

Appendix C

Missions of the NIH Institutes and Centers

The National Cancer Institute

The National Cancer Institute (NCI) is a component of the National Institutes of Health (NIH), one of eight agencies that compose the Public Health Service (PHS) in the Department of Health and Human Services (DHHS). The NCI, established under the National Cancer Act of 1937, is the Federal Government's principal agency for cancer research and training. The National Cancer Act of 1971 broadened the scope and responsibilities of the NCI and created the National Cancer Program. Over the years, legislative amendments have maintained the NCI authorities and responsibilities and added new information dissemination mandates as well as a requirement to assess the incorporation of state-of-the-art cancer treatments into clinical practice.

The National Cancer Institute coordinates the National Cancer Program, which conducts and supports research, training, health information dissemination, and other programs with respect to the cause, diagnosis, prevention, and treatment of cancer, rehabilitation from cancer, and the continuing care of cancer patients and the families of cancer patients. Specifically, the Institute:

- Supports and coordinates research projects conducted by universities, hospitals, research foundations, and businesses throughout this country and abroad through research grants and cooperative agreements.
- Conducts research in its own laboratories and clinics.
- Supports education and training in fundamental sciences and clinical disciplines for participation in basic and clinical research programs and treatment programs relating to cancer through career awards, training grants, and fellowships.
- Supports research projects in cancer control.
- Supports a national network of cancer centers.
- Collaborates with voluntary organizations and other national and foreign institutions engaged in cancer research and training activities.
- Encourages and coordinates cancer research by industrial concerns where such concerns evidence a particular capability for programmatic research.
- Collects and disseminates information on cancer.
- Supports construction of laboratories, clinics, and related facilities necessary for cancer research through the award of construction grants.

National Eye Institute

The National Eye Institute (NEI) was established by Congress in 1968 to protect and prolong the vision of the American people. As one of the Federal government's National Institutes of Health (NIH), the NEI conducts and supports research that helps prevent and treat eye diseases and other disorders of vision. This research leads to sight-saving treatments, reduces visual impairment and blindness, and improves the quality of life for people of all ages. NEI-supported research has advanced our knowledge of how the visual system functions in health and disease.

Vision research is supported by the NEI through approximately 1600 research grants and training awards made to scientists at more than 250 medical centers, hospitals, universities, and other institutions across the country and around the world. The NEI also conducts laboratory and patient-oriented research at its own facilities located on the NIH campus in Bethesda, Maryland.

Because of continued Congressional and public support, the national investment in

vision research has yielded substantial dividends to treat many potentially blinding eye diseases:

- Diabetic retinopathy. Laser technology is safe and effective in treating this disease that affects more than one-third of the nearly 10 million Americans who have been diagnosed with diabetes.
- Amblyopia. Atropine eye drops can treat amblyopia, the most common cause of visual impairment in children, and work as well as the standard treatment of patching one eye.
- Age-related macular degeneration (AMD). An NEI supported study showed that using high levels of antioxidants and zinc significantly reduces the risk of advanced age-related macular degeneration (AMD) by 25 percent.
- Glaucoma. The NEI has supported research on effective drugs that reduce elevated eye pressure, a significant risk factor for this blinding disease.
- Retinopathy of prematurity. Identifying a treatment called cryotherapy—which involves briefly freezing the outer periphery of the retina—has significantly reduced this potentially blinding eye disease in premature infants.
- Corneal stromal keratitis. NEI research discovered that an oral antiviral drug significantly decreases the recurrence of herpes of the eye and reduces the recurrence of corneal stromal keratitis, the more severe form of the disease.
- Cytomegalovirus (CMV) retinitis. Finding that ganciclovir implants into the eye are effective in treating this disease—which affects people with AIDS—has helped to significantly improve quality of life.
- Uveitis. Safe and effective drugs have been introduced against certain forms of this potentially blinding inflammation of the inside of the eye.
- Retinitis pigmentosa. A number of gene mutations have been identified as causing retinitis pigmentosa, which is a group of inherited diseases that affect more than 100,000 Americans. This research provides the first step in developing new strategies to prevent or control these blinding diseases.
- Leber's congenital amaurosis. NEI-supported scientists have demonstrated that inserting substitute genes into the eye restores sight to dogs born blind with this congenital retinal disease. These results may someday allow scientists to develop treatments that will restore vision to children blind from the same disease.
- Lasers for treatment of AMD, glaucoma, and myopia (nearsightedness). The NEI has contributed to the development of medical lasers to treat the wet form of AMD, diagnose and treat patients with glaucoma, and correct myopia and other refractive errors of the eye.

