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

• MUSCLE DEVELOPMENT AND REGENERATION
• MECHANISMS OF MUSCLE FUNCTION AND DYSFUNCTION
• INTERVENTIONS FOR MUSCLE HEALTH
• MUSCLE DISEASE CLINICAL RESEARCH

PROGRAM SUMMARY

The NIAMS Muscle Biology and Diseases programs encourage basic, translational, and clinical research on the biology and disorders of skeletal muscle. Studies address questions about muscle developmental biology, growth, maintenance, and hypertrophy; physiology of muscle contraction; structural biology of the contractile apparatus; mechanisms of muscle diseases and disorders; biomarkers and outcome measures for clinical and preclinical studies; and natural histories of muscle conditions. These programs also support development and testing of therapies for muscle diseases and disorders, including cell and gene therapies, small molecule drugs and biological products, and exercise and other physical interventions to slow or prevent disease progression. Muscular dystrophies are an area of emphasis within the NIAMS muscle research portfolio.

• Muscle Development and Physiology Program
• Muscle Disorders and Therapies Program

PROGRAM HIGHLIGHT

The Paul D. Wellstone Muscular Dystrophy Research Centers

NIH funds a broad portfolio of research into understanding and treating various forms of muscular dystrophy. One component is the Paul D. Wellstone Muscular Dystrophy Research Centers program, established in 2003. Fifteen years later, the NIH Institutes that support the Centers formed a Working Group of the NIAMS Advisory Council to identify best practices for achieving the Wellstone Centers’ goals. The report’s executive summary, including the working group recommendations, is available at https://wellstonemdcenters.nih.gov/sites/wellstone/files/WellstoneCenterEvalRptExecSumm-508.pdf.