic diseases.

CIORA's grant program supports sustainable projects related to rheumatic diseases that promote one of our three core pillars: Awareness/Advocacy/Education, Early Access for Rheumatic Disease Patients, and Multi-disciplinary Care Teams. This granting body, which is part of the CRA, allows questions relevant to rheumatologists to be answered, many of which would not be eligible for other peer-reviewed funding, or be given seed funding for pilots. There is a commitment to knowing where the awardees spent their money—a 10% holdback occurs until after the final report is received, allowing us to gauge the success of the program overall and each grant allocation. The presentations/publications that result from each grant acknowledge CIORA, helping advertise the success of the program. We have committed reviewers (many of whom have been past awardees) and each division head recommends someone to help in the review process. The grants review panel works like a Canadian Institutes of Health Research (CIHR) panel where individuals score each grant and a consensus score is reached after panel discussion. The panel has been chaired for years by Dr. John Esdaile and Dr. Paul Fortin; we are indebted to them both.

The 2016 competition has just been reviewed and candidates will soon know their results. In 2015 nine grants were funded (three for one year and six for two years), totaling approximately $740,000. CIORA is one of the three largest Canadian peer-review funders of rheumatology research (preceded by CIHR and The Arthritis Society). There have also been funding competitions for clinician investigators.

What is really neat about the CIORA program is the breadth and novelty of the projects. Last year the range of projects was very broad, with funding for grants related to pediatrics, vasculitis, rheumatoid arthritis (RA), systemic lupus erythematosus (SLE), cardiovascular disease (CVD) interventions for inflammatory arthritis (IA) by pharmacists, and evaluation of systems for measures of IA.

We could not have this grant competition without our many sponsors, and thank them profusely for their continued contributions.

Janet Pope, MD, MPH, FRCPC
Professor of Medicine, Division Head,
Division of Rheumatology, Department of Medicine,
St. Joseph's Health Care, Western University
London, Ontario

CIORA 2016 Grant Awards

Improving the Care of Patients With Systemic Vasculitis Through the Development of Management Recommendations and Educational Materials[1]
Principal Investigator: Dr. Christian Pagnoux **Award:** $89,170

Supporting Patient Care with Electronic Resource (SuPER): Efficacy of an Online Decision Aid for Patients Considering Biologic Therapy for RA[1]
Principal Investigators: Dr. Linda Li & Dr. Diane Lacaille
Award: $89,170

The Economic Challenges of SLE: Measuring and Mitigating the Impact[1]
Principal Investigator: Dr. Ann Clarke **Award:** $111,800

Translating Research into Practice: Identifying Factors that Influence the Uptake of Canadian Research Findings into the Clinical Care of Children with Arthritis[1]
Principal Investigator: Dr. Elizabeth Stringer **Award:** $74,990

Understanding the Effects of Creating and Viewing Art and Digital Stories with Pediatric Rheumatology Patients, Healthcare Teams, and in Educating the Community[1]
Principal Investigator: Dr. Paivi Miettunen **Award:** $52,841

Do Persons With Rheumatic Diseases Have Timely Access to Chronic Pain Services?[2]
Principal Investigator: Dr. Kadija Perreault **Award:** $68,540

Preventing Rheumatoid Arthritis (Pre-RA): Perspectives of People at Risk and of Rheumatologists on Selected Interventions[2]
Principal Investigators: Dr. Mark Harrison & Dr. Marie Hudson
Award: $82,933

Testing of System-level Performance Measures for Inflammatory Arthritis[2]
Principal Investigator: Dr. Claire Barber **Award:** $110,000

Pharmacist-led CVD Intervention for Inflammatory Arthritis Patients[3]
Principal Investigator: Dr. Carlo Marra **Award:** $99,627

Pillars: 1. Awareness/Advocacy/Education; 2. Early Access for Rheumatic Disease Patients; 3. Multi-Disciplinary Care Teams.

Distinguished Rheumatologist: Dr. Ronald Laxer

Why did you become a rheumatologist? What or who influenced you along the way to do so?

It was all due to a five-year-old boy named Arthur who I was assigned to care for as I was nearing the end of my first year of pediatric residency at the Montreal Children's Hospital. He had systemic juvenile idiopathic arthritis (JIA) and was very sick. We did not have a rheumatologist on our staff and we all struggled to care for Arthur. I decided then that I would become a pediatric rheumatologist and return to Montreal to provide excellent patient care. I went to Vancouver to pursue my fellowship training but was never offered a job in Montreal.

What is it about autoinflammatory disease that so captures your interest? What changes have you seen in the field since the beginnings of your research until now?

When I returned from administrative "purgatory" to full-time rheumatology in 2009 I wanted to tackle a new clinical challenge and decided to start a clinic for patients with autoinflammatory diseases. These disorders are especially interesting because—in most described so far—the biology makes clinical sense (*i.e.*, a gene mutation alters the inflammatory response). For many, there are now effective treatments which can be life-altering. Our team has been part of gene discovery for four novel autoinflammatory diseases. With the ability to do next-generation sequencing more and more diseases will be discovered, pathways described and understood, and hopefully, treatments developed. Many old diseases—such as gout and recurrent pericarditis—are now considered to have a large autoinflammatory component, and treatment for the classic autoinflammatory diseases may be applicable to some of these more common diseases as well. I also love the clinical challenge of being able to actually make a diagnosis in patients with multi-system disease.

Sources close to us report that you walk to and from work and are an avid Fitbit fan. Why is it so important that you get all those steps in daily?

We moved closer to the hospital and our children six years ago; my minimum 45 minute commute by car became a 15-20 minute commute. But I live a 16-minute walk to the subway so I began traveling by subway and eventually was able to get rid of one of our cars. On one sunny day I decided to walk home from work, and then came the idea of walking to work which I do daily (almost 8 kms). If I get out of work at a reasonable time (rare) I also walk home, which I do more often in the summer. I recognize the importance of exercise, which I really do not like to do, but I do love walking, especially with the many excellent podcasts that I listen to.

In 2009 you were the second Canadian to be awarded the *Distinguished Clinician Scholar Award* from the American College of Rheumatology (ACR). In your opinion, why is pediatric research so often overlooked? What did receiving this honour mean in terms of validating your pediatric focus?

Firstly, we are very few in numbers compared to our adult colleagues. Second, we are only now really maturing as a specialty. I think that being overlooked because we are pediatric rheumatologists is a thing of the past. Excellent work aligned with any of the academic pillars (creative, professional activity, research, teaching, and

education) should be—and more recently has been—recognized, no matter where it is coming from.

In two sentences, what happened with the Habs this season?

World's best goalie
Devastating injury
Habs season destroyed

You have been heralded as the "driving force that launched, sustained, and encouraged the growth of the Division of Rheumatology" at the University of Toronto. What do you think about that distinction?

I am very proud of the Division but cannot take sole credit for its development. It began as part of the Division of Immunology under Dr. Erwin Gelfand. Dr. Len Stein had trained in pediatric rheumatology in Ann Arbor and came to Toronto to do research with Erwin. I joined Len in July of 1984 and Dr. Earl Silverman joined the two of us in November 1984.

Both Len and then Erwin departed over the next few years, allowing Earl and me to work together with Dr. Abe Shore, a fully trained pediatric rheumatologist who was also on the SickKids hospital staff. We formed a separate division in 1990. Tragically, Abe died in 1991. We are now up to 10 staff rheumatologists, all of whom (besides Earl and me) are graduates of our fellowship program, and two of whom, Dr. Rayfel Schneider and Dr. Brian Feldman, became my bosses as Division Heads. All have made great contributions, making the SickKids program one of the best pediatric rheumatology programs in the world.

Surrounded by friends and colleagues.

What was your first thought when you learned that you would receive this award?

I had an overwhelming emotional reaction, with feelings of both pride and humility. I felt proud of the progress that our team had made and that our specialty has made, and also that my efforts to help advance the field were being recognized by my peers. This award has been given to the giants of Canadian rheumatology and to be included among such an elite group is very humbling.

What is the greatest professional challenge you have faced, and how did you address/overcome this challenge?

I spent more than six years as a hospital Vice-President overseeing a huge portfolio that included the entire medical staff. Directing areas where I had no experience (*e.g.*, hospital laboratories, quality, and risk-management, among others) proved to be a huge challenge. Once I was able to recognize who in the different groups were the best people to provide leadership, I felt that the situation was under control. Recognizing talent, treating people with respect, providing strong oversight, intervening only when required, and allowing people to do what they were good at were some of the things that allowed me to succeed in the job.

We hear your memory is tremendous and a frequent source of amazement for your trainees. What has it

A poetic moment with Dr. Claire Bombardier, Dr. Ron Laxer, and Dr. Cory Baillie.

From one great educator to another.

meant to your career to have such a precise and detailed recollection? On the other hand, has there ever been a time when you wished you could just forget something?

I have been blessed (and perhaps cursed) with having a good memory. It has allowed me to quote from articles that I read in the distant past and to recall what happened to patients. I remember patients that I knew we should be able to diagnose but could not, and have brought some back many years later to confirm a suspected diagnosis. Are there things I would like to forget? You bet! Those years as a hospital Vice-President are some I would like to forget about! As time goes on, though, I am forgetting more and more.

Over the course of your life, how many cities have you lived in and which was your favourite?

I have lived in Montreal, Vancouver, and Toronto. They are all favourite cities. I grew up, went to school, and trained in Montreal, a city with a *joie de vivre* like no other in Canada at that time. I got married there and our first daughter was born there. I saw the Habs win 10 Stanley Cups, attended the opening game of the Montreal Expos, and saw many events at the Summer Olympics in 1976. I did my fellowship training in Vancouver which has the natural beauty of the mountains and the ocean. We made lifelong friends there whom we are still close with and our second daughter was born there. Toronto is now home, a vibrant, culturally diverse city that has afforded me incredible academic opportunities and was the city where our third daughter was born. We are staying put as we are not planning to have any more children!

Ronald M. Laxer, MDCM, FRCPC
Professor,
Departments of Pediatrics and Medicine,
University of Toronto
Staff Rheumatologist,
The Hospital for Sick Children
Toronto, Ontario

Distinguished Investigator: Dr. Proton Rahman

Our sources tell us Proton is not, in fact, your given name. What is the origin of your moniker?

As things have turned out, my nickname has clearly been my most distinguishing feature. The origin of "Proton" is still not absolutely clear to me, as I have heard different versions from my parents. What is clear, however, is that my mom has been calling me this since I was an infant. I was born in Toronto, a year after my parents came to Canada from Bangladesh. My mother knew very little English when I was born. Apparently, Mom liked the way the word sounded when Dad, an electrical engineer, was reading out loud one day. Dad was amused by this, so Mom persisted to call me Proton. (For the record, my sister's name is Diana and brother's name is Adam).

You have spent the past several years studying the epigenetics of spondyloarthritis and the identification of genes using next generation sequencing approaches. What are some of the major breakthroughs you have had with your research?

Honestly, I am not totally comfortable with the word "breakthrough" when it comes to my work. What I have done is to systematically evaluate some emerging genomic technologies in rheumatic diseases. With this, I have been able to contribute to a better understanding of how common and rare genetic variants and post-translational modifications (*i.e.,* epigenetic changes) can potentially impact our diseases. These are evolving concepts and the true significance and impact will become clear over the next few years.

What was your first thought when you learned that you would receive this award?

