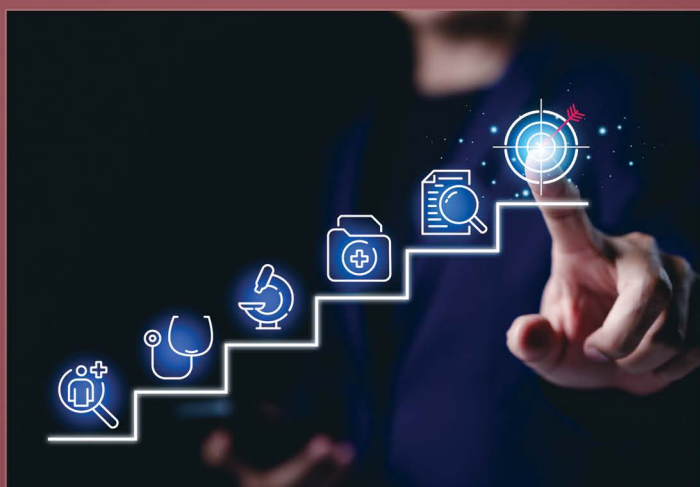


CRA S C R

The Journal of the Canadian Rheumatology Association



What's the CRA/CRAF Doing For You?

CRAF: Celebrating the Summer Studentship Program: Shaping the Future of Rheumatology

Celebrating 45 Years of Excellence: CRA's Awards of Distinction

Honouring Excellence Through the Voices of Past Recipients

Northern (High)lights

Presidential Address

Great Debate 2025: Be it Resolved that MSK POCUS Should be a Mandatory Component of Rheumatology Curricula

RheumJeopardy! 2025

Interviews with the 2025 CRA Award Winners:

- Distinguished Rheumatologist: Dr. Rae S. M. Yeung
- Emerging Investigator: Dr. May Choi
- Distinguished Investigator: Dr. Joan Wither

Spotlight on the 2025 CRA Abstract Award Winners

Spotlight on

The CRA Annual Scientific Meeting: *Ascending to New Heights*

Editorial

Insurance Medicine

News from CIORA

CIORA-Funded Study Shines: Podium Presentation and Quality Care Initiatives in Rheumatology Award Winner

SLE: A National Mixed-Methods Sequential Explanatory Study

Joint Communiqué

Canadian Heroes in Rheumatology:
Dr. Robert Inman

The Arthritis Action Plan: Shaping the Future

The Rheumatology Gender Pay Gap

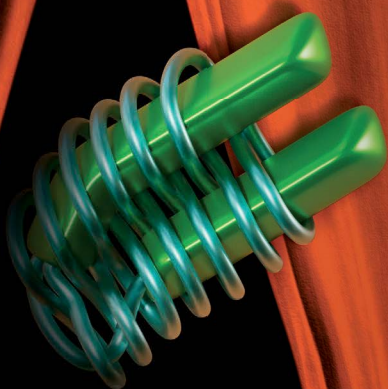
Preventing a Lifetime of Arthritis Pain Through Early Detection

Hallway Consult

Rule Out CNS Vasculitis

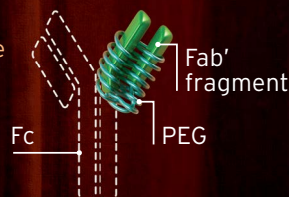
Regional News

Updates from Newfoundland and Labrador



All Fab' fragment

CIMZIA® - a **PEGylated** antibody fragment - is the only anti-TNFα that does not contain an Fc region, normally present in a complete antibody.*



Over 15 years of clinical experience combined across all indications in:†

Rheumatoid arthritis (RA) - 2009; Psoriatic arthritis (PsA) - 2014; Ankylosing spondylitis (AS) - 2014; Plaque psoriasis (PsO) - 2018; and Non-radiographic axial spondyloarthritis (nr-axSpA) - 2019^{1,2}

CIMZIA (certolizumab pegol) in combination with MTX is indicated for:

- reducing signs and symptoms, including major clinical response, and reducing the progression of joint damage as assessed by X-ray, in adult patients with moderately to severely active RA.

CIMZIA alone or in combination with MTX is indicated for:

- reducing signs and symptoms and inhibiting the progression of structural damage as assessed by X-ray, in adult patients with moderately to severely active PsA who have failed one or more DMARDs.

CIMZIA is indicated for:

- reducing signs and symptoms in adult patients with moderately to severely active RA who do not tolerate MTX.
- reducing signs and symptoms in adult patients with active AS who have had an inadequate response to conventional therapy.
- the treatment of adults with severe active nr-axSpA with objective signs of inflammation as indicated by elevated CRP and/or MRI evidence who have had an inadequate response to, or are intolerant to NSAIDs.
- the treatment of adult patients with moderate to severe PsO who are candidates for systemic therapy.

* Comparative clinical significance unknown.

† Clinical significance unknown.

CHF: congestive heart failure; CRP: C-reactive protein; DMARDs: disease-modifying anti-rheumatic drugs; Fc: Fragment-crystallizable; MRI: magnetic resonance imaging; MTX: methotrexate; NSAIDs: nonsteroidal anti-inflammatory drugs; NYHA: New York Heart Association; PEG: polyethylene glycol; TNFα: tumour necrosis factor alpha

1. CIMZIA® Product Monograph. UCB Canada Inc. November 13, 2019.

2. Health Canada Notice of Compliance Database. Available at <https://health-products.canada.ca/noc-ac/?lang=eng>. Accessed January 9, 2025.

Consult the product monograph at <https://www.ucbcanada.com/en/cimzia> for important information about:

- Contraindications in active tuberculosis or other severe infections such as sepsis, abscesses, and opportunistic infections; and moderate to severe heart failure (NYHA Class III/IV)
- The most serious warnings and precautions regarding serious infections and malignancy
- Other relevant warnings and precautions regarding worsening congestive heart failure and new onset CHF; hepatitis B virus reactivation; hematological reactions; neurologic reactions; use in combination with other biologic medicines; monitoring for patients in surgery and those being switched to another biologic DMARD; hypersensitivity symptoms; latex sensitivity; formation of autoantibodies; administration of live or live-attenuated vaccines; use in patients with severe immunosuppression; possible erroneously elevated activated partial thromboplastin time (aPTT) assay results in patients without coagulation abnormalities; women of childbearing potential; pregnancy and breastfeeding; caution in infants exposed in utero; caution in geriatric patients
- Conditions of clinical use, adverse reactions, drug interactions and dosing instructions

The product monograph is also available through Medical Information Services at 1-866-709-8444.



CIMZIA, UCB and the UCB logo are registered trademarks of the UCB Group of Companies.

© 2025 UCB Canada Inc. All rights reserved.

CA-CZ-2500021E




cimzia®
(certolizumab pegol)

Insurance Medicine

By Philip A. Baer, MDCM, FRCPC, FACP

When I trained in Internal Medicine at the Montreal General Hospital, one of the most impressive clinicians I encountered as a resident was Dr. Doug Kinnear.¹ He was a gastroenterologist who was also the team physician for the Montreal Canadiens. That seemed odd, but when I moved to Toronto for my rheumatology fellowship, the Maple Leafs' team physician was a rheumatologist, Dr. Murray Urowitz, who had succeeded another rheumatologist, Dr. Hugh Smythe,² in that capacity. I certainly didn't mind meeting players from both teams as a result.

I remember Dr. Kinnear always cautioning the medical team not to prematurely label patients with a diagnosis that might not ultimately prove correct. Definite inflammatory bowel disease (IBD) was one thing, but someone who might have an infectious colitis should not be listed on their discharge summary as having IBD, lest it affect their ability to buy insurance down the line. If the patient in fact truly did have IBD, it would declare itself over time. The same concept could apply to a mild undifferentiated arthritis, which might resolve spontaneously or progress to definite RA. Very good advice, which Dr. Kinnear highlighted because of his other part-time work as a medical consultant to several life insurance companies based in Montreal.

Later, in parallel with my rheumatology practice, I began working part-time as a Medical Director at a variety of insurance companies and continue to do so. The initial training involved learning about underwriting, medical risk selection and the broad field of insurance medicine. The core textbook was "Medical Selection of Life Risks", edited and largely written by Dr. Robert D.C. Brackenridge, the Consulting Medical Officer at The Mercantile and General Reinsurance Company (M&G) in London, England. Since my first insurance position was at M&G, I was gifted an autographed copy of the 3rd edition of this textbook. I also had the pleasure of meeting Dr. Brack, as he was known, on a visit to London and sitting in with him as he reviewed cases.

Of course, as time went on and I gained experience and confidence in insurance medicine, I referred to the textbook less and less. It was available for reference and reassurance, but I also had company-specific insurance manuals and the entire medical literature to consult as well. Eventually, the wordstem Brack brought to mind first Inspector Thomas Brackenreid, a character on CBC's *Murdoch Mysteries*, rather than Dr. Brackenridge.

The fifth edition of Brack's textbook was published in 2006.³ You can still buy a used copy for \$437 online.⁴ In late 2024, that fact surfaced when I received an email from an insurance medicine colleague in the US. After close to two decades, a 6th edition of Brack was finally in the works. Chapter authors were needed, and as there were apparently only three rheumatologists in North America working in the insurance industry, we were all invited to consider this opportunity. Two of us accepted the challenge, so I am currently writing a textbook chapter for the first time.

Fortunately, I have written chapters on rheumatology topics for the training manuals of the Academy of Life Underwriters, so I have some source materials to draw upon.

I currently work for two insurance companies. I approached my main company to review my authorship contract, thinking they would be pleased to have my affiliation with the company mentioned in the new textbook. Incorrect. They were happy for me to be an author as long as the company's name was not mentioned. Apparently, they assessed that risk as too high, and after all their core business is risk assessment.

My next move was to review the Rheumatic Disorders chapter from Brack 2006 to see if I could use it as a springboard for our update. The first section covered Classification. Reactive arthritis and certain forms of vasculitis still carried their discarded eponyms, and juvenile chronic arthritis was listed as the preferred terminology. Moving along, the chapter included soft tissue rheumatism, nerve entrapment syndromes, intervertebral disc lesions and arthrogryposis multiplex congenita, none of which we plan to include. Also heading for the circular files: "Few of the rheumatic diseases have an early mortality ... Rheumatic diseases not being fatal, statistics are scarce." Regarding RA, we will update the 1987 criteria to those of 2010, and we won't be saying that "The monoclonal antibody treatment of RA is feasible but in the early stages of development; as yet the possible beneficial or long-term side effects of this treatment have not been established."

Interestingly, comorbidities were already recognized as being important markers of increased mortality, although cardiovascular diseases were not specifically mentioned, even if they are the leading cause of death in RA and many other inflammatory arthritides, and even though the assessment of cardiovascular risk is a bread-and-butter topic in insurance medicine.

The chapter submission deadline is sometime in 2025, so my co-author and I have work to do. As at *CRAJ*, I have been reminded that brevity and succinctness are important aspects of textbook writing. Thus, this editorial has reached its natural conclusion. Stay tuned for a possible sequel if I have more to report.

Philip A. Baer, MDCM, FRCPC, FACP
Editor-in-chief, CRAJ
Toronto, Ontario

References:

1. In memory of Dr. Douglas Kinnear. Available at <https://muhc.ca/our-stories/article/memorial-dr-douglas-kinnear>. Accessed June 9, 2025.
2. Toronto Maple Leafs team doctor made Stanley Cup history (obituary). Available at <https://www.theglobeandmail.com/news/national/toronto-maple-leafs-team-doctor-made-stanley-cup-history/article4627645/>. Accessed June 9, 2025.
3. Brackenridge's Medical Selection of Life Risks. 5th edition 2006, Palgrave Macmillan. R.D.C. Brackenridge (Editor), R. Croxson (Editor), Ross Mackenzie (Editor).
4. Brackenridge's Medical Selection of Life Risks (listing). Available at https://www.amazon.ca/Brackenridges-Medical-Selection-Life-Risks/dp/1403906769#detailBullets_feature_div. Accessed June 9, 2025.

CRAJ EDITORIAL BOARD

Mission Statement. The mission of the *CRAJ* is to encourage discourse among the Canadian rheumatology community for the exchange of opinions and information.

