1 from the National Heart, Lung, and Blood Institute A public interest news volume 6, issue 3 January 2006

# NHLBI Sets Course with New Strategic Planning Effort

The NHLBI is in the process of preparing a new strategic plan with the goal of creating a blueprint for the next decade of biomedical achievement. Plan development began last summer with the establishment of the Strategic Plan Framework. Over the course of 2006, the NHLBI will institute a 3-stage approach to finalizing the plan. Stage 1, to be completed by Fall 2006, will formulate recommendations for selected research program themes. Stage 2 will identify Institute-wide strategic themes and draft the Strategic Plan. Stage 3 will include review, revision, and finalization of the plan. Anticipated release date of the plan is Spring 2007.

Key considerations in the planning process include the following: identifying the most pressing scientific opportunities and challenges in heart, lung, blood, and sleep research for which the NHLBI is well positioned to make major contributions; identifying obstacles to progress, and what must be done to overcome them, including needed technologies and resources; evaluating NHLBI operational policies, such as mechanisms of support for clinical research, new investigators, and trainees and instituting necessary changes in NHLBI business operations to facilitate these policies; ensuring that the process is inclusive, with NHLBI grantees and other constituents having an active role; engaging intramural and extramural Institute staff in a common discussion of future directions; and including implementation steps and providing for ongoing evaluation.

"As we view the challenges and opportunities before us, I believe the time is right for the Institute to take a critical look at our scientific directions over the next 5 to 10 years and examine our business operations as well," explained NHLBI Director, Dr. Elizabeth G. Nabel. "We envision this strategic planning process to be a very inclusive, bottom-up approach where NHLBI grantees and other constituencies will play an active role. We have created the *Strategic Plan* section on our public website to provide you with information about what we believe to be an exciting endeavor and to offer you an opportunity to send us your comments via the section "*Opportunities for Input*."

## Annual PIO Meeting Coming Soon

The Seventh Annual NHLBI Public Interest Organization (PIO) meeting is imminent. It will be held January 30–31 at the Holiday Inn Select Bethesda, 8120 Wisconsin Avenue, Bethesda, MD.

Once again, a full agenda of talks, scientific sessions, discussions, and participant networking has been scheduled. Highlights will include an overview and progress report of the NIH Roadmap program by NIH Director, Dr. Elias Zerhouni, and a summary of her first year as NHLBI Director and vision of the future by Dr. Nabel.

This year's meeting will once again feature an opportunity for PIO representatives to meet with NHLBI scientific staff knowledgeable about heart development and disease, vascular disease, lung diseases, airway diseases, blood diseases and resources, and sleep and sleep disorders. And, by popular request, a significant amount of time has been included to enable attendees to interact and share ideas and experiences.

The annual PIO meetings emphasize the NHLBI's commitment to building strong relationships with the public. As Dr. Nabel said at last year's meeting, "I cannot state strongly enough the importance of our working relationship, going forward, to achieve our common goals."

Registration begins at 4 pm on January 30. We hope to see your organization represented.

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## **Upcoming NHLBI Workshops and Working Groups\***

Workshop or Working Group	Date / Location	Contact for More Information
NSF/NIH Workshop on Novel Bioengineering Approaches to Measure and Assess Energy Balance, Intake, and Expenditure	March 1, 2006 Arlington, VA	Dr. Abby Ershow ershowa@nhlbi.nih.gov 301-435-0550
Image Guided Intervention for Cardiovascular Disease	Spring 2006 Bethesda, MD	Dr. Frank Evans <u>evansf@nhlbi.nih.gov</u> 301-435-0510
Working Group: Chronic Obstructive Pulmonary Disease in Never Smokers	May 2006 Bethesda, MD	Dr. Thomas Croxton croxtont@nhlbi.nih.gov 301-435-0202
Imaging of Vulnerable Atherosclerotic Plaque in Population-based Research	May or June 2006 Bethesda, MD	Dr. Hanyu Ni nihanyu@nhlbi.nih.gov 301-435-0448