Although the NEI has done much to promote healthy vision, the future promises to bring even more pioneering advances:

- NEI-supported scientists are working toward transplanting healthy cells into diseased retinas. This research may lead to new treatments for people with blinding retinal diseases, including AMD and retinitis pigmentosa.
- Researchers are exploring gene-based treatments to slow some forms of retinal degeneration.
- NEI-supported scientists are developing “neuroprotection” methods that will prevent or slow glaucoma cell damage and promote the survival of retinal cells damaged by glaucoma.

Part of the NEI mission is to develop public and professional education programs that help prevent blindness, reduce visual impairment, and increase awareness of services and devices that are available for people with low vision. To meet these objectives, the NEI has established the National Eye Health Education Program (NEHEP), a partnership of over 65 professional, civic, and voluntary organizations and government agencies concerned with eye health. The program represents an extension of the NEI's support of vision research, where results are disseminated to health professionals,

patients, and the public. The NEI is also the lead Federal agency for the vision and hearing chapter in Healthy People 2010, the nation's blueprint to improve public health.

National Heart, Lung, and Blood Institute

The National Heart, Lung, and Blood Institute (NHLBI) provides leadership for a national program in diseases of the heart, blood vessels, lung, and blood; blood resources; and sleep disorders. Since October 1997, the NHLBI has also had administrative responsibility for the NIH Woman's Health Initiative.

The Institute plans, conducts, fosters, and supports an integrated and coordinated program of basic research, clinical investigations and trials, observational studies, and demonstration and education projects. Research is related to the causes, prevention, diagnosis, and treatment of heart, blood vessel, lung, and blood diseases; and sleep disorders. The NHLBI plans and directs research in development and evaluation of interventions and devices related to prevention, treatment, and rehabilitation of patients suffering from such diseases and disorders. It also supports research on clinical use of blood and all aspects of the management of blood resources. Research is conducted in the Institute's own laboratories and by scientific institutions and individuals supported by research grants and contracts.

For health professionals and the public, the NHLBI conducts educational activities, including development and dissemination of materials in the above areas, with an emphasis on prevention.

The NHLBI supports research training and career development of new and established researchers in fundamental sciences and clinical disciplines to enable them to conduct basic and clinical research related to heart, blood vessel, lung, and blood diseases; sleep disorders; and blood resources through individual and institutional research training awards and career development awards.

The Institute coordinates relevant activities in the above areas, including the related causes of stroke, with other research institutes and federal health programs. Relationships are maintained with institutions and professional associations, and with international, national, state, and local officials as well as voluntary agencies and organizations working in the above areas.

National Human Genome Research Institute

The National Human Genome Research Institute (NHGRI) led the National Institutes of Health's (NIH) contribution to the International Human Genome Project, which had as its primary goal the sequencing of the human genome. This project was successfully completed in April 2003. Now, the NHGRI's mission has expanded to encompass a broad range of studies aimed at understanding the structure and function of the human genome and its role in health and disease.

To that end NHGRI supports the development of resources and technology that will accelerate genome research and its application to human health. A critical part of the NHGRI mission continues to be the study of the ethical, legal and social implications (ELSI) of genome research. NHGRI also supports the training of investigators and the dissemination of genome information to the public and to health professionals.

