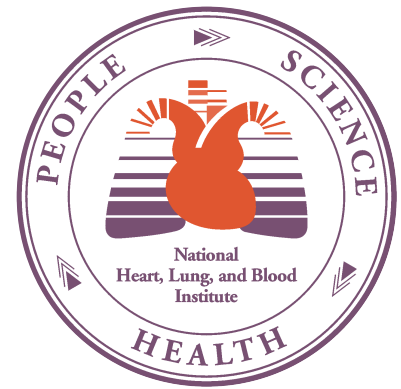


Tyi from the NHLBI



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September is National Cholesterol Education Month

The National Cholesterol Education Program of the NHLBI sponsors National Cholesterol Education Month to help raise awareness of the risks associated with having high cholesterol. The goals of the education program are to help everyone understand what cholesterol is, how it affects heart health, and what steps each of us can take to improve our health through better management of our cholesterol.

What is Cholesterol?

Cholesterol is a fatty chemical that is found in blood. It is a normal, necessary component for development of cell membranes. However, too much cholesterol, over time, can produce serious consequences. One type of cholesterol, called low-density lipoprotein, or LDL, is known as “bad” cholesterol because of its association with increased risk of heart disease, specifically the development and progression of atherosclerosis. A second type of cholesterol, high-density lipoprotein, or HDL, is commonly referred to as “good” cholesterol because it has been associated with cardiovascular protection.

Why are cholesterol levels so important?

High levels of LDL cholesterol are a risk factor for cardiovascular disease, especially heart attack and stroke. Over time, high bad cholesterol promotes the development of atherosclerotic plaques in arteries. Plaques restrict blood flow and can become a life-threatening danger whenever they rupture, causing arterial blockage, subsequent lack of oxygen, and cellular death in nearby body tissue.

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NHLBI Undergoes Reorganization

Dr. Elizabeth G. Nabel, NHLBI Director, recently announced the reorganization of two NHLBI extramural divisions. The Division of Heart and Vascular Diseases (DHVD) will become the Division of Cardiovascular Diseases (DCVD) and the Division of Epidemiology and Clinical Applications (DECA) will become the Division of Prevention and Population Sciences (DPPS).

The change is consistent with the Institute’s vision to take an international lead in cardiovascular research by supporting programs that are innovative, creative, and at the cutting edge of biomedical science.

The purpose of restructuring is to create a more effective organization—one that is aligned with our vision, optimizes our talent and leadership capabilities, strengthens coordination within the Institute, better integrates basic research and clinical trial components, and emphasizes prevention and population sciences. The change will become effective on September 5, 2006.

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Upcoming NHLBI Workshops and Working Groups*

Workshop or Working Group	Date / Location	Contact for More Information
Working Group: Role of Airway Smooth Muscle in Airway Contraction, Inflammation, and Remodeling - Advancing from Basic Knowledge to Clinical Relevance	September 11-12, 2006 Bethesda, MD	Dr. Susan Banks-Schlegel schleges@nhlbi.nih.gov 301-435-0202
Workshop: Research Needs in Bronchiectasis	September 12-13, 2006 Bethesda, MD	Dr. Hannah Peavy peavyh@nhlbi.nih.gov 301-435-0222
Working Group: Cardiovascular Consequences of COPD	September 21-22, 2006 Bethesda, MD	Dr. Antonello Punturieri punturiera@nhlbi.nih.gov 301-435-0202

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

Cholesterol

Continued from page 1

How do I determine my cholesterol level?

The only reliable way to determine your cholesterol level is to have a blood test. If you don't know your cholesterol level, tell your doctor you wish to be tested. You will need to fast for a brief period, usually overnight, before a blood sample is taken.

What amount of "bad" cholesterol is okay?

Current recommendations set forth by the Third Report of the National Cholesterol Education Program Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults, known as the Adult Treatment Panel III (or ATP III), are that an LDL concentration (in mg/dl) of less than 100 is optimal, 100–129 is near optimal/above optimal, 130–159 is borderline high, 160–169 is high, and 190 or greater is very high.

You may also see your test results expressed in terms of total cholesterol. ATP III guidelines set less than 200 as desirable, 200–239 as borderline high, and 240 or greater as high. Additionally, HDL less than 40 is considered low and 60 or greater is considered high.

