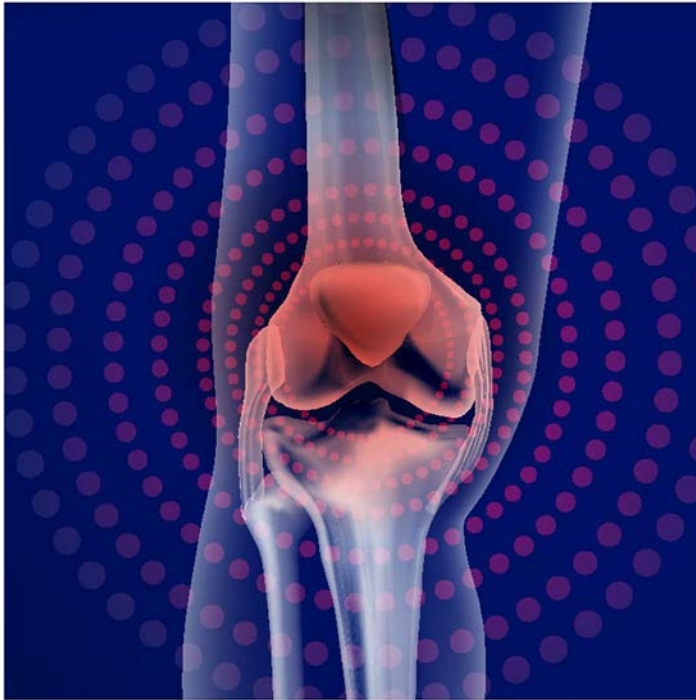


NIAMS

National Institute of Arthritis and
Musculoskeletal and Skin Diseases
About Our Strategic Plan



NIAMS MISSION

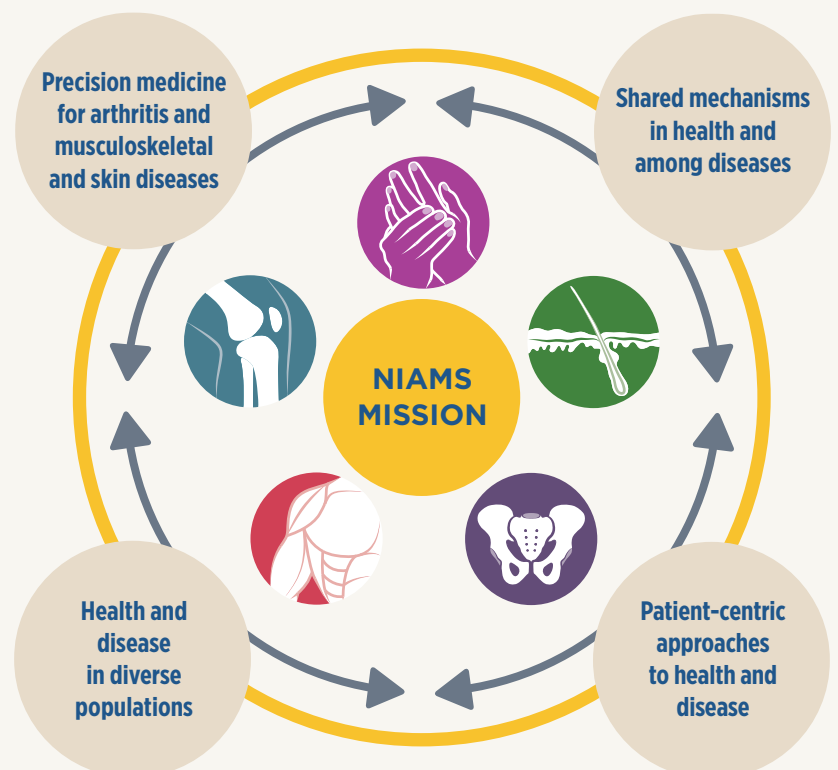
The NIAMS mission is to support research into the causes, treatment, and prevention of arthritis and musculoskeletal and skin diseases; training of basic and clinical scientists to carry out this research; and dissemination of information on research progress in these diseases.

