



IMPACT IN MOTION

THANK YOU FOR STANDING BY US IN 2020

Spring/Summer 2021

BREAKTHROUGHS AND BREAKING NEWS

Whether working in the lab, a clinic, or in the community, researchers are turning your donations into discoveries that are improving care for people living with arthritis today, and opening doors to new treatments for tomorrow. Here are just a couple of the advances you made possible.

Improving joint protection for people with hand osteoarthritis

The Problem: Osteoarthritis (OA) in your hands can be extremely debilitating — and yet joint programs to alleviate pain and improve function for people with hand OA are often outdated and lack concrete evidence.

The Goal: To gather actionable evidence on the impact of daily tasks on hands to help develop new, more targeted therapies.

The Research: Dr. Joy MacDermid at Western University has created an innovative new way of measuring the impact of daily tasks on hands using a sensor embedded in a fake fingernail.

The Future: This study could lead to the development of new ways to improve hand function and preserve joints, which would greatly improve the quality of life of people living with hand OA.

Understanding rheumatoid arthritis in high-risk populations

The Problem: First Nations people have elevated rates of rheumatoid arthritis (RA), but it's not clear why.

The Goal: To identify the factors that precede or aid in the onset of RA in First Nations people, which could help researchers develop new prevention strategies.

The Research: Dr. Vidyanand Anaparti at the University of Manitoba has discovered that microRNAs and methylation — cellular switches that turn genes on and off — have a direct influence on the genes involved in RA.

The Future: These findings could help identify people at risk of developing RA, not only in Indigenous communities, but in all populations.

Your generous support makes life-changing research like this possible.

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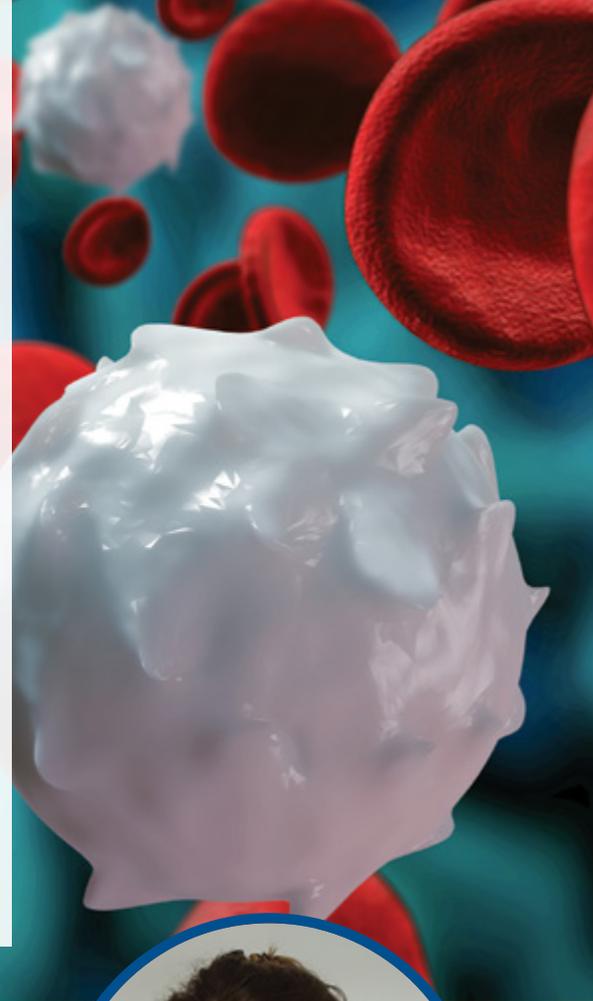
RESEARCHER PROFILE

Digging deeper to reduce joint pain: Dr. Marie Bellio

Research has shown that white blood cells, called neutrophils, can increase the development of arthritis complications by creating a sense of pain when leaving blood vessels and invading the joints. Dr. Marie Bellio is investigating if platelets — blood cells that prevent bleeding — play a role in helping neutrophils leave blood vessels.