I was rushing to get to a meeting on a busy street when I was first told that I was receiving this award. I politely said "thank you" and carried on. It took a few seconds for the weight of what had just happened to sink in, but then I broke out in a huge grin. Once I got to the lecture theatre, I began to reflect on the situation. I was—and still am—very honoured and humbled to receive this award. I am fully aware of the calibre of outstanding researchers that exist in Canada, and the accomplishments of previous winners. At some point in my career, being considered among the top investigators would have been very satisfying. Actually, winning this award surpassed my expectations.

In 2002 you were the CRA *Young Investigator*. At the time, you noted some trepidation about "expectations that better things are yet to come." Where do you stand on that statement now? What changes have the intervening years brought, and what changes remain on the horizon?

The start of any research can be very intimidating. I was fortunate to receive the CRA *Young Investigator Award* after three years of being an independent investigator. Although the potential for a successful career may have been there, there was also a fair amount of uncertainty about how things would progress. The largest stress in being an investigator is carving out a path that will allow you to sustain your research funding. This is particularly the case for genetic research, where carrying out studies is inherently expensive given the cost of collecting families, purchasing chips, and buying high throughput genomic platforms. I was very fortunate to get timely salary and operating support from The Arthritis Society and the Canadian Institutes of Health Research (CIHR) to establish my program and also develop strategic

partnerships. This allowed me the opportunity to accomplish my initial goals and get my foot in the door as an established investigator. Even though funding continues to be my greatest challenge, having been engaged in active research for over 15 years now serves as reassurance and provides a calming influence. I am now much more confident about what I have to contribute and how best to go about doing this.

How does your research influence the clinical care of patients? What are you able to translate from the research lab to the examining room?

A very unique feature of our lab is the creation of a translational laboratory. This may be a first in Canada, where our clinical lab, Eastern Health, and our research lab share common platforms and resources. Thus, the results from our research lab are done to such a standard that they can be rolled out clinically.

Now with the advent of exome sequencing we are routinely identifying rare, private mutations in our families with autoimmune disease that have been important for diagnosis, determining prognosis, and in implementing treatment strategies. This has been very gratifying. I have also been involved in developing a new screening test for axial spondyloarthritis, which I hope will surpass traditional B27-allele testing in terms of cost and specificity.

No further investigation needed: Dr. Proton Rahman received his award from Dr. Vinod Chandran and Dr. Cory Baillie.

Are there other areas of interest you would like to investigate in the future? What projects will you be undertaking this year?

This is an exciting time for my laboratory, as we have now established a state of the art genomics facility with multiple "omic" technologies, an IBM-based high-performance computational infrastructure, and strong bio-informatics support. This has allowed us an interomic approach including interrogation of genomics, transciptomics, and epigenomics. I am also attempting to embark on linking these data to de-identified patient datasets.

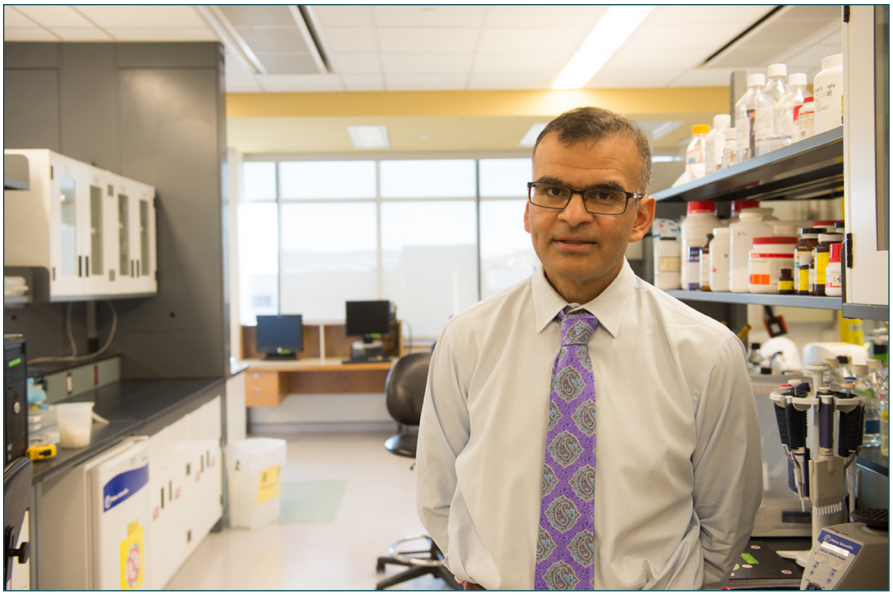
Our present emphasis is to prepare our rheumatology community for the paradigm shift that will undoubtedly occur as a result of precision medicine and precision public health. I am hoping to help redefine autoimmune rheumatic disease with the incorporation of genomic variants along with clinical and serological features. Using genomic technologies for early identification, disease prognostication, and to better target therapeutics based on patients' genetic profiles is of great importance. I also want to help target specific populations at risk for developing autoimmune disease and attempt to prevent or alter the natural history of the disease by changing the potential environmental trigger.

If you could choose an age to remain forever, which age would you choose?

I would freeze things now. I feel that this is the happiest I can ever be. I am blessed to have an incredible wife and kids that are still at home. Both sets of parents, mine and my wife's, live in the same town and all are healthy in their 70s. My siblings are well and very successful. Finally, I have a sense of pride about my work and financial security. Too bad things have to change.

You are the 5th person to win both the CRA *Young Investigator* and *Distinguished Investigator* awards. What commonalities do you see among successful researchers?

Firstly: A love of science! That being said, scientific curiosity is not enough. You need a fire in your belly



Dr. Rahman in his Memorial University lab. *Photo credit: Jennifer Armstrong.*

and a willingness to make quite a sacrifice. Research clearly invades your home life and clinical duties. As such, you need a very supportive family and enthusiastic colleagues who will support your endeavours—I am fortunate to have both.

There is an additional point, which is obviously an opinion: Prior success also leads to future success. In today's funding environment, a pedigree of sustained funding and productivity is essential. Independent research requires funding, and this is the hardest challenge to overcome when maintaining a longstanding research program. Because of this, unfortunately, I think you are less likely to see mid-career clinician scientists emerging. Thus I fully anticipate that the trend of *Young Investigators* being nominated as *Distinguished Investigators* (especially given the track record of the *Young Investigators* nowadays) will continue.

Your work in establishing the Newfoundland Genealogy Database has shaped the landscape of health research. What role does Newfoundland have to play in your success? Could you have envisioned carrying out this research elsewhere in Canada?

The Newfoundland founder population has played an important role in my success. I purposefully have spent time and resources to better characterize the genetic architecture of our population and the potential advantages it poses for genetic studies in rheumatic disease as well as other complex diseases. This has allowed us to strategically collect informative samples, which have contributed to the identification of genetic variants in multiple autoimmune rheumatic diseases. I am also determined to grow Newfoundland's reputation for innovation and make significant contributions to the province's success with respect to R&D and economic performance.

While our research could be carried out elsewhere, the emphasis on the founder population would not be there. If I were to be in a major urban center, the emphasis would be on a large sample collection and studying the impact of ethnic diversity on the genetic association. Either way, I think understanding population architecture is very important.

What do you believe are the qualities of a *Distinguished Investigator*? Moreover, how do they apply to you?

Qualities include scientific curiosity, determination, adaptability, and management skills. You need to have a good understanding of medicine in general, and in-depth knowledge of your scientific area. As new information is always emerging, it is essential to carefully evaluate these studies. Having good background knowledge is not necessarily enough. In order to generate new data, the next step is to challenge existing theories or perceptions. You need to be patient with your staff and students, as a lot of the actual work will be left to them. Mistakes will happen, but you must instill trust in them so you are told of any mistake in order to make sure that the data integrity is not compromised. You then need to adapt to these mistakes without losing your focus. Finally, you need to have great management, business, and communication skills. In many ways, when you employ 20 to 30 staff/students you are, in essence, running a business. You need to have a clear vision, interact well with people, be fair and accommodating, and communicate your message clearly and consistently, all while not being intimidated. I am not sure if I have all these desired attributes, but I have learned to accommodate for what is missing by being transparent and always working hard.

You have served as mentor to some up-and-coming names in Canadian rheumatology. What role have mentors played in shaping your career trajectory and your research interests?

Mentors continue to play a significant role in my career. Dr. David Murray, a nephrologist at Memorial University, championed my potential, so I had a very positive experience in medical school and residency. Dr. Dafna Gladman introduced me to research, facilitated my funding (including a short period of time when I had no funding as a fellow, and it magically appeared from her) and taught me patience, scientific rigour, and the importance of completing a body of work, irrespective of whether it will lead to a publication. The mentorship, trust, and friendship have certainly accelerated my career. Soon after, I came across Dr. Robert Inman due to a shared interest in spondyloarthritis, and he has had a calming and motivating influence on my career. I have also been fortunate to get timely advice from Dr. Janet Pope, Dr. Ed Keystone, and Dr. Art Bookman, all of whom I admire and respect immensely.

A jovial moment at the CRA ASM Gala Dinner.

Personal experiences with arthritis led to your interest in rheumatology. With hindsight, what have been the most rewarding aspects of going into the field of rheumatology, and what have been some of the more challenging aspects?

The late Dr. David Hawkins (past Dean of Memorial's Medical School and fellow rheumatologist) encouraged me to study rheumatology. In hindsight, that was the best advice I was ever given. Rheumatology has been a very satisfying career and I cannot see myself practicing another discipline. My special bond with the discipline comes from struggling with a chronic inflammatory rheumatic condition since I was 16. The insights that I have gained from a patient's perspective are to some extent unteachable, and inspire a drive to help those with musculoskeletal (MSK) pain. This has propelled me to put my patients first whenever possible, sacrificing my research ambitions at times. Since coming to Newfoundland, people frequently ask me why I stay in this province, suggesting, "it's far too busy, especially given your research." I tell them that this is exactly why I am here. I start most clinic days with patients asking me, "Doctor Proton, how are you feeling today?"

An empassioned speech on the merits of investigative research.

Proton Rahman, MD, FRCPC
Associate Dean,
Clinical Research,
Professor of Medicine (Rheumatology),
Memorial University
St. John's, Newfoundland

Teacher-Educator: Dr. Lori Albert

What do you believe are the qualities of a good educator? Moreover, how do they apply to you?

I think there are many qualities that define good educators; I have been impressed by how many different ways excellent teachers think about what they do, and how they are able to connect with and communicate with learners. I would say that some of the most important qualities—which I hope are evident in what I do—are a true enthusiasm for teaching, patience with learners (the ability to slow down and help the learner work through a problem) and a desire to see students grow and advance in their abilities and skill.

You recently edited *The Canadian Clinician's Rheumatology Handbook*. What was the experience like and what was the greatest take-away from the knowledge collected?

Undertaking a national collaborative project is always a daunting prospect; however, my colleagues across the country are a tremendous group, and things got done. In some ways it was easier the second time around. I am also much happier with our second edition than the first one. I think that, having observed the first edition in use for a few years, faculty could see how to enhance and more clearly present the information in a usable way. I think reviewing and revising a body of work is always an educational experience.

What was your inspiration behind the development of the *RheumExam Atlas* online platform?

