



## National Wear Red Day: Taking Women's Health to Heart

Friday, February 6, 2004 is *National Wear Red Day*, a day when people nationwide will take women's health to heart by wearing red to show their support for raising awareness that far more American women die of heart disease than any other cause. By showing off a favorite red dress, shirt, or tie, Americans will unite in the national movement to give women an urgent wake-up call about their risk of heart disease.

*National Wear Red Day* supports the Red Dress as the symbol for women and heart disease awareness, by encouraging women and men across the country to participate in this life-saving movement. The NHLBI developed the Red Dress icon as the centerpiece of *The Heart Truth*, its national awareness campaign for women about heart disease, and is excited to work with national and local partners to proclaim the first

**National  
Wear  
Red Day**  
.....  
**February 6**

Friday of February (American Heart Month) the first *National Wear Red Day*. Special events and awareness activities will be held at clinics, hospitals, workplaces, and other public places to help spread *The Heart Truth*, that heart disease is the

number one cause of death of women, and to motivate women to take their heart health seriously and take steps to reduce their risks.

*The Heart Truth* campaign is sponsored by the NHLBI, in partnership with the Office on Women's Health of the U.S. Department of Health and Human Services, the American Heart Association, WomenHeart: the National Coalition for Women with Heart Disease, and other groups committed to the health and well-being of women.

For more information on women and heart disease and ideas on how to raise awareness in your community, visit *The Heart Truth* Web site at [www.nhlbi.nih.gov/health/hearttruth](http://www.nhlbi.nih.gov/health/hearttruth).

## Collaborative Research Programs for Circulatory and Respiratory Health Launched

The NHLBI is the first of the NIH components to develop collaborative research programs with its counterpart institute, the Institute of Circulatory and Respiratory Health (ICRH), of the Canadian Institutes of Health Research (CIHR). To advance research in areas of importance in heart, lung, and blood diseases, the two institutes are together initiating three research programs. The programs will address new strategies to resuscitate heart attack and trauma patients; develop new cellular and molecular imaging of heart, lung, and blood systems; and improve management of thrombotic disorders such as heart attack, stroke, deep vein thrombosis, and pulmonary embolism.

"This unique programmatic collaboration will bring together scientists who are international leaders in their fields to unravel the complexities of circulatory and respiratory illness. I am very hopeful that this is the first of many collaborative efforts between our two institutes," said Dr. Bruce McManus, ICRH Scientific Director.

Each of the programs will be conducted at multiple sites in Canada and the United States for several years, beginning in 2004. The collaboration will accelerate research progress in these areas by enabling support for more investigators than either Canada or the United States could support separately.

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## News from Capitol Hill

In December, President Bush signed the **Medicare Prescription Drug, Improvement, and Modernization Act of 2003** into law as P.L. 108-173. In addition to establishing a voluntary prescription drug benefit under the Medicare program and requiring Medicare to cover a "preventive physical examination" for beneficiaries, the Act requires the NIH to expand its support for the evaluation of medical technologies to improve the foundation for evidence-based practice. President Bush also signed into law P.L. 108-155, the **Pediatric Research Equity Act of 2003**, which authorizes the Food and Drug Administration to require research into pediatric uses for drugs and biological products.

The Senate passed the **Improved Nutrition and Physical Activity (IMPACT) Act** (S. 1172) on December 9. This version of IMPACT would establish grants to provide services that would improve nutrition, increase physical activity, and prevent obesity. Earlier in 2003, Representative Mary Bono (R-CA) introduced H.R. 716, a slightly different measure also called the IMPACT Act.

In October, the House passed the **National Bone Marrow Donor Registry Reauthorization Act** (H.R. 3034) and Senator Orrin G. Hatch (R-UT) introduced S. 1717 to establish a **National Cord Blood Stem Cell Bank Network** to prepare, store, and distribute human umbilical cord blood stem cells for patients needing transplants and to support peer-reviewed research using such cells. After the Senate passed the **Organ Donation and Recovery Improvement Act** (S. 573), the bill was referred to the House.

Senator Thad Cochran (R-MS) and Representative Lois Capps (D-CA) have introduced different versions of the **Stroke Treatment and Ongoing Prevention Act**. S. 1909 was referred to the Senate Health, Education, Labor, and Pensions Committee and H.R. 3658 was referred to the House Energy and Commerce Committee.