EDITOR-IN-CHIEF

Philip A. Baer, MDCM, FRCPC, FACP
Past-President,
Ontario Rheumatology Association
Chair, Section of Rheumatology,
Ontario Medical Association
Toronto, Ontario

CRA EXECUTIVE

Trudy Taylor, MD, FRCPC
President,
Canadian Rheumatology Association
Associate Professor,
Dalhousie University
Halifax, Nova Scotia

Stephanie Tom, MD, FRCPC
Vice-President,
Canadian Rheumatology Association
Division Head of Rheumatology,
Trillium Health Partners
Mississauga, Ontario

Nigil Haroon, MD, PhD, DM, FRCPC
Past-President,
Canadian Rheumatology Association
Co-Director, Spondylitis Program,
University Health Network (UHN)
Clinician Scientist, UHN
Scientist, Krembil Research Institute
Associate Professor,
University of Toronto
Toronto, Ontario

MEMBERS

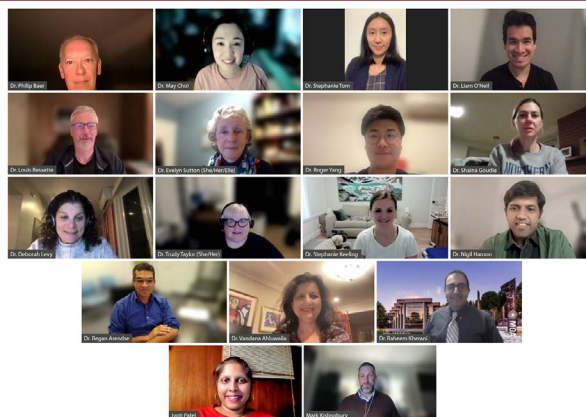
Vandana Ahluwalia, MD, FRCPC
Former Corporate Chief of
Rheumatology,
William Osler Health System
Brampton, Ontario

Regan Arendse, FRCPC, PhD
Clinical Assistant Professor,
Division of Rheumatology
University of Saskatchewan
Saskatoon, Saskatchewan

Louis Bessette, MD, MSc, FRCPC
Associate Professor,
Université Laval
Rheumatologist,
Centre hospitalier universitaire
de Québec
Québec City, Quebec

May Y. Choi, MD, MPH, FRCPC
Associate Professor,
Cumming School of Medicine
University of Calgary and
Alberta Health Services
Calgary, Alberta

Shaina Goudie, MD, MA, FRCPC
Clinical Assistant Professor of
Medicine
Memorial University
Newfoundland and Labrador



Stephanie Keeling, MD, MSc, FRCPC
Professor of Medicine,
University of Alberta
Edmonton, Alberta

Raheem B. Kherani, MD, FRCPC, MHPE
Program Director and
Clinical Associate Professor,
Division of Rheumatology,
Department of Medicine,
University of British Columbia
Clinician Investigator,
Arthritis Research Canada
Vancouver, British Columbia

Deborah Levy, MD, MS, FRCPC
Associate Professor,
University of Toronto,
Team Investigator,
Child Health Evaluative
Sciences Research Institute
Toronto, Ontario

Liam O'Neil, MD, FRCPC, MHSc
Assistant Professor
University of Manitoba
Winnipeg, Manitoba

Evelyn Sutton, MD, FRCPC, FACP
Associate Dean,
Undergraduate
Medical Education
Professor of Medicine,
Dalhousie University
Halifax, Nova Scotia

Roger Yang, MD, FRCPC
Clinical Assistant Professor,
Co-Director of Vasculitis Clinic,
Clinician associated with
RC-HMR, Hôpital Maison-
neuve-Rosemont
Faculty of Medicine,
Université de Montréal
Montreal, Quebec

The editorial board has complete independence in reviewing the articles appearing in this publication and is responsible for their accuracy. The advertisers exert no influence on the selection or the content of material published.

PUBLISHING STAFF

Mark Kislingbury
Executive Editor

Jyoti Patel
Managing Editor

Catherine de Grandmont
Senior Medical Editor
(French)

Virginie Desautels
Junior Editor
(French)

Donna Graham
Production Manager

Dan Oldfield
Design Director

Mark Kislingbury
Publisher

The **CRAJ** is online!
You can find us at:
www.craj.ca

Access code: **craj**

Copyright©2025 STA HealthCare Communications Inc. All rights reserved. THE JOURNAL OF THE CANADIAN RHEUMATOLOGY ASSOCIATION is published by STA Communications Inc. in Pointe Claire, Quebec. None of the contents of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without the prior written permission of the publisher. Published every three months. Publication Mail Registration No. 40063348. Postage paid at Saint-Laurent, Quebec. Date of Publication: July 2025.

The opinions expressed herein are those of the editors and authors and do not necessarily reflect the views of STA Communications or the Canadian Rheumatology Association. THE JOURNAL OF THE CANADIAN RHEUMATOLOGY ASSOCIATION selects authors who are knowledgeable in their fields. THE JOURNAL OF THE CANADIAN RHEUMATOLOGY ASSOCIATION does not guarantee the expertise of any author in a particular field, nor is it responsible for any statements by such authors. Physicians should take into account the patient's individual condition and consult officially approved product monographs before making any diagnosis or treatment, or following any procedure based on suggestions made in this document.

Please address requests for subscriptions and correspondence to: THE JOURNAL OF THE CANADIAN RHEUMATOLOGY ASSOCIATION, 6500 Trans-Canada Highway, Suite 310, Pointe-Claire, Quebec, H9R 0A5.

Celebrating the Summer Studentship Program: Shaping the Future of Rheumatology



This summer, a new generation of bright minds is stepping into the world of rheumatology, ready to drive advancements in patient care and medical research. As the charitable organization working in collaboration with the Canadian Rheumatology Association, the Canadian Rheumatology Association Foundation (CRAF) advances the future of rheumatology by funding research, training, and advocacy—and continues its long-standing commitment to developing future leaders through the Summer Studentship Program. Now in its 24th year, the program is a key part of shaping the future of rheumatology in Canada.

Since 2001, the Summer Studentship Program has supported more than 550 students, offering hands-on experience and mentorship. Notably, 16% of past participants have gone on to become practicing rheumatologists—clear evidence of the program's lasting impact on careers and the field.

Each summer, students engage in meaningful research, build critical skills, and gain exposure to the diverse realities of rheumatology. Their work contributes to medical knowledge while helping them understand the rewards and challenges of the specialty and these early experiences often inspire long-term commitment to the field.

"I didn't know much about rheumatology until my second year of medical school," says Dr. Mo Osman, a clinician-scientist, Associate Professor at the University of

Alberta, CRA member, and CRAF donor. "That changed when I participated in a Summer Studentship—it clearly had a lasting impact because here I am today, a rheumatologist."

Dr. Osman's story reflects the power of early exposure and mentorship. Today, he mentors students as a way of giving back the same encouragement that helped shape his career. Thanks to dedicated professionals like him, the program continues to thrive.

Mentorship is central to the program's success. It builds a strong, collaborative community and helps ensure the next generation is well-prepared to advance the specialty. Each student who participates brings new energy and ideas to the field, while gaining knowledge that can guide their future path.

The Summer Studentship Program remains a cornerstone of CRAF's mission to support emerging leaders in rheumatology. We extend our deepest thanks to the mentors who make this work possible, and to the students who inspire us with their passion and commitment. To support the program and help shape the future of rheumatology, visit crafoundation.ca.



Celebrating 45 Years of Excellence: CRA's Awards of Distinction

For 45 years, the Canadian Rheumatology Association has proudly recognized outstanding members through its **Awards of Distinction**—an honour bestowed upon individuals who have been nominated by their peers for their **remarkable contributions** to the field of rheumatology.

As we approach the **45th anniversary** of the CRA Awards of Distinction in 2026, we take this opportunity to reflect on the many inspiring award winners who have shaped the landscape of rheumatology.

Now, it's your turn to be part of this legacy.

The 2026 awards competition is officially open!

The CRA proudly offers six distinguished awards:

- **NEW!** CRA Leadership Impact Award
- Distinguished Rheumatologist Award
- Distinguished Investigator Award
- Distinguished Teacher-Educator Award
- Early Career Investigator Award
- Early Career Teacher-Educator Award

This year, the CRA is offering a new award! The **CRA Leadership Impact Award** is a mid-career award that recognizes a CRA member who has demonstrated outstanding leadership and advocacy, making a significant impact in the field of rheumatology.

Do you know a colleague whose contributions deserve to be celebrated? Nominate a CRA member for the **2026 Awards of Distinction** and help us recognize excellence in rheumatology. Learn more and submit your nomination at rheum.ca/awards.

Join us in celebrating 45 years of excellence and honouring the educators and innovators who shape the future of rheumatology at the CRA Annual Scientific Meeting in Halifax, April 16-19, 2026!

Honouring Excellence Through the Voices of Past Recipients

What does it mean to be recognized with a CRA Award of Distinction? For many, it represents more than just an accolade—it is a testament to their dedication, contributions, and the deep respect of their peers.

Here's what past award recipients have to say about the impact of receiving this honour:



“During one’s academic life, accomplishments are evaluated by the hospital, the University, by peer review of academic grants and publications each focused on a specific activity. To be recognized by the CRA Award of Distinction by one’s colleagues from across the country is to be recognized for one’s global achievements and is truly a high honour which I cherish until today.”
— Dr. Murray Urowitz, 1995 Distinguished Rheumatologist Award recipient



“It was a great honour to be recognized by the Canadian Rheumatology Association with a Young Investigator Award in 2007. The award reflects the support and mentorship I have had from my colleagues. I have strived to continue contributing to clinical research and advocacy over the years and believe this award has catalyzed my efforts.”
— Dr. Carol Hitchon, 2007 Young Investigator Award recipient

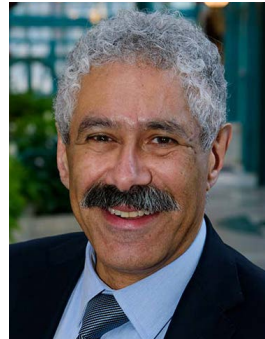


"Receiving the inaugural CRA Distinguished Teacher-Educator Award remains one of the highlights of my career. To be honoured by one's colleagues is uniquely special. The CRA provided the opportunity to work with colleagues across the country to advance postgraduate rheumatology

education. Equally gratifying is that the work which led to the CRA recognition (development of the Canadian Rheumatology Resident Weekend, regional and national annual OSCEs, and the preliminary work on the National Immunology Curriculum) has been continued by those who have followed. It is exciting to see that these initial projects have been adapted and updated over time and continue to be woven into our training programs across Canada. It is such a rewarding sense of contribution to the training of the next generation of rheumatologists."
— Dr. Heather McDonald-Blumer, 2009 Teacher-Educator Award recipient



"This honour means, at least to me, that my peers feel my contributions to our field of rheumatology have been meaningful! This is the highest praise indeed."
— Dr. Gillian Hawker, 2011 Distinguished Investigator Award recipient



"When I received the Distinguished Investigator Award in 2015 at the historic Chateau Frontenac in Quebec City, I was deeply honoured to be recognized by my colleagues and peers, and to have the opportunity to present a summary of my research program to the CRA membership.

I must say, I did feel a bit of the "imposter syndrome", as many do when they are bestowed with such a prestigious honour, particularly when one is aware of the incredible quality of previous (and subsequent) recipients. Every year since, I thoroughly enjoy the presentations of the award recipients and appreciate how they must be feeling in being recognized, as I was. Thank you CRA!"
— Dr. Hani El-Gabalawy, 2015 Distinguished Investigator Award recipient

Be part of this legacy by nominating a colleague for the 2026 CRA Awards of Distinction—submissions are now open at rheum.ca/awards! To learn more, nominate a colleague or view past award recipients, follow this link:



CIORA-Funded Study Shines: Podium Presentation and Quality Care Initiatives in Rheumatology Award Winner SLE: A National Mixed-Methods Sequential Explanatory Study

By Zahi Touma, MD, PhD, FACP, FACR; and Behdin Nowrouzi-Kia, OT Reg. (Ont.), PhD

Work is central to people's lives, as it positively impacts individuals' physical, mental, financial, and social health and well-being. Multidisciplinary collaborative practice offers a practical solution that permits the delivery of complex care that can also be patient-centered. Patient- and clinician-reported functional outcomes measure various domains of work disability and function. Patients with systemic lupus erythematosus (SLE) experience physical and mental challenges that hinder their ability to work. The unpredictable disease course of SLE with its remitting and relapsing phases results in changing levels of work disability and functioning in a patient's life, making it difficult to deliver patient-centered care. Work disability and function have a complicated starting point that includes the study of issues under the patients' control and those in their environment. The link between work and lupus is an important individual concern because of the significant influence of work on different aspects of a patient's health, including engaging in meaningful activities. **Our study proposes a novel evidence-based intervention to mitigate work disability.**

CIORA-CRA funding has been instrumental in allowing us to meet the study objectives. Specifically, in this national Canadian study, we developed a functional profile that will provide an initial understanding of the effect of the disease on a patient's daily functioning. A primary concern in functional assessment is the evaluation of a patient's ability to engage in work. A functional profile is defined as activities of daily living and those related to work functioning (e.g., instrumental activities of daily living, such as managing finances and transportation).¹ We collected data from 404 participants from seven centres across Canada, with a mean age of 47.0 ± 13.7 years. Regarding functioning, the total and subscale scores were comparable to a cancer diagnosis population or a common mental disorder population. Second, the study has identified factors associated with work disability and generated thoughts on improving patient care and work participation. Finally, to explore the li-



ved experiences (a patient's lived situations and perspectives) of SLE patients during their return to work journey, most participants experienced some form of work disability across their employment history related to their clinical manifestations of SLE, including hospitalizations, physi-

cal limitations in engaging in activities of daily living, fatigue, and neurocognitive symptoms (e.g., brain fog). Thematic analysis revealed three key themes: a) the influence of illness experience on work, b) stigmatization of illness disclosure, and c) availability of workplace resources/accommodations.² Participants emphasized the importance of employment characterized by reduced physical and mental demands, enhanced personal autonomy, and increased workplace flexibility as measures to prevent work-related disabilities.

Acknowledgement: We would like to acknowledge our collaborating partners who supported our project nationally from seven institutions, including six academic and one community-based facility across four provinces (Ontario, Quebec, Alberta and British Columbia).