There are many clinical features of rheumatic diseases that are visible to the examining physician but these are not always evident unless the clinician knows what to look for. I used to cart five different atlases to the bedside for teaching, filled with sticky notes marking pages showing vasculitic rashes or nailfold capillary changes. After a while, my bag was not big enough to hold all of them! I also realized that there were no pictures of simple things that I take for granted, but that junior learners had never seen, such as swollen joints in the hands. I started taking my own pictures of people with early arthritis, and pictures of Patient Partners who had classic findings, so I could compare and contrast. Around that time one of my venerable colleagues gave me a huge collection of slides he had amassed over his years in practice, and I suddenly realized that I should just put together my own book with what I wanted in it. This was actually the start of the atlas.

The first print atlas turned out to be a cumbersome affair, and a little difficult to use for anyone but me. I had wanted to make something electronic for a long time. I thought an electronic atlas would make access easier, allow the atlas to grow, and be much easier to take to the bedside on a tablet platform. However, it was not until this year that I finally submitted an application to a competition for the services of a summer student from the biomedical communications program at the University of Toronto. She worked with me to develop the online platform (*www.rheumexamatlas.com/index.php/atlas/*).

Your compassion as an educator is consistently praised. Can you recall a teacher in your own past who inspired your direction into education?

There were wonderful residents who guided me—a terrified clinical clerk—through my cardiovascular (CV), surgery, and obstetrics rotations. They taught me a lot about compassion and being learner-centred. Many

others, especially my teachers when I became a rheumatology fellow, were such outstanding educators that they really did inspire my thinking about how to be an effective teacher and the tremendous impact that has on the trainee experience. I do also particularly remember one moment during my second year in medical school: During clinical skills teaching with our group of six, my tutor, who happened to be Dr. Robert Inman, turned around from the patient he was examining, looked out the window of our 11th floor room and commented to the patient on the beauty of the late-winter sunset. That moment had a huge impact on me and gave me permission to bring humanity into teaching, when my experience as a student was that everything was very proper and regimented. Although Rob actually wanted me to become a scientist, his skill and enthusiasm as a teacher plus his ability to connect with patients and students probably did a lot more to influence my desire to be an educator!

What talent do you have that is not utilized successfully in your workplace?
My skills in flower-arranging.

About 15 years ago you convened the first assembly of Canadian Rheumatology Education and Learning (CanREAL). How has the educational landscape in rheumatology practice changed over the intervening years?
Rheumatology has been subjected to the same external pressures as all specialties; we have had to face reform and renewal of medical school curricula (often more than once), the introduction of CanMEDS and then CanMEDS 2015, and the impending competency-based training. We rheumatologists still sit around trying to figure out how to get more time in the curriculum and how to teach physical exam effectively! But, we also have more people who are dedicated educators and participate on a bigger scale in curricular development. Many are engaged in research in education and hold significant posts at universities, the Royal College, and in national medical education associations. I was just at the Canadian Conference on Medical Education (CCME), and there were a **lot** of rheumatologists there, and a lot of scholarly work by these people. So, I would say that rheumatologists have really embraced the study and practice of high-quality education, which is not all that surprising, but is a change from 15 years ago.


Dr. Claire Bombardier and Dr. Cory Baillie presenting Dr. Albert with her award.

Given your extensive work in rheumatology education, where do you anticipate continuing medical education (CME) moving within the next decade? How do you feel the age of the internet and social media has changed the way rheumatologists approach CME programs and literature in general?
The education landscape has evolved such that we are now more evidence-based in what we do. We are more learner-centered, especially with regard to respecting the diversity of individuals and their learning styles. We think about how learning happens and not just about teaching. I think that this has, and will continue to have, an impact on CME in rheumatology. An increasing awareness of how we learn will empower physicians to better choose the learning modality that is best suited for them. Some people will just continue to do what they have always done, but I hope that research in education will be better disseminated to the rheumatology community and will inspire people to explore different ways of educating themselves. More attention is also being paid now to the "learning continuum" and thinking holistically about our careers; this too may enable us to better map and optimize CME to meet different physician needs at different times.

From one great educator to another.

Dr. Albert teaching us how it is done!

It is hard to imagine that we will have any better access to information than we do now, but perhaps there will be better tools for managing, processing, and appraising the mass of data that is available to us. I guess there will continue to be dinosaurs like me who do not adopt social media trends, but we will see what the next big thing is. I understand that vinyl records are making a comeback…

If you had one free hour each day, how would you use it?

I would like to say that I would exercise or write a novel or do more volunteer work, but probably I would just sleep!

Last year you were the inaugural recipient of the *CRA Summer Student Mentorship Award*. What did it mean to you to receive this honour?

Well, firstly, I was completely surprised to win this award; it had never existed before and it was the first anyone had heard about it, so it really took me by surprise. Secondly, I was unbelievably honoured. The student I worked with was exceptionally bright and motivated and we had an excellent summer together. She baked me cupcakes at the end of the summer and that was enough for me! That she went to the trouble of nominating me was really so touching and meaningful—it was a great moment overall.

What projects are you currently excited to be working on, and what projects would you like to undertake in the future?

Right now my biggest project is curriculum renewal at University of Toronto. It is taking up a lot of energy; once we are through the first year, I will start looking at other projects. I have discovered I am particularly interested in faculty development and would like to do some more learning and practice in this area.

Lori Albert, MD, FRCPC
Associate Professor of Medicine,
University of Toronto
Staff Rheumatologist,
University Health Network,
Toronto Western Hospital
Toronto, Ontario

Young Investigator: Dr. Nigil Haroon

You have collected some serious CRA hardware over the years, with wins for best abstract, paper, basic science research, and now, the *Young Investigator Award*. How has the CRA shaped your career trajectory?

National level recognitions are a benchmark of success used in peer review for promotions, grants, career awards, etc. The CRA has provided a platform for young investigators to present their work, get important feedback, and be recognized. I feel the CRA has contributed immensely not only to my career, but to those of several young rheumatologists across the country. It is extremely gratifying to see so many well-wishers from your family.

Your success in obtaining research funding is commendable, with over one million dollars as a principal investigator in addition to being co-principal investigator in other grants. Any tips you can offer on the subject of making a solid grant proposal?

I had a big advantage of coming into practice with experience writing grants. During my research training with Dr. Robert Inman, I contributed to writing several grants and this gave me a feel for the language, content, and presentation style needed to write a successful grant. I still do not feel I have aced it, but it is a good start! You keep improving with not only writing more but with the amount of preliminary data you have generated, the number of collaborators in your group, and the evidence of productivity and success.

Are you a morning or night person?

Both. And not much in between, sadly.

Why did you decide to focus your investigations into spondyloarthritis? What connections have you seen between ankylosing spondylitis (AS) and the broader field of rheumatic diseases?

My fascination for immunology led me to rheumatology. There were several avenues I explored, including looking at predicting methotrexate efficacy in rheumatoid arthritis (RA) patients using a baseline *ex vivo* assay that was published in the *Journal of Rheumatology* (*JRheum*) during my residency. After joining Dr. Inman's, lab it was natural to work in AS and HLA-B27-related pathogenesis particularly interested me. Is it not amazing that even after 40 years of research we still do not know the pathogenic role of HLA-B27 in AS?

Are there other areas of interest you would like to investigate in the future? What projects will you be undertaking this year?

I am working on the unknown links between inflammation and new bone formation in AS. We have some pretty exciting leads that my post-doctoral fellow, Dr. Vidya Ranganathan, is working on. In my lab, Dr. Michael Zeng is working on intracellular trafficking abnormalities and their link to AS.

What was your first thought when you learned that you would receive this award?

Thanks for all the blessings.

Over the course of your life, how many cities have you lived in and which was your favorite?

I have lived in eight cities, and Toronto is definitely my favourite.

You were the lead author on a landmark study that noted patients with AS have increased cardiovascular and cerebrovascular mortality. The paper significantly changed the narrative around comorbidities in AS and may transform clinical care in this disease. What was the tipping point in that research, and when did you know you were on to something big?

The data were quite impressive and the sheer number of patients that we were able to study, thanks to the Ontario health administrative datasets, was a huge advantage. Our data was validated to an extent by expected observations, including the high prevalence of inflammatory bowel disease (IBD) in AS patients as well as the cardioprotective effects of statin use in cardiovascular disease. The 90% reduction in risk of cardiac events with nonsteroidal anti-inflammatory drug (NSAID) use was exciting and honestly, not a total surprise. This finding was extremely important as it corroborated previous reports of decreased mortality with NSAIDs in RA patients.

Dr. Haroon receiving his latest award from Dr. Inman and Dr. Cory Baillie.

If you could be any joint in the body, which would you be and why?

The temporomandibular joint (TMJ): I could keep eating!

What talent do you have that is not utilized successfully in your workplace?

Leadership.

You were one of only four non-American rheumatologists invited to co-author the recently published American College of Rheumatology (ACR) guidelines for the management of spondyloarthritis. What was your experience in working with this prestigious international collective? Was there anything you took away from the experience that will guide your own authorship practices?

It was a great experience to work with a team of experts. Productivity and quality of work is high when you have teams built around individuals with complimentary expertise. The intensity and level of commitment

Caught in the Lake Louise cam.

needed to complete the Grading of Recommendations Assessment, Development and. Evaluation (GRADE) process is just unbelievable until you have actually experienced it.

If you had a "theme song" that played whenever you enter a room full of people, what song would it be?
The Final Countdown. But no escalators, please.

Our sources tell us you are also an accomplished nature photographer. How do you see the interplay between your art and your research?
Research is intense and balancing the life of a clinician and that of a scientist is extremely important. Often the days are long and the nights sleepless. The level of stress can—at times—peak and you need a vent. Photography is mine. I tend to forget everything when I see the world through my lens. Those are my private moments of meditation. It keeps me sane.

If you had one free hour each day, how would you use it?
Catching up!

What has been your proudest accomplishment in your research to date?
Receiving the CRA Young Investigator Award.

For those wanting to pursue rheumatology and a career in research, what is your advice?
Go for it. The sky is the limit. There is not a dull day in the life of a clinician scientist.

A true highlight in one's career.

Nigil Haroon, MD, PhD, DM
Assistant Professor of Medicine and Rheumatology,
University of Toronto
Clinician Scientist,
University Health Network
Scientist,
Krembil Research Institute
Toronto, Ontario

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- Risk of malignancies, lymphoproliferative disorder, and nonmelanoma skin cancer.
- Risk of lymphopenia, neutropenia, anemia, and lipid elevations.
- XELJANZ should not be used in patients with severe hepatic impairment, or in patients with positive hepatitis B or C virus serology.
- Use with caution in patients with a risk or history of interstitial lung disease (ILD).
- XELJANZ can increase the risk of immunosuppression. Concurrent use with potent immunosuppressive drugs is not recommended.
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- Use with caution in patients with impaired renal function (i.e., CrCl <40 mL/min).
- XELJANZ should not be used during pregnancy.
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- The safety and effectiveness of XELJANZ in pediatric patients have not been established.
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- Use with caution in Asian patients because of an increased risk of events including: herpes zoster, opportunistic infections and ILD.
- Treatment with XELJANZ was associated with increases in creatine kinase.

