



### **Arthritis Foundation Science Highlights 2024**

As we enter 2025, the Arthritis Foundation reflects on a year of significant achievements. In addition to supporting research in osteoarthritis and rheumatic diseases through peer-reviewed grants, we have made notable progress in the clinical trials we support. The Foundation has continued to address the needs of the rheumatology workforce and has increased its presence in the larger conversation on arthritis research funding and policies that support them. These achievements are a testament to our collective efforts and our continuing impact on arthritis.

Continuing to make strides in closing the gap in the shortage of rheumatologists, the Foundation in 2024 awarded Clinical Rheumatology Fellowships to two medical training programs that will reduce workforce barriers to care and support early-in-career physicians committed to engaging with under-served communities. Notably, with its fellowship award, the University of Iowa will create the nation's first designated Rural Rheumatology Health Track within

its Adult Rheumatology Fellowship Training Program, enabling fellows to become agents of change in their communities by addressing long-standing rural health care disparities.

The Foundation partnered with the <u>American</u>

Orthopaedic Foot & Ankle Society® (AOFAS) to kickstart the <u>Foot and Ankle Arthritis Development</u>

Program. This venture will provide medical students and residents from underrepresented groups with valuable training and mentoring opportunities nationwide. This program marks the second partnership between the two organizations.

We have also been steadfast in our support of several osteoarthritis-focused clinical trials. Launched in 2023, **PIKASO** (Post-Injury Knee Arthritis Severity Outcomes) is a randomized phase II study that will test if metformin, a drug widely used for managing type 2 diabetes, can prevent osteoarthritis progression in people at elevated risk for developing post-traumatic











osteoarthritis. This year, Cleveland Clinic and Emory University joined as patient-recruiting centers, bringing the overall number of PIKASO sites to seven. The multi-institutional team also recently published a manuscript in the journal Osteoarthritis and Cartilage Open that outlines the rationale, study design and implementation of the PIKASO study. The potential impact of this trial is significant, as successful results could lead to a new, non-invasive treatment for osteoarthritis.

In April 2024, the Arthritis Foundation and the Hospital for Special Surgery (HSS) co-hosted a two-day Rheumatoid Arthritis (RA) Research Summit. The event included discussions on mechanisms of RA pathogenesis, treatment non-response to therapeutic agents, and comorbidities. These talks, written into a series of manuscripts by presenters, is now published in the journal **Seminars in Arthritis and Rheumatism**. The Foundation has also awarded six RA Research Program awards, totaling to approximately \$1.5 million, to investigators who will study underlying causes for the development of RA and RA comorbidities as well as the social determinants of RA treatment adherence. The Foundation has dedicated over \$1.6 million to rheumatology research in pediatrics through its partnership with the Childhood Arthritis and Rheumatology Research Alliance (CARRA).



To bolster the Foundation's commitment to improving the lives of adults and children with arthritis, President and CEO Steven Taylor was appointed to the Advisory Council of the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS). This prestigious role underscores the Foundation's leadership in public health.

In 2025, the Arthritis Foundation will host its third Diversity, Equity and Inclusion (DEI) Science Summit, bringing together eminent scientists and experts to discuss pertinent topics in DEI and arthritis. In addition, the Foundation will expand its portfolio to include grants for research in patient-reported outcomes and new avenues of DEI research, furthering our commitment to inclusivity. For the next round of clinical fellowships, the Foundation has increased the annual funding to \$75,000 per year and has adjusted the funding duration to coincide with the board eligibility duration of each program.

To read more about the Arthritis Foundation's science and research programs, visit arthritis. org/science.

#### **ADVOCACY UPDATE**

In 2024, the Arthritis Foundation made remarkable progress in advocating at the federal, state and grassroots levels for people living with arthritis.

#### The Department of Defense **Arthritis Research Program**

Due to strong advocacy from the Arthritis Foundation and others, Congress has now included the Department of Defense Arthritis Research Program in the annual appropriations process. The program was funded at \$10 million. The Foundation will continue to urge Congress to increase that funding level to \$20 million.

#### **Judicial Advocacy**

In 2024, the Arthritis Foundation began engaging in judicial advocacy by monitoring and educating patients on key court issues. The Foundation welcomed a court ruling that ensured that copay assistance counted toward patients' out-of-pocket costs and advocated keeping the Food and Drug Administration's authority to approve medications for drug safety and patient access.

#### **State Legislative Successes**

The Foundation is pleased to report that its continued advocacy on priority issues, including copay accumulator limits, step therapy reform and access to biomarker testing, compelled 15 states to enact new legislation.

#### Learn more about the accomplishments of the Arthritis Foundation's advocacy efforts in 2024.

In 2025, advocacy efforts will focus on priority states (Texas, California, Pennsylvania, New Jersey and Michigan) toward building relationships with the 119th Congress and championing key issues. Read the Foundation's 2025 advocacy priorities.