STRATEGIC PLAN GOAL

The goal of the plan is to advance and accelerate research into the causes, treatment, and prevention of arthritis and musculoskeletal and skin diseases. The ultimate goal of these efforts is to develop patient-centered, personalized ways to improve outcomes and thereby “turn discovery into health.”

CROSS-CUTTING THEMES AND RESEARCH AREAS

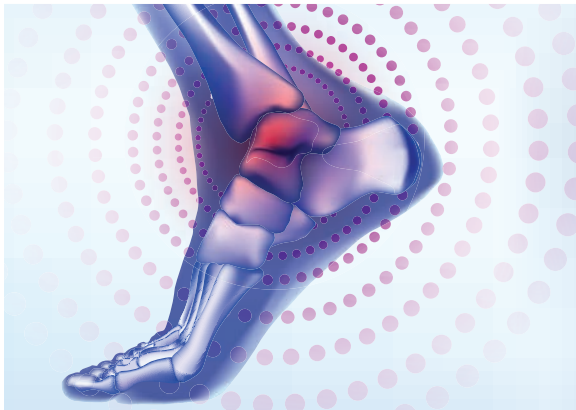
Many scientific challenges and opportunities within the NIAMS mission are not unique to any one field, disease, or scientific or clinical discipline. Rather, they transcend disease- and tissue-specific boundaries, have broad impact across many diseases and conditions, and can therefore serve as a framework to organize science across the assorted fields within the Institute’s purview. In addition to four cross-cutting themes, the Institute’s research portfolio includes five core areas: Systemic Rheumatic and Autoimmune Diseases; Skin Biology and Diseases; Bone Biology and Diseases; Muscle Biology and Diseases; and Joint Biology, Diseases, and Orthopaedics.



JOINT BIOLOGY, DISEASES, AND ORTHOPAEDICS RESEARCH

RESEARCH OBJECTIVES

- JOINT BIOLOGY, STRUCTURE, AND FUNCTION
- REGENERATIVE MEDICINE
- PRECLINICAL AND TRANSLATIONAL RESEARCH INTO JOINT REPLACEMENTS
- BIOCHEMICAL AND IMAGING BIOMARKERS AND COMPUTATIONAL MODELING
- CLINICAL RESEARCH



For More information

Read the full NIAMS Strategic Plan:

<https://www.niams.nih.gov/about-niams/strategic-plan-fiscal-years-2020-2024>

NIAMS Website: www.niams.nih.gov

Contact NIAMS: NIAMSinfo@mail.nih.gov

PROGRAM SUMMARY

NIAMS Joint Biology, Diseases, and Orthopaedics programs fund a broad spectrum of basic, translational, and clinical research centered on the interplay among the body's muscles, bones, and connective tissues. These programs include research on the biology, structure, and function of joints and surrounding tissues and the application of this knowledge to a variety of diseases and conditions. Other programs fund tissue engineering and regenerative medicine to facilitate repair of damage caused by trauma to otherwise healthy tissue; molecular biology to understand the mechanisms of joint tissue formation and defects thereof; imaging to improve diagnosis and treatment of bone and joint disorders; and clinical research focused on treatment and prevention of acute and chronic bone and joint injuries and orthopaedic conditions, including musculoskeletal pain.

- Cartilage and Connective Tissue Program
- Clinical Osteoarthritis and Diagnostic Imaging Program
- Musculoskeletal Tissue Engineering and Regenerative Medicine Program
- Orthopaedic Implant Science Program
- Orthopaedic Research Program

PROGRAM HIGHLIGHT

The Osteoarthritis Initiative (OAI)

A free online resource available to any registered researcher, the OAI offers comprehensive datasets and images from nearly 5,000 participants. The data can be examined to develop hypotheses about possible osteoarthritis biomarkers of disease onset and progression, test theories, describe the natural history of osteoarthritis, and investigate factors that influence disease development and severity. For more information, visit <https://www.niams.nih.gov/grants-funding/funded-research/osteoarthritis-initiative>.