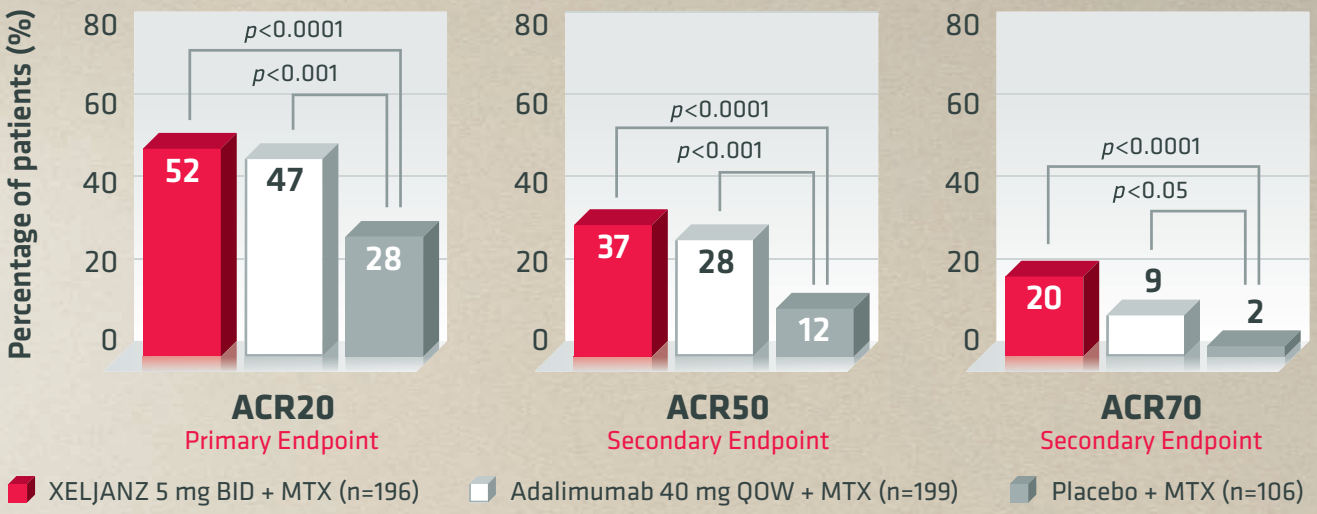
CA0115TOF005E

Demonstrated powerful efficacy where response to methotrexate was inadequate

Significant symptom reduction was shown at 6 months in MTX-IR patients treated with XELJANZ + MTX vs. placebo + MTX.[1*]

This study was not designed to compare XELJANZ to adalimumab.

ACR response rates at 6 months



Significant improvement in physical functioning at 3 months was achieved in MTX-IR patients treated with XELJANZ + MTX vs. placebo + MTX.[1*]

Mean HAQ-DI decrease from baseline at 3 months: -0.56 XELJANZ 5 mg BID or -0.51 adalimumab 40 mg QOW vs. -0.25 placebo ($p<0.0001$).
This study was not designed to compare XELJANZ to adalimumab.

- XELJANZ causes a decrease in heart rate and a prolongation of the PR interval. Caution should be observed in patients with a low heart rate at baseline (<60 beats per minute), a history of syncope or arrhythmia, sick sinus syndrome, sinoatrial block, atrioventricular (AV) block, ischemic heart disease, or congestive heart failure.
- Treatment with XELJANZ was associated with increased incidence of liver enzyme elevations.

For more information:

Please consult the product monograph at http://www.pfizer.ca/en/our_products/products/monograph/342 for important information relating to adverse reactions, interactions, and dosing information which have not been discussed in this piece. The product monograph is also available by calling us at 1-800-463-6001.

Reference: 1. Pfizer Canada Inc. XELJANZ Product Monograph. April 16, 2014. **2.** Arthritis Society. June 2014 Impact - Ease of Use. Available at http://www.arthritis.ca/page.aspx?pid~7650. Accessed July 22, 2014.

BID = Twice daily; QOW = Every other week; MTX-IR = Methotrexate Inadequate Responders

*Multicentre, randomized, double-blind, placebo-controlled study in patients ≥18 years with active RA according to ACR criteria. Patients received MTX and were randomized to receive XELJANZ 5 mg BID (n=196), adalimumab 40 mg QOW (n=199), or placebo (n=106). The primary endpoints were the proportion of patients who achieved an ACR20 response at month 6, mean change from baseline in HAQ-DI at month 3, and the proportion of patients who achieved DAS28-4 (ESR) <2.6 at month 6.

†The Arthritis Society's Ease-of-Use Commendation recognizes products, like the XELJANZ bottle cap, that have been independently tested for easy use and handling for people living with arthritis. The Arthritis Society does not determine the therapeutic value of products and the designation is not intended as a general product endorsement that are designed for ease of use in patients with arthritis.

The XELJANZ bottle cap was awarded The Arthritis Society's Ease-of-Use Commendation.[2†]

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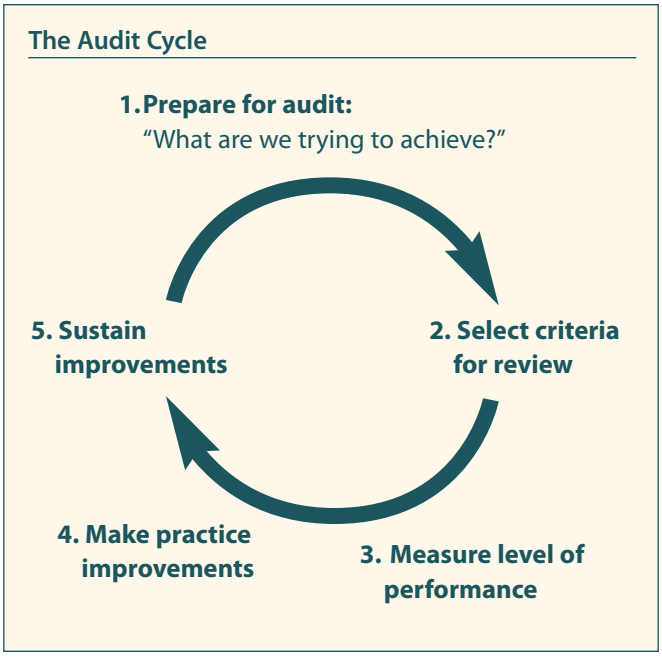
The 2016 Practice Reflection Awards

Gold Award

Henry Averns, MD, FRCPC

Clinical audit is a process that seeks to improve patient care, processes, and outcomes by measuring one's care against explicit criteria. This sort of practice reflection is a key pillar of clinical practice; examples of such questions might include:

- "Do I record core spondyloarthritis outcomes clearly in the chart?"
- "Am I asking patients about their immunization status?"
- "Can I locate this data in the Electronic Medical Record (EMR)?"
- "Do we consider bone sparing therapy in our patients on glucocorticoids?"



In the UK, National Health Services (NHS) clinical audit became a compulsory activity back in 1989. I remember well as a junior doctor the annual audit of quality of medical charts, where one learnt to one's chagrin that clinical notes were often incomplete, illegible, and fell below the agreed standard. It is often a humbling experience to be reminded of one's deficiencies in practice. As the culture of reflection and clinical audit developed, the British Society for Rheumatology (BSR) became actively involved, encouraging members to choose from a range of potential audits, and dedicating time at academic meetings to present results of audits to share best practice.

Over the last few years the CRA has recognized that a self-regulating profession must be seen clearly to engage in reflection and practice change. Clinical audit is not simply a process of data collection, not just a survey of one's practice. It runs far deeper and involves honest reflection on how one is doing, with the opportunity to develop practice changes which improve overall patient care.

The CRA aims to develop a "library" of potential audit projects, which will include the background data which informs the chosen audit standard, and data-collection forms to allow busy clinician to quickly adopt this in to their practice. As we mature in the process, we will explore electronic media as a tool to improve the efficiency of data collection and review. At this point we need your help. We are seeking champions in each province (including trainees) to drive this process forward. There are no sticks—only carrots. Section 3 credits can be claimed for this activity. Whether the Royal College will mandate this activity in the future remains to be seen, but it is my belief that if we can show all stakeholders that this is an activity which we embrace and perform, the advantages will be self-evident. The *Practice Reflection Award* is one way in which the CRA is encouraging us all to make clinical audit not just an add-on, but a firm component of our practice.

Silver Award

Philip A. Baer, MD, FRCPC, FACP; and
J.P. Raynauld, MD, FRCPC

Forty years ago, smoking in public was quite acceptable, and the dangers of second-hand smoke largely unknown. Philip remembers joining the Non-Smokers Rights Association to try to effect change. The present situation is much improved, but 20% of Canadians still smoke. The dangers are well-known, but the impact on rheumatic diseases is just beginning to be better appreciated.

Interestingly, a pioneering study on the negative impact of smoking on disease outcomes in ankylosing spondylitis (AS)[1] was published 20 years ago by our own Dr. Henry Averns. Dr. Averns has the distinction of being the first winner of the CRA *Practice Reflection Award* in 2015, and winning the Gold Award again this year. His work helped inspire our Practice Reflection contribution.

Building on multiple studies illustrating the negative impact of smoking on the risk of development, progression, and response to therapy in inflammatory rheumatic diseases presented at European League Against Rheumatism (EULAR) and American College of Radiology (ACR) in 2014, we participated in developing a Continuing Medical Education (CME) program on this topic. With the increasing need for chart-audit resources to help rheumatologists fulfill their requirements for Section 3 Royal College MAINCERT credits, we decided to leverage this ENVISION CME program into a chart audit program. Our team included Dr. Shelly Dunne and Dr. Marie-Anais Rémillard, as well as May Shawi, PhD, Ms. Alana Lamb, and Ms. Lise Troyer.

The end product includes an online physician demographic questionnaire, followed by a chart audit of 10 rheumatoid arthritis (RA) patients who are current smokers. Participants then review the ENVISION CME program either online or at a CME event. One to two months later, they repeat the chart audit on 10 more patients, and the results are compared. We are interested in the frequency that smoking status is recorded, the disease activity and functional status of the patients, whether the negative impact of smoking on RA is discussed, and whether smoking cessation counselling and tools are provided.

Participants receive three Section 3 credits, equivalent to nine credit hours, a significant fraction of the total 25 hours required every five years. We aim to recruit 50 rheumatologists and review 1,000 patients. A preliminary poster covering 11 rheumatologists and 70 patients was presented at CRA 2016. Future plans include updated abstracts at the 2016 EULAR and ACR meetings, as well as a publication submission and possible extension of the audit to patients with AS and psoriatic arthritis (PsA).

Our team thanks the CRA and the Award Selection Committee for recognizing our project. If you are interested in participating in the audit, please visit *www.envisionchartaudit.com*.

Reference
1. Averns HL, Oxtoby J, Taylor HG, et al. Smoking and outcome in ankylosing spondylitis. Scand J Rheumatol 1996; 25(3):138-42.

Bronze Award

Robert Ferrari, MD, MSc, FRCPC, FACP

I would like to thank the CRA, and in particular the Education Committee, for this brainchild that recognizes the importance of practice reflection. It is clear that practice audits are useful. They improve practice efficiency and effectiveness, reduce clinical errors, demonstrate quality care to stakeholders, promote high standards of practice, lower the risk of liability, and foster practice change. In my submission for the 2016 *Practice Reflection Award*, however, I also emphasized the additional importance of practice audits as a source of publications. Developing publications has markedly improved my skills in many areas of research design (scholar), writing (communicator), clinical practice (professional), and team effort (collaborator). My submission for this Award was an explanation of how I undertake practice audits, with the *a priori* view that I would be publishing the results. In my view, a good researcher is also a good practice auditor. I reviewed the step-by-step process of planning a practice audit as if one is planning a research project. I gave two examples in my submission: The design of a practice audit that led to a publication on osteoporosis in men[1] and another audit that addressed the prevalence of hyperparathyroidism in fibromyalgia.[2] I learned a lot from these audits and the publications hopefully shared some of that knowledge.