*Zahi Touma, MD, PhD, FACP, FACR
Rheumatologist,
Associate Professor of Medicine, Division of Rheumatology
Faculty of Medicine, University of Toronto
Clinician Scientist, Schroeder Arthritis Institute,
Krembil Research Institute, Toronto, Ontario*

*Behdin Nowrouzi-Kia, OT Reg. (Ont.), PhD
Emily Geldsaler Grant Early Career Professor
in Workplace Mental Health
Assistant Professor, Department of Occupational Science
and Occupational Therapy, University of Toronto
Affiliate Scientist, Krembil Research Institute
University Health Network, Toronto, Ontario*

References

1. Nowrouzi-Kia B, Avina-Zubieta J, Fox M, et al. Work Disability and Function in Systematic Lupus Erythematosus (SLE): Results from a Mixed-Methods Exploratory Canadian Study [abstract]. AR, 2022 Nov 13 [cited 2025 Apr 23]; 74 (suppl 9).
2. Nowrouzi-Kia B, Howe A, Li A, et al. Work disability in patients with systemic lupus erythematosus: a Pan-Canadian qualitative study [poster presentation]. J Rheumatol. 2024 Jul;51(Suppl 1):43-98. doi:10.3899/jrheum.2024-0330_poster_presentations.

Presidential Address

By Trudy Taylor, MD, FRCPC

Where has the time gone? I am already one year into my two-year mandate as President of the Canadian Rheumatology Association! Although time seems to have passed quickly, it has been an exciting year with a mix of new projects and continuation of important offerings. As always, this work is enabled by a loyal, passionate community of rheumatologists and our supporters.

Thanks to the hard work of our Scientific Committee, we had a successful Annual Scientific Meeting in Calgary. Whether you go for the excellent Canadian research, to attend workshops to learn from our colleagues or to spend time catching up with one another, there truly is something for everyone. I could not help but burst with pride seeing the fruits of the outstanding efforts of colleagues across the country throughout the meeting, and the recognition of the amazing work of pillars of our community with the CRA Awards of Distinction! This meeting was preceded by another outstanding virtual Rheum Review course, with a full day of high-impact topics and clinical pearls.

In the last year there have been major advances in Project Athena, culminating in the availability of two rheumatology-optimized Artificial Intelligence (AI) scribes at discounted rates for our members. I hope that this will be an effective tool to help improve work efficiency for our members. Another area of major advancement in the last year is the work of the Planetary Health Taskforce, which is slated to culminate in a Planetary Health Toolkit for our members.

In the year ahead, I look forward to continuing to plug away with you to support our community in the work that we do in clinical care, research and education. This work is not possible without the support of our members. As the saying goes, there is power in numbers. I hope that we can grow our membership numbers to truly represent the breadth of rheumatologists across the country. The more inclusive we are of rheumatologists across the country, the better we can support one another and ensure the health of our profession for years to come.



I look forward to welcoming you to Halifax for our Annual Scientific Meeting next year for the first time at our new meeting time in mid-April! I'm sure you will enjoy the East Coast culture and hospitality as much as we enjoy sharing it with you!

*Trudy Taylor, MD, FRCPC
President, Canadian Rheumatology Association
Associate Professor,
Dalhousie University
Halifax, Nova Scotia*

Great Debate 2025: Be it Resolved that MSK POCUS Should be a Mandatory Component of Rheumatology Curricula

By Volodko Bakowsky, MD on behalf of Julie Brooks, BPT, Brian Feldman, MD, MSc, Carol Hitchon, MD, BSc, MSc, and Michael Stein, MD

Musculoskeletal point of care ultrasound (MSK POCUS) is becoming a common ancillary examination in rheumatology practices across Canada. Hence, this year The Great Debate at the CRA Annual Scientific Meeting tackled the issue of whether training in MSK POCUS should be mandatory for all post-graduate training programs in the country.

Arguing in favour of the motion were Julia Brooks and Dr. Michael Stein.

They argued that MSK US enhances diagnostic accuracy, improves patient care, and supports more precise monitoring of disease activity and treatment response. They emphasized that it has become an essential tool in modern rheumatology practice and that standardized training would ensure consistent and safe use across practitioners. When polling both US and Canadian rheumatology trainees and program directors, the vast majority are in favour of including MSK POCUS in their curricula.

On the contrary side of the motion were Drs. Brian Feldman and Carol Hitchon.

They countered that while MSK US may have some utility in certain situations, making training mandatory may not be practical or necessary for all rheumatology trainees. Concerns were raised about training resource limitations, the exceedingly high cost of the technology, and especially the time constraints in already crowded curricula. They argued for flexibility and individual or institutional discretion.

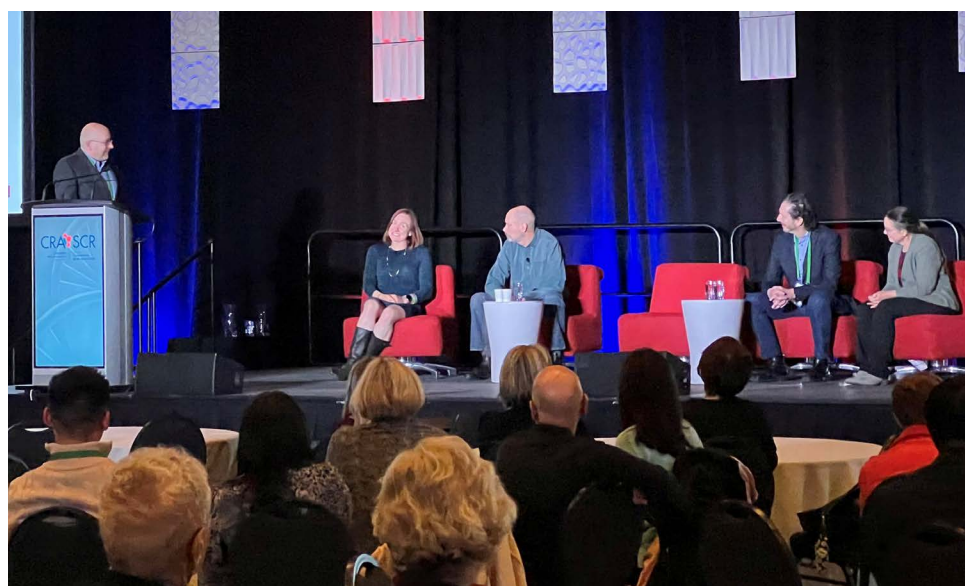
In conclusion, while there was consensus on the utility of MSK US, the debate rested on whether the training should truly be mandatory at this stage

of the landscape in rheumatology, or whether flexibility should be maintained.

The Great Debates always seem to end too soon, and this year was no exception. The eager voting of attendees temporarily crashed the evaluation app, so the vote was taken via audience applause-o-meter. The audience noise decibels were in favour of the against team and, thus, the motion was rejected. When the software eventually caught up, the vote was 51.6% against vs 48.4% for, indicating just how close the debate was.

What was not rejected was the popularity of the event as one of the highlights of the CRA Meeting. Attendees listened, learned, laughed, and liked what they saw.

*Volodko Bakowsky, MD, FRCPC
Interim Division Head/Chief,
Associate Professor, Division of Rheumatology,
Department of Medicine, Dalhousie University
Halifax, Nova Scotia*



The Great Debate team (from left to right): Volodko Bakowsky (chair), Julia Brooks, Brian Feldman, Michael Stein, and Carol Hitchon.

RheumJeopardy! 2025

By Philip A. Baer, MDCM, FRCPC, FACR

RheumJeopardy! was presented as a plenary session at the 2025 CRA ASM in Calgary for the tenth consecutive year, this time in a new timeslot before the Wednesday night opening reception. I hosted from the state-of-the-art TELUS conference centre. The 2025 event was live only, with all attendees participating in answering the questions. Seamless integration of the questions with the PheedLoop Go! meeting app, provided by the teams from BBBlanc and MKEM, prevented any technical issues. After the East team was victorious by 12,000 to 6,916 in the 2024 edition, the winning East captain, Dr. Timothy Kwok from Toronto, acted as Chair and scorekeeper. We maintained the traditional East versus West format, with Toronto to the dividing line this year. Our team captains were Dr. Elizabeth Hazel, a rheumatologist and former Olympian from Montreal, and Dr. Audrea Chen, a pediatric rheumatologist from Edmonton, both members of the CRA ASM Program Committee. Dr. Chen sported an Edmonton Oilers jersey while Dr Hazel donned a Montreal Victoire jersey promoting the new PWHL.

As usual, only the members of the team whose captain had selected a question voted on the answer. Neither team captain exercised the option to overrule their team's answer. The team captains decided the Final Jeopardy wagers and answered the Final Jeopardy question on their own.

The session again drew a large audience of enthusiastic participants, including rheumatologists, trainees, allied health professionals and industry and patient attendees. The practice question related to a newly discovered exoplanet with an atmosphere, which shared a name with one of the industry sponsors of the 2025 CRA ASM. The correct answer was planet Janssen.

Fifteen questions were selected in the main game. Categories included OA/Pediatric Rheumatology (several questions in that category were selected by Dr. Chen, but they proved to be those on OA, not the pediatric questions she may have been hoping for), Guidelines, Old Drugs-New Tricks, Sight Diagnoses, Potpourri, and one combining questions related to the *Journal of Rheumatology* and the CRA.

Questions were designed to be challenging, but the two teams managed well, answering most questions correctly. As usual, the \$800 and \$1,000 rows of questions were the most frequently chosen. Questions selected included those related to ACR-EULAR Boolean remission, graft versus host disease, the HIPPO pathway in cutaneous lupus, and the CRA JIA Uveitis guideline. Voters correctly identified the CRA AI scribe program offer-



Dr. Philip Baer, pictured with Dr. Elizabeth Hazel (Team Captain of the East), Dr. Timothy Kwok (Chair) and Dr. Audrea Chen (Team Captain of the West).

rings, nightmares as a symptom of CNS lupus, and dogs as being better for quality of life than cats in patients with rheumatic diseases. Questions that stumped the teams included rheumatologist personality traits identified in the interestingly named TRUMP-2 study in SLE, the results of a study of heated mittens for hand OA (no benefit), a sight diagnosis question on fibroblastic rheumatism, and the potential benefit of green light therapy in OA (a Top 10 Arthritis Society Canada research finding of 2024). Participants also knew which triple therapies were recommended in the new ACR lupus nephritis guidelines.

One of the "Old Drugs, New Tricks" questions related to tofacitinib for treatment of pretibial myxedema in hyperthyroidism. The audience felt tofacitinib was not an old drug, though it was first approved by the FDA in 2012 and Health Canada in 2014. Henceforth, that category will be renamed "Familiar Drugs, New Tricks."

At the end of the main Jeopardy round, the score favoured East with 3,800 points over West with 3,400. The Final Jeopardy category was "Global Rheumatology Award Winners". The question focused on which of 6 major international awards-granting bodies had the highest percentage of female award recipients. The choices included ACR, EULAR, PANLAR, and APLAR. The correct answer was EULAR, with 31% female winners between 1972 and 2023. The answer slide also revealed that the ACR gave out the most awards, followed by PANLAR and EULAR. The percentage of female winners rose from 12.5% before 1990 to 36% from 2021 onwards.

Team East and Team West both wagered everything they had on the Final Jeopardy question. Unfortunately, both team captains answered incorrectly, choosing PANLAR. That left the two teams tied with a final score of 0. This means we don't know who will chair *RheumJeopardy!* in April 2026 in Halifax if the ASM Scientific Committee grants us a place on the agenda for an eleventh year. I am already preparing a question bank if we are renewed for another season.

Thanks to everyone who participated in the *RheumJeopardy!* session. Special thanks as well to Dr. Shelly Dunne, my colleague in Toronto, who took photographs and tracked the questions we used in 2025 to ensure they do not reappear in future editions of *RheumJeopardy!*

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

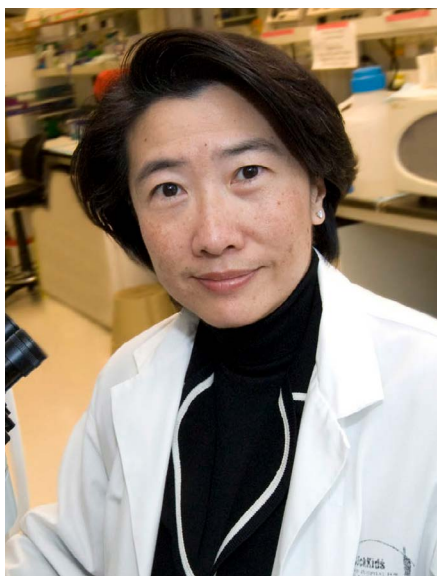
The CRA's 2025 Distinguished Rheumatologist: Dr. Rae S. M. Yeung

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

My decision to become a rheumatologist was shaped by my doctoral training in immunology, which instilled in me a deep appreciation for the complexities of the immune system. I was motivated to use this knowledge in a clinical specialty where it could have a direct and meaningful impact on patient care. Rheumatology was the logical choice. I was also inspired by excellent clinicians who were rheumatologists—those who cared for the whole person, not just an isolated organ or symptom. Their holistic approach and unwavering dedication to understanding complex clinical problems really resonated with me and became a guiding principle in my career.

