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

• TRANSDISCIPLINARY BASIC STUDIES
• SKIN AS A BARRIER
• SKIN AS AN IMMUNE, SENSORY, AND ENDOCRINE ORGAN
• SKIN APPENDAGES
• GENETICS OF SKIN DISEASES
• REGENERATIVE MEDICINE
• SKIN MODEL SYSTEMS
• THERAPY DEVELOPMENT
• CLINICAL RESEARCH
• BEHAVIORAL AND BIOPSYCHOSOCIAL RESEARCH

PROGRAM SUMMARY

NIAMS Skin Biology and Diseases programs fund basic, translational, and clinical research in skin, including both common and rare skin diseases. These programs include investigations of the basic molecular, cellular, and developmental biology of skin, as well as studies of skin as an immune, sensory, endocrine, and metabolic organ. Research on wound healing, autoimmunity, inflammation, heritable diseases, and birth defects is also included, with a focus on translating fundamental research findings into novel diagnostic tools, effective therapeutics, and efficient cost-saving disease management. Understanding skin biology in the context of whole-body physiology is a new horizon. Skin is an integral part of the human body, and skin function and skin diseases are influenced by internal and external environments. Increasing evidence suggests that skin homeostasis is modulated by the immune, nervous, and endocrine systems, as well as by circadian rhythms and resident microbial flora. Studying interactions between skin and other organs is increasingly important for advancing knowledge of skin health and disease and thus calls for multidisciplinary collaborations to invigorate and enrich the skin research field.

• Epidermis, Dermis and Skin Senses Program
• Skin Immunology and Diseases, Skin Microbiome Program
• Skin Repair, Pigmentation and Appendages, Vasculature/Lymphatic Systems Program

PROGRAM HIGHLIGHT

Understanding Co-occurring Conditions in Psoriasis

Certain chronic diseases seem to occur together, and caring for patients with multiple health issues is challenging. For example, psoriasis is associated with an increased risk of developing conditions such as cardiovascular disease, diabetes, depression, and psoriatic arthritis. NIAMS supports a varied portfolio of research on co-occurring conditions, including a translational research center using new technologies and clinical and laboratory data to predict which psoriasis patients are most likely to develop comorbidities and how best to treat them.

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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