The direction and vision for the future for NHGRI and for genomics research - *A Vision for the Future of Genomics Research* - was released in April 2003, coinciding with the 50th anniversary of James Watson and Francis Crick's seminal publication of the structure of DNA.

National Institute on Aging

The National Institute on Aging (NIA), one of the 25 institutes and centers of the National Institutes of Health, leads a broad scientific effort to understand the nature of aging and to extend the healthy, active years of life. In 1974, Congress granted authority to form the National Institute on Aging to provide leadership in aging research, training, health information dissemination, and other programs relevant to aging and older people. Subsequent amendments to this legislation designated the NIA as the primary federal agency on Alzheimer's disease research.

The NIA's mission is to improve the health and well-being of older Americans through research, and specifically to:

Support and conduct high quality research on:

- aging processes
- age-related diseases
- special problems and needs of the aged
- Train and develop highly skilled research scientists from all population groups
- Develop and maintain state-of-the-art resources to accelerate research progress
- Disseminate information and communicate with the public and interested groups on health and research advances and on new directions for research.

National Institute on Alcohol Abuse and Alcoholism

NIAAA provides leadership in the national effort to reduce alcohol-related problems by:

- Conducting and supporting research in a wide range of scientific areas including genetics, neuroscience, epidemiology, health risks and benefits of alcohol consumption, prevention, and treatment
- Coordinating and collaborating with other research institutes and Federal Programs on alcohol-related issues
- Collaborating with international, national, state, and local institutions, organizations, agencies, and programs engaged in alcohol-related work
- Translating and disseminating research findings to health care providers, researchers, policymakers, and the public

National Institute of Allergy and Infectious Diseases

The National Institute of Allergy and Infectious Diseases (NIAID) is a component of the National Institutes of Health (NIH). NIAID conducts and supports research that strives to understand, treat, and ultimately prevent the myriad infectious, immunologic, and allergic diseases that threaten hundreds of millions of people worldwide.

The Institute's mission is driven by a strong commitment to basic research and the understanding that the fields of immunology, microbiology, and infectious disease are related and complementary. NIAID research centers on the four cornerstones of its Strategic Plan — immune-mediated diseases (and immune tolerance), HIV/AIDS, emerging infectious diseases, and vaccines.

National Institute of Arthritis and Musculoskeletal and Skin Disease

The mission of the National Institute of Arthritis and Musculoskeletal and Skin Diseases is to support research into the causes, treatment, and prevention of arthritis and musculoskeletal and skin diseases, the training of basic and clinical scientists to carry out this research, and the dissemination of information on research progress in these diseases.

National Institute of Biomedical Imaging and Bioengineering

The mission of the National Institute of Biomedical Imaging and Bioengineering is to improve health by promoting fundamental discoveries, design and development, and translation and assessment of technological capabilities in biomedical imaging and bioengineering, enabled by relevant areas of information science, physics, chemistry, mathematics, materials science, and computer sciences. The Institute plans, conducts, fosters, and supports an integrated and coordinated program of research and research training that can be applied to a broad spectrum of biological processes, disorders and diseases and across organ systems. The Institute coordinates with the biomedical imaging and bioengineering programs of other agencies and NIH Institutes to support imaging and engineering research with potential medical applications and facilitates the transfer of such technologies to medical applications.

In support of its mission the Institute will:

- Support research and research training through existing NIH funding mechanisms, and take the lead in exploring novel approaches for funding technology development and interdisciplinary research.
- Form partnerships with NIH Institutes and Centers to translate fundamental discoveries into research and applications for specific diseases, disorders, or biological processes.
- Coordinate with other government agencies to translate fundamental or crosscutting discoveries and developments in imaging and engineering, and related areas of information science and technology assessment, into biomedical applications.
- Encourage and support the development of relevant standards and guidelines that will enable widespread adaptability for biomedical imaging, bioengineering, and related information science and technology and computation, by taking a leadership and coordinating role for the NIH.