The reality is that our practices are loaded with data—if one thinks about a practice audit as an effort to publish results of a data analysis, one can plan the practice audit by going through all the steps described and necessary for a research publication. Imagining a research paper with a clear research question, introduction, and methodology is a good test of how ready the clinician is to conduct a practice audit that will lead to meaningful results. By thinking about practice audits as research projects with the goal of publication, the clinician becomes a researcher, and is far more likely to have a useful audit.

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Passing the Torch: A Presidential Address

By Joanne Homik, MD, FRCPC; and Cory Baillie, MD, FRCPC

2016 finds us saying goodbye to our current CRA president and welcoming in a new one. Dr. Cory Baillie has served the CRA in many capacities including Secretary-Treasurer, Vice President, and then President. I asked Cory to reflect on the last two years; during his tenure as President, he has spearheaded the re-organization of the CRA Board, more clearly defining the roles and responsibilities of board members, staff, and volunteers.

The CRA has a new focus on membership engagement and responsiveness to change. Our Annual Scientific Meeting (ASM) enjoys continued success and aims to fulfill the widespread needs of our members. The CRA has brought several initiatives under our umbrella, including the National Rheumatology Resident Weekend (NRRW) and Future Leaders in Rheumatology (FLIRT). There has been renewed energy focused towards activities to both measure (Stand Up and Be Counted) and increase the numbers of (Training the Rheumatologists of Tomorrow) practicing rheumatologists.

The organization remains financially strong. We have been able to expand the CIORA granting program and to support the efforts of the Arthritis Alliance of Canada (AAC). Our investment in the *Journal of Rheumatology* (*JRheum*) has proved sound both academically and financially, as this will soon pay dividends to the CRA.

Dr. Joanne Homik is stepping in as the new CRA president. As Dr. Dianne Mosher likes to remind everyone, Joanne is only the second female CRA president in its history. Joanne has served the CRA in the past as Vice President, Scientific Chair, and as CRA liaison with The Arthritis Society. The goals for the next two years include hosting a successful meeting with the Mexican College of Rheumatology (MCR) and Pan-American League of Associations for Rheumatology (PANLAR) in 2018, maintaining the financial health of the organization, as well as planning for the future revenue stream of *JRheum* dividends. At the board level, the CRA will continue to explore ways to support the success of our members through continued membership engagement. Aside from the usual planning for the upcoming year, this year's CRA board and committee chair retreat will include a session on exploring ethical behavior and avoiding conflict of interest for the organization. We look forward to continued strong partnerships with our fellow arthritis stakeholders, including The Arthritis Society, the AAC, and the Arthritis Health Professions Association (AHPA).

Joanne Homik, MD, MSc, FRCPC
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RheumJeopardy

By Philip A. Baer, MDCM, FRCPC, FACR

Over 100 keen contestants participated in the inaugural CRA *RheumJeopardy* competition on the afternoon of February 19th in Lake Louise.

Pride was on the line for the two teams, "Dr. Geezer" versus "Dr. Young", with a dividing line at age 45. Team captains, both from Alberta, were Dr. Marv Fritzler and Dr. Dax Rumsey, who arrived wearing a backwards baseball cap and shorts. Heckling commenced immediately. I had the pleasure of moderating the event and creating most of the questions, with contributions from Dr. Shirley Chow (*Choosing Wisely Canada* category) and from Dr. Ron Laxer and Dr. Deb Levy (*Legends of Pediatric Rheumatology* category). Dr. Christopher Penney acted as scorekeeper, closely monitored by the audience given his allegiance to the Geezer team. Dr. Evelyn Sutton chaired the event. We took advantage of *Sli.do* technology to allow everyone to vote on each question, transforming the event into a massive multiplayer online game (MMOG).

Questions covered topics such as the secretome, CRA award winners, scandals in rheumatology, and rheumatologists who knit (Dr. Joanne Homik) or suffer from motion sickness (Dr. Ed Keystone). Very few questions stumped both teams. Going into *Final Jeopardy*, the Young team led the Geezers in a tight contest. Wisely, both teams wagered their entire score on a single question on the topic of "Where's Waldo?" With the correct answer of Dr. John Thomson being the top choice of both teams, the Dr. Young team prevailed over the Dr. Geezer team by a score of 15,600 to 13,800. Well played by all!

Depending on the evaluations and popular demand, *RheumJeopardy* may return at CRA 2017 in Ottawa. Personally, I certainly hope so.

Philip A. Baer, MDCM, FRCPC, FACR
Editor-in-chief, CRAJ
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RheumJeopardy

What's in a name?	CRA	Rheum News 2015	Choosing Wisely	Rheums in Canada	Pediatric Rheum
100	100	100	100	100	100

Life With Arthritis Inspires Queen's Medical Student

Photo credit: Queen's Gazette / University Communications.

Molly Dushnicky, a medical student attending Queen's University, has only ever known a life with arthritis. When Molly tells people that she has arthritis, they say, "No you don't, that's for 60-year-olds and 80-year-olds."

Her experience as a patient living with juvenile idiopathic arthritis (JIA) will likely inform her practice as a top-tier physician: Molly aspires to be a part of the arthritis solution by pursuing a career in rheumatology. At the same time, she is an active advocate for continued education, fundraising for research, and championing awareness.

Her ambition is getting noticed: Molly's story was recently profiled in the *Queen's Gazette*,[1] and she has gained the support of a rheumatology mentor who will be advising her in her studies.

The CRA and The Arthritis Society are teaming up to pave the way for Molly and every other student interested in pursuing a career in rheumatology. If you have already contributed to the CRA **Every Member Campaign**, thank you! If you have not yet done so, it is an opportunity to give back to your field and help ensure that your patients enjoy continuity of care for years to come.

To make your contribution to the CRA **Every Member Campaign**, please register for the June 5th **Walk to Fight Arthritis** by visiting *www.walktofightarthritis.ca*, or contact Sandra Dow—*sdow@arthritis.ca* or 416-979-7228 x3343—to make your five-year pledge.

Suggested Readings

1. Carroll A. Arthritis can't stop medical student. Queen's Gazette, April 2016. Available at: *www.queensu.ca/gazette/stories/arthritis-cant-stop-medical-student*.

The Arthritis Society

Rheum Round Up

By Janet Pope, MD, MPH, FRCPC

The CRA meeting in Lake Louise in February 2016 was a huge success. There were 255 posters, 14 oral presentations, and more than 20 workshops. These workshops ranged in focus from diseases (antiphospholipid syndrome, IgG4, spondyloarthritis, Lyme, central nervous system inflammatory disease, vasculitis, Sjögren's, systemic sclerosis) to special scenarios (imaging, pregnancy and rheumatic diseases, medical legal issues, sleep, depression, cardiovascular comorbidities, nonsteroidal anti-inflammatory drugs [NSAID] safety, research capacity, Cochrane reviews, nutrition, and practice management). The opinions I express about the meeting are my own. I could not attend every workshop as times conflicted, so important learnings may not be mentioned here.

There was a great review of sleep quality and quantity, including common sense points like avoiding eating or drinking too much (alcohol or caffeine) before bed, and striving to get enough sleep or risk missing out on crucial cycles of restorative sleep. We also learned that if we do not sleep well, we live shorter lives.[1] My thoughts are that, unfortunately, sleep is something we cannot outsource, unlike cleaning, child care, etc.!

Highlights are too many to mention but some excellent studies by trainees include work on the British Columbia claims database for RA patients showing that (obviously) steroid use increases the onset of Type II diabetes mellitus, but hydroxychloroquine, methotrexate, and tumour necrosis factor (TNF)-inhibitors decrease new onset of diabetes.[2]

IgG4 disease was the focus of a workshop. This disease can be considered a mimicker with varied presentations; a common presentation is a patient with lymphadenopathy, submandibular gland enlargement, and autoimmune pancreatitis. Pearls were given. Half the patients with IgG4 disease do not have serum elevations of IgG4. The gold standard of diagnosis is biopsy. The pathologist needs to know what is suspected on biopsy so proper staining can be done to make a diagnosis.

There were abstracts about disparities in response or outcomes. There are different rates of lupus nephritis in the Canadian *1,000 Faces of Lupus* cohort. For instance, there is more nephritis in Canadians of Asian descent than in Caucasians, Blacks, or Aboriginals, but Asians demonstrate relatively lower rates of renal damage. There are also differences in clinical and antibody characteristics between South Asians and those from the Pacific Rim.[3] Research into minimal important difference (MID) for the SLE responder index (SLEDAI-2K RI-50) was presented.[4] Aboriginal Canadians with RA may experience delays in access to care along with receiving biologic prescriptions only at higher rates of disease activity; however, we also learned that Aboriginal populations have higher serious adverse events on biologics such as infections. The reasons for this are likely multiple (*e.g.,* higher disease state is related to more infections; more comorbidities; low socioeconomic status; living in remote areas could mean problems monitoring for complications). An important take-home message is to warn high risk populations of signs/symptoms of serious infections and to seek medical attention before getting too sick.[5]

There were studies on improving early access to care. Dr. Paul Fortin has a referral tool that has identified early inflammatory arthritis so patients can be seen earlier while Dr. Walter Maksymowych has tried to identify younger onset chronic back pain patients from key clinics (dermatology, ophthalmology, and gastroenterology) where seronegative spondyloarthropathy has an increased prevalence.

There could be hope for fibromyalgia patients, where, at the McGill Pain Clinic, there have been better outcomes when the baseline characteristics of the patients are taken into consideration and the main difference may be more exercise in patients over time.[6]

There was scientific debate in areas such as use of medicinal marijuana for chronic pain and use of social media in our practices.[7,8]

The meeting was a success due to the great breadth and depth of topics and from the hard work of the Scientific Committee, led by Dr. Evelyn Sutton.

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References associated with this article are available online at *www.craj.ca*

AHPA in Lake Louise

By Leslie Soever, BScPT, MSc, ACPAC

The Arthritis Health Professions Association (AHPA) was pleased to join the CRA for the Annual Scientific Meeting (ASM) in Lake Louise, Alberta. This year featured our 8th annual Pre-course for arthritis health professionals with 101 attendees. There was an excellent slate of speakers including Dr. Joel Rubenstein (*Imaging Review of Spondyloarthropathy*); Dr. Jessica Weiser (*Dermatologic Manifestations in Inflammatory Arthritis*); Dr. Jennifer Stinson (*Moving On: Engaging and Supporting Youth with Rheumatic Conditions in Transition*); Dr. Shahin Jamal (*Biologics and Small Molecules: 2015 in Review*); Dr. Dawn Richards (*Canadian Arthritis Patient Alliance: Past, Present, and Future*); and Dr. Dharini Mahendira (*Systemic Lupus Erythematosus Update*). We also introduced a panel discussion, called *Research^{Interrelational}: The Power of Different Minds*. Panelists included Dr. Mary Bell, Dr. Dawn Richards, Dr. Jennifer Boyle, and Dr. Sydney Brooks. Other contributors were anthropologist Dr. Gaya Embuldeniya and Dr. Joanna Sale, qualitative researcher. In keeping with the "Quality" theme, the day was capped off with a dynamic interactive presentation by nurse Leah Gitterman (*A Complexity Science Based Approach to Improving Quality*).

