NHLBI Strategic Plan

National Heart, Lung, and Blood Institute
Provide global leadership through research and education to enhance the health of all individuals so that they can live longer and more fulfilling lives.
Our Approach

Work in partnership in an ever evolving environment.
NHLBI Strategic Plan Objectives

Develop a scientific blueprint for the next decade.

- A living, working plan from an inclusive and participatory process.
- Identify strategic priorities for the NHLBI to:
  - Initiate – *will not happen unless the Institute takes the lead*
  - Catalyze – *will be facilitated by the Institute*
  - Support – *will be accomplished through investigator-initiated research*
Planning Principles

- Identify the scientific directions for which the NHLBI is well positioned to make major contributions
- Ensure an inclusive process with grantees and other NHLBI constituencies having an active role
- Look inward as well as forward; evaluate NHLBI operational policies as part of the process
- Create a living document by providing for ongoing implementation and evaluation
Scientific and Operational Questions

- What are the most pressing scientific opportunities and challenges in heart, lung, blood, and sleep research?
- What are the obstacles to progress and what is needed to overcome them, including needed technologies and resources?
- What changes in the NHLBI business operations are needed to facilitate this research?
- How can the NHLBI enable the community to address these opportunities and challenges?
Strategic Plan Timeline

2005-2007

Level One: Identify Research Program Themes
- Winter 2005/Summer 2006

Level Two: Develop Institute-wide Strategic Themes
- Fall 2006

Level Three: Public Comment
- Winter 2006-2007

Plan Dissemination
- Spring 2007

Implementation
- Summer 2007

Implementation
Level 1 Meetings

1. Heart Failure and Cardiomyopathy
2. From Discovery to Clinical Application
3. Coronary Artery Disease and Atherosclerosis
4. Arrhythmias
5. Regenerative and Reparative Medicine
6. Bioinformatics and Computational Biology
7. Translation, Implementation, & Community Research
8. Vascular Diseases and Hypertension
9. Emerging and Evolving Technologies
10. Valvular and Congenital Diseases
11. Clinical Trial Methodology
12. Personalized Medicine
Level 1 Meetings (continued)

13. Injury/Inflammation; Repair/Remodeling; Replacement/Regeneration  
14. New Investigator Workshop (ATS)  
15. Enabling Therapeutic Trials and Translational Research  
16. Personalized Medicine  
17. Integrative Approaches to Pathogenic Research  
18. Development and Early Origins of Disease  
19. Global Blood Safety and Availability  
20. Acquired and Inherited Blood Diseases  
21. Cellular Therapeutics  
22. Critical Role of Inflammation in Ischemic Disorders  
23. Diagnosis and Treatment of Thrombotic Disorders
Resulted in:

Three Goals

with each Goal further defined by Challenges

and Eight Strategies that will change as Challenges are met and new Challenges emerge
Public Comment Period - January, 2007 through February 1, 2007

A total of 89 commentators, both individual and organizational, provided 218 comments on the draft strategic plan. The major themes raised were:

1. Implementation steps
2. Collaboration with other agencies and institutions
3. Continuing support for investigator-initiated research
Goal One: Form to Function

**Goal 1**
To improve understanding of the molecular and physiological basis of health and disease and to use that understanding to develop improved approaches to disease diagnosis, treatment, and prevention.

**Challenge 1.1**
To delineate mechanisms that relate molecular events to health and disease.

**Challenge 1.2**
To discover biomarkers that differentiate clinically relevant disease subtypes and that identify new molecular targets for application to prevention, diagnosis – including imaging, and therapy.
Goal Two: Function to Causes

**Goal 2:**
To improve understanding of the clinical mechanisms of disease and thereby enable better prevention, diagnosis, and treatment.

**Challenge 2.1**
To accelerate the translation of basic research findings into clinical studies and trials and to promote the translation of clinical research findings back to the laboratory.

**Challenge 2.2**
To enable early and accurate risk stratification and diagnosis of cardiovascular, lung, and blood disorders.

**Challenge 2.3**
To develop personalized preventive and therapeutic regimens for cardiovascular, lung, and blood diseases.

**Challenge 2.4**
To enhance the evidence available to guide the practice of medicine and improve public health.
Goal Three: Causes to Cures

**Goal 3**
To generate an improved understanding of the processes involved in translating research into practice and use that understanding to enable improvements in public health and to stimulate further scientific discovery.

**Challenge 3.1**
To complement bench discoveries and clinical trial results with focused behavioral and social science research.

**Challenge 3.2**
To identify cost-effective approaches for prevention, diagnosis, and treatment.

**Challenge 3.3**
To promote the development and implementation of evidence-based guidelines in partnership with individuals, professional and patient communities, and health care systems and to communicate research advances effectively to the public.
Plan Strategies: 1, 2 and 3

Eight Strategies – will change as Challenges are met and new Challenges emerge

1. Develop and facilitate access to scientific research resources
2. Develop new technologies, tools and resources
3. Increase the return for NHLBI population-based and outcomes research
Plan Strategies: 4 thru 8

4. Establish and expand collaborative resources for clinical research
5. Extend the infrastructure for clinical research
6. Support the development of multidisciplinary teams
7. Develop and retain human capital
8. Bridge the gap between research and practice through knowledge networks
Next Steps

**Develop a communications plan to inform, engage, and elicit continued feedback**
Next Steps: Dissemination

- Printed version of the plan for Scientific audiences
- Printed summary brochure for Public audiences
- PowerPoint slide set
- Presentations at meetings and other events
Initiative Development Process

Plan and Develop Initiatives and Ideas

- NHLBI staff develop initiatives and ideas, based upon input from
  - scientific community
  - other NHLBI constituencies
  - congress
  - BEE and Council

- NHLBI staff discuss Ideas and Initiatives at Idea Forum

Select and Prioritize Initiatives

- “Director’s Table” selects proposals from Idea Forum to be considered by the BEE
- BEE prioritizes initiatives
Consider and Recommend Initiatives for Funding

- Council reviews initiatives and BEE prioritization and makes recommendations

Make Funding Decisions

- Director, NHLBI makes funding decisions by considering
  - BEE priorities
  - Council recommendations
  - Fiscal resources
  - Program need
  - Program balance
  - Etc.