National Institute of Child Health and Human Development

The National Institute of Child Health and Human Development (NICHD) is part of the National Institutes of Health, the biomedical research arm of the U.S. Department of Health and Human Services. The mission of the NICHD is to ensure that every person is born healthy and wanted, that women suffer no harmful effects from reproductive processes, and that all children have the chance to achieve their full potential for healthy and productive lives, free from disease or disability, and to ensure the health, productivity, independence, and well-being of all people through optimal rehabilitation.

National Institute on Deafness and Other Communication Disorders

The National Institute on Deafness and Other Communication Disorders (NIDCD) is one of the Institutes that comprise the National Institutes of Health (NIH). NIH is the Federal government's focal point for the support of biomedical research. NIH's mission is to uncover new knowledge that will lead to better health for everyone. Simply described, the goal of NIH research is to acquire new knowledge to help prevent, detect, diagnose, and treat disease and disability. NIH is part of the U.S. Department of Health and Human Services.

Established in 1988, NIDCD is mandated to conduct and support biomedical and behavioral research and research training in the normal and disordered processes of hearing, balance, smell, taste, voice, speech, and language. The Institute also conducts and supports research and research training related to disease prevention and health promotion; addresses special biomedical and behavioral problems associated with people who have communication impairments or disorders; and supports efforts to create devices which substitute for lost and impaired sensory and communication function.

It is estimated that more than 46 million people in the United States suffer some form of disordered communication. NIDCD has focused national attention on disorders of human communication and has contributed to advances in biomedical and behavioral research that will improve the lives of millions of individuals with communication disorders. NIDCD has made important contributions to the body of knowledge needed to help those who experience communication disorders and to advance research in all aspects of human communication.

NIDCD accomplishes its mandate through the Division of Intramural Research, which conducts research in laboratories at the NIH, and the Extramural Research Program, a program of research grants, career development awards, individual and institutional research training awards, center grants, and contracts to public and private research institutions and organizations. As a whole, the Institute supports and conducts approximately 600 research projects. The Institute also conducts and supports research and research training in disease prevention and health promotion and the special biomedical and behavioral problems associated with people having communication impairments and disorders.

NIDCD's extramural grant portfolio demonstrates a balance of basic and clinical research. The intramural research program spans a variety of topics, including, but not limited to, the development of a vaccine against otitis media, the identification and characterization of genes responsible for hereditary hearing impairment, genes associated with neoplasms affecting human communication, and treatment of voice disorders.

National Institute of Dental and Craniofacial Research

The mission of the National Institute of Dental and Craniofacial Research (NIDCR) is to promote the general health of the American people by improving their oral, dental and craniofacial health. Through the conduct and support of research and the training of researchers, the NIDCR aims to promote health, prevent diseases and conditions, and develop new diagnostics and therapeutics.

National Institute of Diabetes and Digestive and Kidney Disease

The National Institute of Diabetes and Digestive and Kidney Diseases conducts and supports research on many of the most serious diseases affecting public health. The Institute supports much of the clinical research on the diseases of internal medicine and related subspecialty fields as well as many basic science disciplines.

The Institute's Division of Intramural Research encompasses the broad spectrum of metabolic diseases such as diabetes, inborn errors of metabolism, endocrine disorders, mineral metabolism, digestive diseases, nutrition, urology and renal disease, and hematology. Basic research studies include biochemistry, nutrition, pathology, histochemistry, chemistry, physical, chemical, and molecular biology, pharmacology, and toxicology.

NIDDK extramural research is organized into divisions of program areas:

- Division of Diabetes, Endocrinology, and Metabolic Diseases
- Division of Digestive Diseases and Nutrition
- Division of Kidney, Urologic, and Hematologic Diseases

The Division of Extramural Activities provides administrative support and overall coordination. A fifth division, the Division of Nutrition Research Coordination, coordinates government nutrition research efforts.

The Institute supports basic and clinical research through investigator-initiated grants, program project and center grants, and career development and training awards. The Institute also supports research and development projects and large-scale clinical trials through contracts.