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

# More about the Women's Health Initiative

If you attended the 2005 Public Interest Organization meeting, you probably remember the plenary session about the Women's Health Initiative (WHI) - "Clinical Trials and Tribulations" - led by Dr. Sally Shumaker, WHI principal investigator, and Dr. Gene Gary-Williams, WHI volunteer. At that time, the only results available were from two trials that had been stopped because the risks of hormone therapy exceeded the benefits. However, other aspects of the WHI a trial of dietary modifications, a trial of calcium and vitamin D supplements, and an observation study – continued as planned through March 2005. On February 28 and March 1, results from those studies will be discussed at a conference on the NIH campus. The conference also will pay tribute to the heroic contributions of the 161,808 WHI volunteers and will outline how the findings affect actions that women should take to improve or maintain their health. Other topics to be addressed include the Institute's interest in funding ancillary studies that use WHI resources and its plans for a WHI Extension Study that will continue to collect data through 2010. More information about the "WHI Conference: The WHI Legacy to Future Generations of Women" and the "WHI Broad Agency Announcement (BAA): Opportunity to Use Women's Health Initiative Resources" is available at

www.nhlbi.nih.gov/whi/references.htm.

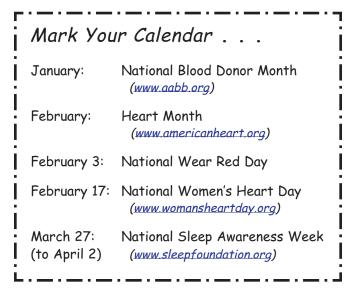
## Heart Truth Hits the Road

The *Heart Truth* Road Show 2006 is the campaign's second cross-country tour to raise awareness about the leading cause of death among U.S. women. It features the Red Dress Collection, free heart health screenings, and information about heart disease and its risk factors. Sponsored in partnership with the American College of Cardiology, the *Heart Truth* Road Show 2006 will be making stops at shopping malls in Detroit, MI, Jacksonville, FL, Memphis, TN, Pittsburgh, PA, and Washington, DC. For more information, visit www.nhlbi.nih.gov/health/hearttruth.

## **ORD Co-Sponsors Conferences**

The NIH Office of Rare Diseases (ORD) will partner with the NHLBI again in Fiscal Year 2006 to co-sponsor scientific conferences on research topics related to rare diseases. Conferences will include the following:

- Cardiofaciocutaneous Syndrome and Noonan Syndrome Scientific Meeting 2006
- Conference on Adult Sickle Cell Disease Care: Guidelines for Pain Management
- Evolution of Pulmonary Hypertension: Emerging Diseases and Novel Therapeutics
- · Neuroimaging of Sleep Disorders
- International Progeria Workshop
- Vascular Anomalies: 2005—Research and Controversies Working Group on the Prevention of Sudden Cardiac Death in Atypical Congenital Long QT Syndrome
- Workshop on Genetic Arrhythmias and Cardiomyopathy Caused by Cardiac Sodium Ion Channel Gene Defects
- 29th Annual Meeting of the National Sickle Cell Disease Program.



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## **NHLBI Research Initiatives**

From time to time, the NHLBI invites investigators to submit grant applications or contract proposals for specific research programs. We currently are soliciting applications for the following programs. Unless a due date is mentioned, applications are accepted for February 1, June 1, and October 1 deadlines each year. For full descriptions of these and other research initiatives, visit www.nhlbi.nih.gov/funding/inits/index.htm.

#### Genomics and Proteomics: Short Courses on Application to Complex Heart, Lung, Blood, and Sleep Disorders (RFA HL-05-012)

Applications due: January 17, 2006

*Objective:* To develop, conduct, evaluate, and disseminate short-term courses on the application of genomics to heart, lung, blood, and sleep disorders.

## RNA Interference (RNAi) Biology: Stability, Delivery, and Processing by Tissues (RFA HL-05-019)

Applications due: January 18, 2006

*Objective:* To increase our understanding of the biology of RNA interference, an effective post-transcriptional strategy for silencing genes, in order to develop its therapeutic potential for a wide range of heart, lung, and blood diseases.

#### Anemia in the Elderly (RFA AG-06-002)

Applications due: January 20, 2006

*Objective:* To explore the epidemiology, pathophysiology, and clinical aspects of anemia in the elderly.

#### Long-Term Oxygen Treatment Trial (RFP HR-06-07) Applications due: January 24, 2006

*Objective:* To determine the efficacy of continuous longterm oxygen treatment for improving survival in subjects with chronic obstructive pulmonary disease and less-thansevere hypoxemia at rest.

#### Short Sleep Duration and Risk of Obesity or Overweight: Linking Mechanisms (RFA HL-06-003) Applications due: January 25, 2006

*Objective:* To investigate whether metabolic and appetite changes resulting from short sleep duration contribute to weight gain.

