

Tyi from the NHLBI

NHLBI Shares in Global Health Initiative

The NHLBI, in conjunction with Minneapolis-based UnitedHealth Group’s Chronic Disease Initiative (CDI), will establish the “UnitedHealth and NHLBI Collaborating Centers of Excellence” (COEs) network to fund research and training centers for prevention and treatment of chronic diseases in developing countries.

“Scientific discovery knows no boundaries – and neither do chronic diseases, which are increasingly affecting the young and the elderly, the rich and the poor, and every ethnic group in every nation,” said Dr. Elizabeth G. Nabel, Director, NHLBI.

The NHLBI is awarding 10 contracts totaling more than \$34 million in this effort. The Institute and UnitedHealth Group’s CDI are jointly funding six centers in Bangladesh, China, Guatemala, India (Bangalore and New Delhi), and South Africa. Additionally, the NHLBI is providing funding for three more centers in Argentina, Kenya, and Peru, while the UnitedHealth CDI is funding two centers located at the U.S.-Mexico border and in Tunisia. The NHLBI will also be awarding a six-year contract to Westat of Rockville, MD, to serve as the administrative coordinating center for the NHLBI COEs.

Each COE research institution in a low- or middle-income developing country is being paired with at least one partner academic institution in a developed country to enhance research and training opportunities. Partner institutions include Tulane University School of Public Health and Tropical Medicine, New Orleans, LA; Johns Hopkins University, Bloomberg School of Public Health, Baltimore, MD; Duke Global Health Institute and Duke University Medical Center, Durham, NC; RAND Corporation, Santa Monica, CA; Harvard School of Public Health and Harvard Medical School, Boston, MA; Emory University, Atlanta, GA; and Hamilton Health Sciences and McMaster University, Hamilton, Ontario, Canada.

The centers will conduct research tailored to their local or regional needs to reduce the burden of chronic diseases, including heart disease, heart failure, stroke, diabetes, and chronic obstructive pulmonary disease. The World Health Organization estimates that these chronic diseases account for more than half of deaths worldwide, of which 80 percent occur in low- and middle-income countries. Furthermore, the WHO projects that without action, deaths due to chronic diseases will increase substantially. With action, however, 36 million premature deaths worldwide could be averted by 2015, nearly half in people under 70 years of age.

The COEs are also expected to train and mentor emerging scientists, physicians and other health professionals, and/or community health workers in collaboration with their partner institutions.

For more information about the UnitedHealth and NHLBI Collaborating Centers of Excellence, as well as details about other NHLBI global health efforts, please visit <http://www.nhlbi.nih.gov/about/globalhealth/>.

Inside

NHLBI Workshops and Working Groups	2
Science Advance from the NHLBI	2
Mark Your Calendar	2
NHLBI Research Initiatives	3
National Heart, Lung, and Blood Advisory Council’s June Meeting	4
News from Capitol Hill	4
Upcoming Events	5
Constituents’ Corner	6
Need More Information?	6

Upcoming NHLBI Workshops and Working Groups*

Workshop or Working Group	Date / Location	Contact for More Information
Workshop: Getting from Genes to Function in Lung Disease	September 3-4, 2009 Bethesda, MD	Susan Banks-Schlegel, Ph.D., schleges@nhlbi.nih.gov 301-435-0202

* PIO representatives will be accommodated on a space-available basis and will be responsible for their own travel and lodging expenses.

Science Advance from the NHLBI: ALLHAT Provides New Information on Preventing Heart Failure in Patients with Hypertension

Hypertension (high blood pressure) is a leading cause of heart failure, a serious condition with debilitating symptoms (including shortness of breath and fatigue) that causes about 300,000 deaths in the United States each year. In 2002, the NHLBI-supported Antihypertensive and Lipid-Lowering to Prevent Heart Attack Trial (ALLHAT)—a randomized, practice-based trial involving over 42,000 high-risk individuals with hypertension—reported that traditional diuretics were superior in treating high blood pressure and preventing cardiovascular events (including heart failure) to several newer, more expensive classes of medications (calcium-channel blockers, alpha-adrenergic blockers, and angiotensin-converting enzyme [ACE] inhibitors) and provided strong evidence that diuretics should be the initial treatment of choice for lowering high blood pressure in most patients. ALLHAT also found that most patients need more than one drug to control their blood pressure adequately.