How do I lower my cholesterol?

Begin by talking to your doctor. Tell your physician that you want to take control of your high cholesterol. In many cases modifying your diet by reducing the amount of fats, especially saturated and trans fats, and getting more exercise will help lower the bad cholesterol and increase the level of good cholesterol. However, for some people, diet and exercise alone fail to produce the desired cholesterol-lowering results. If you find yourself in this group, your physician will likely prescribe a medication to help lower your cholesterol.

Ultimately, it's up to you to take the first step. You can reduce your cholesterol. Know your cholesterol numbers, see your physician, follow the dietary and exercise advice you are given, and if you are prescribed cholesterol lowering medication, adhere faithfully to the treatment regimen.

Please visit hin.nhlbi.nih.gov/cholmonth for more information.

Mark Your Calendar . . .

- September:** National Sickle Cell Month
(www.SickleCellDisease.org)
- America on the Move Month of Action
(www.americaonthemove.org)
- October:** Healthy Lung Month
(www.lungusa.org)
- 25th Lung Health Day
(www.aarc.org)
- November** Pulmonary Hypertension Awareness Month
(www.phassociation.org)
- COPD Awareness Month
(www.uscopd.org)
- December** 1st - 7th 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 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.

Non-Viral Systems for Gene Transfer Applications for Heart, Lung, and Blood Diseases

(PA-06-243)

Applications/Proposals Due: September 12, 2006

Objective: To foster development of efficient non-viral approaches for a broad range of gene- and cell-mediated therapies for heart, lung, and blood diseases. The initiative will use the two-phase R21/R33 Innovation Award.

Environmental Pathways and Susceptibility: Comparative Biology Elucidation

(RFA ES-06-004)

Applications/Proposals Due: September 18, 2006

Objective: To understand the responses of biological networks and pathways to perturbations from environmental factors by combining comparative biology approaches with high information-content techniques such as "omics," RNA interference, and tissue arrays.

Systems Biology Exploratory Program

(RFA HL-06-004)

Applications/Proposals Due: September 25, 2006

Objective: To undertake a coordinated systems biology approach to understanding the normal physiology and perturbations associated with heart, lung, blood, and sleep disorders.

Chronic Lung Diseases Genetics and Genomics: Career Development Program (K12)

(RFA HL-07-004)

Applications/Proposals Due: November 30, 2006

Objective: To develop the early research careers of both physician and non-physician scientists who are interested in furthering knowledge of the genetic bases of chronic lung disease.

Diabetic Complications: Biomarker Development

(RFA DK-06-004)

Applications/Proposals Due: December 12, 2006

Objective: To conduct exploratory and developmental research on biomarkers for the microvascular and macrovascular complications of diabetes.

Lung Stem Cell Biology and Cell Based Therapy: Collaborative Studies

(RFA HL-07-003)

Applications/Proposals Due: December 12, 2006

Objective: To conduct multi-disciplinary studies on the potential for developing cell-based therapies for the lung, particularly through greater understanding of the molecular development of the various lung cell phenotypes.

Bioengineering Research Partnerships

(Program Announcement with Review PA-06-459)

Applications/Proposals Due: January 22, 2007

Objective: To apply integrated, multidisciplinary, systems approaches to significant areas of basic bioengineering research within the mission of the NIH. Continuation of this program beyond FY 2007 is dependent on the findings of an evaluation process to be conducted in FY 2006 to assess the 47 applications funded by the NHLBI under this program between 1999 and 2006.

Comprehensive Sickle Cell Centers

(RFA Renewal HL-06-008)

Applications/Proposals Due: January 23, 2007

Objective: To operate a nationwide network of interactive, state-of-the-art, comprehensive centers in basic and translational research focused on the development of cures or significantly improved treatments for sickle cell disease.

NHLBI Strategic Plan Progress Report: On Target

The NHLBI Strategic Plan is progressing according to schedule and will be available in its completed form during Spring of 2007.

Level 1 of the planning process has been completed. It consisted of 23 meetings that spanned all of the extramural divisions of the NHLBI and enlisted the participation of approximately 500 outside panel members drawn from the heart, lung, and blood disease and sleep research communities.