National Institute on Drug Abuse

NIDA's mission is to lead the Nation in bringing the power of science to bear on drug abuse and addiction

Recent scientific advances have revolutionized our understanding of drug abuse and addiction. The majority of these advances, which have dramatic implications for how to best prevent and treat addiction, have been supported by the National Institute on Drug Abuse (NIDA). NIDA supports over 85 percent of the world's research on the health aspects of drug abuse and addiction. NIDA supported science addresses the most fundamental and essential questions about drug abuse, ranging from the molecule to managed care, and from DNA to community outreach research.

NIDA is not only seizing upon unprecedented opportunities and technologies to further understanding of how drugs of abuse affect the brain and behavior, but also working to ensure the rapid and effective transfer of scientific data to policy makers, drug abuse practitioners, other health care practitioners and the general public. The NIDA web page is an important part of this effort. The scientific knowledge that is generated through NIDA research is a critical element to improving the overall health of the Nation. Our goal is to ensure that science, not ideology or anecdote, forms the foundation for all of our Nation's drug abuse reduction efforts.

NIDA was established in 1974, and in October 1992 it became part of the National Institutes of Health, Department of Health and Human Services. The Institute is organized into divisions and offices, each of which plays an important role in programs of drug abuse research.

National Institute of Environmental Health Sciences

Human health and human disease result from three interactive elements: environmental factors, individual susceptibility and age. The mission of the National Institute of Environmental Health Sciences (NIEHS) is to reduce the burden of human illness and dysfunction from environmental causes by understanding each of these elements and how they interrelate. The NIEHS achieves its mission through multidisciplinary biomedical research programs, prevention and intervention efforts, and communication strategies that encompass training, education, technology transfer, and community outreach.

National Institute of General Medicine Sciences

The National Institute of General Medical Sciences (NIGMS) primarily supports basic biomedical research that is not targeted to specific diseases or disorders. Because scientific breakthroughs often originate from such untargeted studies, NIGMS-funded work has contributed substantially to the tremendous progress that biomedical research has made in recent years. The Institute's training programs help provide the most critical element of good research: well-prepared scientists.

NIGMS is one of the National Institutes of Health (NIH), the principal biomedical research agency of the Federal Government. NIH is a component of the U.S. Department of Health and Human Services.

Each year, NIGMS-supported scientists make major advances in understanding fundamental life processes. In the course of answering basic research questions, these investigators also increase our knowledge about the mechanisms involved in certain diseases. Other grantees develop important new tools and techniques, many of which have applications in the biotechnology industry. In recognition of the significance of their work, a number of NIGMS grantees have received the Nobel Prize and other high scientific honors.

National Institute of Mental Health

The National Institute of Mental Health conducts Strategic Planning for specific research areas as well as for the Institute as a whole. NIMH staff and experts, including the public, carry out this process of reviewing current research, and assessing areas of need and scientific opportunity. Generally both immediate goals and long-range goals are outlined as a guide to decisions about the NIMH research portfolio. Strategic planning often involves National Mental Health Advisory Council members and sometimes is in response to a request by that Council. The reports are usually internal documents to guide research planning.

National Institute of Neurological Disorders and Stroke

The mission of NINDS is to reduce the burden of neurological disease - a burden borne by every age group, by every segment of society, by people all over the world. To support this mission, NINDS:

- Conducts, fosters, coordinates, and guides research on the causes, prevention, diagnosis, and treatment of neurological disorders and stroke, and supports basic research in related scientific areas.
- Provides grants-in-aid to public and private institutions and individuals in fields related to its areas of interest, including research project, program project, and research center grants.
- Operates a program of contracts for the funding of research and research support efforts in selected areas of institute need.
- Provides individual and institutional fellowships to increase scientific expertise in neurological fields.
- Conducts a diversified program of intramural and collaborative research in its own laboratories, branches, and clinics.
- Collects and disseminates research information related to neurological disorders.