Dr. Bellio will analyze the blood of people with rheumatoid arthritis (RA) and will use sophisticated instruments to examine platelets and neutrophil interactions. She also plans to block the interactions between platelets and neutrophils to see if this affects arthritis development and pain.

If the study shows that changing the interactions between neutrophils and platelets can reduce pain, it could lead to the development of new therapies for pain management and improve the quality of life of people living with RA.



Your support launches rising stars

Dr. Bellio's research is being funded through the Launch a Star fund, which is supported by generous Leadership Circle donors. We created the Launch a Star fund to give promising early career researchers the opportunity to push even further to find the next big discovery.

Check out our top 10 research advances for 2020 and see how your support is accelerating life-changing discoveries at arthritis.ca/research



\$4.2M
invested



77 lead
researchers

With
your support,
here are
some of the
investments the
Arthritis Society
made in arthritis
research in
2019-2020.



78
active
research
projects

32
research
institutes



Enough is enough: Annie Lévesque's story

Annie Lévesque, 42, is the mother of two teenagers. Diagnosed with osteoarthritis at 18 and rheumatoid arthritis at 32, she can barely walk a kilometre today.

In March 2020, at the very beginning of the COVID-19 pandemic, Annie's doctor informed her that she had to undergo a joint replacement of both hips. "When I first learned of the one-year wait time for my surgery, I was surprised and felt extremely discouraged," she says. Since then, the delays for joint replacements have increased exponentially because of the pandemic. Annie's hip replacement wait time may extend from one to two years.

The impact of these delays is significant for Annie and so many other Canadians like her. "Having my surgery put on pause is disastrous for me," she says. "If we have to keep waiting, there are many people in pain like me who may not have the health to undergo surgery when the time finally comes."

In addition to the pain and lack of mobility she lives with every day, Annie also has to deal with the financial impact the delay is causing. The cost of pain relievers, treatments, medications, task assistance and day-to-day adjustments continues to add up.



After attending a webinar about delayed surgeries offered by the Arthritis Society, Annie felt inspired and empowered to speak out. She has joined voices with 4,000 other Canadians who have called on the provincial and federal governments to find solutions to joint replacement delays affecting people with osteoarthritis.



With your support, the Arthritis Society will keep advocating provincial and federal governments to prioritize joint replacement surgeries and reduce the unacceptable wait times for Canadians like Annie.

[Learn more at arthritis.ca/advocacy](https://www.arthritis.ca/advocacy)

DID YOU KNOW?

- 99% of knee and 80% of hip joint replacements are due to arthritis
- Data before COVID-19 shows that 30% of patients who required joint replacement surgery did not have their procedure done within the recommended wait time
- Hip replacements have increased 20% and knee replacements 22% over the last 5 years



Gaining essential insights from people with lived experiences

People living with the real-life impacts of arthritis bring unique and important insights to research. They can help ensure that research strategies are informed by what matters most to them, interpret findings in the context of their lived experiences and share research outcomes with others in a relatable way.

To assess the effectiveness of patient engagement in research, Dr. Linda Li assembled a team of researchers, trainees and people living with arthritis. Co-led with Post-doctoral Fellow Dr. Clayton Hamilton, the team used a rigorous consensus-building approach to develop a questionnaire exploring areas like team environment and interactions, support, benefits and feeling valued.

This questionnaire provides a new tool for the research community to assess whether they are truly engaging people affected by arthritis in a meaningful way. Using the questionnaire to measure the effectiveness of patient engagement can establish a benchmark of success and encourage continued improvement in how researchers partner with patients to have the biggest impact on the lives of those living with arthritis.

“When I was a trainee, I benefited from the wisdom of patient partners in my research. Today, with a new generation of patient partners, my trainees are learning firsthand about meaningfully engaging patients in research. The contributions of patients in arthritis research cannot be overstated.”

- Dr. Linda Li,
University of British Columbia

To learn more about patient engagement in research, visit arthritis.ca/research

SPEAKING OUT FOR CHANGE

Joint replacement surgeries must become a priority

Wait times for joint replacement surgeries are unacceptably long, causing unbearable pain for too many Canadians, like Annie Lévesque, and the pandemic has made things worse. Not a single province achieved the medically recommended six-month target in 2020.

