

## NIH Pain Consortium

The NIH Pain Consortium was established to enhance pain research and promote collaboration among researchers across the many ICs that have programs and activities addressing pain. These activities include research on sensory and basic mechanisms, as well as the emotional and biobehavioral aspects of pain. Age, sex, hormones, gender, ethnicity, and genetics all play a role in pain response and perception.

The Pain Consortium is developing a comprehensive research agenda for the NIH and identifying key opportunities in pain research, particularly those that provide for trans-NIH participation. Increased knowledge of basic pain mechanisms is anticipated to result in better pain management. The Consortium is co-chaired by the directors of the National Institute of Nursing Research (NINR), the National Institute of Neurological Disorders and Stroke (NINDS), and the National Institute of Dental and Craniofacial Research (NIDCR).

NIH Participants: NINR, NINDS, NIDCR, NCI, NIA, NIAAA, NIAMS, NIBIB, NICHD, NIDA, NIGMS, NIMH, CC, FIC, NCCAM, NCRR, OBSSR, ODP/ORD, and OER/OTT.



## NIH Components

Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)

National Cancer Institute (NCI)

National Eye Institute (NEI)

National Heart, Lung, and Blood Institute (NHLBI)

National Human Genome Research Institute (NHGRI)

National Institute on Aging (NIA)

National Institute on Alcohol Abuse and Alcoholism (NIAAA)

National Institute of Allergy and Infectious Diseases (NIAID)

National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)

National Institute of Biomedical Imaging and Bioengineering (NIBIB)

National Institute on Deafness and Other Communication Disorders (NIDCD)

National Institute of Dental and Craniofacial Research (NIDCR)

National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

Division of Nutrition Research Coordination (DNRC)

National Institute on Drug Abuse (NIDA)

National Institute of Environmental Health Sciences (NIEHS)

National Institute of General Medical Sciences (NIGMS)

National Institute of Mental Health (NIMH)

National Institute of Neurological Disorders and Stroke (NINDS)

National Institute of Nursing Research (NINR)

National Library of Medicine (NLM)

Center for Information Technology (CIT)

Center for Scientific Review (CSR)

John E. Fogarty International Center (FIC)

National Center for Complementary and Alternative Medicine (NCCAM)

National Center on Minority Health and Health Disparities (NCMHD)

National Center for Research Resources (NCRR)

NIH Clinical Center (CC)

Office of AIDS Research (OAR)

Office of Behavioral and Social Sciences Research (OBSSR)

Office of Disease Prevention (ODP)

Office of Extramural Research (OER)

Office of Intramural Research (OIR)

Office of Portfolio Analysis and Strategic Initiatives (OPASI)

Office of Research on Women's Health (ORWH)