National Institute of Nursing Research

The National Institute of Nursing Research supports clinical and basic research to establish a scientific basis for the care of individuals across the life span—from management of patients during illness and recovery to the reduction of risks for disease and disability, the promotion of healthy lifestyles, promoting quality of life in those with chronic illness, and care for individuals at the end of life. This research may also include families within a community context. According to its broad mandate, the Institute seeks to understand and ease the symptoms of acute and chronic illness, to prevent or delay the onset of disease or disability or slow its progression, to find effective approaches to achieving and sustaining good health, and to improve the clinical settings in which care is provided. Nursing research involves clinical care in a variety of settings including the community and home in addition to more traditional health care sites. The NINR's research extends to problems encountered by patients,

families, and caregivers. It also focuses on the special needs of at-risk and underserved populations, with an emphasis on health disparities. These efforts are crucial in the creation of scientific advances and their translation into cost-effective health care that does not compromise quality.

NINR accomplishes its mission by supporting grants to universities and other research organizations as well as by conducting research intramurally at laboratories in Bethesda, Maryland. The research fosters interdisciplinary collaborations to ensure a comprehensive approach to research on health promotion, illness, and disabling conditions. This approach is especially relevant in research such as that aimed at long-term care for the elderly, the special needs of women across the life span, bioethical issues related to genetic testing and counseling, biobehavioral aspects of managing the prevention and treatment of infectious diseases, end of life care, and environmental influences on risk factors related to chronic illnesses. NINR research includes all age groups and is based on adequate gender and minority representation.

NINR's intramural investigations, with an interdisciplinary, patient-focused approach to human health and illness, are particularly suited to the research environment on the NIH campus. The unique clinical research facilities offer diverse opportunities for professional exchange and collaboration on questions related to patient care and quality of life. These studies also provide training opportunities that acquaint scientists with the research issues and clinical strategies employed by investigators in nursing research.

In addition, the Institute supports comprehensive research training and career development programs to prepare individuals with requisite skills to conduct nursing research in an interdisciplinary setting.

National Library of Medicine

The National Library of Medicine (NLM), on the campus of the National Institutes of Health in Bethesda, Maryland, is the world's largest medical library. The Library collects materials in all areas of biomedicine and health care, as well as works on biomedical aspects of technology, the humanities, and the physical, life, and social sciences. The collections stand at more than 7 million items—books, journals, technical reports, manuscripts, microfilms, photographs and images. Housed within the Library is one of the world's finest medical history collections of old and rare medical works. The Library's collection may be consulted in the reading room or requested on interlibrary loan. NLM is a national resource for all U.S. health science libraries through a National Network of Libraries of Medicine.

Centers

Center for Information Technology

To provide, coordinate, and manage information technology, and to advance computational science.

The vision of CIT is to be a vital partner in the discovery of biomedical knowledge.

Center for Scientific Review

- Serves as the central receipt point for all research and training grant applications submitted to the NIH. Also receives some of the applications submitted to other components of the Department of Health and Human Services (DHHS) and refers them to these components;

- Assigns all NIH applications to the appropriate institutes or centers for consideration for funding and also to the scientific review groups within CSR or other institutes or centers for review;
- Provides the scientific merit review of most research grant and fellowship applications submitted to the NIH;
- Provides staff support to the Office of the Director, NIH, in the formulation of grant and award policies and procedures; and
- Assists other NIH components in providing information on the NIH peer review system and information about the research grant and fellowship application process and procedures to the scientific community, the Congress, other NIH staff, and the general public.

John E. Fogarty International Center

Over the past four generations, public health tools and interventions resulting from research have dramatically improved life expectancy and quality of life. However, significant disparities continue to exist in global health status. Low- and middle-income nations suffer over ninety percent of the burden of premature mortality as measured in lost years of life. These countries, constituting three-quarters of the world's population, now share a double burden: The persistent cluster of infectious diseases and malnutrition that are responsible for 16 million deaths per year, of which many are children; and a growing incidence of chronic disease and disabilities due to increased life spans and new risk exposures that accompany the demographic transition.

