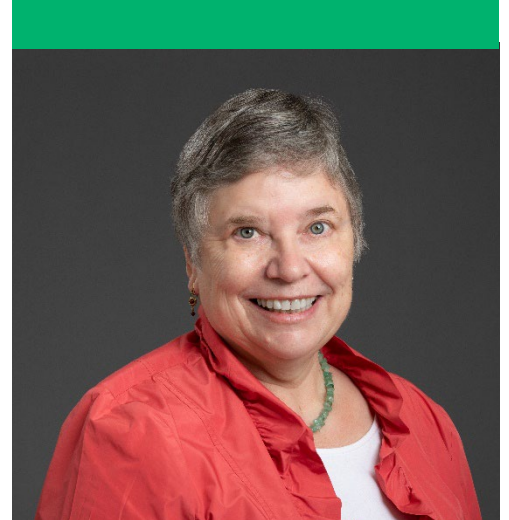


Anna Plaas, PhD

The Robert S. Katz, MD - Joan and Paul
Rubschlager Presidential Professor of
Osteoarthritis Research



Advancement of Medicine

In 2023-2024, your generosity continued to support my work as scientific mentor for junior faculty involved in musculoskeletal disease and therapies research as well as my continuing service to the scientific community.

Research

I have two junior faculty mentees. Meghan Moran, PhD, focuses on anatomy and cell biology, while Thea Price, MD, is a surgeon. Dr. Moran published one review, and Dr. Price published a clinical research paper since we last reported to you. In addition, I established a collaboration with Georgia Papavasiliou, professor of biomedical engineering at Illinois Institute of Technology, to explore novel methods for drug delivery to the inflamed joint in osteoarthritis and rheumatoid arthritis. We have submitted grant proposals to the Department of Defense, the Rheumatology Research Foundation, the National Science Foundation and the National Institutes of Health, or NIH.

Clinical Work

I collaborated with two clinical faculty in the Division of Rheumatology at Rush University Medical Center — Ted Pincus, MD, and Aleksandra Burkiej, MD — to establish a biorepository of serum, synovial fluid and feces for studying gut inflammation in rheumatoid arthritis.

Educational Endeavors

Your support enabled me to teach methodologies and research concepts in collaboration with my mentees as well as the above-mentioned new collaboration with Professor Papavasiliou. This allows the research direction during the 16 years I have held this endowed chair to be continued by junior faculty while we also investigate novel methods for drug delivery to inflamed tissues.

Grants

- Dr. Moran submitted a New Investigator proposal to the Rheumatology Research Foundation to study the relationship between gut health, pain and bone loss in inflammatory arthritis models.
- In collaboration with Dr. Price, we have established a relationship with an industry partner, Inozyme, to test a novel therapeutic for prevention of muscle calcification in the preclinical animal model.

Service

I am the chair of the organizing committee for the International Society for Hyaluronan Sciences, or ISHAS, HA2025 meeting to be held in St. Charles, Illinois, in June 2025. I continue my editorial duties for *Osteoarthritis and Cartilage* and review responsibilities for several other musculoskeletal research journals, including the *Journal of Orthopaedic Research*, *Journal of Cartilage and Joint Preservation*, Public Library of Science *PLOS One*, and *Cells*. Finally, I chaired one Department of Defense-sponsored research grant review session.

Publication and Presentations – Abbreviated

- “Joint inflammation induces altered mucin metabolism and microbiome changes in the ileum and colon,” Public Library of Science *PLOS One*, Summer 2024.
- Poster presentation, Orthopedic Research Society, February 2024.

The Year Ahead: 2024 and Beyond

Dr. Moran will submit a Maximizing Investigators’ Research Award, or MIRA, proposal to NIH for young investigators, and I will be her mentor on the osteoarthritis project in this proposal. Also, I will be assisting Drs. Moran and Price in preparation of three manuscripts for submission.

With Gratitude

My mentees, collaborators and I all want to thank you, Joan and Paul, for your support. Our ongoing, state-of-the-art research in musculoskeletal diseases at Rush is enabled through your generosity.