You are Professor of Paediatrics, Immunology and Medical Science at the University of Toronto, and Staff Physician and Senior Scientist at The Hospital for Sick Children. The central theme of your research is precision medicine in childhood arthritis and rheumatic diseases. You meld phenotype with biology to understand the mechanisms governing autoimmunity to further discovery of cellular and molecular tools for improved disease diagnosis, treatment, outcomes and prevention. The integrated program is reflected in linked clinical, research and educational activities that are internationally recognized. Your goal is to transform the treatment of affected children by defining the underlying biologic causes of their diseases to ultimately develop a precision medicine approach to improve outcomes.

To achieve this goal, you have established extensive partnerships in the clinic and in research to improve care, and to provide a family-focused opportunity for children to have an integrated experience with a multi-disciplinary team providing ongoing care and the opportunity to seamlessly participate in research. You have extended partnerships and established translational research platforms and consortia, serving as the founder and scientific director of local, national and international translational research networks to directly complement clinical care.



a) Can you tell us more about your research?

The central theme of my research program is precision medicine in childhood arthritis and rheumatic disease with a focus on arthritis and vasculitis. Making precision decisions means having the crystal ball and being able to predict who needs treatment, when and for how long and with which medicine. My research program uses genomic technology partnered with machine learning and artificial intelligence to help us gather the data and synthesize the evidence needed to guide these decisions.

b) Can you tell us about some of the research partnerships?

One example of research partnerships in childhood arthritis is UCAN. I established UCAN (Understanding Childhood Arthritis Network), a federation of research networks representing over 50 countries, serving as Scientific Director and developed best practices to ensure high quality translational research, enhance collaborations and improve research efficiencies. The UCAN framework and infrastructure has been a springboard for success in collaborative research projects and joint publications with increased efficiencies and value added for research. We launched regional cores in Utrecht, Toronto, and Singapore. Foundational efforts such as standard operating procedures, an integrated genomic medicine platform, care transformation tools, frameworks for national partnerships and benchmarking for societal impacts established by UCAN have been used as templates for other chronic and inflammatory diseases of childhood including COVID-19 associated conditions.

International collaboration in UCAN culminated in the 2016 London Declaration, where leaders of all major research networks in pediatric rheumatology signed an agreement “to improve care and ultimately cure childhood rheumatic disorders through worldwide collaboration.” The CARD Biobank at Sickkids is the Canadian hub of UCAN. UCAN is now supported by granting agencies in Canada and around the world with large-scale team grants funded by CIHR, Genome Canada, The Arthritis Society, ZonMw (the Netherlands), ReumaNederlands, EU-E-Rare and EU-Precision-Medicine funding schemes and Horizon 2020.



Dr. Rae S. M. Yeung receiving her award from CRA President Dr. Trudy Taylor at the CRA Annual Scientific Meeting in Calgary, which took place in February 2025.

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

Bringing amazing talent and brilliant minds together to think and act as one team is a huge challenge. Defining common goals and valuing everyone's contributions have resulted in deep and lasting friendships that have overcome this challenge.

You and your team have used state-of-the-art techniques including cellular and animal models partnered with multi-omic and machine learning approaches to define the biologic pathways responsible for disease. Your work has improved understanding of disease etiology and pathogenesis, and more importantly has altered clinical practice. Knowledge generated in disease models has been translated to the bedside, resulting in improved understanding of the pathobiology of disease, biomarker identification, clinical trials, and a proposed new disease taxonomy integrating clinical and genomic data and improved clinical practice guidelines to manage affected children. Can you tell us more about your research and findings and their implications?

Expanding on the points discussed above—some of the most exciting research findings have been to identify good predictors for the problems outlined above—the crystal ball. Being able to identify which child with arthritis is at high risk for poor outcomes and who is not (predicting disease course). Being able to predict who will respond to which drug (predictors of treatment response) and when we can stop a drug (predictors of successful de-prescribing).

We have also identified new drug targets and new mechanisms of disease in Kawasaki Disease, leading to new treatments for affected children.

What do you foresee as challenges to Canadian rheumatologists in the future and what can individual rheumatologists and the CRA do to meet these challenges?

It is an incredible time to be a rheumatologist—with so many new tools to help us understand and treat disease. We have exponential growth in technologies in genomics and machine learning, partnered with many powerful new drugs targeting biologic pathways responsible for disease. Navigating the ever-growing complexities of biological and medical advancements will require a strategic approach. By fostering interdisciplinary collaboration, leveraging artificial intelligence tools, and committing to continuous education, we can make use of the vast amounts of data for the benefit of our patients and guide how to rationally make decisions to improve care.

In light of current events and the ongoing challenges of obtaining research funding, how resilient are international research networks?

Very resilient. I see international research networks with strong partnerships and team science as critical foundations and the path forward to overcoming these challenges. We are stronger together.

What is the professional accomplishment of which you are proudest to date?

My academic family. So very proud of the people (my trainees/mentees), and programs (our teams in UCAN and KD) we have built together.

What do you believe are the qualities of a distinguished rheumatologist?

There are so many different ways to define this and all are meaningful—nicely stated in the CRA award.

What are some of your other passions outside of rheumatology?

Spending time with my friends and family.

You are marooned on a desert island? What book would you like to have on hand with you?

The Bible.

What is your favourite food or cuisine?

I enjoy all types of cuisine—as long as it's good.

You are offered a plane ticket to anywhere in the world. Where would you like to go?

Somewhere I have not been before.

*Rae S. M. Yeung, MD, PhD, FRCPC
Professor of Paediatrics, Immunology & Medical Science
University of Toronto
Senior Scientist and Staff Rheumatologist,
The Hospital for Sick Children, Toronto, Ontario*

The CRA's 2025 Emerging Investigator: Dr. May Choi

You are a rheumatologist and clinician-scientist at the Cumming School of Medicine at the University of Calgary. Your research focuses on biomarker discovery and validation for the prediction of clinical outcomes in autoimmune rheumatic diseases and the prevention of autoimmune disease development and disease-related complications. You lead an immunology research laboratory (Artificial Intelligence and Autoimmune Diagnostics or AI.Dx) and biobank for local, national, and international collaborators.



a) Can you tell us more about your research and its implications?

I believe this is a truly exciting time to be in the field of rheumatology. There is still a great deal to uncover about these diseases and there are many opportunities to enhance patient care. Through my research, I hope to contribute to earlier and more accurate diagnosis, ultimately improving outcomes for patients. I'm also particularly interested in exploring strategies to prevent the onset of autoimmune diseases, which involves identifying markers that can help pinpoint individuals at higher risk.

b) Can you describe some of the most significant findings in this research area?

A recent advancement in the field is the incorporation of artificial intelligence, which I believe will become increasingly central to biomarker analysis and to advancing rheumatology as a whole.

You have been funded by several career development grants including the Lupus Foundation of America's Gary S. Gilkeson Career Development Award and the Arthritis Society's Stars Career Development Award. You have also received a Canadian Institutes of Health Research project grant and a Canadian Foundation of Innovation (CFI) John R. Evans Leaders Award in your first and second year on faculty, respectively.

In total, you have been nominated PI or co-investigator on 31 peer-reviewed grants totaling more than \$12.9

million. To date, you have published 87 peer-reviewed articles and four book chapters with an h-index of 23 and 1,640 citations. You have supervised and mentored 22 trainees at all stages of career development. Your most recent awards include the prestigious Lupus Foundation of America's 2023 Mary Betty Stevens Young Investigator Prize, Calgary Avenue Magazine's 2023 Top 40 Under 40, and the Association of Medical Laboratory Immunologists 2023 Future Leader and 2023 Young Investigator Award.

What is the professional accomplishment of which you are proudest to date?

Building my research team and my students' accomplishments.

What are some of the highlights and challenges you have experienced thus far in your career? How have you overcome these challenges?

Highlights: Being able to work with my team, collaborators, advocacy organizations, and my mentors. Challenges: Work-life balance. Still working on it.

For those wanting to pursue rheumatology and a career in research, what advice would you give them? Have you had key mentors who supported your career path? If yes, what were the key learnings you gained from them? How do you ensure "hitting the ground running" when you transition from training to being an independent investigator?

I've been fortunate to have had exceptional mentors throughout my career, including Drs. Marvin Fritzler, Ann Clarke, and Karen Costenbader. Their support and insight have been invaluable, shaping my research trajectory. One piece of advice I would offer is to stay open to further training and actively seek opportunities to expand your expertise and perspective. Embrace collaboration and never forget to express gratitude to those who have supported you along the way. I'm especially thankful to my institution for enabling me to pursue additional training in Boston and complete a degree in epidemiology—both of which have greatly strengthened my skills as a researcher.



Dr. May Choi receiving her award from CRA President Dr. Trudy Taylor at the CRA Annual Scientific Meeting in Calgary, which took place in February 2025.

If you weren't pursuing research as a career, what would you be doing?

I'd be in a band.

If you had an extra hour in the day, how would you spend it?

Learning how to cook.

What is your favourite food or cuisine?

My mom's cooking hands down.

What is your dream vacation destination?

Anywhere where I can sleep in.

How many cups of coffee or tea does it take to make a productive day?

At least two. One, if it's a Vietnamese coffee.

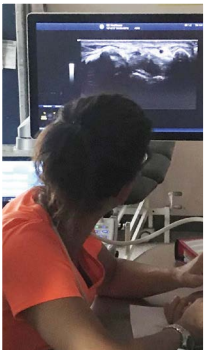
May Y. Choi, MD, MPH, FRCPC

*Associate Professor, Cumming School of Medicine
University of Calgary and Alberta Health Services
Calgary, Alberta*



15TH ANNUAL CANADIAN RHEUMATOLOGY ULTRASOUND SOCIETY BASIC COURSE

- In-person education meeting focused on the basics of musculoskeletal ultrasonography
- Develop skills to identify sonographic patterns of different MSK tissue and joints. Recognize MSK artifacts and pitfalls in obtaining optimal MSK US images
- Learn how to scan normal anatomy and pathology including osteoarthritis, rheumatoid arthritis, seronegative arthritis, gout, calcium pyrophosphate arthropathy, median nerve impingement and other regional MSK pathology



Course Dates:

October 18-19, 2025

March 28-29, 2026

Location:

Toronto, Canada
(Women's College Hospital)

Both Weekends:

\$3499 non CRA Members

\$2999 CRA Members

\$1999 Trainees

Key Highlights:

Two weekends of in person anatomy review, lectures, and live Q and A sessions

Biweekly ultrasound image submission and personalized review by expert sonographers

Focus on all major joints

Weekend 1: Hand, wrist, ankle, feet

Weekend 2: Shoulder, elbow, hip, knee

Accredited CME Program:

- Section 1 Group Learning
- Section 3 Feedback and Improvement

Level 1 Basic Certificate offered (criteria and requirements to be provided at course)

► Reserve your spot today!

Please contact info@crus.ca for more information or visit CRUS at <https://crus-surc.ca/courses> for registration.

Course requirements: Access to an ultrasound machine with power Doppler capabilities. No prior knowledge of MSK ultrasound required.

**BIMZELX IS THE
FIRST AND ONLY
IL-17A AND IL-17F
INHIBITOR.*^{1,2}**

AN OPPORTUNITY TO CHALLENGE PSA AND AXSPA WITH BIMZELX

BIMZELX is indicated for the treatment of adult patients with:¹

- moderate to severe plaque psoriasis who are candidates for systemic therapy or phototherapy
- active psoriatic arthritis. BIMZELX can be used alone or in combination with a conventional non-biologic disease-modifying antirheumatic drug (cDMARD) (e.g., methotrexate)
- active ankylosing spondylitis who have responded inadequately or are intolerant to conventional therapy
- active non-radiographic axial spondyloarthritis with objective signs of inflammation as indicated by elevated C-reactive protein (CRP) and/or magnetic resonance imaging (MRI) who have responded inadequately or are intolerant to nonsteroidal anti-inflammatory drugs (NSAIDs)

Conditions of clinical use:

BIMZELX is not authorized for use in pediatrics (<18 years of age).

Relevant warnings and precautions:

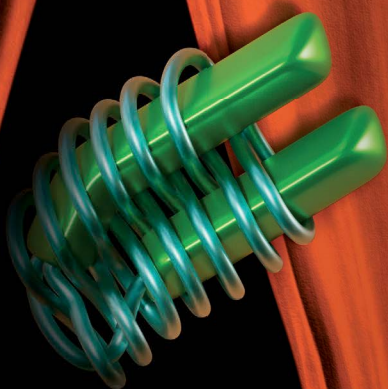
- Inflammatory bowel disease
- Serious hypersensitivity reactions
- Vaccinations
- Infections, including tuberculosis
- Pregnant or nursing women
- Women of childbearing potential

For more information:

Please consult the Product Monograph at ucb-canada.ca/en/bimzelx for important information relating to adverse reactions, drug interactions, and dosing information which have not been discussed in this piece. The Product Monograph is also available by calling 1-866-709-8444.

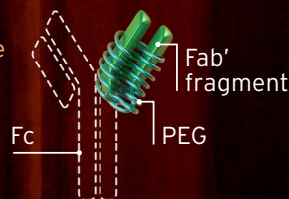
* Comparative clinical significance is unknown.

¹ BIMZELX Product Monograph. UCB Canada Inc. November 27, 2024. ² Data on file, UCB Canada Inc.