Rashmi Mandhane being presented the *Extraordinary Service Award* by Leslie Soever, AHPA President.

Rashmi Mandhane received the *Extraordinary Service Award*, which recognizes contributions by an AHPA Board Member in advancing the mission, vision, and goals of our association. Rashmi has served on the AHPA Board of Directors since 2012, initially as the Prairie Provinces Representative, then Member-at-Large for Western Canada. Since our Annual General Meeting (AGM) in 2016, she has added the Treasurer portfolio to her duties. Her many achievements include her excellent leadership, development, and implementation of AHPA's new website which launched successfully on target and on budget November 1, 2016. In addition, Rashmi has been instrumental in her advocacy for our organization throughout Western Canada.

The AHPA *Clinical Innovation Award* recognizes members who have designed and implemented an innovative clinical project or related initiative that benefits the lives of Canadians living with arthritis. This year's winner was Dr. Marie Westby for her project *Total Joint Arthroplasty Outcome Measure (TJAOM) Toolkit*.

The *Arthritis Society Research Award* was presented to Dr. Lucie Brosseau for her work, *Are Popular Structured Physical Activity Programs Promising for the Pain Management of Juvenile Idiopathic Arthritis? A Pilot Randomized Controlled Trial*.

The *Carolyn Thomas Award* was established in honour of a founding member of the AHPA who supported research. It is given to the first author of the year's best scientific abstract. The recipient was Dr. Raquel Sweezie for her research *Reliability Analysis of Two Short Medication Adherence Questionnaires in Patients with Rheumatoid Arthritis*.

The *Barbara Hanes Memorial Award* was established in honour of her work as an Occupational Therapy Director at The Arthritis Society, Ontario Division, and her contributions as a teacher and a contributing author of the rheumatology textbook *Physical Therapy in Arthritis*. This award was presented to Dr. Karine Toupin-April for her research entitled *A Decision-making Needs Assessment of Youth with Juvenile Idiopathic Arthritis and their Caregivers: Preliminary Results from a Narrative Review*.

Congratulations to all award winners and thank you for your excellent work which contributes to improved care for individuals with arthritis! I would also like to thank all members of the AHPA Board of Directors for their dedication and efforts in the ongoing work of AHPA.

Leslie Soever, BScPT, MSc, ACPAC
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Chikung...What?

By Stephanie Keeling, MD, Msc, FRCPC

Case: The patient was a healthy 46-year-old triathlete, with no past history of arthritis, who went to the Dominican Republic for one week, and returned home with a febrile polyarthritis. Given his history of fever in a returning traveler, his family physician sent off an excellent work-up. In consideration of the differential, this included screens for dengue fever, Chikungunya virus (ChikV; IgM antibody to the Winnipeg Centre for Disease Control [CDC]), Epstein-Barr virus (EBV), malaria, leptospirosis, measles, mumps, rubella, blood cultures for bacterial infections (*e.g.,* meningococcemia), rickettsia, HIV, chlamydia, and gonorrhea. Within one week, during which he received nonsteroidal anti-inflammatory drugs (NSAIDs), his anti-chikungunya IgM came back positive, confirming what was clinically suspected: This patient had textbook ChikV.

When I saw this gentleman in clinic, he was debilitated and miserable. His presentation included significant polyarthritis of his hands, feet, ankles, and knees with superimposed periarticular edema and tenosynovitis. He was negative for any rheumatic serologies, had elevated inflammatory markers, and normal baseline X-rays. Given he had already failed a trial of NSAIDs and was on prednisone (20 mg daily) at first presentation in the rheumatology clinic, we treated him as if he had severe rheumatoid arthritis (RA). Over four months he received combination therapy (25 mg subcutaneous methotrexate weekly with hydroxychloroquine 400 mg daily and sulfasalazine 1 gram twice a day) with partial response only. He failed a recent trial of leflunomide (added to his aforementioned regimen) and is now being assessed for a tumour necrosis factor (TNF)-inhibitor.

While the threat of Zika virus makes nightly news rounds, a related arthropod-borne virus, Chikungunya, should figure into the rheumatologist's mind. First described during an outbreak in Tanzania in 1952, the single-stranded RNA-α virus (belonging to the family *Togaviridae*) has spread to nearly 40 countries in Asia, Africa, Europe (specifically Italy), and most recently, the Americas. The widespread disease is no longer a simple "tropical disease," largely because of the geographic range of the two main mosquito vectors (*Aedes aetypti* and *Aedes albopticus*).

The initial cases in the Americas were reported in December 2013 in the Caribbean island of St. Martin, with eventual local transmission reported in the continental United States in Florida in mid-July 2014. While *Ae. aegypti* is found in the southeastern United States, parts of the Southwest and California, *Ae. albopticus* has a broader potential to spread the disease given its presence in the southeastern and mid-Atlantic states as well as parts of the Southwest, Northeast, and lower Midwest. Similarly, the extensive degree of human travel between the Americas for sun worship and commerce combined with mosquitoes hitching rides on commercial freighters and aircrafts promotes the inevitable spread of this disease, similar to the projected future distribution of Zika virus.

Clinical symptoms from a ChikV infection manifest quickly, with an average incubation of two to four days (range one to 14 days). Typical symptoms include high fevers for three to five days, polyarthralgias within a few days of fever, and a macular or maculopapular rash in many patients. Some also develop terrible headaches, myalgias, and gastrointestinal symptoms. More rarely, patients develop respiratory failure, cardiovascular decompensation, myocarditis, acute hepatitis, renal failure, and neurologic involvement (*e.g.,* meningoencephalitis, Guillain-Barré syndrome).

Typical joint involvement includes hands, wrists, and ankles; however, many also describe other arthralgias and axial skeletal involvement. Many patients have periarticular

edema, swelling, and/or large joint effusions. Over time, chronic ChikV features include persistent arthralgia/arthritis, edematous polyarthritis of fingers and toes, and/or severe tenosynovitis. *Chikungunya* is Swahili for "that which bends up" or "stopped walk", which accurately depicts the posture many acquire due to the severe pain from this disease.

The problem with ChikV is the great potential for more chronic, post-ChikV chronic inflammatory rheumatism (CIR), with development of nonspecific post-viral arthritis, RA, seronegative spondylitis, and other non-inflammatory musculoskeletal complaints including persistent arthralgia. A recent systematic literature review found that 25% of ChikV cases would develop post-ChikV CIR and 14% develop a chronic arthritis. The duration of these symptoms can vary considerably. In the majority of cases, NSAIDs and steroids are used first-line with associated physical therapy for affected joints. With more persistent and debilitating disease, traditional disease modifying anti-rheumatic drugs (DMARDs) such as methotrexate and biologic agents such as TNF-inhibitors have been used with varying success.

Antiviral agents such as ribavirin and interferon-α may work in vitro, but do not combat the infection in humans. Similarly, antimalarials are not effective, even though some clinicians postulate that they have an anti-inflammatory effect. The persistence of ChikV in those with chronic disease has been questioned, as well as whether those affected individuals have immune dysregulation. Unfortunately, no current vaccine exists for ChikV. Recommendations are largely preventative, meaning avoid mosquito bites. Effective preventative methods include the use of screens, bed nets, avoidance of standing water, and use of insect-repelling products including Deet or Picaridin.

The case presentation above was my first experience with a patient with ChikV arthritis. While this gentleman likely represents a minority of post-ChikV-CIR patients, the profound pain and functional impairment is difficult to forget. Some patients who present with post-ChikV CIR have a premorbid status of other musculoskeletal complaints (*e.g.,* osteoarthritis) and these symptoms can be amplified as well. Cohorts reporting post-ChikV-CIR from different areas around the world may vary in the degree of musculoskeletal complaints, possibly reflecting differences in viral strains and joint effects in the local population.

While post-ChikV-CIR patients currently make up only a tiny portion of inflammatory arthritis (IA) patients in our practice, there remains the question of whether we can truly lump these patients into an inflammatory group. It is important to keep ChikV in mind in those patients with a history of travel to higher-risk countries. Confirming the diagnosis may have an impact on prognosis for the patient and how quickly one pursues the IA treatment paradigm. Moreover, a significant percentage of patients may improve and not require DMARDs, but rather supportive NSAIDs and the tincture of time. On a cautionary note, post-ChikV-CIR prevalence may increase, thanks to the contributions of the mosquito vectors and climate change.

Image courtesy of Centers for Disease Control and Prevention. Available at: *www.cdc.gov/chikungunya/fact/index.html*.

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Top Ten Things Rheumatologists Should (And Might Not) Know About Quality Improvement

By Shirley Chow, MD, FRCPC, MSc (QIPS); and Kaveh G. Shojania, MD

This year's annual meeting of the CRA had "optimizing quality" as its theme. With many recent innovations and changes in best practices, as well as increasing calls for accountability, rheumatologists must know how to address quality problems in their practices. The following list will help rheumatologists understand quality improvement and how they can proceed.

1. Work smarter, not harder: Change the system.
Most problems call for fixing the system in which we work, not asking people to work harder or "be more careful." We need to redesign processes such that the right way to do something becomes the easy way to do it.[1]

2. Do not rush to a solution: Understand the problem first.
Too often, people rush to creating a checklist, guideline, new order set, or educational material. Each of these strategies presupposes a certain type of problem or lever for change, one which may not apply to your problem.[2] Using a reminder implies that everyone agrees that such-and-such is the right thing to do, but they forget to do it. Sometimes that is true. Other times, though, it may be that you are "reminding" people of something they either disagree with or do not like to do.

3. Achieving an improvement requires a clear and concrete goal.
"I want to improve the care of patients with rheumatoid arthritis (RA)" is so vague as to be pointless. Something specific, such as aiming for low Clinical Disease Activity Index (CDAI) scores by one year, is better. Ideally, one would articulate a measurable improvement such as an increase of X% in RA patients achieving low CDAI by one year.

4. Take aim at appropriate targets.
Pick your battles. Consider not just the importance of the problem but also the likelihood of success. Key factors contributing to a problem may fall outside your control or the solutions tried by others either have not worked to date or have produced unintended consequences. Before wasting hours of your time in a valiant but doomed effort to, for example, ensure your patients never develop infections, consider a more modest but feasible target, such as ensuring every inflammatory patient has their immunizations up to date.

5. Rapid cycle change should be rapid.
You do not need to review 100 charts to demonstrate a problem or see how your intervention is working. You need just enough information on a process to evaluate if there is a problem, implement a change, measure its effect, and study how to refine or discard your process (a Plan-Do-Study-Act cycle).[3-5] The Super Bowl is not won by planning the perfect first game, but by constantly making small improvements. This is the basis of continuous quality improvement.

6. Reflection is important.
Take time to reflect on what was learned in each cycle and how to build on it.

7. Anticipate what can go wrong and take steps to mitigate these issues.

8. All improvement is change but not all change is improvement.

Physicians have often been labeled as resistant to change; however, no one categorically resists all forms of change. Winning a lottery involves change, but who would say, "Go ahead and keep the money – I hate change." People resist change when the change involves loss – loss of control, change to comfortable routines, increases in work, decreases in reward, and so on. In light of this reality, develop changes that take into account the stakes for people affected by the change and do not chalk up all complaints to knee-jerk resistance to change.