#### Clinical Hematology Research Career Development Program (K12) (RFA HL-06-006)

Applications due: February 14, 2006

*Objective:* To develop multidisciplinary career development programs in non-malignant clinical hematology research in order to equip new academic researchers with the knowledge and skills necessary to address complex problems in blood disease, transfusion medicine, and cellular therapies.

#### Weight Loss in Obese Adults with Cardiovascular Risk Factors: Clinical Interventions (RFA HL-06-007) *Applications due:* February 15, 2006

*Objective:* To test the effectiveness in routine clinical practice of interventions for weight loss in obese patients who have other cardiovascular risk factors such as hypertension, dyslipidemia, and diabetes.

## Cardiovascular Cell Therapy Research Network (RFA HL-06-001)

Applications due: March 10, 2006

*Objective:* To establish a network to conduct multiple, collaborative, proof-of-concept, cell therapy clinical protocols to enhance the repair and regeneration of damaged cardiovascular tissue.

## Systems Biology Exploratory Program (RFA HL-06-004)

*Applications due:* March 10, 2006 *Objective:* To undertake a coordinated "systems biology" approach to understanding the normal physiology and perturbations associated with heart, lung, blood, and sleep disorders in order to develop new treatments and prevention strategies.

#### Community-Responsive Interventions to Reduce Cardiovascular Risk in American Indians and Alaska Natives (RFA HL-06-002)

Applications due: March 10, 2006

*Objective:* To test the effectiveness of behavioral interventions such as weight reduction, regular physical activity, and smoking cessation to reduce the risk of cardiovascular disease in American Indians and Alaska Natives.

#### Type 1 Diabetes and its Complications: Development of New Therapeutics and Monitoring Technologies (SBIP/STTR) (REA DK-05-015 and

## Technologies (SBIR/STTR) (RFA DK-05-015 and RFA DK-05-016)

Applications due: March 15, 2006

*Objective:* To develop new approaches, through small business innovation research and technology transfer, to prevent, treat, monitor, and cure type 1 diabetes and its macro- and micro-vascular complications.

#### Obese and Diabetic Intrauterine Environment: Long-Term Metabolic or Cardiovascular

## **Consequences in the Offspring** (RFA DK-05-014) *Applications due:* March 16, 2006

*Objective:* To investigate the effect of maternal obesity and diabetes on mechanisms that could potentially contribute to obesity, metabolic disease, and cardiovascular disease in the offspring.

## National Heart, Lung, and Blood Advisory Council Meetings

#### September 16, 2005

Dr. Nabel welcomed Council members and briefly discussed her second in a series of journal editorials, titled "New Investigator: Fostering Independence," which describes the NHLBI's new policies to help fledgling investigators receive their first independent research award earlier in their careers. The new investigator payline will be 5 percentile points beyond the established payline for research project grants. Moreover, new investigators whose applications miss the payline by 5 or fewer percentile points will be offered expedited administrative reviews of their responses to reviewers' concerns.

NIH Director Dr. Elias Zerhouni addressed the meeting, reiterating his goal of breaking down unnecessary barriers to science by reducing the rigidity of the research enterprise. He noted, in particular, the growing importance of interdisciplinary science and the need to "harmonize" the regulatory environment to simplify conducting translational research.

Dr. Sonia Skarlatos presented an initiative for the gene therapy resource program, a major translational effort to move gene therapy from the bench to the bedside.

Dr. Denise Simons-Morton summarized trends in overweight/obesity in the United States over the past 25 years. Dr. Philip Smith, National Institute of Diabetes and Digestive and Kidney Diseases, reviewed important findings from recent NIH-supported basic research in obesity. Dr. Jeffrey Friedman of the Rockefeller University proposed addressing obesity by defining molecular pathways that regulate body weight and may be disrupted in obesity, identifying effects of environmental factors on the pathways, and developing rational therapies.

Ms. Karen Donato discussed the NHLBI Obesity Education Initiative and its dual strategies to provide treatment guidelines for overweight/obese individuals at high risk of medical complications and to prevent overweight/obesity and physical inactivity in the general population.

#### October 26, 2005

Dr. Nabel welcomed members and acknowledged the contributions of Drs. Robert Mason, Jane Newburger, George Thomas, and Linda Van Horn, who are retiring from the Council.

