

# The Spondyloarthritis Research Consortium of Canada: Year in Review

By Sherry Rohekar, MD, FRCPC



The Spondyloarthritis Research Consortium of Canada (SPARCC) is continuing its mission to improve the health of spondyloarthritis (SpA) patients in Canada. SPARCC is a trans-disciplinary national research program that continues to foster innovation in SpA research. In 2018, SPARCC had three core investigative sites and 11 collaborating sites, and the dataset reached an impressive 5,656 patients who are being followed annually.

SPARCC is currently involved in several exciting genetic studies. Current investigations include identification of pharmacogenomics in psoriatic arthritis (PsA), identification of rare variants for extreme phenotypes, and single nucleotide polymorphism (SNP)-based algorithms to identify individuals who are at high risk of developing PsA or axial SpA.

Investigators in Toronto are examining the gut-joint interface in AS, as well as defining the risks and benefits of interrupting tumor necrosis factor (TNF) inhibition in patients with non-radiographic axial SpA. The SPARCC team is also achieving high profile for the application of cutting-edge imaging and bioinformatics to understand the origins of chronic pain in ankylosing spondylitis (AS). Excitement is also building in research regarding the innate immune cytokine MIF (macrophage migration inhibitory factor) which has the potential to be a new biomarker for radiographic progression in AS.

In PsA, investigators are working to define axial disease, examine mortality, remission, and malignancy rates.

SPARCC, in conjunction with the Canadian Rheumatology Association, is also in the process of updating Canadian treatment recommendations for the management of SpA. The last recommendations were written five years ago, and the treatment landscape in SpA has changed rapidly in that time.

In keeping with its mandate to foster innovation in SpA research, SPARCC funded four projects through its research pilot program in 2018 (see table below).

SPARCC also continues to work with the Canadian Spondyloarthritis Association (CSA) to improve patient education. A live patient forum in AS was held November 13, 2018, and was also videotaped and livestreamed on YouTube. More than 150 participants attended talks regarding therapy, the impact of chronic illness on mental health, and concepts in pain management.

The year 2019 also promises to be exciting for SPARCC. Fellows and early-career clinicians are encouraged to attend the SPARCC Research Fellows Training Day in Toronto on May 3, 2019. If you are interested in attending, please email Maria Morales at [maria.morales@uhnresearch.ca](mailto:maria.morales@uhnresearch.ca) – space is limited!

We will also have another call for pilot projects, which will allow us to fund three-to-four research proposals for up to \$25 000 each. Important dates include:

- Application deadline: April 30, 2019
- Notice of decision: May 10, 2019
- Funding start date: July 1, 2019

The full details of this initiative and application guidelines may be found by visiting the following link: [www.sparcc.ca/grants](http://www.sparcc.ca/grants). Applications may be sent to Maria Morales at [maria.morales@uhnresearch.ca](mailto:maria.morales@uhnresearch.ca) or via fax (416-603-9387) or telephone (416-603-5800 ext. 5093). For further details, visit [www.sparcc.ca](http://www.sparcc.ca).

We welcome anyone with an interest in SpA research to collaborate with our team. Please contact us if you would like more information. Together, we can improve outcomes for our SpA patients.

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Investigator/Affiliation	Project Title
Dr. Ejaz Mohammed Ishaq Pathan, Spondylitis Program, University Health Network Co-Investigators: Drs. N. Haroon and V. Chandran Award: \$25,000	Macrophage Migration Inhibitory Factor as a Prognostic Biomarker of Radiographic Progression in Psoriatic Arthritis
Dr. Lihi Eder, Women's College Research Institute Co-Investigator: Dr. P. Rahman Award: \$24,500	Genetic Testing and Musculoskeletal Ultrasound to Improve Early Detection of Psoriatic Arthritis in Patients with Psoriasis
Dr. Sibel Zehra Aydin, University of Ottawa Co-Investigators: Drs. D. Solmaz and J. Karsh Award: \$24,600	Accuracy of Physical Examination to Detect Synovial and Extra Synovial Pathologies in Psoriatic Arthritis in Comparison to Ultrasonography as the Gold Standard
Dr. Jonathan Chan, University of British Columbia Co-Investigators: Drs. A. C. L. So and A. Avina-Zubieta Award: \$10,000	Validation of Administrative Billing Codes for the Diagnosis of Axial Spondyloarthritis