9. Do not forget your stakeholders.

Stakeholders are anyone affected by a problem, and anyone who will be involved with and/or affected by the change. This could include other physicians, inter-professional teams, patients, administrative staff, and other departments. Creating a culture of change is critical, so engaging stakeholders early in the development process will help to really understand the problem, inform the change, and build commitment for the change. Having a champion in a leadership position acknowledge, for example, that there is waste and over-ordering of serological tests, will help remove barriers and encourage others to help to tackle this problem.

10. Quality improvement differs from traditional research.

Academics may want to publish the results of a successful quality improvement project. This is a complex topic. However, it is no longer true that, just because you might publish something, you need to obtain research ethics approval. Some institutional ethics committees are more familiar with this change than others; a good reference tool is the Alberta Research Ethics Community Consensus Initiative, providing useful guidance and a screening tool to indicate the need for ethics approval on a given project.[6]

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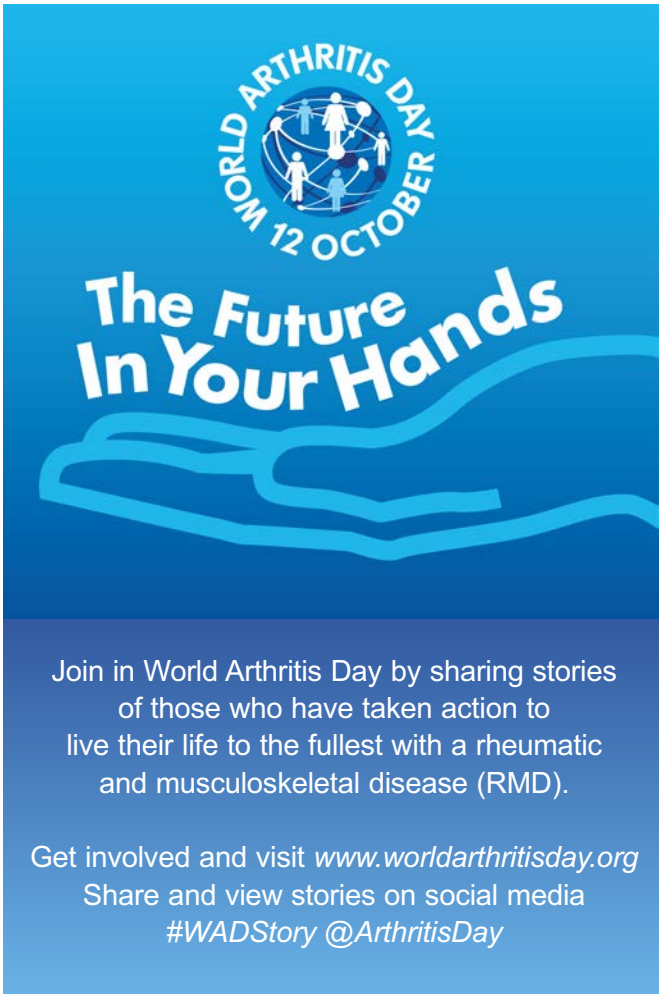

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QC

Laëtitia Michou @drlaëtitiamichou

The rheumatology division of Université Laval is proud to announce that Dr. Laëtitia Michou is succeeding Dr. Jacques Brown as Head of the rheumatology division of the Centre Hospitalier Universitaire de Québec (CHUQ). Dr. Louis Bessette also succeeds Dr. Jacques Brown as Chief of the rheumatology department of CHU de Québec-Université Laval. Beginning in July 2016, administration of Université Laval's rheumatology program will be assumed by Dr. Zeineb Mahjoub of Hôtel-Dieu de Lévis, who will be assisted in her duties by Dr. Anne-Laure Chetaille of CHU de Québec-Université Laval.

Mark Hazeltine @drmarkhazeltine

Laval is one of the first cities to use, on a daily basis, the model of care developed by the Arthritis Alliance of Canada (AAC). The program is called "PARLER" (Programme d'accès rapide de lavallois en rhumatologie or Laval rapid-access rheumatology program). Since its inception, the team has grown to three rheumatologists, a clinical nurse, and a physiotherapist. The nurse is responsible for patient instruction and infusions. For her part, the physiotherapist is actively involved in patient follow-up, conducting the initial assessment. We are proud of our achievements!

CENTRE *de* RHUMATOLOGIE *de Laval*

#Laval

Christian Pineau @drchristianpineau

The McGill University rheumatology division continues its tradition of excellence. In addition to our prolific basic and epidemiology research initiatives, we are continuing to develop our highly specialized multidisciplinary clinics in systemic lupus erythematosus (SLE), vasculitis, scleroderma, myositis, YARD, rheumatoid arthritis (RA), spondyloarthritis (SpA), musculoskeletal ultrasound (MSK-US), and reproductive issues in rheumatology. We are also proud of our training program, with six residents in core rheumatology, and with fellowship programs in scleroderma, SLE, and vasculitis.

Paul Fortin & Nathalie Amiable
@drpaulfortin @drnathalieamiable

The study of systemic autoimmune rheumatic diseases (SARD) in a clinical context is often limited by the lack of biospecimens supplemented by relevant longitudinal clinical information. Dr. Paul R. Fortin of the CHU du Québec-Université Laval recently set up a clinical database associated with a SARD bio-database that compensates for the infrastructure shortfall for this type of research. To date, this unique research program has made it possible to initiate a number of collaborative endeavours with the laboratories of the CHUL pavilion of the research centre of the CHU de Québec-Université Laval and to generate many very promising results. This integrated clinical platform combines a multidimensional/transdisciplinary approach and a patient-centred approach in a single tool.

UNIVERSITÉ LAVAL

#UniversitéLaval

Alexandra Albert @dralexandraalbert

Our team is very pleased to announce the arrival of three new rheumatologists at the CHU de Québec-Université Laval: Dr. Alena Ikic, a specialist in scleroderma and capillaroscopy, Dr. Marie-Claude Audet, a specialist in bone diseases and fall prevention, and Dr. Jean-Philippe Proulx-Gauthier who, in addition to a specialty in pediatric rheumatology, practices MSK sonography. We are extre-mely fortunate to now have nine adult rheumatologists and two pediatric rheumatologists on staff. Our rheumatology department is actively recruiting rheumatologists to fill the remaining vacant positions.

#newrecruits #CHUdeQuébec-UniversitéLaval

Advice on Advisory Boards

By Christine Charnock, CEO

This issue, the CRA surveyed members about their thoughts on Advisory Boards meetings; read on for a closer look at the advice provided. The survey was sent to the entire membership, of whom 194 members (37%) contributed their feedback. That noted, the results depicted below are reflective of rheumatologists currently in practice.

More than half (59%) of respondents replied they do attend Advisory Board meetings (Table 1); Table 2 lists the most common reasons noted, including educational opportunity (25%), opportunity to connect with key opinion leaders (25%), and as a source of income outside of clinical practice (22%).

On the other side of the spectrum, the 41% of respondents who do not attend Advisory Boards named lack of time (39%) as the primary reason why (Table 3).

The CRA asked whether they could provide a different opportunity to address member needs in lieu of Advisory Board meetings (Table 4); interestingly, the general consensus was no (73%). Of the 41% of respondents who indicated they do not attend advisory board meetings, 27% thought the CRA should provide some other opportunities to achieve some of the same goals, while of those 59% who attend the meetings, 24% thought that the CRA should provide other opportunities. Those who said yes suggested having the CRA offer small unbranded regional meetings, in-person or online, to highlight pivotal new publications, study results, or emerging data. Communicating how members could become more involved with the CRA in their region and providing CRA-endorsed state-of-the-art continuing medical education (CME) from key opinion leaders were also mentioned. Many responses commended the CRA for already hosting an excellent annual scientific meeting.

Further conversations within the CRA will ensue. However, we certainly appreciate our members weighing in on this key issue. We are always open to further ideas or feedback, so feel free to contact me at *christine@rheum.ca*.

Christine Charnock, CEO
Newmarket, Ontario

Table 1. **Do you attend Advisory Board meetings?**

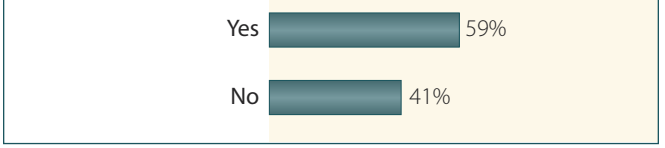


Table 2. **If yes, why do you attend Advisory Board meetings?**

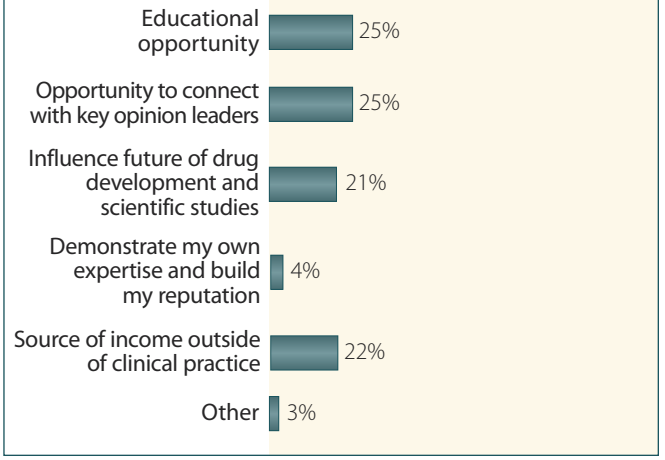


Table 3. **If no, why do you not attend Advisory Board meetings?**

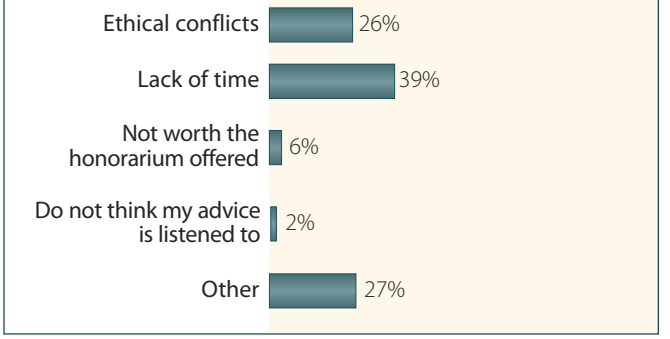
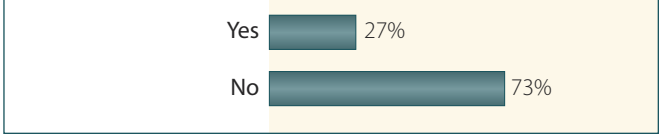
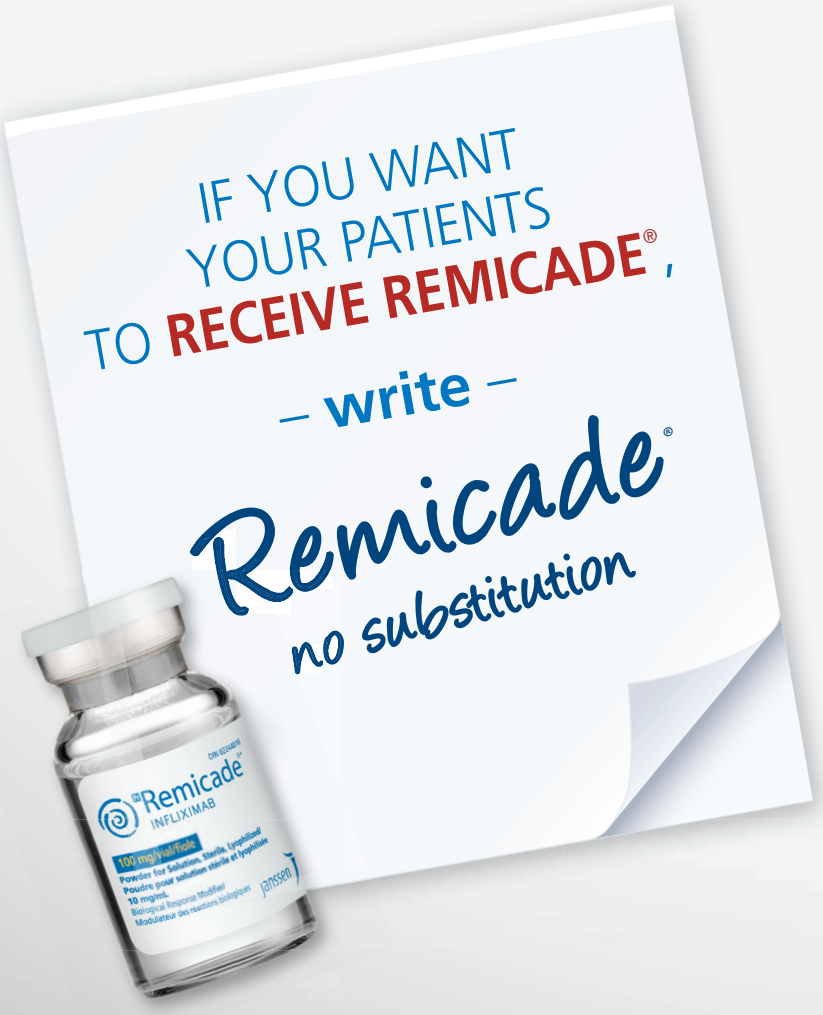