All Fab' fragment

CIMZIA® - a **PEGylated** antibody fragment - is the only anti-TNFα that does not contain an Fc region, normally present in a complete antibody.*



Over 15 years of clinical experience combined across all indications in:†

Rheumatoid arthritis (RA) - 2009; Psoriatic arthritis (PsA) - 2014; Ankylosing spondylitis (AS) - 2014; Plaque psoriasis (PsO) - 2018; and Non-radiographic axial spondyloarthritis (nr-axSpA) - 2019^{1,2}

CIMZIA (certolizumab pegol) in combination with MTX is indicated for:

- reducing signs and symptoms, including major clinical response, and reducing the progression of joint damage as assessed by X-ray, in adult patients with moderately to severely active RA.

CIMZIA alone or in combination with MTX is indicated for:

- reducing signs and symptoms and inhibiting the progression of structural damage as assessed by X-ray, in adult patients with moderately to severely active PsA who have failed one or more DMARDs.

CIMZIA is indicated for:

- reducing signs and symptoms in adult patients with moderately to severely active RA who do not tolerate MTX.
- reducing signs and symptoms in adult patients with active AS who have had an inadequate response to conventional therapy.
- the treatment of adults with severe active nr-axSpA with objective signs of inflammation as indicated by elevated CRP and/or MRI evidence who have had an inadequate response to, or are intolerant to NSAIDs.
- the treatment of adult patients with moderate to severe PsO who are candidates for systemic therapy.

* Comparative clinical significance unknown.

† Clinical significance unknown.

CHF: congestive heart failure; CRP: C-reactive protein; DMARDs: disease-modifying anti-rheumatic drugs; Fc: Fragment-crystallizable; MRI: magnetic resonance imaging; MTX: methotrexate; NSAIDs: nonsteroidal anti-inflammatory drugs; NYHA: New York Heart Association; PEG: polyethylene glycol; TNFα: tumour necrosis factor alpha

1. CIMZIA® Product Monograph. UCB Canada Inc. November 13, 2019.

2. Health Canada Notice of Compliance Database. Available at <https://health-products.canada.ca/noc-ac/?lang=eng>. Accessed January 9, 2025.

Consult the product monograph at <https://www.ucbcanada.com/en/cimzia> for important information about:

- Contraindications in active tuberculosis or other severe infections such as sepsis, abscesses, and opportunistic infections; and moderate to severe heart failure (NYHA Class III/IV)
- The most serious warnings and precautions regarding serious infections and malignancy
- Other relevant warnings and precautions regarding worsening congestive heart failure and new onset CHF; hepatitis B virus reactivation; hematological reactions; neurologic reactions; use in combination with other biologic medicines; monitoring for patients in surgery and those being switched to another biologic DMARD; hypersensitivity symptoms; latex sensitivity; formation of autoantibodies; administration of live or live-attenuated vaccines; use in patients with severe immunosuppression; possible erroneously elevated activated partial thromboplastin time (aPTT) assay results in patients without coagulation abnormalities; women of childbearing potential; pregnancy and breastfeeding; caution in infants exposed in utero; caution in geriatric patients
- Conditions of clinical use, adverse reactions, drug interactions and dosing instructions

The product monograph is also available through Medical Information Services at 1-866-709-8444.



CIMZIA, UCB and the UCB logo are registered trademarks of the UCB Group of Companies.

© 2025 UCB Canada Inc. All rights reserved.

CA-CZ-2500021E




cimzia®
(certolizumab pegol)

The CRA's 2025 Distinguished Investigator: Dr. Joan Wither

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

I was pleased and honoured.

You are a professor in the Departments of Medicine and Immunology at the University of Toronto and a Senior Scientist in the Schroeder Arthritis Institute at the Krembil Research Institute. You are also a staff rheumatologist at University Health Network, where you are a Director of the STAT (urgent assessment) and Early Autoimmune Rheumatic Disease Clinics.

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

When I was a medical student at the University of Alberta, I first learned about immunology (which was in its infancy) and became interested in the immune system. This led me to do an elective in immunology at the National Institutes of Health. There we did rotations on the clinical wards, one of which was the rheumatology ward where I remember seeing lupus patients, and another of which was the immunology ward run by Tony Fauci, where he was studying patients with granulomatous diseases including GPA. As part of that elective, we had lectures from several world-renowned immunologists, including some who later received Nobel Prizes, and I became fascinated with the immune abnormalities that produce disease, in particular rheumatic disease. When I moved to Toronto to do my internal medicine residency, one of my first electives was rheumatology, where unfortunately I saw virtually no patients with systemic disease, as they mostly suffered from osteoarthritis and soft tissue rheumatism. As a result, I almost changed my mind and ended up in gastroenterology, but ultimately became persuaded to apply to rheumatology (which I have never regretted!).

What do you believe are the qualities of a distinguished investigator and rheumatologist?

An inquisitive nature—always wanting to know why or how something works, and a passion for trying to solve puzzles. Per-



severance and a thick skin—when you are doing experimental work, most things do not work the first time and require trouble-shooting. Also, there is lots of rejection! Grant applications are more likely to be rejected than not. Manuscript submissions are often rejected at first, or at the very least have to be revised. This definitely keeps you humble.

Your translational research program focuses upon the Systemic Autoimmune Rheumatic Diseases (SARDs), including systemic lupus erythematosus, Sjogren's disease, and systemic sclerosis. What are the goals of the program?

SARDs often have irreversible organ damage at diagnosis. Although anti-nuclear antibodies (ANAs) are present years before disease onset, they cannot be used to accurately predict disease development because they are also found in many healthy individuals, the majority of whom will not progress to SARDs. Early treatment could prevent much of the organ damage present when SARDs are diagnosed. Currently there is insufficient knowledge regarding the immunological changes that distinguish ANA+ individuals from those with SARDs, and those who

will progress from those who will not, to identify individuals at high risk for disease development and determine which immune pathways should be targeted. (Our goals are to address these questions and fill this knowledge gap).

To address these questions, I established the Early Autoimmune Rheumatic Disease Clinic, in which ANA+ individuals who lack or have insufficient clinical criteria for a SARD diagnosis (ANA+NS) are followed longitudinally, with blood drawn for bio-banking at baseline and yearly thereafter (or earlier if new symptoms develop). To date, ~400 subjects have been recruited, of which approximately two thirds are ANA+ without a SARD diagnosis, with 15% of these individuals demonstrating clinical progression upon follow-up. Using this unique cohort, my laboratory has made substantial inroads into the understanding of the immunologic processes that lead to development of a positive ANA, promote progression, and distinguish ANA+NS from patients with early untreated SARDs. Specifically, we have shown that many of the immunologic features thought to be specific for SARDs, such as increased proportions of antibody secreting cells and the T cells that support them, are also seen in ANA+NS, suggesting that they are associated with production of autoantibodies. In ANA+NS, symptomatic autoimmunity appears to be held in check by an expansion of T regulatory cells, whereas in SARD this expansion becomes attenuated and is accompanied by increases in pro-inflammatory T (Th2 and Th17) and innate (CD14+mDC and intermediate monocytes) immune subsets.

Your laboratory has produced a large body of work dissecting the genetic basis for disease in lupus mouse strains that provided a conceptual basis for our understanding of human SLE pathogenesis. You have also contributed to international GWAS and ImmunoChip efforts leading to identification of novel genetic risk loci in SLE. More recently, your work has provided insight into how interferons disrupt immune function to promote development of SARD and affect disease outcomes in SLE. Through creation of a novel cohort of longitudinally followed individuals with anti-nuclear antibodies, you have identified biomarkers associated with an increased risk of SARD development and begun to elucidate the immunologic events that result in the transition from asymptomatic autoimmunity to disease. Finally, your research has led to identification of novel biomarkers allowing stratification of lupus nephritis patients with regard to treatment responses and long-term renal outcomes.

Can you tell us more about your research in SLE and its major findings?

Defining the role of Interferons (IFNs) in SARDs. Elevated levels of IFN-induced gene expression are a hallmark of SARDs, in particular SLE, and my laboratory has provided several key insights into the role of IFNs in these conditions. We were the first to conclusively demonstrate that the levels of IFN-induced gene expression in the blood are relatively stable despite fluctuations in disease activity in SLE and consequently cannot be used to predict impending flares. Instead, we showed that high levels of IFN-induced gene expression predict a more severe disease course requiring more aggressive therapy. We have also explored the immune mechanisms by which IFN exacerbates disease. We have shown that serum levels of IFN in SLE are sufficient to disturb B cell function, leading to enhanced B cell activation following B cell receptor engagement. Using a novel mouse model with a B cell repertoire enriched for dsDNA reactivity that is injected with an IFN α -producing adenovirus, together with a B cell specific knockout for the IFN α receptor, we have shown that IFN acts directly on B cells to disturb their function, overcoming multiple mechanisms of B cell tolerance, resulting in autoantibody production. Collectively, these studies indicate the importance of IFN as a drug target in SLE, which is supported by the recent successful trials of anifrolumab, an anti-IFN Type 1 receptor monoclonal antibody, in SLE.

Development of tools to improve disease outcomes in Lupus Nephritis. As co-I of LuNNET, a collaboration between rheumatologists, nephrologists, and pathologists to investigate renal disease in SLE, I was responsible for creating an extensive biobank of DNA, serum, RNA, and urine samples from longitudinally followed SLE patients with and without nephritis, a highlight of which was approximately 100 patients who had their baseline sample at the time of a renal biopsy. This invaluable resource has attracted CIHR, industry and US public (Alliance for Lupus Research) funding, and led to the identification of novel molecular, serologic, and urinary biomarkers for nephritis, resulting in a patent application. We recently demonstrated the utility of these urinary biomarkers in monitoring and predicting treatment responses and are now working towards developing this into a clinical test. In ongoing experiments, we are seeking to stratify patients with regard to long-term renal outcomes at the time of renal flare. To this end, we are examining the ability of IFN-induced gene expression levels in renal biopsies (measured by imaging mass cytometry using our IFN-induced protein specific panel) and various serologic markers (NETs, IFN α) to predict treatment responses. This will allow intensification of therapy in patients at risk of a poor prognosis, improving long-term outcomes.

The CRA's 2025 Distinguished Investigator: Dr. Joan Wither

(continued)



Dr. Joan Wither receiving her award from CRA President Dr. Trudy Taylor at the CRA Annual Scientific Meeting in Calgary, which took place in February 2025.

Examination of the immune mechanisms that lead to flares of disease activity in SLE. In the majority of patients, SLE is a relapsing and remitting disease. Currently, the immune mechanisms that promote/trigger flares and, conversely, maintain disease quiescence are unknown. To address this question, SLE patients with a recent flare (< 1 month) or prolonged disease quiescence (at least 1 year) were recruited, and their blood obtained at baseline and every 6 months for at least 2 years. Using flow cytometry to perform extensive profiling of peripheral blood immune subsets, the immune changes in SLE patients were found to be segregated into five clusters that variably contained active and quiescent SLE patients and that had distinct clinical phenotypes. Notably, patients characterized by increased T peripheral helper, activated B, and age-associated B cells were the most likely to be flaring at baseline, as well as the most likely to remain active or flare over the subsequent year if they acquired or retained this phenotype at follow-up. These findings re-iterate the importance of controlling B cell activation in the management of lupus, which has been reinforced by the results of CD19 CAR-T cell trials, where effective depletion of B cells has led to prolonged remissions.

Are there other areas of interest you would like to investigate in the future?

I am very interested in what triggers flares of disease and whether the type of trigger plays a role in defining disease heterogeneity. I am also interested in whether we can manipulate the immune system to restore tolerance and prevent disease.

What are some of your other passions outside of rheumatology and medical education?

Golf and fitness. I golf 2-3 times a week in the summer. I also attend fitness classes twice a week all year and do additional cardio/fitness activities myself another 2-3 times a week.

Do you find there is synergy between your research and your clinical work with patients? If so, can you provide any examples?

Yes, there is synergy. Not uncommonly, research questions arise from patient management issues or questions raised by patients. For example, we did a study on whether fatigue in ANA+ individuals was associated with elevated levels of inflammatory markers and predicted development of disease, because I was often asked this question by patients. We showed that this was not the case, and thus I am able to tell my patients that we studied this and showed that this was not associated with an increased risk of progression. Our studies of urinary and blood biomarkers came out of the desire to improve management of lupus nephritis by identifying patients early who are not responding to conventional treatment, so that their treatment can be modified to improve outcomes.

How many cups of coffee or tea does it take to make a productive day?

I am decaffeinated so this is not a big thing for me.

*Joan Wither, MD, FRCPC, PhD
Rheumatologist,
Department of Immunology,
Faculty of Medicine, University of Toronto
Schroeder Arthritis Institute,
Krembil Research Institute,
University Health Network
Toronto, Ontario*

Canadian Heroes in Rheumatology: Dr. Robert Inman

Robert D. Inman, MD, was born and raised in Toronto. He completed his undergraduate degree (Eng Hon) at Yale University, and his medical degree at McMaster University. He completed his residency in Internal Medicine at Vanderbilt University and his fellowship in rheumatology at Cornell University, based at the Hospital for Special Surgery in New York City. He was a Research Fellow at the Hammersmith Hospital in London before returning to a faculty position as Assistant Professor of Medicine at Cornell University. He then moved to the University of Toronto where he was appointed Associate Professor and attending physician at Toronto Western Hospital. He was subsequently promoted to Professor in the Departments of Medicine and Immunology, and appointed Director of Rheumatology at the University of Toronto.