Recently, ALLHAT investigators re-examined the incidence of heart failure in ALLHAT participants. The investigators carefully studied hospital records of ALLHAT participants to identify patients with heart failure and the type of heart failure they had. Heart failure has two main types, both of which occur in hypertensive patients and cause substantial death and disability. One type, heart failure with reduced ejection fraction, usually occurs because the heart cannot contract normally and therefore cannot pump forcefully. The other, heart failure with preserved ejection fraction, develops because the heart muscle stiffens, impeding the heart's ability to fill normally with blood; blood then backs up in the lungs and veins.

The recent analysis showed that initiating treatment with diuretics significantly reduced the overall risk of heart failure requiring hospitalization, and also reduced the risk of heart failure with preserved ejection fraction, compared with initial treatment with any of the three other medications tested. In addition, initial treatment with diuretics reduced the

risk of heart failure with reduced ejection fraction compared with calcium-channel blockers and alpha-adrenergic blockers, and had an effect similar to ACE-inhibitors in reducing risk of this type of heart failure.

Considering these results along with data from many heart failure trials, the investigators concluded that treatment with a combination of diuretics and ACE-inhibitors is likely to be especially effective in preventing heart failure in high-cardiovascular-risk patients with hypertension. Given estimates that nearly 1 in 3 adults in the United States has high blood pressure and the large proportion of people with high blood pressure who eventually develop heart failure, results such as these that can help fine-tune treatment guidelines hold promise for preventing development of many cases of heart failure.

Mark Your Calendar . . .

September	National Cholesterol Education Month (hp2010.nhlbihin.net/cholmonth/)
	National Sickle Cell Month (www.sicklecelldisease.org)
October	Healthy Lung Month (www.lungusa.org)
November	Pulmonary Hypertension Awareness Month (www.phassociation.org)
December 1-7	National Aplastic Anemia and MDS Awareness Week (www.aamds.org)

NHLBI Research Initiatives

From time to time, the NHLBI invites investigators to submit grant applications or contract proposals for specific research programs. We are soliciting applications for the following new programs. Please visit the URL listed with each program to obtain information about important application dates and deadlines. For full descriptions of these and other current research initiatives, visit www.nhlbi.nih.gov/funding/inits/index.htm.

Ancillary Studies of Acute Kidney Injury, Chronic Kidney Disease, and End Stage Renal Disease Accessing Information from Clinical Trials, Epidemiological Studies, and Databases (PA-09-196)

<http://grants.nih.gov/grants/guide/pa-files/PA-09-196.html>
Objective: Carry out ancillary studies to ongoing or completed clinical trials, existing administrative and clinical databases, and epidemiological studies of kidney disease, acute kidney injury, and chronic kidney disease in order to extend our understanding of the risk factors for developing kidney disease.

Directed Stem Cell Differentiation for Cell-Based Therapies for Heart, Lung, and Blood Diseases (PA-09-248/249/250)

<http://grants.nih.gov/grants/guide/pa-files/PA-09-248.html>
Objective: Define the factors that control differentiation of stem cells in vitro or in vivo in order to develop methods to direct differentiation of stem cells to yield replacement cells for clinical use or to develop methods to stimulate differentiation of resident stem cells in vivo for regeneration or repair of the heart, blood vessels, lungs, and blood.

Erythropoiesis: Components and Mechanisms (R01) (PA-09-255)

<http://grants.nih.gov/grants/guide/pa-files/PA-09-255.html>
Objective: Develop a complete description of the molecular and cellular components of erythropoiesis, including gene expression, protein translation, and post-translational modification.