Dr. Nabel reviewed NIH plans for electronic submission (form SF 424) of all competing grant applications via Grants.gov, which became mandatory for R01s as of the October 2006 submission date. Before submitting electronic applications, applicant institutions must register with Grants.gov, and institutions and principal investigators must be registered in the NIH eRA Commons.

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## News from Capitol Hill Public Laws

On December 20, the President signed the Stem Cell Therapeutic and Research Act of 2005 (P.L. 109-129), which creates a new Federal program to prepare, store, and distribute human umbilical cord blood stem cells for the treatment of patients and for peer-reviewed research. The program, called the C.W. Bill Young Cell Transplantation Program, will be administered by the Health Resources and Services Administration.

With passage of H.R. 3010, Congress agreed to provide the NHLBI with a 0.3 percent increase over the \$2,941,201,000 that it received in fiscal year (FY) 2005. However, passage of a separate bill (H.R. 2863) reduced the budget of many federal programs or agencies—including NIH Institutes and Centers—by 1 percent and resulted in a final FY 2006 appropriation of \$2,921,757,000 for the NHLBI. On December 30, the President approved the FY 2006 appropriations for the Departments of Labor, Health and Human Services, and Education.

## Resolutions

Resolutions were introduced in support of National Idiopathic Pulmonary Fibrosis Awareness Week. The

House passed its version (H. Con. Res. 178) on September 29. The Senate version (S. Res. 236) has been referred to the Senate Health, Education, Labor, and Pensions (HELP) Committee. The House passed a resolution (H. Res. 220) on October 25 recognizing America's Blood Centers for their commitment to providing a safe and adequate donor blood supply. In December, resolutions (H. Res. 629 and S. Con. Res. 69) were introduced to support the Day of Hearts, Congenital Heart Defect Day. The resolutions have been referred to the House Committee on Government Reform and the Senate HELP Committee.

## Hearings

On December 8, the House Committee on Energy and Commerce Subcommittee on Health held a hearing titled Improving America's Health: Examining Federal Research Efforts for Pulmonary Hypertension and Chronic Pain. Witnesses discussed pulmonary hypertension and described issues that affect soldiers who are injured during combat and challenges in treating patients who are disabled by chronic pain. A videocast of the hearing and written testimony from the witnesses are available at http://energycommerce.house.gov/108/Hearings/12082005 hearing1734/hearing.htm.

## **Upcoming Events**

Activity	Date/Location	More Information	
National Heart, Lung, and Blood Advisory Council 221st Meeting	February 1 Bethesda, MD	www.nhlbi.nih.gov/meetings/nhlbac/index.htm	
NIH Office of Research on Women's Health Women's Health Initiative Conference: The WHI Legacy to Future Generations	February 28 - March 1 Bethesda, MD	www.nhlbi.nih.gov/whi/references.htm	
American Academy of Family Physicians Annual Leadership Forum and National Conference of Special Constituencies	May 4-6 Kansas City, MO	www.aafp.org/x13929.xml	
US Chronic Obstructive Pulmonary Disease Coalition Spring Meeting	May 24 San Diego, CA	www.uscopd.com/activities/meetings.htm	
National Heart, Lung, and Blood Advisory Council 222nd Meeting	June 13 Bethesda, MD	www.nhlbi.nih.gov/meetings/nhlbac/index.htm	
Pulmonary Hypertension Association 7th International PH Conference and Scientific Sessions: Roadmap to a Cure	June 23-25 Minneapolis, MN	www.phassociation.org/Conference/	

## **Research Advances from the NHLBI**

## Measuring Iron Levels in Patients with Transfusion-Dependent Hemoglobin Disorders

A new, noninvasive approach for measuring iron deposits in human tissue may lead to better clinical care and new therapies. Thousands of patients who regularly receive blood transfusions as treatment for sickle cell disease or betathalassemia must undergo chelation therapy to prevent ironinduced organ damage, and their iron levels are monitored regularly with liver biopsies and blood tests. However, heart failure caused by toxic amounts of iron remains a significant, often fatal, consequence of regular blood transfusions. The new approach, which relies on magnetic resonance imaging (MRI), can accurately measure iron accumulation in the liver, and possibly in other organs such as the heart. The MRI screening method is expected to allow clinicians to detect toxic iron accumulation before heart tissue is irreversibly damaged and, because it is non-invasive, to be better tolerated by patients. It also has value as a research tool: the NHLBI Thalassemia Clinical Research Network plans to use the technique to evaluate a new chelation regimen that may better prevent iron toxicity in cardiac tissue.