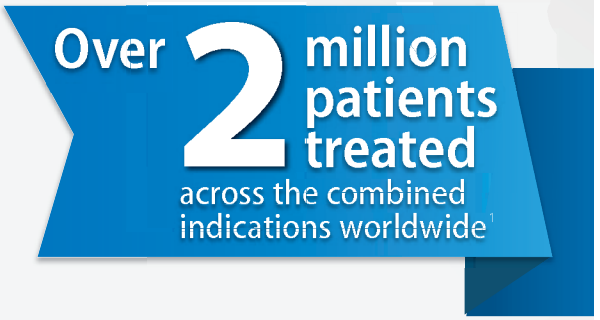
Table 4. **Could the CRA provide another opportunity that would address your needs instead of attending Advisory Board meetings??**



There is ONLY ONE REMICADE®



JANSSEN BIO ADVANCE®



REMICADE®:

- The biologic with the **most indications:** RA, AS, PsA, PsO, adult CD, pediatric CD, fistulizing CD, adult UC and pediatric UC[1,2]
- More than **20 years of worldwide clinical experience**[1]
- Part of the **Janssen BioAdvance® Program**

Pr Remicade® INFLIXIMAB
Here for you and your patients

REMICADE® is indicated:

- In combination with methotrexate (MTX), for the reduction in signs and symptoms, inhibition of the progression of structural damage and improvement in physical function in adult patients with moderately to severely active rheumatoid arthritis (RA)
- Reduction of signs and symptoms and improvement in physical function in patients with active ankylosing spondylitis (AS) who have responded inadequately, or are intolerant, to conventional therapies
- Reduction of signs and symptoms, induction and maintenance of clinical remission and mucosal healing and reduction of corticosteroid use in adult patients with moderately to severely active Crohn's disease (CD) who have had an inadequate response to a corticosteroid and/or aminosalicylate; REMICADE® can be used alone or in combination with conventional therapy
- Reduction of signs and symptoms and induction and maintenance of clinical remission in pediatric patients with moderately to severely active CD who have had an inadequate response to conventional therapy (i.e., corticosteroid and/or aminosalicylate and/or an immunosuppressant)
- Treatment of fistulizing CD in adult patients who have not responded despite a full and adequate course of therapy with conventional treatment
- Reduction of signs and symptoms, induction and maintenance of clinical remission and mucosal healing and reduction or elimination of corticosteroid use in adult patients with moderately to severely active ulcerative colitis (UC) who have had an inadequate response to conventional therapy (i.e., aminosalicylate and/or corticosteroid and/or an immunosuppressant)
- Reduction of signs and symptoms, induction and maintenance of clinical remission and induction of mucosal healing in pediatric patients with moderately to severely active UC who have had an inadequate response to conventional therapy (i.e., aminosalicylate and/or corticosteroid and/or an immunosuppressant)
- Reduction of signs and symptoms, induction of major clinical response, inhibition of the progression of structural damage of active arthritis and improvement in physical function in patients with psoriatic arthritis (PsA)
- Treatment of adult patients with chronic moderate to severe plaque psoriasis (PsO) who are candidates for systemic therapy. For patients with chronic moderate PsO, REMICADE® should be used after phototherapy has been shown to be ineffective or inappropriate. When assessing the severity of psoriasis, the physician should consider the extent of involvement, location of lesions, response to previous treatments and impact of disease on the patient's quality of life.

Please consult the product monograph at http://www.janssen.ca/product/183 for important information on conditions of clinical use, contraindications, warnings, precautions, adverse reactions, drug interactions and dosing information, which have not been discussed in this piece.
The product monograph is also available by calling 1-800-567-3331.

References: 1. Data on file, Janssen Inc. **2.** REMICADE® Product Monograph, Janssen Inc., September 26, 2014.

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Member R&D PAAB

Janssen PHARMACEUTICAL COMPANIES OF Johnson&Johnson

XELJANZ (tofacitinib) in combination with methotrexate (MTX) is indicated for reducing the signs and symptoms of rheumatoid arthritis (RA) in adult patients with moderately-to-severely active RA who have had an inadequate response to MTX. In cases of intolerance to MTX, physicians may consider the use of XELJANZ as monotherapy.

Use of XELJANZ in combination with biological disease modifying anti-rheumatic drugs (DMARDs) or potent immunosuppressants such as azathioprine and cyclosporine is not recommended.

WHEN METHOTREXATE ALONE IS NO LONGER ENOUGH, CONSIDER PrXELJANZ®.

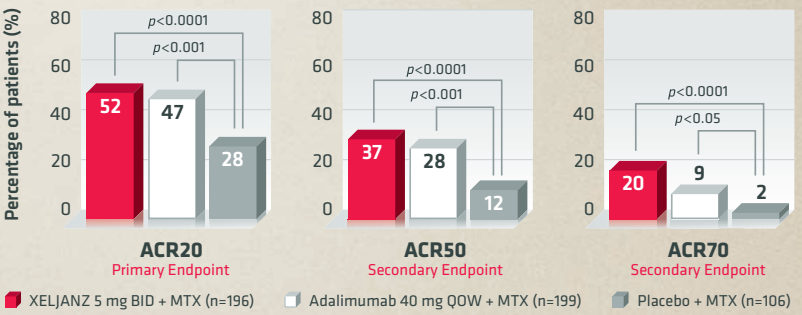
Simple, twice-daily oral dosing

Demonstrated powerful efficacy where response to methotrexate was inadequate

Significant symptom reduction was shown at 6 months in MTX-IR patients treated with XELJANZ + MTX vs. placebo + MTX.[1*]

This study was not designed to compare XELJANZ to adalimumab.

ACR response rates at 6 months



Significant improvement in physical functioning at 3 months was achieved in MTX-IR patients treated with XELJANZ + MTX vs. placebo + MTX.[1*]

Mean HAQ-DI decrease from baseline at 3 months: -0.56 XELJANZ 5 mg BID or -0.51 adalimumab 40 mg QOW vs. -0.25 placebo (p<0.0001). This study was not designed to compare XELJANZ to adalimumab.

Most serious warnings and precautions:

Risk of Serious Infections: Patients treated with XELJANZ are at increased risk for developing serious infections that may lead to hospitalization or death. Most patients who developed these infections were taking concomitant immunosuppressants such as methotrexate or corticosteroids. If a serious infection develops, interrupt XELJANZ until the infection is controlled. Reported infections include: active tuberculosis, invasive fungal infections, bacterial, viral, and other infections due to opportunistic pathogens.

Treatment with XELJANZ should not be initiated in patients with active infections including chronic or localized infection.

Patients should be closely monitored for the development of signs and symptoms of infection during and after treatment with XELJANZ, including the possible development of tuberculosis in patients who tested negative for latent tuberculosis infection prior to initiating therapy.

Malignancies: Lymphoma and other malignancies have been observed in patients treated with XELJANZ. Epstein Barr Virus-associated post-transplant lymphoproliferative disorder has been observed at an increased rate in renal transplant patients treated with XELJANZ and concomitant immunosuppressive medications.

Other relevant warnings and precautions:

- Risk of gastrointestinal perforation. Use with caution in patients who may be at increased risk for gastrointestinal perforation.
- Risk of viral reactivation, including herpes zoster.
- Risk of malignancies, lymphoproliferative disorder, and nonmelanoma skin cancer.
- Risk of lymphopenia, neutropenia, anemia, and lipid elevations.
- XELJANZ should not be used in patients with severe hepatic impairment, or in patients with positive hepatitis B or C virus serology.
- Use with caution in patients with a risk or history of interstitial lung disease (ILD).
- XELJANZ can increase the risk of immunosuppression. Concurrent use with potent immunosuppressive drugs is not recommended.
- Concurrent use with live vaccines is not recommended.
- Use with caution in patients with impaired renal function (i.e., CrCl <40 mL/min).
- XELJANZ should not be used during pregnancy.
- Women should not breastfeed while being treated with XELJANZ.
- The safety and effectiveness of XELJANZ in pediatric patients have not been established.
- Caution should be used when treating the elderly because of an increased risk of serious infection.
- Use with caution in Asian patients because of an increased risk of events including: herpes zoster, opportunistic infections and ILD.
- Treatment with XELJANZ was associated with increases in creatine kinase.
- XELJANZ causes a decrease in heart rate and a prolongation of the PR interval. Caution should be observed in patients with a low heart rate at baseline (<60 beats per minute), a history of syncope or arrhythmia, sick sinus syndrome, sinoatrial block, atrioventricular (AV) block, ischemic heart disease, or congestive heart failure.
- Treatment with XELJANZ was associated with increased incidence of liver enzyme elevations.

For more information:

Please consult the product monograph at http://www.pfizer.ca/en/our_products/products/monograph/342 for important information relating to adverse reactions, interactions, and dosing information which have not been discussed in this piece. The product monograph is also available by calling us at 1-800-463-6001.

Reference: 1. Pfizer Canada Inc. XELJANZ Product Monograph. April 16, 2014.

BID = Twice daily; QOW = Every other week; MTX-IR = Methotrexate Inadequate Responders

*Multicentre, randomized, double-blind, placebo-controlled study in patients ≥18 years with active RA according to ACR criteria. Patients received MTX and were randomized to receive XELJANZ 5 mg BID (n=196), adalimumab 40 mg QOW (n=199), or placebo (n=106). The primary endpoints were the proportion of patients who achieved an ACR20 response at month 6, mean change from baseline in HAQ-DI at month 3, and the proportion of patients who achieved DAS28-4 (ESR) <2.6 at month 6.

Pfizer

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PrXELJANZ™ (tofacitinib citrate)