Other bills referred to the House Energy and Commerce Committee include the **Hepatitis C Epidemic Control and Prevention Act** (H.R. 3539) and the **Protection for Participants in Research Act of 2003** (H.R. 3594). A main provision of H.R. 3594, which was introduced by Representative Diana DeGette (D-CO), is the extension of protections to all participants in human subjects research, regardless of funding source. H.R. 3539, as introduced by Representative Heather Wilson (R-NM), would direct the Secretary of HHS, in consultation with the Directors of the Centers for Disease Control and Prevention (CDC) and the NIH, to develop a plan to prevent, control, and manage hepatitis C infection. It also would require the NIH Director to create a Liver Disease Research Advisory Board.

## Dr. Alving Talks with Virginia Women about Postmenopausal Hormone Therapy

On Saturday, October 25, Dr. Alving sat down with participants at a Women's Issues Conference hosted by Congressman Jim Moran (D-VA) to talk about the results of the Women's Health Initiative, postmenopausal hormone therapy, and health concerns of menopausal and postmenopausal women. During the 45-minute session titled Hormone Replacement Therapy: Fact and Fiction, Dr. Alving answered questions and discussed information in the NHLBI *Facts About Postmenopausal Hormone Therapy* booklet ([www.nhlbi.nih.gov/health/women/pht\\_facts.htm](http://www.nhlbi.nih.gov/health/women/pht_facts.htm)), the Food and Drug Administration *Menopause and Hormones* fact sheet ([www.fda.gov/womens/menopause/mht-FS.html](http://www.fda.gov/womens/menopause/mht-FS.html)), and *Fast Facts on Osteoporosis* ([www.osteoporosis.org/osteolinks.asp](http://www.osteoporosis.org/osteolinks.asp)) from the NIH Osteoporosis and Related Bone Diseases – National Resource Center. She emphasized the importance of diet and exercise to women of any age, and reminded women about the importance of regular visits to a health care provider regardless of whether they take replacement hormones or not.

We're looking forward to seeing you at the Public Interest Organization Meeting on February 11, 2004.



## Spotlight on Our Web Site

The NHLBI Web site is sporting a new look. The site was designed to provide easy access to information of interest to the Institute's three primary audiences – patients and the public, health professionals, and researchers. The site also features links to information on funding, training, and policies; clinical trials; and networks and outreach; in addition to a news and events center. While you are adjusting to the new site, you may find the upgraded search feature helpful.

## 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](http://www.nhlbi.nih.gov/funding/inits/index.htm).

### **Animal Models of Organ-specific Tolerance for Heart and Lung Transplantation (PA-02-044)**

- Objective: To encourage development of organ-specific tolerance protocols using large animal models for heart transplantation and both large and small animal models for lung transplantation.

### **Biological Basis of Hutchinson-Gilford Syndrome: Relationship to Mutations in the Lamin A/C Gene and to Other Known Laminopathies (PA-03-069)**

- Objective: To understand how mutations in the gene for lamin A/C affect nuclear structure, thus leading to both dysfunction of the nuclear envelope, and depending on the mutation, Hutchinson-Gilford syndrome.

### **Chemical Screens for New Inducers of Fetal Hemoglobin (SBIR/STTR) (PA-03-049)**

- Applications due: April 1, August 1, and December 1
- Objective: To develop drugs that increase fetal hemoglobin levels for the treatment of beta-chain hemoglobinopathies such as sickle cell disease and Cooley's anemia (beta-thalassemia).

### **Chronic Illness Self-Management in Children (PA-03-159)**

- Objective: To support research related to sociocultural, environmental, and behavioral mechanisms as well as biological/technological factors that improve self-management and quality of life in children and adolescents with chronic diseases.

### **Exploratory and Developmental Research Grants for Investigations in Rare Diseases (R21) (PA-03-171)**

- Objective: To encourage new approaches to understanding, treating, and preventing rare diseases in the areas of heart, lung, and blood disease, as well as sleep disorders.

### **Innovative Exploratory Studies and Technology Development in Neuroinformatics Research (R21) (PAR-03-036)**

- Applications due: January 21, 2004; May 21, 2004; September 22, 2004; January 21, 2005; May 20, 2005; and September 22, 2005
- Objective: To encourage exploratory research pilot studies having the potential for significant advances in neuroscience research through the creation of neuroscience databases, knowledge management systems, and analytic tools to integrate vast, complex data and information about the nervous system.