Throughout the course of the Level 1 meetings, participants were encouraged to think boldly, to not be constrained by current limits in knowledge or technology, and to offer far-reaching recommendations that look ahead five to ten years in order to help them achieve long-term objectives. As the

Level 1 meetings unfolded, common concerns, suggestions, and themes emerged.

The next step, Level 2, will be a time for harmonizing the recommendations developed during the Level 1 meetings. Participants in the Level 2 meeting activities will include co-chairs from the Level 1 meetings as well as others, including members of the National Heart, Lung, and Blood Advisory Council. The outcome of Level 2 will be a draft strategic plan which will then be further developed and finalized during Level 3.

For the latest information, visit the NHLBI website *Strategic Plan* section. Comments and questions can be addressed through the *Opportunities for Input* link.

National Heart, Lung, and Blood Advisory Council Meeting

June 13, 2006

Dr. Nabel welcomed Council members and introduced the four newest members: Victor J. Dzau, M.D., Duke University; Helen H. Hobbs, M.D., University of Texas Southwestern Medical Center; Joseph Loscalzo, M.D., Ph.D., Brigham and Women's Hospital; and Jennie R. Joe, Ph.D., M.P.H., University of Arizona.

Dr. Nabel introduced new NHLBI staff members: Dr. Susan Shurin will serve as Deputy Director of the NHLBI, Dr. Charles Friedman will serve as Director of the new NHLBI Center for Research Informatics and Information Technology, and Dr. Christopher O'Donnell will serve as Senior Advisor to the Director for Genome Research and will continue in his role as Associate Director of the Framingham Heart Study. In addition, Dr. Alan Michelson of Brigham and Women's Hospital will serve as Associate Director for Basic Research, pending administrative clearances.

Dr. Nabel highlighted several items of interest including the NHLBI Legislative Update on the 109th Congress, recent scientific articles published by NHLBI grantees, recent NHLBI press releases, NIH Fact Sheets that are being developed to educate Congress and the public about NIH extramural funding policies and research areas of interest, and recently released NHLBI initiatives.

Dr. Nabel discussed the strategic planning process, which began in April 2006. Each NHLBI extramural division has established a series of Level 1 meetings to identify scientific areas in which the NHLBI is well positioned to make major

contributions and to evaluate Institute business and operational policies. A Level 2 meeting will be held in October to aggregate the recommendations from the Level 1 meetings. The Council and members of the NHLBI Board of Extramural Advisors will participate. A final strategic plan is expected in Spring 2007.

The proposed FY 2007 President's Budget for the NHLBI is \$2,865.9 million, a 1.0 percent decrease from the FY 2006 appropriation. The NHLBI payline for research project grants has been increased from the 14.0 percentile to the 15.0 percentile (20.0 percentile for new investigators). Grants between the 14.0 and 15.0 percentile that were not funded earlier in the year can now be funded. Dr. Nabel noted that the current NHLBI payline is one of the highest among the NIH Institutes and Centers.

Dr. Shurin presented an overview of the conduct of NHLBI-sponsored clinical trials and described recent efforts to enhance clinical trial efficiency and effectiveness. Business operations related to clinical trials will be examined carefully during the NHLBI strategic planning process.

Dr. Elias Zerhouni, NIH Director, discussed the NIH budget, presented his vision for the future of the NIH, and announced the new Pathway to Independence Award that will support mentored post-doctoral fellows and help them transition to independent research positions. He also shared his vision of making health care predictive, personalized, and preemptive.

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News from Capitol Hill

Appropriations

The House and Senate Committees on Appropriations have approved bills that would fund the NHLBI in fiscal year 2007. Consistent with the President's request, H.R. 5647 would provide \$2,901,012,000 for the NHLBI. The Senate version (S. 3708) includes \$2,924,299,000 for the NHLBI, an increase of 0.09 percent over the \$2,921,757,000 that the NHLBI received for fiscal year 2006. The next step of the appropriations process entails convening a conference committee to reconcile the two versions of the bill. Both chambers must then approve the revised bill before it can be forwarded to the President to be signed into law.