In the United States, health disparities are evident within and among population groups. Genetic and environmental factors, nutrition, access to health education and services, behavior, and other factors are implicated in varying degrees as contributors to these disparities. Research advances made abroad may have a positive impact on U.S. populations through improvements in education or counseling strategies; development of diagnostics, drugs or intervention technologies; or through identification of new avenues of research that ultimately lead to health care interventions. In addition, basic knowledge gained through research studies conducted abroad contribute to the scientific foundation upon which U.S. and international medical studies are built.

Adapting research advances in biomedicine to populations at home and abroad requires a continuing commitment to basic science as well as rigorous clinical and applied studies. To address these needs, the Fogarty International Center (FIC) forges collaborations with a range of domestic and international partners in international research and training to pursue three core objectives. The first is to accelerate the pace of discovery and its application by enabling scientists worldwide to share conceptual insights, analytic methods, data sets, patient cohorts or special environments. The second is to engage and assist both young and established U.S. investigators to address scientific challenges related to global health. And the third is to help develop a cadre of highly capable young foreign investigators positioned to cooperate with U.S. scientists in areas of the world that, due to geography, population structure, or disease burdens, provide unique opportunities to understand disease pathogenesis, anticipate disease trends, or develop interventions.

These objectives form the conceptual basis for current FIC programs related to HIV/AIDS, emerging infectious diseases, maternal and child health, population research and demographic science, medical informatics, drug discovery from biodiversity, as well as fellowship programs for young Americans, with emphasis on under represented minorities. The disciplinary fields described are pursued through a range of funding mechanisms, including institutional training grants, cooperative agreements, small

research grants, fellowships, and multilateral initiatives involving international organizations.

The Fogarty International Center promotes and supports scientific research and training internationally to reduce disparities in global health.

National Cancer for Minority Health and Health Disparities

The National Center for Complementary and Alternative Medicine (NCCAM) is 1 of the 27 institutes and centers that make up the National Institutes of Health (NIH). The NIH is one of eight agencies under the Public Health Service (PHS) in the Department of Health and Human Services (DHHS).

NCCAM is dedicated to exploring complementary and alternative healing practices in the context of rigorous science, training complementary and alternative medicine (CAM) researchers, and disseminating authoritative information to the public and professionals.

Our four primary areas of focus are

- Research. We support clinical basic science research projects in CAM by awarding grants across the country and around the world; we also design, study, and analyze clinical and laboratory-based studies on the NIH campus in Bethesda, Maryland.
- Research Training and Career Development. We award grants that provide training and career development opportunities for predoctoral, postdoctoral, and career researchers.
- Outreach. We sponsor conferences, educational programs, and exhibits; operate an information clearinghouse to answer inquiries and requests for information; provide a Website and printed publications; and hold town meetings at selected locations in the United States.
- Integration. To intergrate scientifically proven CAM practices into conventional medicine, we announce published research results; study ways to intergrate evidence-based CAM practices into conventional medical practice; and support programs to develop models for incorporating CAM into the curriculum of medical, dental, and nursing schools.

National Center for Research Resources

The mission of the National Center on Minority Health and Health Disparities (NCMHD) is to promote minority health and to lead, coordinate, support, and assess the NIH effort to reduce and ultimately eliminate health disparities. In this effort NCMHD will conduct and support basic, clinical, social, and behavioral research, promote research infrastructure and training, foster emerging programs, disseminate information, and reach out to minority and other health disparity communities.

The NCMHD envisions an America in which all populations will have an equal opportunity to live long, healthy and productive lives.

National Center for Research Resources

The National Center for Research Resources (NCRR) serves as a “catalyst for discovery” by creating and providing critical research technologies and shared

resources. This infrastructure underpins biomedical research and enables advances that improve the health of our Nation's citizens.

