NIH Common Fund Initiatives Announced

The National Institutes of Health (NIH) announced seven scientific initiatives to be supported through the NIH Common Fund. The programs will distribute $17.8 million in NIH Common Fund support in the 2010 fiscal year and additional funds in future years. The NIH Common Fund, enacted into law by Congress through the 2006 NIH Reform Act, supports trans-NIH programs that require participation by at least two NIH Institutes or Centers (ICs) or would otherwise benefit from strategic planning and coordination.

The seven new scientific programs are:

Science of Behavior Change Program: This initiative will focus on understanding human behavior change across a broad range of health-related behaviors. The program will address strategies to curb unhealthy behaviors such as smoking, drinking, and drug abuse, as well as inactivity and poor diet.

Library of Integrated Network-based Cellular Signatures Program (LINCS): The LINCS program will develop a community resource of scientific information pertaining to biological systems. The initiative will catalogue how components of biological systems – genes, proteins, metabolites and other molecules - function normally and how they become disrupted by genetic and environmental stressors to cause disease. This will be a two-phase initiative.

Protein Capture Reagents Program: This initiative will create a suite of new research tools to isolate proteins in order to study their function under normal conditions and when the cell is stressed or diseased. The program will be accomplished in four phases.

Knockout Mouse Phenotyping Program: This program will explore how specific genes control phenotypes such as metabolism, energy balance, and physical appearance in mice. The initiative will establish a system to characterize the vast collection of knockout mice.

Global Health Program: This program will amplify the capacity for global health research by enhancing education, training and research opportunities in developing countries.

Translational Application of Stem Cells – NIH Induced Pluripotent Stem (iPS) Cell Center: This initiative will create a national iPS Cell Center as part of the NIH Intramural Research Program. The Center will promote translational work involving stem cells.

Regulatory Science Program: This Regulatory Science Program is a collaboration between NIH and the Food and Drug Administration (FDA). The program will work to expedite development, regulatory review, and implementation of new knowledge, technologies, and innovations as related to medical products. The primary focus is to accelerate the development of safe, effective, and scientifically sound products into accessible items and therapies for use in patient care.

For further detail pertaining to the NIH Common Fund and these seven initiatives, visit: http://nihroadmap.nih.gov/.

Methodist Hospital Research Institute Awarded $11.5M Center Grant

The Methodist Hospital Research Institute was awarded an $11.5 million Center Grant by the National Institutes of Health (NIH) for breast cancer research. Investigators from the Institute, as well as other team members from Baylor College of Medicine and the University of Texas Health Science Center at Houston, will focus on targeting cancer stem cells to enhance breast cancer treatments. The study will be led by Stephen Wong, PhD, PE, Director of the Center for Bioengineering and Informatics at The Methodist Hospital Research Institute.

The research team will create a modeling platform with special emphasis on the role of tumor-initiating cells (TIC) that will include biological experiments and mathematical computational modeling. Investigators will use advanced genetic, imaging and computational modeling techniques to develop and study model breast cancer stem cells. Their examination of cancer stem cell behavior will provide a framework for understanding breast cancer stem cell evolution and establish predicable outcomes for use in testing and development of targeted drugs.

University of Kansas Hospital Cancer Program Receives $1M

The University of Kansas Hospital's Richard and Annette Bloch Cancer Care Pavilion in Westwood received a $1 million gift from the Burns & McDonnell Foundation to establish a high-risk prostate cancer prevention program. The donation supports the Center's effort to earn designation as a National Cancer Institute (NCI) and represents the largest amount given by a corporation toward that end, bringing total contributions made toward NCI designation to $38 million since January 2009.

Burns & McDonnell is an engineering and design firm employing over 3,000 employee-owners in nearly 2 dozen locations in the US. This donation marks the largest single gift in the 24-year history of firm's foundation.

Joan C. Edwards School of Medicine Receives $4M Translational Research Grant

The Joan C. Edwards School of Medicine received a $4 million grant to aid in the development of a translational genomic center at the Edwards Comprehensive Cancer Center at Cabell Huntington Hospital. The funds will help to equip the center with state-of-the-art clinical facilities for patient care as well as laboratory space for DNA and chromosome research. The center will be focused on making new discoveries in personalized medicine that can be applied to patient care.