To address this crisis, the Arthritis Society brought together leaders from across the country to form a Pan-Canadian Working Group, with the goal of developing action-oriented recommendations to tackle the backlog and provide long-term solutions. Once the report is completed, we will advocate to governments to adopt and implement the recommendations.

Your support makes our life-changing advocacy efforts possible. With you in our corner, we will keep fighting for people affected by arthritis. Visit arthritis.ca/advocacy to learn more.



Create your legacy: a future free from arthritis

Throughout your life, you've planned for vacations, home purchases, retirement and even how your final wishes will be carried out. What if you could also plan to leave a lasting legacy of impact for people affected by arthritis?

Including the Arthritis Society in your Will is a meaningful way to invest in cutting-edge research and fund essential programs and services for future generations. After ensuring that your loved ones are taken care of, you can designate a percentage of the residual of your estate to help create a future free from the devastating effects of arthritis.

May is National Leave a Legacy month and a perfect time to learn more about leaving a gift in your Will. To get started on your own legacy journey, visit arthritis.ca/plannedgiving or call 1-844-979-7228.



“It’s important to give back to causes that speak to your heart.”

- Cheryl Johnson,
legacy donor and volunteer

When I was at my weakest and most vulnerable, learning to cope with three types of arthritis, and being told that I would be wheelchair bound for the rest of my life, people from the Arthritis Society lifted me up. They encouraged me to become a volunteer and use my experiences to help others who are struggling.

I decided to leave a gift to the Arthritis Society in my Will so that the vitally important work that they're doing will continue. I know my contribution will be directed to where it can make the maximum impact and help the most: supporting people affected by arthritis and funding research to one day find a cure. I am also confident that this organization is fiscally responsible. It's important for me to leave something behind. I hope you will join me in giving the **gift of a lifetime**.



INFORMATION AT YOUR FINGERTIPS: ARTHRITIS TALKS

Managing arthritis can be challenging, but getting the relevant information you need doesn't have to be. Arthritis Talks webinars bring the latest information, tools, news and guidance from arthritis experts straight to your computer, tablet or smartphone.

Here is just a sampling of webinar topics:

- COVID-19 and arthritis
- Strategies to manage pain
- Medical cannabis
- Managing arthritis with assistive devices

To learn more or to register for upcoming Arthritis Talks, visit arthritis.ca/arthritis-talks

Vaccines and arthritis: what you need to know

For people affected by arthritis, an episode of another illness or disease could have serious consequences.

However, some people living with a chronic condition may question whether they are a good candidate for vaccines.

To know which vaccines are recommended and safe for someone living with arthritis, here are a few things to consider and discuss with your healthcare provider:

- Most of the major adult vaccines, including shingles, tetanus, diphtheria and pneumococcal, are inactivated vaccines, which means they do not contain a live virus. Inactivated vaccines are generally considered safe and effective in people taking antirheumatic drugs.
- The yearly flu shot, which is also an inactivated vaccine, is generally recommended for people affected by arthritis.
- Preferably, inactivated vaccines should be administered before starting disease-modifying anti-rheumatic drug treatments (DMARDs), but treatment should not be withheld or postponed.
- Some less common vaccines, such as yellow fever, contain a living but weakened strain of a virus or bacteria. Live vaccines are not usually recommended for people taking biologics and long-term corticosteroids.



Should people with arthritis get the COVID-19 vaccine?

At this time, there is limited data on the use of the COVID-19 vaccine for people who are immunosuppressed because of disease or medications they are taking. This could include people with inflammatory forms of arthritis. We suggest you discuss the risks and benefits of the COVID-19 vaccine with your healthcare provider.

Donate today to help create a future free from arthritis.

Giving is easy:

By phone: 1-855-834-4427

Online: arthritis.ca/givenow

By mail: Return the form attached to our letter



THANK YOU for your incredible generosity and partnership.