## Free-Breathing Magnetic Resonance Imaging (MRI)

Cardiac MRI can be used to assess myocardial damage after a heart attack, but patients must hold their breath during the scan-an act that is difficult for many people with cardiorespiratory ailments. A new cardiac MRI technique developed by NIH intramural scientists allows patients to undergo cardiac MRI while breathing freely. The method uses an innovative computer algorithm to remove respiratory motion artifacts before averaging several images of the heart to create a single image. When the researchers compared the conventional breath-held imaging method with their free-breathing method, they found that the new approach produced images of comparable quality in the same amount of time. Moreover, when used to measure the size of an area of damaged heart muscle caused by a heart attack, the two methods gave similar results. The new technique shows promise for making cardiac MRI available to a wider range of patients.

## **Constituents' Corner**

## From National Marfan Foundation Movie Boosts Marfan Awareness

The National Marfan Foundation has been working hard to make its mark as the movie version of the Tony Awardwinning Broadway play "RENT" hit the silver screen nationwide. The Broadway show was written by Pulitzer Prize-winning playwright Jonathan Larson who died of an aortic dissection (a tear in the large artery near the heart) before its opening in 1996. His death is strongly believed to have been caused by Marfan syndrome, a connective tissue disorder that affects the bones, eyes, heart, lungs, and blood vessels. Only after his death did Jonathan's family and friends learn that his tall, lanky frame, indented chest bone, and other features were outward signs of Marfan syndrome, which puts people at high risk for aortic dissection. Those diagnosed with Marfan syndrome undergo annual heart evaluations, are prescribed medications, and have surgery before the aorta tears. With treatment, a patient can expect to live a normal life span. Jonathan's father, Al Larson said, "We hope that the excitement about the movie translates into more people learning about what happened to Jonathan. For those who learn about Marfan syndrome and are diagnosed, the film can truly be life-saving." The "RENT" DVD, due out in the Spring of 2006, will include a public service announcement about Marfan syndrome.

## From National Stroke Association National Public Health Stroke Conference

Emergency Medical Services and Systems was the focus of the fourth annual National Public Health Stroke Summit of the National Stroke Association (NSA), held in Denver, CO, December 5-7, 2005. Supported by a grant from the Centers for Disease Control and Prevention, the conference was part of a five-year series to educate public health professionals on the latest stroke issues, interventions, resources, and tools. The 2005 Summit included presentations by stroke specialists from around the country on the topics of emergency stroke protocols, stroke center certification, and the use of telemedicine in emergency stroke situations. During the past several years, conference participants have collaborated to create the NSA's Stroke Program Implementation Guide to assist state health agencies with the development and implementation of state stroke plans and programs. This year's conference included roundtable discussions to allow state public health and health care professionals to confer on a variety of hot topics. Founded in 1984, NSA is the only national organization in the United States that focuses 100% of its efforts on stroke. For more information visit www.stroke.org.

Submitted by Josephine Grima, National Marfan 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 5A03, 31 Center Drive, MSC-2482, Bethesda, MD 20892-2482.

## National Heart, Lung, and Blood Advisory Council Meeting

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In FY 2005, the NHLBI budget totaled \$2.941 billion, the R01 percentile payline was 19.0, and the percentile payline for new investigators was 24.0.

The NHLBI will develop a new Strategic Plan over the next 12 to 15 months (see article on page 1). The Institute will

## **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.

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

solicit suggestions and recommendations from Council members and other constituents.

Submitted by Colette LaFosse, National Stroke Association

Dr. Mark Gladwin, of the NHLBI Division of Intramural Research, summarized recent findings about nitric oxide, nitrite, and hemoglobin in human disease and therapeutics.

Nine new initiatives that had been reviewed in September by the Board of Extramural Advisors were presented. Council members made several specific recommendations for consideration prior to release of the solicitations.

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

- For health-related questions and publications, please contact the trained information specialists at the NHLBI Information Center (NHLBlinfo@nhlbi.nih.gov) or write to the Information Center at P.O. Box 30105, Bethesda, MD 20824-0105.
- For communications pertaining to NHLBI policies and priorities, contact the NHLBI Office of Public Liaison (nhlbi.listens@nih.gov).
- For additional information regarding NHLBI events, consult the references provided or <u>www.nhlbi.nih.gov/calendar/nhcal.htm</u>. Most other NIH Institutes and Centers also maintain calendars on their Web sites. Links to their Web pages are at www.nih.gov/icd.