The genomic center, which will be located on the top floor of the Edwards Comprehensive Cancer Center, could be occupied as soon as this fall. Investigators will not be limited to cancer; however, translational cancer research will be the primary focus and researchers are planning genomic investigations on almost all tumor samples at the genomic center.

Albany Medical Center Receives $10M for Research

The Albany Medical Center was awarded a $9.1 million grant from the National Institutes of Health's National Center for Research Resources (NCRR). The award was made through the NIH Extramural Facilities Program (C06) with funding provided through the American Recovery and Reinvestment Act of 2009 (ARRA). The Center will receive a corresponding 10% "match" of nearly $1 million from the New York State Innovation Economy Matching Grant Program. This award brings the total stimulus funding awarded to Albany Medical College through the NIH to $17.2 million.

Funds will be used to add two floors dedicated for research laboratories to a new college building currently under construction. Upon completion of construction, the medical school plans to add 10 research scientists and 10 technical staff members to its current staff of 77 scientists. The college plans to allocate part of the new space as a Regional Clinical Competency and Patient Safety Center for training medical students, physicians and other health care professionals. The additional square footage will also be used to facilitate the expansion of research efforts in the areas of cardiovascular sciences, cell biology and cancer research, immunology and microbial disease, and neuropharmacology and neuroscience.

Wright State University to Create Neuroscience Research Hub

Wright State University (WSU) in Dayton, Ohio, announced plans to build a 64,000-square-foot, $22 million, facility for neuroscience research. The facility will house the Wright State University & Premier Health Partners (PHP) Neuroscience Institute, a public-private partnership designated as an Ohio Center of Excellence. The University will receive $4.3 million over five years from PHP to create a department of neurology at WSU's Boonshoft School of Medicine.

Researchers at WSU collaborate with the clinical neurologists of PHP to conduct research and clinical trials. The proposed hub will serve to expedite the translational process by bringing together scientists and clinicians who are working together, and will support investigation of neurological disorders affecting movement control, such as: stroke; Parkinson's disease; Multiple Sclerosis; Amyotrophic Lateral Sclerosis (ALS); neuromuscular disorders; and other neuropathies associated with diabetes, chemotherapy, or nerve injury. The facility is slated for construction within in the biomedical and engineering research corridor on the Wright State University campus and will begin once funding is secured for the project. Funding is expected to come from contributions by WSU, the state of Ohio and private sources.

UTMB-Galveston Now Part of Texas Medical Center

The University of Texas Medical Branch (UTMB) at Galveston recently became the 49th institution to be named a member of the Texas Medical Center in Houston. The Texas Medical Center, the world's largest medical complex, was founded in 1945 and includes self-governing institutions from public and private sectors. The Center enables collaboration among its membership. As a member institution, UTMB-Galveston will be able to apply for research grants with other Center members. Additionally, researchers at UTMB-Galveston will gain access to the laboratory and medical equipment as well as the libraries and classroom facilities of other member centers.

Hopkins School of Medicine Receives $9.7M Grant

Johns Hopkins University School of Medicine (JHUSOM) received a $9.7 million grant from the National Heart, Lung and Blood Institute (NHLBI), a part of the National Institutes of Health (NIH), to study ways of improving cardiovascular health among African American patients. The goal of the program is to better understand and to reduce racial and ethnic disparities in blood pressure management in Baltimore. As part of the five-year grant, the school will develop a research center aimed at reduction of hypertension among the African American patients receiving treatment there.