House Report 109-515 and Senate Report 109-287 mention numerous diseases and conditions of interest to the NHLBI, including alpha-1 antitrypsin deficiency, bleeding disorders, chronic obstructive pulmonary disease (COPD), congenital and acquired heart disease, Cooley's anemia, cystic fibrosis, Diamond-Blackfan anemia, Duchenne muscular dystrophy, hereditary hemorrhagic telangiectasia, juvenile diabetes, lymphangiomyomatosis, lymphatic

diseases, Marfan syndrome, neurofibromatosis, pulmonary fibrosis, pulmonary hypertension, sleep disorders, temporomandibular joint disorders, thrombophilia, and tuberous sclerosis complex. NIH efforts to prevent unhealthy weight gain and obesity also are addressed.

National Peripheral Arterial Disease Week

On August 3, Senators expressed their support of National Peripheral Arterial Disease Awareness Week with the passage of S. Res. 556. National Peripheral Arterial Disease Awareness Week is scheduled for September 18-22, 2006.

Home Oxygen Patient Protection Act of 2006

On June 20 and 27, Dr. Vldy Rozenbaum of COPD-ALERT visited Capitol Hill to provide a patient perspective on the Home Oxygen Patient Protection Act of 2006 (H.R. 5513). The bill, which was referred to the House Committees on Energy and Commerce and on Ways and Means on May 25, would provide Medicare coverage for long-term rental of oxygen equipment.

Upcoming Events

Activity	Date/Location	More Information
National Heart, Lung, and Blood Advisory Council 223rd Meeting	September 12 Bethesda, MD	www.nhlbi.nih.gov/meetings/nhlbac/index.htm
Adult Congenital Heart Association 2006 National Conference	September 15-17 San Francisco, CA	www.achaheart.org
National Sarcoidosis Society Walk-a-Thon	September 15-17 Chicago, IL	Sarcoidosis@hotmail.com
Sarcoid Networking Association 14th Annual Conference	September 29-30 Seattle, WA	www.sarcoidosisnetwork.org/
Pseudoxanthoma Elasticum (PXE) International Annual Meeting	Sept. 29 - Oct. 1 Bethesda, MD	www.pxe.org/2006meetinginfo.html
Pulmonary Hypertension Association PH Resource Network Symposium	Sept. 30 - Oct. 1 Bethesda, MD	www.phassociation.org/PHRN/symposium/index.asp
National Hemophilia Foundation 58th Annual Meeting	October 12-14 Philadelphia, PA	www.hemophilia.org
Hereditary Hemorrhagic Telangiectasia Foundation 13th International Patient and Family Conference	October 13-15 San Diego, CA	www.hht.org
National Heart, Lung, and Blood Advisory Council 224th Meeting	October 17 Bethesda, MD	www.nhlbi.nih.gov/meetings/nhlbac/index.htm
Fanconi Anemia Research Fund 18th Annual Scientific Symposium	October 19-22 Bethesda, MD	www.fanconi.org
Narcolepsy Network Inc. 21st Annual Patient Conference	October 20-22 Irving, TX	www.narcolepsynetwork.org
National Lymphedema Network 7th International Conference	November 1-5 Nashville, TN	www.lymphnet.org
American Heart Association Scientific Sessions 2006	November 12-15 Chicago, IL	www.americanheart.org
Restless Legs Syndrome Foundation National Meeting	November 17-18 San Antonio, TX	www.rls.org
American Autoimmune Related Diseases Association 5th International Congress on Autoimmunity	Nov. 29 - Dec. 3 Sorrento, Italy	www.kenes.com/autoimmunity/
National Stroke Association 2006 National Public Health Stroke Summit	December 6-8 Chicago, IL	www.stroke.org
American Society of Hematology 48th Annual Meeting and Exposition	December 9-12 Orlando, FL	www.hematology.org/meetings/
American Association of Respiratory Care 5th International Respiratory Congress	December 11-14 Las Vegas, NV	www.aarc.org
International Association for Chronic Fatigue Syndrome 8th International Conference	January 12-14, 2007 Bahia Mar Beach, FL	www.aacfs.org

Research Advance from the NHLBI: Trans Fat Promotes Risky Weight Gain

Researchers using an animal model have learned that consumption of trans fat causes an excess accumulation of abdominal fat—now considered a major risk factor for diabetes and cardiovascular disease—when compared with monounsaturated fat. Trans fat is found in foods that are fried in or made with partially hydrogenated oils, while monounsaturated fats are found in products such as olive oil.