He is currently Deputy Physician in Chief (Research), University Health Network and is Co-Director of the Schroeder Arthritis Institute. He is Co-Chair of the Centre for Immunology to Immunotherapy (Ci2i) at UHN. He is a Senior Scientist in the Krembil Research Institute (KRI) and is a member of the KRI Research Council. He is Co-Director of the Spondylitis Program at Toronto Western Hospital. He is Co-PI of the Spondyloarthritis Research Consortium of Canada (SPARCC) and is Chair of the Medical Advisory Committee of the Canadian Spondylitis Association.

Dr. Inman has received the Distinguished Investigator Award (2004) and the Master Award from the CRA, the Roger Demers Award from the Laurentian Rheumatology Congress, and the Distinguished Lecturer Award from the Western Alliance of Rheumatology. He also received the Dunlop-Dottridge Lectureship and the M. Ogrzylo Lectureship awards. He has been appointed a Fellow of the Canadian Academy of Health Sciences and is a recipient of the Queen's Diamond Jubilee Medal. The University of Toronto has established the annual Inman Lectureship in his honour. He has been inducted as a Fellow of the Royal College of Physicians of Edinburgh.

Dr. Inman has held several leadership positions within the American College of Rheumatology, including President of the Northeast Region of the ACR, and member of the ACR Board of Directors. He has been the recipient of



numerous awards including the Medical Communicator Award from the ACR, the Jonas Salk Award from the March of Dimes, the Master Award from the ACR, and the Research Career Achievement Award from the Spondyloarthritis Research and Treatment Network (SPARTAN). He was Vice-President of the XXI PanAmerican Congress of Rheumatology, and was President of the VIII International Spondyloarthritis Symposium.

Dr. Inman is a member of the Medical and Scientific Advisory Board of the Spondylitis Association of America, the Executive Committee of the International Ankylosing Spondylitis Genetics Consortium

(IGAS), and the Advisory Committee of the Assessment of Spondyloarthritis International Society (ASAS). He is an Associate Editor of *Nature Reviews Rheumatology*.

Dr. Inman's research interests have focused on the interaction of infection with autoimmunity, initially examining clinical and experimental reactive arthritis. Studies currently probing the immune basis of axial spondyloarthritis are characterizing cells mediating the gut-joint axis, cytotoxic T cell oligoclonality and dysregulation, and epigenetic control of regulatory T cells. He has authored over 400 peer-reviewed publications and is Co-Editor of the Oxford Textbook of Axial Spondyloarthritis.

Over his career, Dr. Inman regards one of the key highlights being his role as supervisor and mentor for the large number of graduate students and research fellows who have trained in the Spondylitis Program at Toronto Western Hospital: "It has been especially gratifying to see our trainees return to their home universities across Canada and around the world and move into important leadership positions."

Dr. Inman sees the future of rheumatology as an exciting challenge. The advent of artificial intelligence (AI), electronic medical records (EMRs), new imaging modalities, and new targeted immunotherapies mean there are new opportunities at hand. Contemplating this changing landscape, he would offer the following as a challenge to his fellow members of the CRA:

Rheumatologists!

What are your common dreams?

What are your joint aspirations?

The Rheumatology Gender Pay Gap

By Angela Hu, MD, FRCPC; Barbara Blumenauer, MD, FRCPC; May Kazem, MD, FRCPC, MHA; Corisande Baldwin, MD, FRCPC, MSc; Raheem B. Kherani, MD, FRCPC, MPHE; Shahin Jamal, MD, FRCPC; Heather Day, MD, FRCPC; Jacqueline Stewart, MD, FRCPC; Grace Wright, MD, PhD; Gwenesta Melton, MD; Kam Shojania, MD, FRCPC; Diane Lacaille, MDCM, FRCPC, MHSc; and Mollie Carruthers, MD, FRCPC

It has been increasingly recognized that despite Canadian female physicians doing the same clinical work as their male counterparts, they are systemically paid less.¹ Why is this the case, when fee-for-service billing codes are the same for everyone? In British Columbia, we sought to identify some of the root causes for this inequity amongst rheumatologists.²

A survey was designed by the Division of Rheumatology Equity Committee at the University of British Columbia. We conducted a cross-sectional study where this anonymized survey was sent out to members of the British Columbia Society of Rheumatologists (BCSR). We heard from 49 rheumatologists across the province, capturing two thirds of all practising members. In terms of remuneration, gross fee-for-service billings were reported and did

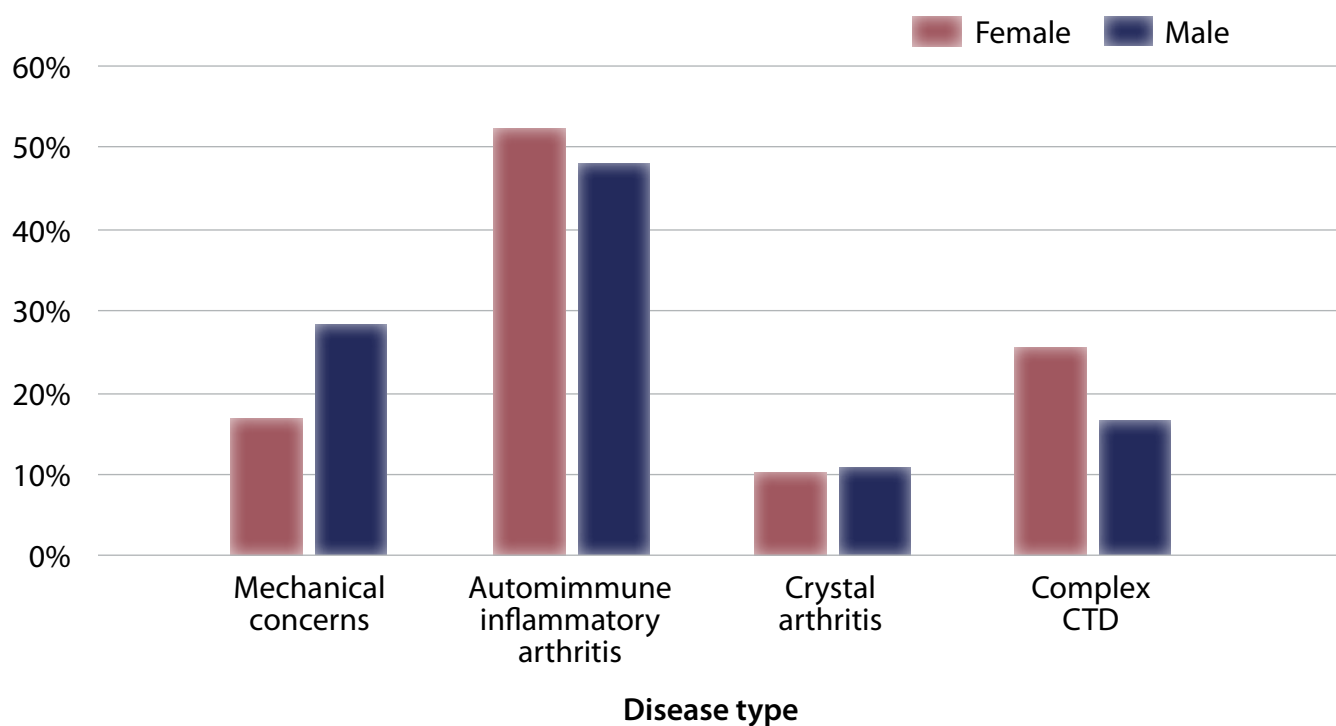
not account for overhead, which can be quite variable and substantial, up to 48.6%.³

We found that, on average, men and women worked nearly identical hours per week (42.5 and 42.6 hours respectively). However, 71% of women earned less than \$400,000 annually, compared to only 33.5% of men. Medical Services Plan (MSP) data echoed this gap: between 2018 and 2022, women rheumatologists earned 31.2% less in terms of gross earnings.⁴

What is behind this disparity? One key factor appears to be how time is spent. Women reported spending more time on each initial consultation—50.4 minutes versus 40.8 minutes for men. Women also saw a higher frequency of complex connective tissue disease patients and fewer patients with mechanical concerns. (Figure 1).²

Figure 1.

Prevalence of diseases in patient population reported by self-survey of rheumatologists, 2022-2023.



CTD = complex connective tissue disease.

In BC, most physicians and rheumatologists specifically are compensated in a fee-for-service model. This disincentivizes care for complex and time-consuming patients. Historically, the predominant belief was that female physician remuneration is lower as women work fewer hours in order to fulfill other roles, such as parental responsibilities. However, this is not the case, as our study highlights that female and male rheumatologists are working the same weekly hours. There are nuanced factors therefore contributing to these pay disparities, including longer time spent on consultations, greater frequency of patients with complex disease, and other patient-specific factors where higher numbers of patients with psychosocial vulnerabilities are referred to female physicians.⁵ A counterargument to this is that male physicians are seeing increased numbers of patients overall, given their shorter consult time length. In a system already burdened with long specialist wait times, it is important to also balance this consideration.

In contrast to sociocultural or biological factors, the structuring of medical benefit schedules is a modifiable

factor under the jurisdiction of government bodies and provincial medical associations. One such way that the BC Medical Service Commission has already helped to address this inequity is by increasing the compensation for complex consults (>53 minutes). Exploring alternative payment models—like the recently introduced Longitudinal Family Physician Payment Model—could be another step toward fairer compensation.

We all have a role in recognizing the different ways that women and men practise medicine, but this is only the beginning. It is time we ensure those differences are equally valued.

Selected References:

1. Cohen M, Kiran T. Closing the gender pay gap in Canadian medicine. *CMAJ*. 2020;192:E1011-E1017. <https://doi.org/10.1503/cmaj.200375>.
2. Hu A, Blumenauer B, Kazem M, et al. Explaining the gender pay gap: Lessons from rheumatology. *BCMJ*. 2025; 67(1). <https://bcmj.org/articles/explaining-gender-pay-gap-lessons-rheumatology>.
3. Doctors of BC. Overhead Study – Survey of Physicians: Executive Summary. Vancouver, BC: Doctors of BC; 2019.
4. Ministry of Health. MSC financial statement (blue book). Accessed 14 November 2024. www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/msp/publications.
5. Ruzyczki SM, Sunba S, Ejaredar M, et al. Addressing the root causes of the sex-based pay gap in medicine in Canada. *CMAJ*. 2024;196(12):E416–E418. doi: 10.1503/cmaj.231518.

Angela Hu, MD, FRCPC
Clinical Instructor,
Division of Rheumatology,
Faculty of Medicine,
University of British Columbia

Barbara Blumenauer, MD, FRCPC
Rheumatologist (Kamloops BC)

May Kazem, MD, FRCPC, MHA
Clinical Instructor,
Division of Rheumatology,
Faculty of Medicine,
University of British Columbia

Corisande Baldwin, MD, FRCPC, MHA
Clinical Assistant Professor,
Division of Rheumatology,
Faculty of Medicine,
University of British Columbia

Raheem Kherani, MD, FRCPC, MPHE
Clinical Associate Professor,
Residency Program Director,
Division of Rheumatology,
Faculty of Medicine,
University of British Columbia

Shahin Jamal, MD, FRCPC
Clinical Professor,
Division of Rheumatology,
Faculty of Medicine,
University of British Columbia

Heather Day, MD, FRCPC
Rheumatologist (West Vancouver, BC)

Jacqueline Stewart, MD, FRCPC
Retired rheumatologist (Penticton, BC)

Grace Wright, MD, PhD
President, Association of
Women in Rheumatology

Gwenesta Melton, MD
Vice-President, Association of
Women in Rheumatology

Kam Shojania, MD, FRCPC
Head of Rheumatology,
Vancouver General Hospital,
Clinical Professor,
Division of Rheumatology,
Faculty of Medicine,
University of British Columbia

Diane Lacaille, MDCM, FRCPC, MHS
Scientific Director,
Arthritis Research Canada
Professor,
Division of Rheumatology,
Faculty of Medicine,
University of British Columbia

Mollie Carruthers, MD, FRCPC
Clinical Investigator,
Arthritis Research Canada,
Clinical Associate Professor,
Division of Rheumatology,
Faculty of Medicine,
University of British Columbia

The Arthritis Action Plan: Shaping the Future

By Trish Barbato, President and CEO, Arthritis Society Canada



Rheumatologists know better than anyone: It's not "just arthritis"—it's a devastating reality that silently destroys lives. Every day, millions of Canadians struggle with tasks most take for granted: holding a coffee cup, climbing stairs, or even hugging their children. This invisible disease costs our economy \$33 billion annually yet remains critically underfunded and overlooked.

That's about to change with the Arthritis Action Plan.

The Arthritis Action Plan is an unprecedented collaboration of 20+ leading organizations uniting to transform arthritis care in Canada. Our mission? To revolutionize outcomes for the 6 million Canadians battling this debilitating condition.