Genetic and Genomic Analyses of *Xenopus* (R01) (PAR-09-240/241)

<http://grants.nih.gov/grants/guide/pa-files/PA-09-240.html>
Objective: Improve the use of the African aquatic clawed frog (genus *Xenopus*) as a vertebrate model for biomedical research by developing new resources to advance the detection and characterization of genes, pathways, and phenotypes of interest in development, organogenesis, and in cell biological processes such as cell division, signaling, and migration.

Improving Diet and Physical Activity Assessment (R01) (PAR-09-224/225)

<http://grants.nih.gov/grants/guide/pa-files/PA-09-224.html>
Objective: Improve diet and physical activity measurement through development of novel assessment approaches, improved instruments, new technologies, or statistical/analytical techniques.

Senator Paul D. Wellstone Muscular Dystrophy Cooperative Research Centers (U54) (HD-09-027)

<http://grants.nih.gov/grants/guide/rfa-files/RFA-HD-09-027.html>
Objective: Participate in a network of six centers to foster the translation of new scientific findings and technological developments into novel treatments for the muscular dystrophies, a group of hereditary, progressive degenerative disorders causing weakness of the skeletal or voluntary muscles. Each Center may contain a mixture of basic, translational, and/or clinical research, as long as efforts are directed toward therapeutic development.

Innovations in Biomedical Computational Science and Technology (R01) (PAR-09-218)

<http://grants.nih.gov/grants/guide/pa-files/PA-09-218.html>
Objective: Conduct research and development in biomedical computing and biomedical information science and technology in order to ensure better management and analysis of biomedical data and better modeling of biological processes.

NHLBI Systems Biology Collaborations (PAR-09-214)

<http://grants.nih.gov/grants/guide/pa-files/PA-09-214.html>
Objective: Promote the use of collaborative teams of investigators to develop a coordinated systems biology approach to understand the normal physiology and perturbations associated with heart, lung, blood, and sleep disorders.

Pilot Studies for Studying the Mechanisms of Improvement in Type 2 Diabetes and Cardiovascular Risk Factors or in Cardiovascular, Lung, or Sleep Diseases after Bariatric Surgery (R01) (DK-09-012)

<http://grants.nih.gov/grants/guide/rfa-files/RFA-DK-09-012.html>
Objective: Determine the optimal research design as well as collect pilot data on feasibility and implementation for a randomized clinical trial of the effects of bariatric surgery on patients with cardiovascular, lung, and sleep diseases. Studies should focus on subjects with a BMI of 30 to 40.

Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellowships (F31) to Promote Diversity in Health-Related Research (PA-09-209)

<http://grants.nih.gov/grants/guide/pa-files/PA-09-209.html>
Objective: Improve the diversity of the health-related research workforce by supporting the training of predoctoral students from groups that have been shown to be underrepresented, such as individuals from underrepresented racial and ethnic groups, individuals with disabilities, and individuals from disadvantaged backgrounds.

Ruth L. Kirschstein National Research Service Awards for Individual Senior Fellows (F33) (PA-09-211)

<http://grants.nih.gov/grants/guide/pa-files/PA-09-211.html>
Objective: Enable experienced scientists who have at least seven years of research experience beyond the doctorate and who have progressed to the stage of independent investigators to make major changes in the direction of their research careers or broaden their scientific backgrounds by acquiring new research capabilities through a program of full-time training for up to two years at the NIH or at other institutions.

Translational Programs in Lung Diseases (P01) (PAR-09-185)

<http://grants.nih.gov/grants/guide/pa-files/PA-09-185.html>
Objective: Encourage interdisciplinary approaches to lung translational research, allowing for potentially high-impact research, which will translate recent findings from basic biomedical research into the development of new prevention, diagnosis, and treatment strategies for pulmonary diseases.