## Connecting to NIH

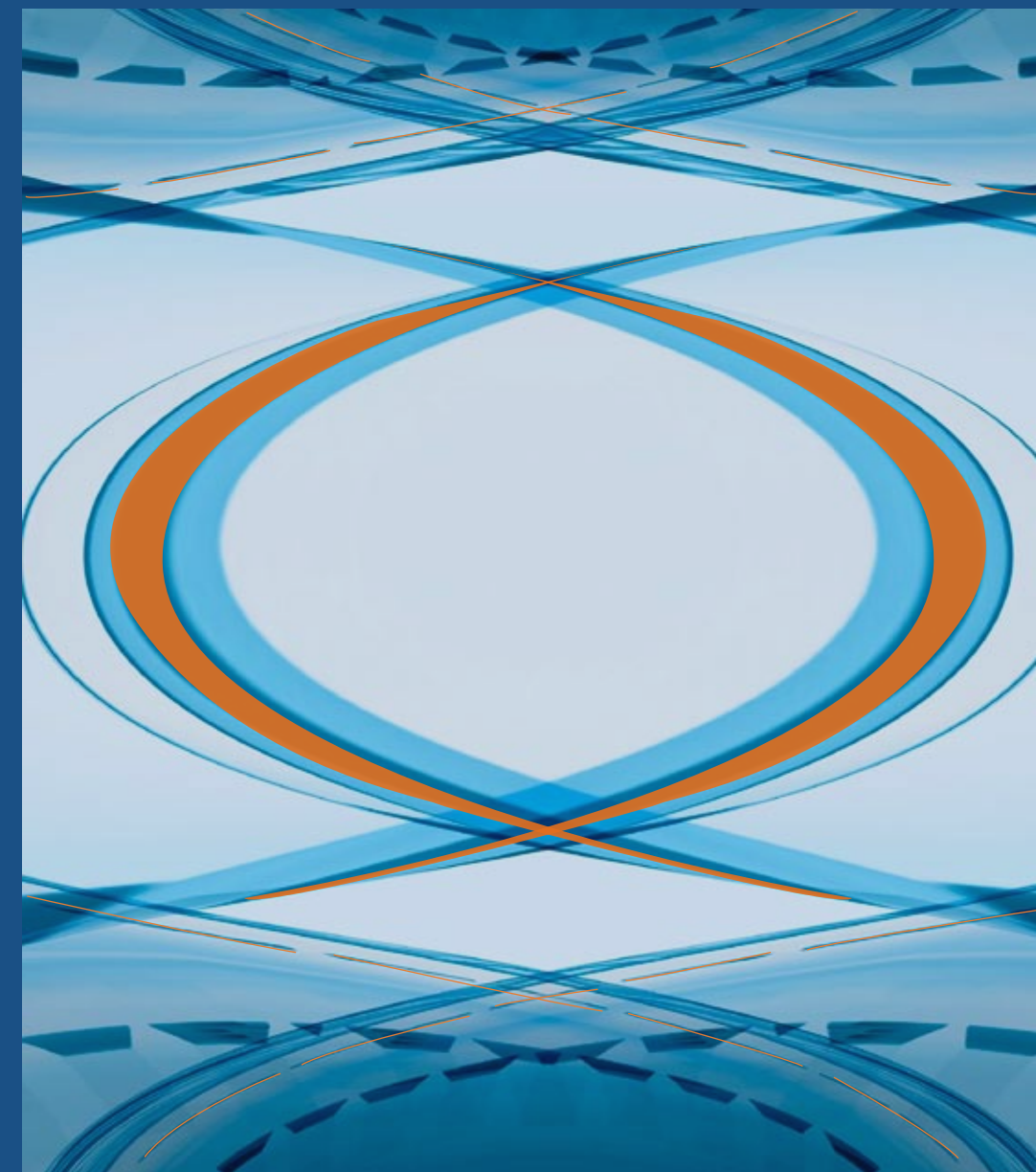
For more information on the National Institutes of Health, go to the NIH website, [www.nih.gov](http://www.nih.gov) to link to the latest, reliable health information and news; more details about the National Institutes of Health and its 27 Institutes and Centers; and information about clinical trials.



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<http://opasi.nih.gov/collaboration>

# TRANS-NIH RESEARCH: Scientific Collaboration for the 21st Century



## Overview of Collaborations within NIH

Today, more than ever, the National Institutes of Health's (NIH) Institutes, Centers, and Offices are working together in new ways, and leveraging their unique strengths and resources. These collaborations can be formal or informal, and may involve sharing financial resources, materials, or specimens. Often, it is sharing actual scientific expertise. By maximizing resources, these trans-NIH initiatives serve to advance medical research in all disease areas and across the basic, translational, and clinical research continuum.

An annual report to Congress identifies initiatives shared by NIH Institutes, Centers and Offices. That report focuses only on collaborations supported outside the context of the NIH Common Fund/Roadmap to highlight the extent of trans-NIH research. Accordingly, the initiatives presented here illustrate how successful collaborations can produce substantial results from sharing ideas, resources, and methods. For a complete description of trans-NIH activities including co-sponsored research, conferences, workshops, task forces, and educational campaigns, visit: <http://opasi.nih.gov/collaboration>

## Examples of Collaboration at the NIH

### NIH Obesity Research Task Force

An epidemic of obesity is compromising the lives of millions of Americans. More than 65 percent of US adults and 17 percent of US children are overweight and obese. Nearly 31 percent of adults – over 61 million – are obese. Left unabated, the escalating rates of obesity in the U.S. population will place a severe burden on the Nation's health and its healthcare system. Being obese increases the risk of diabetes, heart disease, certain cancers, and other medical conditions. The NIH currently supports a broad spectrum of obesity-related research, and is taking important new steps to augment its obesity research portfolio.

The NIH Obesity Research Task Force, co-chaired by the directors of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) and of the National Heart, Lung, and Blood Institute (NHLBI), is a cooperative effort that accelerates progress in obesity research and education across the NIH.

NIH Participants: NIDDK, NHLBI, NCI, NHGRI, NIA, NIAAA, NIAMS, NIBIB, NICHD, NIDA, NIDCR, NIEHS, NIMH, NINDS, NINR, CSR, FIC, NCCAM, NCMHD, NCRR, OBSSR, ODP/ODS, ORWH, and NIH DNRC.