Our strategy rests on three powerful pillars:

1. Awareness and Advocacy: Breaking the silence around arthritis and demanding the attention it deserves.
2. Access to Care: Eliminating barriers that prevent Canadians from receiving vital treatment, regardless of location or background.
3. Research and Innovation: Prioritizing research to accelerate breakthrough discoveries and paths to cures.

The momentum is building, and arthritis clinicians, specialists, researchers and patients have been part of the journey at every step. For example, the Canadian Rheumatology Association, under Dr. Ahmad Zbib's leadership, is spearheading efforts to articulate the key imperatives under the "Access to Care" pillar of the plan. Chairing a working group of experts, Dr. Zbib will support the creation of recommendations to redefine equitable, patient-centered care. In addition, our "Research and Innovation" pillar leaders, including Dr. Diane Lacaille and Dr. Hani El-Gabalawy, have already engaged 400-plus researchers and patients and, collaboratively with arthritis researchers from centres across the country, will prioritize research initiatives that will position Canada at the forefront of arthritis innovation.

We're also focused on addressing disparities in care. Dr. David Robinson is part of the Equity Advisory Group, tasked to ensure our approach serves everyone—from young adults to seniors across all socioeconomic backgrounds. Dr. Cheryl Barnabe brings an Indigenous lens to our Research and Innovation work and is supporting our effort to reflect on and respond to the Truth and Reconciliation recommendations for health.

The Arthritis Action Plan will launch in April 2026, and your expertise and insights are crucial in this transformative journey. Together, we can build a future where arthritis is understood, treated effectively, and eventually cured.

Join us in this historic initiative. Visit arthritis.ca/AAP to learn more about how you can shape the future of arthritis care.

Rule Out CNS Vasculitis

By Kim Legault, MD, MSc, FRCPC

When faced with the referral stating: “Please rule out central nervous system vasculitis”, all rheumatologists know that it’s time to get their thinking caps on! Assessing a patient for the presence of central nervous system vasculitis (CNS-V) is challenging due to the lack of specificity of our standard diagnostic tools. Diagnosis requires careful review of history, physical exam, imaging, cerebrospinal fluid (CSF) analysis, laboratory findings, serologies, and, if needed, pathology of brain tissue. Collaboration with other specialists, particularly neurologists, neuroradiologists, and neurosurgeons is critical to properly interpret investigations and explore the non-rheumatological conditions on the differential diagnosis. This can be a daunting task, and having an organized approach to the mimickers and classification of CNS-V is critical.

Consider following these steps to approach these consults:

1) Categorize the location of the potential neuroinflammation:

Is it *Vascular*, *Parenchymal*, or *Pachymeningeal*? (or a combination). This requires **neuroimaging**.

- **Brain magnetic resonance imaging (MRI)** allows assessment for the presence of parenchymal, pachymeningeal/leptomeningeal inflammation, and/or evidence of changes that suggest vascular compromise.
 - **Parenchymal** inflammation can have a variety of different appearances, though in general it will present as *hyperintense signal on T2 and FLAIR sequences*. Administration of gadolinium can increase the sensitivity, and enhancement can indicate “activity” of specific lesions.
 - “*Demyelination*” is a specific subtype of parenchymal inflammation. Inflammatory processes that disrupt the myelin sheath in disorders such as multiple sclerosis lead to a specific pattern of white matter hyperintensities on MRI. There are specific rheumatological diagnoses that can lead to this type of inflammatory picture, particularly MS-like presentations of Sjogren’s disease, and neuromyelitis optica spectrum disease.
 - **Pachymeningeal** inflammation of the dura mater is seen as thickening and enhancement on MRI. This

can be seen in isolation or with other vascular or parenchymal findings.

- **Vascular** compromise to the brain will manifest as a stroke on imaging, if the vessel is large enough. However if the vasculitis affects very small vessels (e.g., anti-neutrophil cytoplasmic antibody (ANCA) vasculitis with CNS involvement), it may manifest only as an increased number of white matter hyperintensities on T2 and FLAIR sequences, a finding which is non-specific, and can be indistinguishable from parenchymal inflammation, non-inflammatory small vessel microvascular changes (e.g., from diabetes, hypertension, smoking), migraine, or normal aging.
- **Neurovascular imaging – computed tomography (CT) angiography** (or magnetic resonance (MR) angiography) of the cerebral vessels
 - Will show stenosis, tortuosity, occlusion of affected vessels, provided the vessels affected are sufficiently large – small vessel CNS-V can be below the resolution of angiography.

2) Develop a differential diagnosis based on the location of the potential neuroinflammation, considering non-inflammatory and inflammatory pathologies:

The differential diagnosis for the appearance of inflammation in each of these locations is outlined in figure 1.

Parenchymal

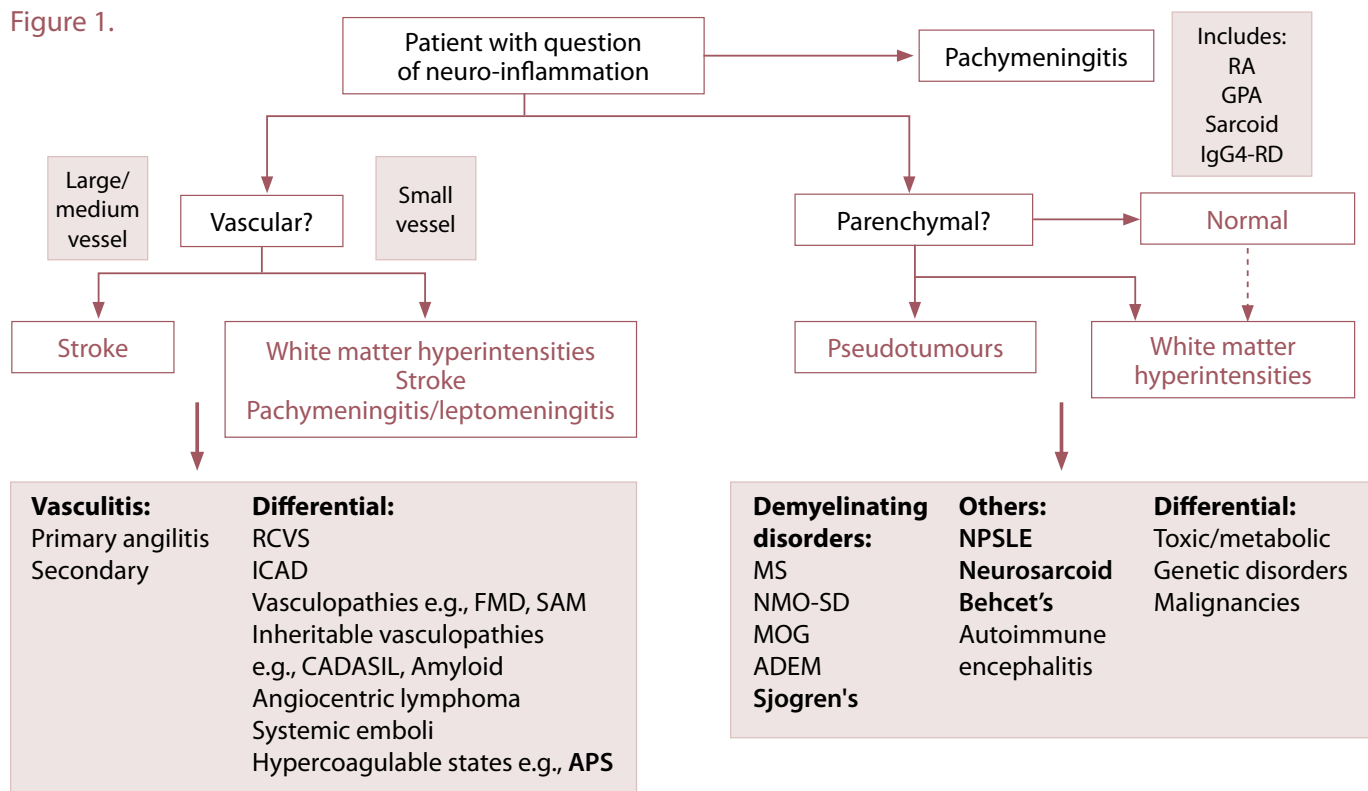
- For parenchymal CNS white matter abnormalities, the differential includes:
 - **Non-inflammatory**: toxic/metabolic conditions, genetic disorders e.g., leukodystrophy, and malignancies such as lymphoma. It is critical to partner with the neurology team in order to assess for these entities.
 - **Inflammatory**: Neuropsychiatric manifestations of connective tissue disease such as systemic lupus erythematosus, sarcoidosis, and Behcet’s. These can be investigated through the rheumatologist’s assessment of whether there are signs or symptoms of active disease, whether serologies are supportive of a diagnosis, or whether there is a site for biopsy in other organ systems.

Pachymeningeal

- **Non-inflammatory**: malignancy.
- **Inflammatory**: IgG4-related disease, rheumatoid arthritis (RA), ANCA vasculitis, sarcoidosis, idiopathic. The rheumatologist can assess for extra-neurological manifestations of these conditions to come to a presumed diagnosis, or to access sites for relevant biopsies outside of the CNS if possible.

Rule Out CNS Vasculitis Continued from page 25

Figure 1.



Vascular

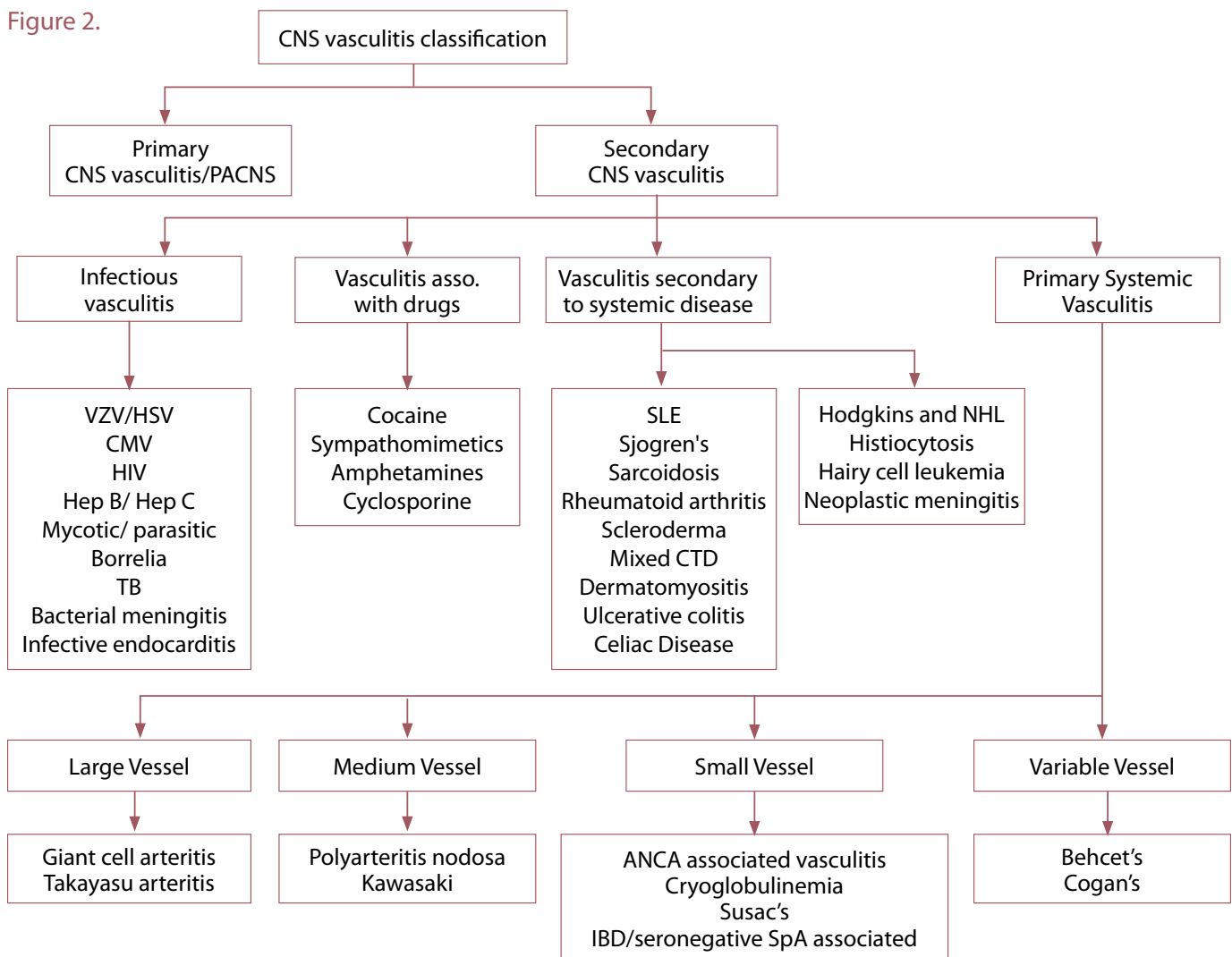
- **Non-inflammatory mimickers:** reversible cerebral vasoconstriction syndrome, intracranial atherosclerotic disease (ICAD), vasculopathies e.g., fibromuscular dysplasia, vascular Ehlers-Danlos, inheritable vasculopathies such as CADASIL, hereditary cerebral amyloid, angiocentric lymphoma, and hypercoagulable states. Differentiation of these conditions from vasculitis can be challenging, particularly in the setting of ICAD. Many require experienced neuroradiology assessment.
- **Inflammatory vasculitis (i.e., CNS-V):**
 - Primary CNS-V: rare disorder of isolated vasculitis in the CNS without systemic vasculitis
 - Secondary CNS-V: vascular inflammation secondary to another systemic process (See figure 2 for full differential)
 - Infectious
 - Drug-induced
 - Vasculitis associated with other systemic diseases – malignancies, autoimmune conditions
 - Primary systemic vasculitis with CNS involvement

3) In the setting of a vascular process, attempt to differentiate inflammatory from non-inflammatory vasculopathies, as follows.