### Leading the Way in Rheumatology Care & Research

Scientists, health care professionals, patients, researchers, fellows, supporters and many others joined us in Washington, D.C., for three events we hosted during the American College of Rheumatology's Convergence in November. Arthritis Foundation President and CEO Steve Taylor and the advocacy team hosted a brunch for the Arthritis Healthcare Forum. The science team joined Taylor to host an OA Clinical Trials Brunch, where three Foundation-funded osteoarthritis (OA) clinical trials were presented. And we welcomed many of our current and past fellows, researchers, donors and other friends and supporters for the 2024 Arthritis Foundation Welcome Reception.

#### The Arthritis Healthcare Forum

The shortage of rheumatologists and allied health professionals was the focus of our Arthritis Healthcare Forum presentation. A panel of patients, parents and providers shared their personal experiences and insights with a packed audience at the brunch.

The number of rheumatologists in the U.S. is shrinking as the population of people with rheumatic conditions is growing, and that's especially true of **pediatric rheumatologists**. Fewer physicians are choosing to specialize in the field, which can be more demanding than other specialties, partly because of the shortage.



Speakers at the Arthritis Healthcare Forum (from left to right): Patient speakers, Suzy Palmer, Patrick Campbell and Heidi Barrett. Health professionals Ekemini Ogbu, MD, MSc, and Andy Chan, MD, PhD

Rheumatology care is especially hard to find in rural areas and other under-served communities — some states lack any pediatric rheumatologists. But as Heidi Barrett, parent of a child with arthritis, explained, getting timely diagnosis and care can be difficult even in metropolitan areas. Her home city, Seattle, has more pediatric rheumatologists than many places. But because they also care for patients in Alaska, Oregon,



The Arthritis Foundation Science Team (from left to right): Susanne Nilson, MBA, Paul Larkin, PhD, Michelle McLeod, PhD, Jason Kim, PhD, and Mandy McQuiller, MBA

Idaho and beyond — who get priority care because they must travel long distances to receive it — local patients often wait months to get an appointment.

Such delays in diagnosis and treatment — whether due to long lead times before appointments, insurance barriers or lack of knowledge — lead to poorer outcomes for the patients.

The Arthritis Foundation is working to bridge that gap through <u>its fellowship program</u> and <u>advocacy efforts</u>, among other initiatives.

Complicating care, especially for children, is that autoimmune arthritis is often just **one of many conditions** they are dealing with, so they need an army of medical professionals, explained Patrick Campbell, also a parent of a child with juvenile arthritis. Even with his background in public health, learning to navigate various health systems, multiple appointments and insurance challenges can be a full-time job, he said. In just the first year of diagnosis, his child had around 150 appointments.

Dr. Ekemini Ogbu, a pediatric rheumatologist at Cincinnati Children's Hospital Medical Center, discussed starting pediatric rheumatology programs at Johns Hopkins Medicine. In them, multiple disciplines coordinate so patients receive more holistic care — one way of addressing the need that Campbell pointed out.











Panelists talked about several potential solutions, such as introducing more students to rheumatology at an even earlier point in their education — perhaps even high school — and providing relief from burdensome student loans.

Dr. Andy Chan, senior vice president of research at Genentech, discussed the promise of artificial intelligence in rheumatology and medicine in general, from helping facilitate office operations to accelerating diagnosis and treatment. It's already being used on a small scale, he pointed out; Al can take notes so the doctor can focus more fully and engage with the patient, improving communication.

#### **OA Clinical Trials Brunch**

The Arthritis Foundation and its Science Department staff played host to a packed room full of scientists and medical professionals from academia, industry, and government to hear about cutting-edge clinical trials into osteoarthritis (OA) that the Foundation is funding. Lead investigators presented each of their three clinical trials aimed at preventing or delaying osteoarthritis.

Cale Jacobs, PhD, director of outcomes research at Mass General Brigham, explained the PIKASO (Preventing Injured Knees from Osteoarthritis Severity Outcomes) clinical trial. OA currently has no disease-modifying treatments available; typically, people manage their OA pain until they opt for joint replacement surgery.



Cale Jacobs, PhD (left), and David Felson, MD, MPH (right), attend the OA Clinical Trials Brunch

PIKASO is a double-blind, placebo-controlled, randomized clinical trial testing whether metformin, commonly used to treat type 2 diabetes, can slow or prevent OA progression in people with major knee injuries. The trial is currently enrolling participants — those who are scheduled for surgery to repair an ACL tear that can be followed by the onset of early osteoarthritis. The multi-site trial will last for five years.