Biomedical research investigators supported by the Institutes and Centers of the National Institutes of Health require a broad array of technologies, tools and materials critical to their research efforts. From the models required for research on diseases and disabilities, to the biomedical technology and instrumentation necessary to elucidate cellular and molecular structure, to the clinical settings in which to conduct studies to discern the cause of disease and in which novel clinical trials of new therapies can be developed, biomedical researchers must have access to the necessary resources in order to continue to make progress against human disease and disability.

The NCRR has a unique responsibility at the National Institutes of Health: to develop critical research technologies and to provide cost-effective, multidisciplinary resources to biomedical investigators across the spectrum of research activities supported by the NIH. This has four major facets:

Create resources and develop technologies that are cost-effective, accessible and responsive to the research needs of the biomedical research community. To meet these needs the NCRR must be in the vanguard of evolving trends in basic and clinical research so that resources will be available to facilitate that research.

Provide shared clinical, primate and biotechnology resources for use by investigators supported by all the NIH Institutes and Centers. These resources, primarily centers, serve more than 10,000 researchers, supported through well over \$1 billion of categorical research resource Institute funds, thus leveraging those funds for more cost-effective and efficient research.

Develop quick, flexible approaches to new and emerging biomedical research needs and opportunities. These innovations often involve high-risk research, but the payoffs may be substantial.

Strengthen the nation's biomedical research infrastructure through programs to develop and enhance the capacity of minority institutions and centers of emerging excellence to participate in biomedical research, to increase the exposure of K-12 students and their teachers to the life sciences, to improve the condition of research animal facilities, and to construct or renovate facilities for biomedical and behavioral research.

The NCRR plays a key role in addressing pressing trans-NIH research issues, such as access to state-of-the-art instrumentation and biomedical technologies; containment of the escalating costs of highly sophisticated clinical research; development of appropriate, specialized research models both animal and nonanimal; and remedying the shortage of independent clinical investigators and the under representation of minority investigators. Present and future program directions emphasize "smart," network-connected technologies, computer-aided drug design, development and testing of gene and molecular therapies, bioengineering approaches to decrease health care costs, and enhanced training and career development for patient-oriented research.

Warren Grant Maguson Clinical Center

The NIH Clinical Center will serve as a premier center for clinical research. A model of collaborative excellence, the NIH Clinical Center will lead through innovation in the design, conduct, training, and impact of clinical research.

The NIH Clinical Center is the clinical research facility of the National Institutes of Health. It provides patient care, services, training, and the environment in which NIH clinician-scientists creatively translate emerging knowledge into better understanding, detection, treatment, and prevention of human diseases for the health of a diverse nation.

The Standards for Clinical Research, established in 2001, set forth some essential principles and processes for the conduct of clinical research in the NIH intramural research programs. A clinical standards review process using these standards was initiated in the summer of 2000.

The Bench-to-Bedside Program encourages collaborations between basic and clinical investigators across the NIH institutes in order to translate scientific findings into clinical applications. Since its inception in 1998 more than 175 proposals have been submitted and 32 projects have been funded. In addition to institute resources, a new source of funding has been identified: The NIH Office of Rare Diseases will be supporting five projects at \$100,000 per award per year for two years. The projects must focus on an area of science/research directly related to a rare disease.

The Office of Protocol Services was established in 2002 to provide principal investigators with tools and applications that help simplify the entire protocol process. One such effort, ProtoType, will simplify the protocol writing process by providing recommended language cassettes for protocol and consent form use. The application will assure that regulatory requirements are met by providing help on relevant parts of the protocol and by linking to NIH Clinical Center policies.

Clinical Research Information System (CRIS), the Clinical Center's next-generation clinical information infrastructure, is a \$60 million project that will link and support patient care, research and management. This phase of the CRIS project replaces and expands the Clinical Center's current hospital information system known as the Medical Information System, or MIS. Once complete, at least 24 distinct information systems will feed into two CRIS hubs, the Clinical Data Repository and the Clinical Data Warehouse.