Strategic Plan for Research

Executive Summary

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) Strategic Plan for Research presents a broad vision for the future of the Institute. As an overarching Plan, it will complement and inform the Institute’s disease-specific planning efforts over the next 5 years.

NIDDK supports and conducts research to improve health and quality of life for people with diabetes and other endocrine and metabolic disorders; liver, intestinal, and other digestive diseases; obesity; nutritional disorders; and kidney, urologic, and hematologic diseases.

Development of the Strategic Plan: Throughout the strategic planning process, NIDDK sought extensive input from leading researchers and patient advocates across the country through a Working Group of the NIDDK Advisory Council. The Plan also reflects the innovative ideas and insights from organizations and individuals who responded to public Requests for Information.

Scientific Goals: The Strategic Plan includes four major Scientific Goals, each with a set of broad Research Opportunities to advance understanding of contributors to health and disease, develop and test prevention and treatment approaches in clinical trials, disseminate and implement evidence-based strategies to improve health, and engage stakeholders as partners in research. In addition, several cross-cutting topics are emphasized throughout the Strategic Plan, focused on reducing health disparities and achieving health equity, improving women’s health, and strengthening the biomedical research workforce.

Stewardship: Serving as an efficient and effective steward of public resources is critical to NIDDK’s mission, and the Strategic Plan addresses many facets of stewardship related to the research workforce, rigor and reproducibility in research, partnerships, data science, and other key topics.

The infographic on the following page provides an overview of the Plan’s Goals and Research Opportunities.
## NIDDK Scientific Goals and Research Opportunities

Under each Scientific Goal below, there is a set of broad areas of research opportunity. Numerous research topics are encompassed within each area; these are described throughout the Strategic Plan.

### Scientific Goal 1

**Advance understanding of biological pathways and environmental contributors to health and disease.**

1.1 Identify and characterize factors that affect human health in diverse populations
1.2 Analyze the links between biology, behavior, and the environment, including social determinants of health and structural factors, that contribute to disease heterogeneity and health disparities
1.3 Develop innovative technologies and resources and expand data science to advance scientific progress and enhance health
1.4 Strengthen the research investigator pipeline by enhancing and diversifying workforce development and training of basic and translational investigators

### Scientific Goal 2

**Advance pivotal clinical studies and trials for prevention, treatment, and cures in diverse populations.**

2.1 Enhance the development and testing of diagnostics, therapeutics, and prevention strategies
2.2 Increase the diversity of participants in clinical trials
2.3 Bolster workforce development and training to increase and diversify the pipeline of clinical investigators
2.4 Utilize data science to improve clinical studies
2.5 Optimize clinical infrastructure and resources for clinical studies

### Scientific Goal 3

**Advance research to disseminate and implement evidence-based prevention strategies and treatments in clinics and community settings, to improve the health of all people, more rapidly and more effectively.**

3.1 Improve dissemination and implementation research to accelerate the reach of prevention and treatment strategies proven successful in clinical trials
3.2 Evaluate large health programs and policies initiated by communities and others (“natural experiments”) – research toward broader implementation
3.3 Study major unanticipated events – toward future implementation of preparedness and response efforts
3.4 Engage and partner with stakeholders in dissemination and implementation research
3.5 Enhance the dissemination and implementation research workforce and multidisciplinary studies

### Scientific Goal 4

**Advance stakeholder engagement — including patients and other participants as true partners in research.**

4.1 Comprehensively involve diverse stakeholders in each step of the research process, including patients, caregivers and family members, patient advocacy groups, and community-based organizations
4.2 Ensure stakeholders who engage in research are representative of the populations affected by diseases in NIDDK’s mission
4.3 Develop new ways to address barriers to stakeholder engagement

### Cross-cutting Topics

Several cross-cutting topics are addressed throughout the research opportunities as integral to each of the Goals; these include: reducing health disparities and increasing health equity among racial and ethnic minority populations and others who are underserved, improving women’s health, and strengthening biomedical research workforce diversity and training.