NHLBI-supported investigators set out to determine the role played by dietary trans fat in body fat accumulation and weight gain. They fed one of two controlled diets to monkeys. Both diets contained the same number of calories and derived 35 percent of their calories from fat. In one diet, however, about one-fourth of the total fat calories were from trans fat and the remainder were from monounsaturated fat. This diet was chosen to approximate the percentage of trans

fat consumed by people who eat a lot of fried foods or snack foods. The second diet contained no trans fat, only monounsaturated fat.

The monkeys that got the trans fat diet had a 7 percent weight increase compared with slightly less than 2 percent weight gain for those that received the diet containing only monounsaturated fat. Additionally, the trans fat diet monkeys deposited 30 percent more fat in their abdomen, some of which was redistributed from other parts of their bodies.

If additional research indicates that humans have similar results in response to trans fat, this study emphasizes the need to reduce the amount of dietary trans fat in order to avert accumulation of abdominal fat and the subsequent increased risk for cardiovascular disease and diabetes.

Constituents' Corner

From Foundation for Sarcoidosis Research **New Consumer Publication Available**

The Foundation for Sarcoidosis Research (FSR) unveiled a new consumer publication at the American Thoracic Society meeting that was held in San Diego in May. "Sarcoidosis and the Heart" was produced by FSR to educate patients and their health care providers about the symptoms of cardiac sarcoidosis as well as current diagnostic tools and treatment options. Single copies are available free by calling 866-358-KISS or visiting the FSR web site at www.stopsarcoidosis.org.

Sarcoidosis is an inflammatory disease that most commonly affects the lungs, but the disease can also damage the heart, a condition called cardiac sarcoidosis. Researchers who study sarcoidosis estimate that cardiac sarcoidosis affects more than 10 percent of people who have sarcoidosis in the United States, and perhaps as many as 25 percent. For this reason, and because heart problems are serious and should be diagnosed and treated as early as possible, people who have sarcoidosis should discuss being screened for cardiac sarcoidosis with their doctors.

FSR also used May as an opportunity to promote another 2006 publication focused on inflammatory disease and bone loss. "SOS: Your Bones Need Your Help" is designed to educate patients with inflammatory diseases

and their health care providers about the consequences of long-term glucocorticoid use, the standard treatment for many inflammatory diseases. It was produced with an unrestricted education grant from the Illinois Department of Public Health Office of Women's Health. Single copies may be obtained free from FSR by calling 866-358-KISS or through the web site at www.stopsarcoidosis.org.

Submitted by Debbie Durrer, Foundation for Sarcoidosis Research

From Restless Legs Syndrome Foundation **National RLS Foundation Meeting**

The Restless Legs Syndrome (RLS) Foundation will hold its 4th Annual National Meeting on Friday and Saturday, November 17 and 18, 2006, at the Hyatt Regency on the River Walk in San Antonio, Texas. The meeting will feature several leading experts who will address the latest research advances and treatment recommendations for RLS. Meeting topics will include epidemiology, genetics, pathophysiology, treatment, children and RLS, coping with RLS, complementary therapy, and roundtable discussions. The meeting provides participants with the unique opportunity to meet RLS experts, learn more about RLS treatments and research, get tips for managing RLS, and share experiences with others. For more information, visit www.rls.org.

Submitted by Beth Osowski, Restless Legs Syndrome 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.

Please send your Constituents' Corner submissions no later than the second week of April, August, or December for inclusion in the May, September, or January issues of FYI from the NHLBI, respectively.

June 2006 Advisory Council Meeting

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The Council thanked Dr. Zerhouni for his testimony to Congress and presentations to the public about the tremendous return the United States receives on its investment in biomedical research and its importance to the nation's health and economic competitiveness.

Dr. Toni Scarpa, Director of the NIH Center for Scientific Review, discussed new challenges and opportunities facing the NIH peer review system.

Eighteen new initiatives were presented. Council members made several 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 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 (nhlbi.listens@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.