

The CRA's 2021 Emerging Investigator: Dr. Zahi Touma

Your research focuses on patients with systemic lupus erythematosus (SLE) and measurement science with a particular interest in the assessment of disease activity, patient-reported outcomes and cognitive function. One of your most significant contributions has been development of the SLE disease activity indices — the SLEDAI Responder Index-50 (S2KRI-50) and SLEDAI-2K Glucocorticoids Index (SLEDAI-2KG). Can you tell us more about your work and the development of these SLE disease activity indices?

My work encompasses clinical, research, teaching and other administrative tasks. Developing a new instrument is always exciting. The first step is to have an understanding of why you need a new instrument and what needs to be measured and in whom, in addition to its benefit to rheumatology.

Each of these instruments brings a new concept in the way you assess disease activity where S2KRI-50 is focused on measuring $\geq 50\%$ improvement in disease activity over time, while SLEDAI-2KG measures disease activity while accounting for prednisone dosage.

Another major focus of your research is the assessment of cognitive impairment in patients with SLE. You've established the NeuroLupus Program with the goal of developing improved methods of identifying cognitive impairment in SLE and understanding its course over time and impact on health-related quality of life and productivity. Why was creating this program so important and what have you learned so far?

There is an unmet need to improve and standardize the way we measure and define cognitive impairment in SLE in ambulatory settings. Cognitive impairment is highly prevalent among patients with SLE, and we have shown this in our recent systematic review of the literature. More recently, we also highlighted the lack of agreement between studies on tests used to measure cognitive impairment and the way it is defined. The current available measures of cognitive impairment are associated with time and cost burden and our work provides evidence on the validity of new instruments that can facilitate the assessment of cognitive function. Our future projects are focused on iden-



tifying different cognitive phenotypes in SLE, studying the role of functional MRI brain images in cognitive assessment and the role of biomarkers.

Having published 117 peer-reviewed manuscripts and several book chapters, you recently also edited the Outcome Measures and Metrics in SLE book, which was published in August 2021. What has your experience as editor of this book been like?

This was a very demanding and lengthy process but very rewarding. It takes a huge amount of work to develop the main theme of the book, the chapters, inviting authors, editing, proofing and finally publishing the material.

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

Currently, I am focused on a major project related to the OMERACT SLE working group. We have developed a large international group of lupologists, scientists, patients, and other stakeholders, to revisit the domains and instruments used in the assessment of SLE.

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

The life of a scientist is full of challenges and achievements, and you have to be dedicated to the science. Ultimately, the goal of improving patients' quality of life is the reward. Only perseverance, hard work, and time will help you achieve your goals.

What has been your proudest accomplishment to date in your research?

Everything plays an equal part in all of my achievements, and currently my biggest joy would be guiding my students and watching them flourish in their careers.

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

I am honoured to have my peers recognize my efforts and honour me with this prestigious award.

For those wanting to pursue rheumatology and a career in research, what advice would you give them?

Anyone pursuing rheumatology as a specialty should understand how rewarding it is to help patients and make a difference in their lives. For those pursuing research, it is satisfying to know that you will contribute to knowledge advancement, and this requires a lot of dedication.

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

I enjoy clinical work and I would have dedicated all my time to this.

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

I am very artistic so I would enjoy the time painting.

If you could eat one food for the rest of your life, what would it be?

I love Italian cuisine and I would enjoy various pasta dishes and fresh vegetables.

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

One is more than enough.

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Raising Awareness and New Patient Resources

By Trish Barbato, President and CEO Arthritis Society

It's an exciting time at the Arthritis Society as we launched a bold new campaign to kick off Arthritis Awareness Month in September to bring much-needed awareness about the fire of arthritis.

I hope you'll join us in raising awareness by setting the record straight whenever you hear "it's just arthritis."

And while we're raising the alarm about the seriousness of arthritis, we're continuing to develop high-quality resources for people living with the disease.



We've added some new "life hack" videos to our library. These videos show tools and tricks to help people navigate everyday activities more easily such as leisure time, working in the kitchen or getting dressed. If you haven't already, we encourage you to share these with your patients. They can be found at arthritis.ca or through our YouTube channel.

In June, we released a report on wait times for joint replacement surgeries. We're calling for provincial leadership on the issue and the creation of a Canadian wait times task force to ensure that wait times will be reduced permanently.

We also commissioned a study from the Arthritis Community Research Evaluation Unit that revealed 30% of people living with osteoarthritis were diagnosed before age 45 and the impact of the disease on them is, in many ways, more profound than in older adults.

As always, thank you for sharing our resources with your patients and be sure to watch for our awareness campaign. It's time to be audacious about fighting the fire of arthritis.