Steven Messier, PhD, professor and director of the J.B. Snow Biomechanics Lab at Wake Forest University, is well known for his research in exercise and weight loss for OA. He is now principal investigator of The Osteoarthritis Prevention Study (TOPS), looking at whether weight loss and exercise can also prevent OA in women at risk of developing it. This multi-site study is currently recruiting participants.

Elena Losina, PhD, presented the Knee Arthroplasty Activity Trial (KArAT). Co-director of Orthopedics and Arthritis Center for Outcomes Research at Brigham and Women's Hospital, she is looking at physical activity levels after knee replacement surgery, one of the most common surgeries in the United States. Although physical activity can improve health and quality of life and reduce pain, most people who have a knee replacement do not become more active, even with less knee pain and more mobility. The multi-site KArAT study is looking at post-surgical results and ways to increase physical activity levels.

Two researchers working with Dr. Losina, Samantha Chin and Daniel Betensky, both presented posters at ACR Convergence. Chin's focused on activity levels in people with advanced knee OA and Betensky's compared the costs of bariatric surgery with weight-loss drugs like Ozempic for knee OA. Weight loss can ease knee OA.



Attendees at the 2024 Arthritis Foundation Welcome Reception include (from left to right) Steven Taylor, MBA, Jason Kolfenbach, MD, Julie Campbell, MD, and Peggy Crow, MD

### 2024 Arthritis Foundation Welcome Reception

The Arthritis Foundation wrapped up the weekend by hosting an evening reception for volunteers, past and current fellows, funded investigators, supporters and other Foundation friends. In addition to great networking opportunities, this event included remarks by Dr. Jason Kolfenbach, Fellowship Program Director at the University of Colorado, Denver, and by Dr. Julie Campbell, formerly a Foundation-funded Fellow and now the only full-time pediatric rheumatologist in Montana, on the impact that the Foundation's funding of fellowship training has had for them.













#### **Announcements**

### Request for Proposals: 2025 AF-AOSSM Shoulder Arthritis Think Tank Research Program

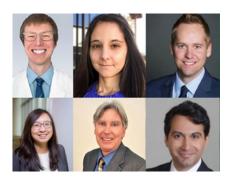
This Request for Proposals (RFP) invites applications for investigator-initiated clinical research proposals to study interventions to stop or slow the development and progression of osteoarthritis (OA) related to shoulder pathology. Studies are encouraged to identify and utilize high-risk patients for rapidly progressing OA. **The earliest submission date is January 1, 2025, and the letter of intent is due on January 31, 2025**. The principal investigator (PI) or a co-PI must be a practicing orthopedic surgeon trained in sports medicine or shoulder and elbow and a member of the American Orthopaedic Society for Sports Medicine (AOSSM). The funding for this initiative is provided through a collaborative effort between the Arthritis Foundation's OA Clinical Research Program and the AOSSM Research Committee.

For application and instructions, please log into <u>ProposalCentral</u>, click the Grant Opportunities tab, and search for Arthritis Foundation.



#### **Request for Proposals: Summer Science Internship**

The Arthritis Foundation is seeking applications from high school juniors, seniors and college undergraduates with an interest in the fields of rheumatology and immunology, with a focus on arthritis and related autoimmune diseases. This 8-week internship offers experience in basic laboratory (bench) research, clinical epidemiological/translational (patient oriented) or bioinformatics (computational) research at UCSF and affiliated institutions. For application and instructions, please see <a href="here">here</a>. The due date for applications is March 10, 2025. All applications are due by 5:00 p.m. ET.



#### 2024 Rheumatoid Arthritis Research Program Awards

The Arthritis Foundation announced the awardees of the 2024 Rheumatoid Arthritis Research Program grants, totaling approximately \$1.5 million. The grants have been awarded to six investigators whose research will unveil crucial insights into the underlying causes for the development of RA and RA comorbidities as well as the social determinants of RA treatment adherence. Read the full news article.













#### The Arthritis Foundation TRUST Trial Gout Biobank

The Arthritis Foundation has dedicated \$407,785 over three years toward the TRUST Trial Gout Biobank, which will store biological samples from individuals with gout. This biobank will help researchers learn more about the biology of gout, especially gout flares. In particular, researchers hope to identify biomarkers of gout progression, gain insights that will improve clinical trials, and find opportunities for developing new treatments. The TRUST trial, funded by an \$11 million NIH grant, compares two treatment strategies for gout. It will include 660 participants who have been treated for two years. Participants will also donate extra blood samples to the biobank for use in future genetic, proteomic and transcriptomic research.



#### **Biomarker Testing Experience Survey**

Arthritis Foundation is partnering with the American Cancer Society Cancer Action Network (ACS CAN) to understand providers' experiences with biomarker testing, and we want to hear from you.