### **Inter-Relationships of Sleep, Fatigue, and HIV/AIDS (RFA-HL-04-010)**

- Applications due: March 15, 2004
- Objective: To elucidate the etiology of sleep disturbances and fatigue associated with human immunodeficiency virus (HIV) infection and acquired immunodeficiency disease syndrome (AIDS).

### **Molecular Mechanisms Underlying Diamond-Blackfan Anemia and Other Congenital Bone Marrow Failure Syndromes (RFA-HL-04-008)**

- Applications due: March 17, 2004
- Objective: To encourage research into the genetics and basic mechanisms of inherited bone marrow failure syndromes such as, Diamond-Blackfan Anemia, dyskeratosis congenita, Pearson syndrome, severe congenital neutropenia (Kostmann syndrome), Shwachman-Diamond syndrome, and congenital amegakaryocytic thrombocytopenia.

### **NIH Support for Conferences and Scientific Meetings (PAR-03-176)**

- Applications due: April 15, August 15, December 15
- Objective: To encourage the exchange and dissemination of information related to research on heart, lung, blood or sleep disorders or blood resources.

### **Overweight and Obesity Control at Worksites (RFA-HL-04-006)**

- Applications due: March 12, 2004
- Objective: To support worksite interventions that include environmental strategies (programs, policies or organizational practices to influence health behaviors) for the prevention or treatment of obesity in adults.

### **Progression of Cardiovascular Disease in Type 1 Diabetes (RFA-HL-04-013)**

- Applications due: March 24, 2004
- Objective: To support basic and clinical studies on the effects of type 1 diabetes and its metabolic complications on the early development and fast progression of cardiovascular disease.

### **Sleep Disturbance in Parkinson's Disease and Parkinson-like Conditions (PAS-03-131)**

- Objective: To stimulate research on sleep disorders in Parkinson's disease and Parkinson's related neurological conditions, and on associated sleep disorders such as Restless Legs Syndrome and sleep-disordered breathing.

## National Heart, Lung, and Blood Advisory Council's Fall Meetings

### September 4, 2003

Members of the National Heart, Lung, and Blood Advisory Council (NHLBAC) were welcomed to the 211<sup>th</sup> meeting by Dr. Barbara Alving, Acting Director of the NHLBI. Dr. Alving announced that Dr. Claude Lenfant retired as Director of the Institute, effective August 30, and that she is serving as Acting Director until a new director is appointed. Dr. Lawrence Friedman will serve as the Acting Deputy Director in addition to continuing his duties as the NHLBI Assistant Director for Ethics and Clinical Research. Dr. Alving also announced that during September two NHLBI programs will be recognized officially – the Sickle Cell Disease Program and the Cholesterol Education Program.

Dr. Carl Roth, Associate Director for Scientific Program Operation, presented a budget overview for FY 2004. A small increase is projected in the number of research project grants. Dr. Roth then paid tribute to Dr. Claude Lenfant, praising him for his high standards and outstanding leadership. Dr. Lenfant served as the Director of the Institute from July 1982 - August 2003. Dr. David White, Associate Professor of Medicine, Harvard Medical School, and Chair of the Task Force appointed to review the 1996 National Sleep Disorders Research Plan, discussed the Executive Summary of the 2003 Plan.

Dr. John Thomas, Division of Blood Diseases and Resources (DBDR), reviewed the Institute's stem cell research programs. Dr. Jean Henslee-Downey, DBDR, described the NHLBI Specialized Centers of Clinically Oriented Research (SCCOR) in cell-based therapies for repair and regeneration of damaged heart, lung, and blood tissues. The Council enthusiastically supported these programs. Dr. Raynard Kington, Deputy Director of the National Institutes of Health (NIH), summarized the recommendations of the Congressionally mandated Institute of Medicine (IOM) report on the organizational structure of the NIH.

During the closed portion of the meeting, the Council concurred on the award of 122 grants for a total cost of \$51,527,499.

The next National Heart, Lung, and Blood Advisory Council (NHLBAC) meeting is scheduled for 8:00 a.m. on February 12, 2004. It is open to the public and will be in NIH Building 31C, Conference Room 10.

The *FYI from the NHLBI* staff thanks Ms. Sue Byrnes, member of the NHLBAC and director of the LAM Foundation, for her efforts in preparing this summary. Full minutes of Council meetings and summaries of the initiatives are available at [www.nhlbi.nih.gov/meetings/nhlbac](http://www.nhlbi.nih.gov/meetings/nhlbac).