**The National  
Institutes of Health**  
The Nation's Medical  
Research Agency

## NIH Blueprint for Neuroscience Research

The NIH Blueprint for Neuroscience Research is a cooperative effort that pools resources and expertise. The Blueprint supports the development of new tools, training opportunities, and other resources to assist neuroscientists in both basic and clinical research. The Blueprint is co-chaired by the directors of the National Institute of Mental Health (NIMH) and the National Institute of Neurological Disorders and Stroke (NINDS).

The Blueprint enables daily collaboration in how the NIH conducts neuroscience research and provides a framework for planning and implementing the NIH's neuroscience research efforts. The Blueprint does not target specific disorders. Instead, it creates common resources. Nervous system disorders appear in many forms including mental, neurological and developmental disorders, alcohol dependence, and drug addictions. Although there are clear differences, many disorders share characteristics of causation and outcome. Tools that are useful in one area – either in the laboratory or the clinic – are likely to be useful in others. One of these tools is the Blueprint Resource Antibodies Initiative for Neurodevelopment (BRAINdev). This resource supports the creation and distribution of high-quality antibodies for use as markers in neurodevelopment research.

NIH Participants: NIMH, NINDS, NEI, NIA, NIAAA, NIBIB, NICHD, NIDA, NIDCD, NIDCR, NIEHS, NIGMS, NINR, NCCAM, NCRR, and OBSSR.

For over a century, the National Institutes of Health has played an important role in improving the health of the nation. The NIH traces its roots to 1887 with the creation of the Laboratory of Hygiene at the Marine Hospital in Staten Island, NY.

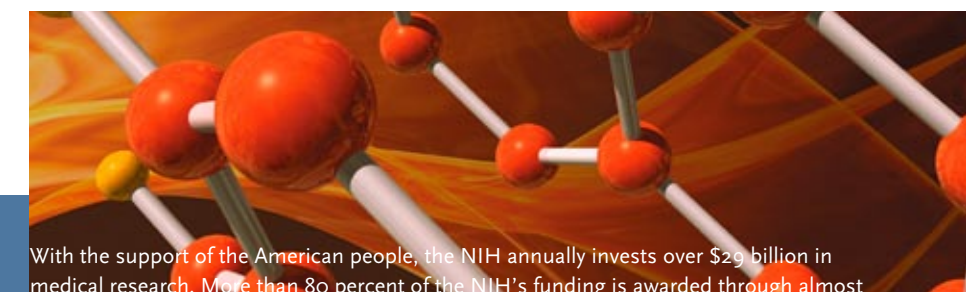
The NIH is an agency of the U.S. Department of Health and Human Services. With the headquarters in Bethesda, MD, the NIH has more than 17,000 employees on the main campus and at satellite sites across the country.

## Trans-NIH Nanotechnology Task Force

Nanotechnology involves the creation and use of materials and devices at the level of molecules and atoms. Research began with applications outside of medicine based on discoveries in physics and chemistry. At the nanoscale, the physical, chemical, and biological properties of materials differ from the properties of matter either at smaller scales, such as atoms, or at larger scales, such as millimeters or inches that we use in everyday life. By understanding the physical and chemical properties of molecules inside living tissues, nanotechnology has the potential to change the very foundations of disease diagnosis, treatment, and prevention.

The Trans-NIH Nanotechnology Task Force is co-chaired by representatives from multiple institutes and centers. It is charged with developing an NIH-wide scientific and policy vision for nanotechnology including a trans-NIH plan to determine the fundamental interactions of engineered nanomaterials with biological systems. This collaborative effort also entails exploring the physicochemical principles that may maximize biocompatibility and biomedical application of nanotechnology.

NIH Participants: NCI, NHGRI, NEI, NHLBI, NIA, NIAAA, NIAID, NIAMS, NIBIB, NICHD, NIDA, NIDCD, NIDCR, NIDDK, NIEHS, NIGMS, NIMH, NINDS, NINR, NLM, FIC, NCMHD, and NCRR.



With the support of the American people, the NIH annually invests over \$29 billion in medical research. More than 80 percent of the NIH's funding is awarded through almost 50,000 competitive grants to more than 325,000 researchers at over 3,000 universities, medical schools, and other research institutions in every state and around the world. About 10 percent of the NIH's budget supports projects conducted by nearly 6,000 scientists in its own laboratories, most of which are on the NIH campus in Bethesda, MD.