Features that can assist include:

- **Clinical assessment** – CNS-V can result in subacute headache and cognitive or behavioural changes
- Symptoms and signs of associated infectious, neoplastic, autoimmune processes can be found
- **Labs/Serologies** - for potential associated infections, rheumatological conditions
- **CSF analysis** - can show elevated protein, a mild pleiocytosis (<50 cells; higher levels are more consistent with infection or lymphoma), and oligoclonal bands
 - **Oligoclonal bands** are indicative of immunoglobulins in the CSF space
 - They are collected from CSF with a paired serum sample.
 - If they are “non-matching”, then they are only in CSF space, and indicate an inflammatory process isolated to the CSF with intrathecal production of immunoglobulin. This is classically seen in MS; can be seen in primary CNS-V.
 - If they are “matching” this indicates a systemic process where immunoglobulin have reached the CSF space through a breakdown in the blood-brain barrier, which suggests a systemic inflammatory disorder. Can be seen with many processes, e.g., secondary CNS-V such as ANCA vasculitis; neuropsychiatric lupus; infections, etc.

Figure 2.



Imaging

- *Pachy- or leptomeningeal enhancement* are associated with CNS-V.
- *Vessel wall imaging*: Both ICAD and CNS-V can show abnormalities in medium vessels on angiography; MRI with vessel wall imaging targeting an affected vessel can be helpful to differentiate – CNS-V shows concentric vessel wall enhancement (circumferential inflammation of the vessel wall of an affected vessel) whereas ICAD generally shows eccentric enhancement (asymmetrical plaque deposition).

Biopsy

- If diagnostic uncertainty remains after these tests, consider brain biopsy, of leptomeninges and cortex – targeting an affected site that is accessible as per the neurosurgery team. This is diagnostic in ~90% of cases, with 30-50% of cases showing an alternative diagnosis. Sensitivity decreases if non-targeted biopsies (non-dominant temporal lobe) are performed.

It is through a careful process of assessment of all of the available diagnoses fitting a patient's particular clinical scenario, as well as multispecialty review considering all of the appropriate differential diagnoses, where the best diagnosis possible is achieved. Therapy can then be targeted to this diagnosis. At follow-up assessment, if a patient is not responding as expected to a particular course of therapy, it is always important to reconsider the diagnosis, and to consider additional or repeat diagnostic tests to increase yield.

This approach will assist rheumatologists in having a framework to use to consider patients with the question of central nervous system vasculitis.

Kim Legault, MD, MSc, FRCPC
Program Director, Rheumatology Residency Program
McMaster Professorship in Rheumatology Education
Associate Professor, Division of Rheumatology,
Department of Medicine
McMaster University
Hamilton, Ontario

Preventing a Lifetime of Arthritis Pain Through Early Detection



Each year, an estimated 10,500 babies in Canada are born with Developmental Dysplasia of the Hip, also known as hip dysplasia—a condition that, if undiagnosed in infancy, can lead to irreversible joint damage, chronic pain and mobility issues. Despite its seriousness, current screening techniques may miss up to 90 per cent of cases.

Yet when caught early, hip dysplasia is easily corrected with a simple brace, avoiding surgery and high healthcare costs, and reducing the risk of developing arthritis later in life. A timely diagnosis can change the course of a child's future.

As part of its mission to create a pain-free future, Arthritis Society Canada has partnered with Dr. Jacob

Jaremko, pediatric musculoskeletal radiologist at the University of Alberta, to advance AI-powered ultrasound technology that detects hip dysplasia in seconds. With each scan, the tool becomes more accurate, requiring minimal training, which means it has immense potential to be scaled across the country.

With dedicated new funding, the model is growing and being implemented in three Alberta hubs, with a focus on rural, remote and Indigenous communities. Through this funding, over 2,000 scans have identified 45 cases of hip dysplasia, 29 of which standard physical exams would likely have missed.

Learn more about how you can support this project at arthritis.ca/naps.

Spotlight on the 2025 CRA Abstract Award Winners

IAN WATSON AWARD *for the Best Abstract on SLE Research by a Trainee*

Sponsored by the Lupus Society of Alberta

Winner: Kaitlin Nuechterlein, McGill University

Abstract Title: Placental Abnormalities in Systemic Lupus

Erythematosus: Novel Markers of Adverse Pregnancy Outcomes

Supervisor: Dr. Evelyn Vinet

PHIL ROSEN AWARD *for the Best Abstract on Clinical or Epidemiology Research by a Trainee*

Sponsored by the Arthritis Society – Phil Rosen Memorial Award

Winner: Enoch Yau, Western University/University of Toronto

Abstract Title: Anti-Integrin $\alpha\beta6$ Autoantibodies as a Biomarker

for Ulcerative Colitis in Patients with Axial Spondyloarthritis

Supervisor: Dr. Robert Inman

BEST ABSTRACT *by a Rheumatology Resident*

Sponsored by the CRA

Winner: Alec Yu, University of British Columbia

Abstract Title: Lung Transplantation Outcomes of Patients with

Interstitial Pneumonia with Autoimmune Features

Supervisors: Dr. Kun Huang and Dr. Hyein Kim

BEST ABSTRACT *on Basic Science Research by a Trainee*

Sponsored by the CRA

Winner: Sreemoyee Ghosh, University of Toronto

Abstract Title: Identification of Psoriatic Arthritis-Related Pathways Using Multi-Omics Data Integration

Supervisor: Dr. Vinod Chandran

BEST ABSTRACT *by a Post-Graduate Research Trainee*

Sponsored by the CRA

Winner: Leah Flatman, McGill University

Supervisors: Dr. Evelyn Vinet and Dr. Sasha Bernatsky

Winner: Jeba Maisha, University of Manitoba

Abstract Title: Impaired Neutrophil Extracellular Trap (NET) Degradation in Rheumatoid Arthritis (RA) and Pre-Clinical RA is Mediated by Anti-Net Antibodies

Supervisor: Dr. Liam O'Neil

BEST ABSTRACT *on Quality Care Initiatives in Rheumatology*

Sponsored by the CRA

Winner: Zahi Touma, University Health Network/University of Toronto

Abstract Title: Work-Related Disability and Function in Systemic Lupus Erythematosus (SLE): Outcomes of an Exploratory Study from Different Canadian Centres

BEST ABSTRACT *by a Medical Student*

Sponsored by the CRA

Winner: Amanda Brissenden, University of Alberta

Abstract Title: Transitioning Juvenile Idiopathic Arthritis to Adult Care: Disease Reclassification, Patterns of Care, and Mental Health Insights

Supervisors: Dr. Steven Katz and Dr. Lillian Lim



BEST ABSTRACT *by an Undergraduate Student*

Sponsored by the CRA

Winner: Ganesh Ramanathan, Queen's University/ University of Toronto

Abstract Title: Elevated Serum Brain Injury Markers Correlate with Disease Features and Interferons in Children with Systemic Lupus Erythematosus

Supervisor: Dr. Andrea M. Knight

BEST ABSTRACT *by a Rheumatology Post-Graduate Research Trainee*

Sponsored by the CRA

Winner: Mats Juneke, McMaster University

Abstract Title: Validating the Accuracy of Diagnostic Codes for Vision Changes in Giant Cell Arteritis Using Healthcare Administrative Data from a Tertiary Hospital in Ontario, Canada

Supervisor: Dr. Amber Molnar

BEST ABSTRACT *on Research by Young Faculty*

Sponsored by the CRA

Winners: Lauren King, University of Toronto

Abstract Title: Association Between Symptomatic Knee Osteoarthritis and Blood Glucose Control in Persons with Type 2 Diabetes

Winners: May Choi, University of Calgary

Abstract Title: Machine Learning Can Identify an Antinuclear Antibody Pattern that May Rule Out Systemic Autoimmune Rheumatic Diseases

BEST ABSTRACT *on Pediatric Research by Young Faculty*

Sponsored by the CRA

Winner: Jeanine McColl, University of Calgary

Abstract Title: Chronic Non-Infectious Osteomyelitis of the Petrous Bone: A Case Series

BEST ABSTRACT *on Spondyloarthritis Research*

Sponsored by the Canadian Spondylitis Association

Winner: Archita Srinath, University of Toronto

Abstract Title: The Deubiquitinase Molecule TRABID: A Novel Therapeutic Target for Axial Spondyloarthritis

Supervisor: Dr. Nigil Haroon

BEST ABSTRACT *on Equity Diversity and Inclusion in Rheumatology*

Sponsored by the CRA

Winner: Molly Dushnicky, McMaster University

Abstract Title: Assessment of Juvenile Idiopathic Arthritis Outcomes and Place of Residence in Canada: Identifying Disparities in Care

Supervisor: Dr. Roberta Berard



CRUS CADAVERIC ADVANCED INJECTION COURSE

**REGISTER
NOW!**

NOVEMBER 2025

ULTRASOUND GUIDED PROCEDURES COURSE

In person ultrasound guided procedures course on cadaveric specimens with a focus on large and small joint areas. The course will be interdisciplinary consisting of small group sessions with international faculty and intimate sessions with focus on practical exercises. Bring your ultra-portable machines to practise and obtain the skills to do US guided injections compared to the high-end machines our course will offer.

Dates:

November 28-30, 2025 in Ottawa

Location

University of Ottawa Skills and Simulation Center
(725 Parkdale Ave, Ottawa, ON K1Y 4M9)

CME/AMA Credits

After completing the course students will receive a certificate of completion from CRUS, as well as CME or AMA credits.

COURSE FEES

Regular Attendee
3250\$

CRA Member
2950\$

Trainee
1950\$



► **RESERVE YOUR
SPOT TODAY!**



For more information

info@crus-surc.ca

View all courses

<https://crus-surc.ca/courses>

News from Newfoundland & Labrador

By Dr. Natalia Pittman

We've had a few big changes in rheumatology in Newfoundland (NL) over the past few years. Dr. Sean Hamilton is now enjoying more travel and visiting his grandchildren since his retirement two years ago. His contributions to rheumatology in Newfoundland over the decades have certainly left a lasting impression.

Dr. Shaina Goudie and Dr. Natalia Pittman have a very busy community practice. Dr. Majed Khraishi has a part-time practice in the community. We have two hospital-based physicians, Dr. Sam Aseer and Dr. Proton Rahman, and Dr. Paul Dancey who is kept busy as our pediatric rheumatologist for the province.

There are some new additions to our group including Dr. Kristina Roche, our newest community rheumatologist, and Dr. Amjid Rashid, who came all the way from the UK and is hospital-based.

We have had two Newfoundland rheumatology retreats in 2023 and 2024 with a very interesting talk by Dr. Hamilton about the history of rheumatology in NL. We also had some excellent guest speakers. These events were very



Newfoundland Rheumatology Retreat 2023.
(Photo Credit: Dr. Paul Dancey)

special as we don't get all the rheumatologists in the province in one room very often!

We still face many challenges including long waitlists, increased administrative burden, and limited access to primary care, making specialty care more demanding. Despite this, we are happy to report that rheumatology in Newfoundland is continuing to grow.

Natalia Pittman, MD, FRCPC

Rheumatologist,
Grace Medical Specialists
St. John's, Newfoundland



**BIMZELX IS THE
FIRST AND ONLY
IL-17A AND IL-17F
INHIBITOR.*^{1,2}**

AN OPPORTUNITY TO CHALLENGE PSA AND AXSPA WITH BIMZELX

BIMZELX is indicated for the treatment of adult patients with:¹

- moderate to severe plaque psoriasis who are candidates for systemic therapy or phototherapy
- active psoriatic arthritis. BIMZELX can be used alone or in combination with a conventional non-biologic disease-modifying antirheumatic drug (cDMARD) (e.g., methotrexate)
- active ankylosing spondylitis who have responded inadequately or are intolerant to conventional therapy
- active non-radiographic axial spondyloarthritis with objective signs of inflammation as indicated by elevated C-reactive protein (CRP) and/or magnetic resonance imaging (MRI) who have responded inadequately or are intolerant to nonsteroidal anti-inflammatory drugs (NSAIDs)

Conditions of clinical use:

BIMZELX is not authorized for use in pediatrics (<18 years of age).

Relevant warnings and precautions:

- Inflammatory bowel disease
- Serious hypersensitivity reactions
- Vaccinations
- Infections, including tuberculosis
- Pregnant or nursing women
- Women of childbearing potential

For more information:

Please consult the Product Monograph at ucb-canada.ca/en/bimzelx for important information relating to adverse reactions, drug interactions, and dosing information which have not been discussed in this piece. The Product Monograph is also available by calling 1-866-709-8444.

* Comparative clinical significance is unknown.

¹. BIMZELX Product Monograph. UCB Canada Inc. November 27, 2024. ². Data on file, UCB Canada Inc.