### October 29, 2003

Dr. Alving, Acting Director of the NHLBI, welcomed members to the 212<sup>th</sup> meeting of the NHLBAC. She introduced Dr. Robert Jesse, the new ex officio Council member representing the Department of Veterans Affairs, and announced four new council members, Dr. Roberto Bolli, Dr. Richard C. Boucher, Jr., Ms. Mary H. Deer, and Dr. Robert F. Lemanske, Jr.

Dr. Amy Patterson, Director of the Office of Biotechnology Activities in the Office of the Director, NIH, discussed steps the NIH is taking to harmonize clinical research regulatory policies and processes. Dr. Gordon Bernard, NHLBAC member and Medical Director of the Vanderbilt University Institutional Review Board (IRB), described the challenges faced by the university's IRB. Council members voted unanimously to send Dr. Elias Zerhouni, Director, NIH, a resolution, which expresses their concerns that the current complexity of regulations to protect human subjects in research settings is limiting scientific progress without necessarily enhancing the protection of subjects.

Dr. Elizabeth Nabel, Director of the Clinical Research Program of the NHLBI Division of Intramural Research, introduced Drs. Neal Young and John Barrett, intramural scientists from the Hematology Branch. Dr. Barrett summarized the progress made in allogeneic bone marrow stem cell transplants at the NHLBI over the past decade. Dr. Young reviewed the research undertaken by the Hematology Branch involving intensive immunosuppression of severe aplastic anemia.

Dr. Friedman, Acting Deputy Director, NHLBI, recommended that at least 15 percent of the competing T32 budget be devoted to new awards and returning to two application receipt dates with applications funded bi-annually. The Council agreed with the recommendations. Dr. Bruce McManus, Scientific Director of the Institute of Circulatory and Respiratory Health (ICRH), Canadian Institutes of Health Research (CIHR), described the mission of the CIHR and the activities of the ICRH. He discussed three joint research initiatives that are part of the Canada – U.S. Collaboration in Circulatory and Respiratory Health.

Sixteen initiatives were presented to the Council for their approval. The Council was supportive of all submitted proposals, with members making selected recommendations for their improvement. Dr. Alving will take them into consideration, along with other budget issues, when determining which proposals to implement.

During the closed portion of the meeting, the Council concurred on the award of 196 grants for a total cost of \$118,697,000.

## Need More Information?

- For health-related questions and publications, please contact the trained information specialists at the NHLBI Information Center (NHLBIinfo@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 (SL34V@nih.gov).
- For additional information regarding NHLBI events, consult the references provided or [www.nhlbi.nih.gov/calendar/nhcal.htm](http://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](http://www.nih.gov/icd).

## Upcoming Events

Activity	Date	Details	More Information
National Heart, Lung, and Blood Advisory Council Meeting	February 12 and May 13	8:00 a.m. - 1:30 p.m., Building 31C, Conference Room 10, NIH Campus, Bethesda, MD. Meetings are open to the public.	<a href="http://www.nhlbi.nih.gov/meetings/nhlbac/index.htm">www.nhlbi.nih.gov/meetings/nhlbac/index.htm</a>
Congenital Heart Defect Awareness Day	February 14	The Congenital Heart Information Network sponsors this national awareness day to help reduce childhood deaths from congenital heart defect related deaths.	<a href="http://www.tchin.org/aware">www.tchin.org/aware</a>
Women's Health Research for the 21st Century: Women and Heart Disease	March 18	1:00 p.m. - 3:00 p.m., Building 10, Lipsett Amphitheater, NIH Campus, Bethesda, MD. NHLBI representatives will discuss the signs, symptoms, and modifiable risk factors of heart disease in women and interventions to encourage heart-healthy lifestyles. The seminar is open to the public and sponsored by the Office of Research on Women's Health, NIH.	301-402-1770
LAM Foundation Research Conference	March 26-28	Cincinnati, OH. The objectives of this conference are to advance LAM research, to improve LAM clinical practices, and to provide support and inspiration to patients, physicians, and investigators.	<a href="http://lam.uc.edu/html/conferences.html">http://lam.uc.edu/html/conferences.html</a>
Frontiers of Knowledge in Sleep and Sleep Disorders: Opportunities for Improving Health and Quality of Life	March 29-30	Natcher Conference Center, NIH Campus, Bethesda, MD. Health care providers, public health and education experts, policy makers, patient advocacy organizations, and sleep medicine specialists will review the gaps between knowledge and effective health care related to sleep and develop an action plan for improving public health. The National Center on Sleep Disorders Research, the NHLBI, the NIH, the U.S. Department of Health and Human Services, and the Trans-NIH Sleep Research Coordinating Committee are sponsors.	<a href="http://www.nhlbi.nih.gov/meetings/slp_front.htm">www.nhlbi.nih.gov/meetings/slp_front.htm</a>
Adult Congenital Heart Association National Conference	April 23-25	Mayo Clinic, Rochester, MN. Patients, their families, and health care professionals will discuss ways to improve health care and support for adults and adolescents with congenital heart disease.	<a href="http://www.achaheart.org/conference/index.php">www.achaheart.org/conference/index.php</a>
2 <sup>nd</sup> National Steps to a HealthierUS Summit	April 29-30	Baltimore, MD. Sponsored by the U.S. Department of Health and Human Services, this summit will focus on chronic disease prevention and health promotion and will feature presentations on asthma, obesity, diabetes, heart disease, and stroke.	<a href="http://healthierus.gov/steps">http://healthierus.gov/steps</a>