National Heart, Lung, and Blood Advisory Council Meeting

June 10, 2009

Dr. Nabel welcomed members to the 234th meeting and announced two Institute changes. First, the Division of Cardiovascular Diseases and the Division of Prevention and Population Sciences will be merged into the Division of Cardiovascular Sciences to align the Institute's administrative structure with its cardiovascular programs, which now effectively span basic, clinical, and population research. Dr. Michael Lauer, currently Director of the Division of Prevention and Population Sciences, will serve as Director of the new Division, and Dr. Sonia Skarlatos, currently Acting Director of the Division of Cardiovascular Diseases, will serve as Deputy Director. Second, the Institute is seeking a Director for its new Office of Global Health.

The Institute initiated several global health activities this year. In June, it awarded contracts (jointly with Minneapolis-based UnitedHealth Group) to establish nine global health Centers of Excellence to form a worldwide network of research and training centers to build institutional and community capacity to prevent and control chronic diseases in developing countries.

Dr. Nabel announced two changes in NHLBI leadership: First, Dr. Gregory Morosco, who served as Director of the Division for the Application of Research Discoveries, retired recently after more than 25 years with the Institute. He played an instrumental role in the Institute's educational and outreach programs for health professionals, patients, and the public. Dr. Rob Fulwood is serving as Acting Director. Second, Mr. Donald Christoferson, the NHLBI's Executive Officer, will retire in July after 37 years with the NIH. He was recently awarded the Presidential Rank Award of Meritorious Executive. Mr. Timothy Wheelles will serve as

the NHLBI's Acting Executive Officer.

Dr. Nabel reviewed the Institute's FY 2010 President's Budget, which represents a 1.1 percent increase over the FY 2009 Conference budget. No major changes have been made since FY 2009 in any of the budget categories.

Dr. Nabel summarized the NIH scientific research and funding approach to the American Recovery and Reinvestment Act (ARRA) and described NHLBI ARRA funding plans. The NHLBI will receive about 10 percent of the \$7.4 billion provided to NIH ICs for scientific research. NHLBI ARRA funding plans are to accelerate implementation of the NHLBI Strategic Plan, fund programs that will demonstrate significant advances in 2 years, and create or preserve jobs, especially to support new and early-stage investigators. The NHLBI ARRA web site (<http://www.nhlbi.nih.gov/recovery>) provides additional information, guidelines for grantees, FAQs, and links to additional ARRA resources.

Dr. Nabel discussed the proposed process the NHLBI developed to facilitate Council nominations of peer reviewers for study sections and NHLBI review committees. Council members will be able to complete reviewer nomination forms via the Electronic Council Book. The Council concurred with the proposed process and nomination forms will be available on the Electronic Council Book for the next Council meeting.

Dr. Nabel reviewed the NHLBI Method to Extend Research in Time (MERIT) Award (R37), which is intended to provide long-term research grant support to investigators whose

continued on page 6

News from Capitol Hill

New NIH Director Appointed

Following unanimous confirmation by the Senate, on August 11, 2009, Dr. Francis Collins was sworn in as the 16th director of the National Institutes of Health. Dr. Collins, a physician-geneticist noted for his landmark discoveries of disease genes and his leadership of the Human Genome Project, served as director of NIH's National Human Genome Research Institute from 1993-2008. In President Obama's nomination announcement, the President noted that "The National Institutes of Health stands as a model when it comes to science and research. My administration is committed to promoting scientific integrity, and pioneering scientific research and I am confident that Dr. Francis Collins will lead the NIH to achieve

these goals. Dr. Collins is one of the top scientists in the world and his groundbreaking work has changed the very ways we consider our health and examine diseases."

