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.
RESEARCH OBJECTIVES

• GENETICS, FUNCTIONAL GENOMICS, AND EPIGENETICS
• MECHANISMS OF RHEUMATIC DISEASES
• TARGET ORGAN DAMAGE
• PRECLINICAL AND TRANSLATIONAL RESEARCH
• CLINICAL RESEARCH
• BEHAVIORAL AND BIOPSYCHOSOCIAL RESEARCH

PROGRAM SUMMARY

NIAMS Systemic Rheumatic and Autoimmune Diseases programs address basic, translational, and clinical research, including clinical trials and observational and mechanistic studies, focused on immune-mediated arthritis and autoimmune-related acute and chronic disorders in adults and children. Many of these diseases disproportionately affect women and groups historically underrepresented in biomedical research. While the underlying causes for these differences are largely unknown, progress is occurring in understanding them and translating that knowledge into effective treatments. The results of NIAMS-funded research have paved the way for biologic therapies for systemic rheumatic and autoimmune diseases. These therapies have improved outcomes and quality of life for many patients, highlighting the importance of fundamental research in improving health. Going forward, NIAMS will continue to build on this progress to further understanding of systemic rheumatic and autoimmune diseases and to develop even more effective and personalized treatment approaches.

• Arthritis Biology Program
• Rheumatic Diseases Integrative Biology Research Program
• Scleroderma, Fibrosis, and Autoinflammatory Disease Program
• Systemic Autoimmune Disease Biology Program

PROGRAM HIGHLIGHT

Accelerating Medicines Partnership (AMP) in rheumatoid arthritis and lupus

NIAMS is participating in the AMP in rheumatoid arthritis (RA) and lupus, one component of a public-private partnership among NIH, the Foundation for the NIH, biopharmaceutical companies, and nonprofit organizations. The network is adapting cutting-edge, high-throughput technologies to analyze single immune and tissue cells from organs affected by RA and lupus. Through the AMP, researchers are identifying and defining shared and disease-specific biological pathways that scientists can study to identify relevant drug targets for treating autoimmune diseases.

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

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