This brief online survey will take no more than ten minutes of your time and is being conducted anonymously, so your responses will be used only in aggregate and cannot be attributed to you. There is no need to prepare in advance for the survey questions; only your opinion is sought. The survey will cover current use and practices regarding biomarker testing across cancer types as well as other disease areas and seeks to understand any challenges that you face.

Click here to take a quick, confidential survey. The first 100 qualified respondents can receive a \$50 Amazon gift card.



#### State of Arthritis Research Webinar, February 25, 12:00 – 1:00 p.m. ET

Join us for an exciting and informative webinar on the State of Arthritis Research. Hear keynote speaker Kristi Kuhn, MD, PhD, Professor, Medicine-Rheumatology at the University of Colorado Anschutz Medical Campus discuss mechanisms by which gut bacteria can generate RA-associated autoantibodies, and consequently the development of RA. You will also hear from the Arthritis Foundation staff leaders about how the Arthritis Foundation is contributing to advancing the science in arthritis, key policy issues that impact arthritis patients' access to care and ways to access Arthritis Foundation patient resources and support services.

The event is free, but pre-registration is required. Learn more about the event and registration.



#### Juvenile Arthritis Family Summit, Salt Lake City, Utah, July 10 – 13, 2025

The annual JA Family Summit (previously known as the National JA Conference) is the Arthritis Foundation's signature nationwide event for families affected by juvenile arthritis and childhood rheumatic diseases. This four-day educational conference focuses on health, wellness and fun for families, children and teens (ages six months and up) and young adults (ages 18-30) affected by juvenile arthritis and related childhood rheumatic diseases. Learn more about registration, hotel reservations, and volunteer opportunities.









#### **COMMUNITY IN ACTION**

Make an impact! Join the Arthritis Foundation's signature events happening at a location near you.

<u>The Walk to Cure Arthritis</u> is the largest arthritis gathering in the world. It celebrates people living with arthritis while raising funds.

#### Carolina Hills Classic Bike Tour (CHC),

presented by Amgen, is a fully appointed and e-bike-friendly road cycling adventure in the foothills of the unmatched beauty of the Blue Ridge Mountains. Fundraising from this event fuels Arthritis Foundation advocacy, scientific research and life-changing programs. Explore the quiet winding roads, vibrant art scene, and welcoming hospitality of this premier Southeastern cycling destination.

Orthopedic Paceline Challenge is calling for nominations across the country for orthopedic surgeons. Clip in for an iconic cycling experience as an orthopedist ambassador at the inaugural Carolina Hills Classic Bike Tour in June 2025. Members of the Medical Honoree Paceline will enjoy epic riding and national recognition as they raise funds for a better future for everyone living with arthritis.

California Coast Classic Bike Tour, presented by Amgen, is a scenic bike ride that takes place over eight days and covers 525 miles along the coast on U.S. Highway 1. The tour starts in the heart of San Francisco and ends on the iconic strand of Los Angeles.

**Ride Your Way with Arthritis Cycling Experience** allows you to participate in our signature cycling events virtually if you are unable to attend in person.

To learn more about our events and to participate, visit arthritis.org/events.

#### **LET'S CONNECT!**

To ensure you are receiving our most up-to-date communication from Joint Matters, please visit our website to confirm your subscription.

You can also email us at <u>afscience@arthritis.org</u> for queries and to unsubscribe from *Joint Matters*.

# The 2025 Pathways Conference, March 28–29, 2025

March 28 - 29, 2025

#### 2025 PATHWAYS CONFERENCE

The Westin Chicago Lombard

GET INSPIRED. BE EMPOWERED. SPREAD HOPE!

The annual Pathways Conference brings together people living with arthritis and the Foundation's volunteers and staff. This event will include inspiring talks from speakers sharing their secrets of success, the latest tools, resources and programs available to the arthritis community, and recognition awards for the Foundation's leading volunteers.

This year's conference will be held at the Westin Chicago Lombard and is free to attend. **Register for Pathways**.

## Educational Resources for Your Patients

#### **Live Yes! Connect Groups**

Connect Groups provide supportive social connections and are open to parents/guardians of children with rheumatic diseases and to adults living with any type of arthritis or rheumatic diseases. These virtual and in-person groups bring people together for fun social and informative educational events and activities focused on mutual support and positive coping strategies for living well. <a href="Learn about our Connect Groups and upcoming events">Learn about our Connect Groups and upcoming events</a>.

### Anxiety and Arthritis: Coping Strategies and Treatments, February 27, 7:00—8:15 pm ET

Get support for the emotional challenges of living with arthritis and learn effective strategies for building resilience. Discover techniques for managing stress and anxiety and finding mental health support resources for individuals with arthritis. Register for the event.