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## Research Advances from the NHLBI

### **PAD by Trained Community Volunteers Increases Survival**

The number of survivors of sudden cardiac arrest markedly increased when the victims were helped by community volunteers trained not only to perform CPR but also to use an automated external defibrillator (AED), a device that shocks an ineffectively beating heart back into normal rhythm, according to the results of a large multi-center study funded by the NHLBI in collaboration with the American Heart Association.

The Public Access Defibrillation (PAD) Trial compared survival of cardiac arrest victims in areas where community volunteers were trained in CPR only, to areas where volunteers were trained in both CPR and the use of an AED.

The PAD Trial trained approximately 20,000 volunteer rescuers at 24 sites in the U.S. and Canada. "Sudden cardiac arrest is a major cause of death of Americans. This important study shows that lives can be saved by training community volunteers to use external defibrillators," said Acting NHLBI Director Barbara Alving, M.D.

An important next step in research on the use of AEDs, is to test the safety and effectiveness of home use of these devices. The NHLBI is currently funding a multi-center 7,000 patient study designed to evaluate whether providing the devices to families of heart attack patients will improve survival if a cardiac arrest occurs while the patient is at home.

### **Moderate Physical Activity Promotes Weight Loss As Well As Intense Exercise**

Women trying to lose weight can benefit as much from a moderate physical activity as from an intense workout, according to a study supported by the NHLBI. The "Effect of Exercise Duration and Intensity on Weight Loss in Overweight, Sedentary Women: A Randomized Trial" involved 201 overweight but otherwise healthy women ages 21-45.

Participants were provided with meal plans and instructed to limit their food calories to 1,200 to 1,500 kcal per day. Additionally, participants were randomly assigned to one of four physical activity regimens, which varied by intensity and duration. The regimens consisted of either a moderate- or vigorous-intensity physical activity performed for either a shorter (2 ½ to 3 ½ hours per week) or longer (3 ½ to 5 hours per week) duration. The physical activity consisted primarily of brisk walking, and the regimens used about 1,000 or 2,000 kcal per week.

Women in all four groups lost a significant amount of weight—about 13 to 20 pounds—and maintained their weight loss for a year. They also improved their cardiorespiratory fitness. However, the amount of weight loss or fitness improvement did not differ among the four physical activity regimens.

### **Hostility and Impatience Increase Long-term Risk of Developing Hypertension**

Hostility and impatience (two features of the so-called Type A personality) increased young adults' long-term risk of developing hypertension (high blood pressure) based on findings from the NHLBI funded Coronary Artery Risk Development in Young Adults (CARDIA) study. Although hostility and impatience increased risk, the other psychological and social factors examined, such as competitiveness (another Type A feature), depression, and anxiety, did not increase risk.

These findings will help researchers to identify behavioral characteristics that require further study. They also highlight the need for people to be able to recognize, modify, and manage harmful psychosocial behaviors so that they can thrive in the fast-paced U.S. society without compromising their cardiovascular health.

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### **Constituents' Corner**

Space is reserved for you, our readers, to share ideas and broadcast opinions. We invite you to submit your comments, thoughts, and suggestions via email (NHLBI.Listens@nih.gov) or snail mail (Public Interest News, c/o Office of Science and Technology, Building 31, Room 5A03, 31 Center Drive, MSC-2482 Bethesda, MD 20892-2482).