Research Partnership in Cognitive Aging Awards 17 Grants

The Research Partnership in Cognitive Aging – led by the National Institute on Aging (NIA), a part of the National Institutes of Health (NIH), and the McKnight Brain Research Foundation (MBRF) – has awarded 17 grants. The grants are focused on examining causes and interventions for age-related cognitive decline and neural and behavioral profiles of cognitive function in aging. The grant recipients and their area of research focus are:

Ellen F. Binder, MD, and Mark A. McDaniel, PhD, Washington University School of Medicine, St. Louis: Combining Exercise and Cognitive Training to Improve Everyday Function

Patricia A. Boyle, PhD, Rush University Medical Center, Chicago: Characterizing the Behavior Profile of Healthy Cognitive Aging

Randy L. Buckner, PhD, Massachusetts General Hospital, Boston: Neural Processes Underlying Cognitive Aging

Jeffrey M. Burns, MD, University of Kansas Medical Center, Kansas City: Dose-Response

Study of Exercise in Older Adults

Carl W. Cotman, PhD, University of California, Irvine: Gene Expression, Compensation, Mechanisms and Successful Cognitive Aging

Mark D'Esposito, MD, University of California, Berkeley: A Brain-Based Approach to Enhancing Executive Control Functions in Healthy Aging

Victor W. Henderson, MD, Stanford University, Stanford, CA: Tai Chi and Guided Autobiography for Remediation of Age-Related Cognitive Decline. *This study is also supported by the National Center for Complementary and Alternative Medicine.*

William J. Jagust, MD, University of California, Berkeley, Lawrence-Berkeley Laboratory: Neural and Biochemical Mechanisms of Cognitive Aging

Alfredo Kirkwood, PhD, Johns Hopkins University, Baltimore, MD: Synaptic Function and Plasticity in CA3 Circuits in the Aging Hippocampus

Mika J. Kivimaki, PhD, and Archana Singh-Manoux, PhD, University College London, England: Health Behaviors over the Adult Lifecourse and Cognitive Aging

Robert Krikorian, PhD, University of Cincinnati: Omega-3 and Blueberry Supplementation in Age-Related Cognitive Decline. *This study is also supported by the NIH Office of Dietary Supplements.*

Philip W. Landfield, PhD, University of Kentucky, Lexington: Hippocampal Electrophysiology and Myelinogenesis in Healthy Cognitive Aging

Coleen T. Murphy, PhD, Princeton University, Princeton, NJ: Molecular Mechanisms Regulating Age-Related Cognitive Decline in C Elegans

Scott A. Small, MD, Columbia University Health Sciences, NY: Neural and Behavioral Profiles of Cognitive Aging

Craig E. Stark, PhD, University of California, Irvine: High Resolution Structural and Functional Brain Imaging of the Medial Temporal Lobe

Yaakov Stern, PhD, Columbia University, NY: Combined Exercise and Cognitive Training Intervention in Normal Aging

Joe Z. Tsien, PhD, Medical College of Georgia, Augusta: Hippocampal Network Profiles of Memory Aging. *This study is supported by funds from the American Recovery and Reinvestment Act (ARRA).*

CPRIT Announces Cancer Prevention Awards

The Cancer Prevention and Research Institute of Texas (CPRIT) announced its first round cancer prevention program awards, totaling over $6.8 million. The programs will be administered through clinics, academic institutions, health districts and community-based organizations throughout the state. Awardees were selected from 56 prevention applications submitted to CPRIT. Prevention awards announced in March this year were made in the categories of: Evidence-Based Prevention Programs and Services; Health Promotion, Public Education, and Outreach Programs; Planning Award – Community Collaborative Prevention Programs and Services for Breast, Cervical and Colorectal Cancers; and Texans Conquer Cancer Patient Support Services.

Evidence-Based Prevention Programs and Services include short-term projects focused on early detection, cancer prevention and survivor quality of life improvements and provide a maximum of $1 million for up to 24 months. Health Promotion, Public Education, and Outreach Programs include projects aimed at disseminating methods that, if adopted by individuals, would reduce cancer risks through preventative measures, early detection and improved quality of life for survivors. These awards offer a maximum of $300,000 for up to 24 months. Planning Award – Community Collaborative Prevention Programs and Services for Breast, Cervical and Colorectal Cancers include projects aimed at development of collaborations to address documented cancer prevention and control challenges. The maximum award for these programs is $15,000. Texans Conquer Cancer Patient Support Services grants are awarded for projects providing support services for cancer patients and their families through proceeds from the sale of Texans Conquer Cancer specialty license plates. The maximum award for these projects is $3,000. Additional award information can be found online at http://www.cprit.state.tx.us/.