



IMPACT IN MOTION

YOUR LEADERSHIP IN ACTION

Summer/Fall 2022



FIGHTING THE FIRE OF ARTHRITIS WITH THE POWER OF INNOVATION

Q&A with Trish Barbato, President & CEO

The Arthritis Society wants to uncover, unlock and unleash innovative solutions to transform lives. We sat down with Trish Barbato to learn about this bold, change-making approach.



Q. Why is innovation important for the Arthritis Society? We have a disease to crush. With rapid changes in healthcare, coupled with the dramatic rise in arthritis diagnoses expected in the next 20 years, safe is no longer

an option. We have to expand our thinking, and that means investing in arthritis innovation.

Q. Tell us about the three parts of your Innovation Strategy? We have created Ignite Grants to inspire breakthrough research. Not all of the high-risk projects we support will succeed, but even if one in 10 leads to a change, it's worth the investment.

Through our Social Impact pillar, we're hoping to make infant screening for hip dysplasia more widely available across Canada. If hip dysplasia is treated early, it will greatly reduce the likelihood of osteoarthritis in later life.

We created the Arthritis Ideator Awards to find entrepreneurs who are doing innovative work the world doesn't know about. We want to unearth new products and technologies that can help people with arthritis and bring those innovations to life. We received 21 submissions in the inaugural year! (Turn the page to see the winners.)

Q. Why should donors support innovation? Because you will have a direct impact. The fire of arthritis can no longer be ignored. Everything we do and everything your donations support is going to make a difference in the lives of people living with arthritis, now and in the future. You should feel really good about investing in innovation because you're going to get a return. 😊

"We have a disease to crush. Innovation will help us do just that." — TRISH BARBATO

WHAT'S INSIDE

- Arthritis Ideator Award Winners 2
- Stories of Inspiration 3
- Researcher Profile 4
- Arthritis Pain Management Guide 4



Meet the first-ever Ideator Award winners

The Arthritis Ideator Awards were created to uncover new ideas, products and technologies that will chart a new course for arthritis management and care. The following four winners each received a \$50,000 grant to scale up their idea so more people can benefit from it.

An app that enables self-care

OPERAS is an app-based program that captures information on the go, providing trends on symptoms, disease activity and treatments. People living with arthritis can keep track of medications, collect physical activity data and create action plans. Says OPERAS creator, Dr. Linda Li, "It gives a detailed picture to help users lead healthier, pain-free lives." The Ideator Award grant will help make OPERAS accessible to more people.

A revolutionary diagnostic tool for knee osteoarthritis

KneeKG is a dynamic tool that examines biomechanical markers while the knee is in motion, enabling custom treatment plans. "It's like an electrocardiogram for the heart but for the knee. It tells the doctor exactly what's going on in the knee, and what needs to be treated," says Michelle Laflamme, CEO of Emovi, which produces KneeKG. The Ideator Award grant will help bring KneeKG to 500 healthcare centres in Canada.

Smart in-soles that can help improve your gait

PROVA Innovations has developed a gait rehabilitation system for people with early and mid-stage knee and hip osteoarthritis. Specially designed in-soles in a person's shoes act as a portable gait lab and virtual trainer on the go. Says Matthew Rosato, PROVA Innovations founder, "Our innovative approach works in real time, outside of the clinic, whether the patient is walking, running or climbing stairs." The Ideator Award grant will help make these smart in-soles available to more people.

People's Choice Winner: Guided Hands

Guided Hands is an assistive device that guides hand movements to enable people with limited hand mobility to write, draw and access technology such as touch-screen devices. "Improving quality of life is our mission," says Lianna Genovese, CEO of ImaginAble Solutions, which produces Guided Hands. The Ideator Award grant will help get more of these innovative devices into the hands of more people living with arthritis. 🍷



The Arthritis Ideator Program is all about finding innovative solutions to fight the fire of arthritis. And your generous support makes it possible.

Audrie Cossar has always been a fighter

“Some days are better than others, but the pain is always there. You just have to keep fighting.”



Now 86 years young, Audrie Cossar has been living with osteoarthritis and fibromyalgia since she was in her early 30s. A mom with four young children at the time of her diagnosis, Audrie felt like she had to pick and choose what she could do. “I had to pace out the day so I could keep going,” she says.

Growing up fast because of arthritis

Audrie is no stranger to the challenges of living with arthritis. She was only 3 years old when her mother Jean was diagnosed with rheumatoid arthritis, which was referred to as “housemaid’s knee” back then. “My mother’s knees were swollen and she could barely walk,” says Audrie. “I had to help as much as possible.” Audrie remembers helping with the shopping even before she could read — her mother would draw pictures of the stores she wanted Audrie to visit.



Jean, Audrie's mom

“Over the years, arthritis hit the rest of her body in different ways and never left her,” says Audrie. “My mother was in pain for all of her life.”

Three generations of arthritis

Two of Audrie’s four children have arthritis. Her youngest son has ankylosing spondylitis and her youngest daughter has rheumatoid arthritis. “It has really stopped her in her tracks,” says Audrie. “She had a flourishing cake decorating business, but had to close it down because of arthritis. It became too painful to squeeze the icing bags.”

Three generations of support

Audrie and her mom both received support from the Arthritis Society over the years. And Audrie and her daughter have made extensive use of our online resources and webinars, especially during the pandemic. In gratitude for the support she and her family have received, Audrie became an Arthritis Society donor more than 20 years ago. “There are many other families like mine who are impacted by arthritis. I want to help ensure support is always there for them,” she says.

Audrie also hopes her donations will help advance research into more effective treatments, so her six grandchildren and 13 great-grandchildren won’t have to keep fighting the same fight. “We need researchers to keep working on this if there is ever going to be an end to it.” 😊



RESEARCHER PROFILE

One step closer to curing osteoarthritis back pain: Dr. Lisbet Haglund

Since we first introduced you to Dr. Haglund's research, she and her team have made exciting progress thanks to your leadership support.

The problem: Chronic low back pain is common in people with osteoarthritis. Osteoarthritis in the back can occur when intervertebral discs (IVD) – the discs between the vertebrae of the spine – degenerate.

The research: When IVD cells have stopped growing and multiplying but haven't died, they are referred to as senescent. Dr. Lisbet Haglund and her team at McGill University are investigating ways to kill IVD cells that are senescent using novel therapies.

The findings: The researchers have proven that two novel therapies, called RG7112 and O-vanillin, can kill senescent IVD cells. The drugs effectively reduced inflammation and degeneration in IVD samples obtained from patients undergoing back surgery. The therapies have also been effective in reducing pain in an animal model.

Dr. Haglund's research could revolutionize how lower back pain is treated, bringing relief to millions of people worldwide. Thanks to your support, we're one step closer to finding a cure for osteoarthritis-related back pain. 😊

Your support helped drive this research forward

Last year, we reached out to our leadership donors asking for a special donation in support of game changing research like Dr. Haglund's. We're thrilled to let you know that you helped us raise \$50,000 to fund critical arthritis research.

NEW: Arthritis Pain Management Guide

With your support, we recently launched our new Arthritis Pain Management Guide. You'll find all sorts of helpful articles and videos, from understanding pain to self-management tools to regional support groups and clinics. **Learn more at arthritis.ca/pain**

Donate today to help extinguish the fire of arthritis



Giving is easy:

By phone: 1.855.834.4427

Online: arthritis.ca/givenow

By mail: Return the enclosed form in the postage-paid envelope

THANK YOU for your inspiring generosity and partnership.