Smoking Prevention and Control

On June 22, 2009, the President signed into law the Family Smoking Prevention and Tobacco Control Act, H.R. 1256 (P.L. 111-31). The law grants the Food and Drug Administration (FDA) the authority to regulate tobacco products. It authorizes the agency to restrict the sale and distribution of tobacco products if the agency determines regulation is necessary to protect public health, recall harmful products, establish tobacco product standards to protect public health, and establish standards for the sale of modified-risk tobacco products.

Upcoming Events

Activity	Date/Location	More Information
National Heart, Lung, and Blood Advisory Council 235th Meeting	September 1, 2009 Bethesda, MD	http://www.nhlbi.nih.gov/meetings/nhlbac/index.htm
Tuberous Sclerosis Alliance 2009 International TSC Research Conference	September 23-26, 2009 Bloomingdale, IL	http://www.tsalliance.org/pages.aspx?content=564
Pulmonary Hypertension Association 2009 PH Resource Network Symposium	September 24–26, 2009 Arlington, VA	http://www.phassociation.org/PHRN/symposium/
Aplastic Anemia and MDS International Foundation Living with Myelodysplastic Syndromes (MDS)	September 26, 2009 Los Angeles, CA <i>and</i> October 10, 2009 Tampa, FL	http://www.aamds.org/aplastic/information__hope/patient_and_family_c/los_angeles.php
Sickle Cell Disease Association of America, Inc. 37th Annual Convention	September 30 – October 3, 2009 Orlando, FL	http://www.scdaaconvention.com
Fanconi Anemia Research Fund, Inc. Twenty-first Annual Fanconi Anemia Scientific Symposium	October 1–4, 2009 Baltimore, MD	http://www.fanconi.org/research/Symposium/21st7.html
Sudden Cardiac Arrest Association (SCAA) 2009 Annual Meeting & Medical Education Conference	October 9-11, 2009 Chicago, IL	http://associationdatabase.com/aws/SCAA/pt/sp/annualmtg
Cooley's Anemia Foundation Ninth Cooley's Anemia Symposium	October 21–24, 2009 New York, NY	http://www.nyas.org/Events/Detail.aspx?cid=9c11e73d-2349-4cdd-8910-0d8fad184ced
Preeclampsia Foundation Patient Symposium	October 23, 2009 Chicago, IL	http://www.preeclampsia.org/pdf/patient_symp.pdf
Narcolepsy Network 24th Annual Patient Conference	October 23-25, 2009 Jacksonville, FL	http://www.narcolepsynetwork.org/
National Hemophilia Foundation 61st Annual Meeting	October 29–31, 2009 San Francisco, CA	http://www.hemophilia.org/NHFWeb/MainPgs/MainNHF.aspx?menuid=10&contentid=2&rptname=annualmeeting
American Heart Association Scientific Sessions 2009	November 14-18, 2009 Orlando, FL	http://www.americanheart.org/presenter.jhtml?identifier=3064925
American Association for Respiratory Care 55th AARC International Respiratory Congress	December 5–8, 2009 San Antonio, TX	http://www.aarc.org/education/meetings/congress_09/
Parent Heart Watch 5th Annual Conference	January 15–18, 2010 Arlington, TX	http://www.starwoodmeeting.com/StarGroupsWeb/booking/reservation?id=0908054189&key=138E9
National Sleep Foundation Sleep Health & Safety 2010 Conference	March 5-6, 2010 National Harbor, MD	www.sleepfoundation.org

Constituents' Corner

Sarcoidosis Group to Hold 5th Annual Sarcoidosis Walk for a Cure

Janine's Sarcoidosis Outreach Foundation and Support Group (JSOF) will host its 5th Annual Sarcoidosis Walk for a Cure on October 24, 2009, at the JCC Community Center, 5601 S. Braeswood Blvd., Houston, Texas. We invite all to join us as we empower communities through Sarcoidosis education, awareness, and research into a cause and cure.

Our guest will be Marc A. Judson, M.D., Professor of Medicine, Department of Medicine, Division of Pulmonary and Critical Care Medicine, Medical University of South Carolina, Charleston, SC. Dr. Judson is the director of the MUSC Sarcoidosis Center, one of the largest sarcoidosis clinics in the United States. His other interests include non-invasive pulmonary aspergillus disease and lung transplantation.

If you are unable to join us, you can be a virtual walker, or we will have someone walk for you. For more information, please phone

Emma Carroll at 800-846-5158 or 832-248-6621, or send email to her at Sarcoidosis@jsof.org.

*Submitted by Emma Carroll, Executive Director
Janine's Sarcoidosis Outreach Foundation*

National Sleep Foundation Announces New "Sleep Health & Safety" Conference

National Sleep Foundation invites primary care physicians, sleep clinicians and researchers, public health, policy, and transportation safety specialists to Washington, DC, March 5-6, 2010, for its new "Sleep Health & Safety" conference. Top experts will present the latest information in the clinical management of common sleep disorders and issues related to drowsy driving legislation and school start times. Attendees may choose between courses with a clinical or public health focus. AMA PRA Category 1 Credits will be offered for physicians. Visit www.sleepfoundation.org for more details.

*Submitted by Jennifer Cowher Williams
National Sleep Foundation*

We invite you to use this space that we reserve for you to share your successes and opinions. You may submit your ideas and articles to nhlbi.listens@nih.gov or Public Interest News, Office of Science and Technology, Building 31, Room 5A07, 31 Center Drive, MSC-2482, Bethesda, MD 20892-2482.

June 2009 Advisory Council Meeting

Continued from page 4

research competency and productivity are distinctly superior and who are likely to continue to perform in an outstanding manner. Investigators may not apply for a MERIT award; instead, they are selected by the NHLBI on the basis of their current grant applications and their present and past grant support. Although generally supportive of the program and its award process, Council members recommended instituting a more stringent review of potential nominees to ensure that all nominees are exceptionally productive researchers.

Ms. Paula Polite, Council member and Manager of Quality Programs, Division of General Services, Memphis, Tennessee, reported on the tenth annual NHLBI PIO meeting held on June 8-9, 2009. She thanked the NHLBI and reported results of an informal survey indicating that participants found the meeting content and opportunities for networking and meeting with NHLBI staff to be beneficial. She emphasized that participants find the "Meet the NHLBI

Staff" portion of the meeting to be especially helpful for building relationships. Dr. Nabel noted the importance of this event to the Institute.

Dr. Sidney C. Smith, Jr., Professor of Medicine, University of North Carolina, and Senior Advisor, Cardiovascular Research Translation and Application, NHLBI, presented a status report on the development of NHLBI CVD risk factor guidelines. He summarized the guidelines development process and discussed the new Web-based approach being used to develop guidelines.

NHLBI staff presented 7 new initiatives and 8 renewals, 2 ideas, and 2 requests by other ICs for secondary support, all of which had been reviewed in October by the Board of External Experts. The Council was supportive of the initiatives presented, but made a number of specific recommendations for consideration prior to their release.

Need More Information?

We are always interested in receiving comments and suggestions from the community. If you or your organization have questions for me or for the Institute, please contact me at nabele@nhlbi.nih.gov or Dr. Carl Roth at rothc@nhlbi.nih.gov.



Elizabeth G. Nabel, M.D.
Director, NHLBI

For information on specific issues, the following contacts may be helpful:

- For health-related questions, information about publications, or communications pertaining to NHLBI policies and priorities, please contact the trained information specialists of the NHLBI Information Center at 301-592-8573, or write to the Information Center at P.O. Box 30105, Bethesda, MD 20824-0105, or email inquiries to nhlbiinfo@nhlbi.nih.gov.
- For additional information regarding NHLBI events, consult the references provided or www.nhlbi.nih.gov/calendar/nhcal.htm. Most other NIH Institutes and Centers also maintain calendars on their Web sites. Links to their Web pages are at www.nih.gov/icd.