

## 9. Research Grants

### NHLBI Research Grants by Funding Mechanism: Fiscal Year 2004

	Number of Grants	Total Cost (Dollars in Thousands)	Percent of Total NHLBI Research Grant Dollars
<b>Research Project Grants (RPGs)</b>			
<b>Research Project Grants (excluding Small Business RPGs)</b>			
Regular Research Grants (R01)	3,572	\$1,328,958	58.88%
Small Research Grants (R03)	1	80	0.00
Program Project Grants (P01)	194	361,903	16.03
Cooperative Agreements (U01)	235	185,602	8.22
Area Grants (R15)	19	3,838	0.17
Explorative Developmental Grant (R21)	93	18,165	0.80
Method to Extend Research in Time (R37)	83	32,891	1.46
Exploratory/Developmental Grants Phase II (R33)	2	802	0.04
Subtotal, Research Project Grants (excluding Small Business RPGs)	4,199	1,932,239	85.60
<b>Small Business Research Project Grants</b>			
Small Business Technology Transfer (STTR Phase I) (R41)	37	5,142	0.23
Small Business Technology Transfer (STTR Phase II) (R42)	8	2,761	0.12
Small Business Innovation Research (SBIR Phase I) (R43)	115	15,239	0.68
Small Business Innovation Research (SBIR Phase II) (R44)	115	48,388	2.14
Subtotal, Small Business Research Project Grants	275	71,530	3.17
Subtotal, Research Project Grants	4,474	2,003,769	88.77
<b>Research Center Grants</b>			
Specialized Centers of Research (SCOR)	58	115,304	5.11
Animal Model and Animal and Biological Material Resource Grants (P40)	0	125	0.01
Sickle Cell Centers (U54)	11	21,010	0.93
Center for AIDS Research (P30)	0	2,646	0.12
Specialized Centers (Cooperative Agreements) (U54)	1	1,215	0.05
National Swine Research and Resource Center (U42)	0	300	0.01
Subtotal, Research Center Grants	70	140,600	6.23
<b>Research Career Programs</b>			
Mentored Research Development Award for Minority Faculty (K01)	46	6,150	0.27
Minority Institution Faculty Mentored Research Scientist Award (K01)	6	867	0.04
Mentored Scientist Development Award in Research Ethics (K01)	2	253	0.01
Independent Scientist Award (K02)	31	3,079	0.14
Research Career Award (K06)	1	34	0.00
Nutrition Academic Award (K07)	9	1,516	0.07
Cultural Competence and Health Disparities Academic Award (K07)	8	925	0.04
Clinical Investigator Scientist Award (K08)	229	29,037	1.29
Career Enhancement Award for Stem Cell Research (K18)	5	980	0.04

	<b>Number of Grants</b>	<b>Total Cost (Dollars in Thousands)</b>	<b>Percent of Total NHLBI Research Grant Dollars</b>
Mentored Patient-Oriented Research Career Development Award (K23)	122	16,216	0.72
Midcareer Investigator Award in Patient-Oriented Research (K24)	32	3,815	0.17
Mentored Quantitative Research Career Development Award (K25)	12	1,622	0.07
Clinical Research Curriculum Award (K30)	55	3,115	0.14
Career Transition Award (K22)	1	185	0.01
Subtotal, Research Career Programs	559	67,794	3.01
<b>Other Research Grants</b>			
Cooperative Clinical Research (U10, R10)	26	20,565	0.91
Minority Biomedical Research Support (S06, S14, R25)	0	2,806	0.12
Other (R09, R13, R18, R24, R25, T15, U09, U24, UH1)	64	21,620	0.96
Subtotal, Other Research Grants	90	44,991	1.99
<b>Total, NHLBI Research Grants</b>	<b>5,193</b>	<b>\$2,257,154</b>	<b>100%</b>

### NHLBI Total Research Grants by Category

#### Percent

Research Project Grants	88.8
Research Centers Grants	6.2
Research Career Programs	3.03
Other Research Grants	2

### NHLBI Research Project Grant,\* Research Centers Grant, and Other Research Grant Obligations: Fiscal Years 1994-2004

#### Dollars (Thousands)

	Fiscal Year										
	1994	1995	1996***	1997	1998	1999	2000	2001	2002	2003	2004
Research Project Grants*	\$797,092	\$819,674	\$862,027	\$935,322	\$1,009,152	\$1,142,473	\$1,356,034	\$1,580,751	\$1,779,573	\$1,920,201	\$2,003,769
Research Centers Grants	101,535	106,980	106,688	108,665	114,397	119,889	123,803	127,232	128,161	138,941	140,600
Other Research Grants**	52,576	55,974	56,692	56,993	66,234	84,219	90,666	88,958	98,460	113,172	112,785
<b>Total</b>	<b>\$951,203</b>	<b>\$982,628</b>	<b>\$1,025,407***</b>	<b>\$1,100,980</b>	<b>\$1,189,783</b>	<b>\$1,346,581</b>	<b>\$1,570,503</b>	<b>\$1,796,941</b>	<b>\$2,006,194</b>	<b>\$2,172,314</b>	<b>\$2,257,154</b>

\* Includes R01, U01, P01, R29, R37, R43, and R44; R03 and R41 beginning in 1994; R55 in 1995-1996; R15 and R42 beginning in 1996; R21 beginning in 1997; and R33 beginning in 2001.

\*\* Includes Program Evaluation and IMPAC II Assessment of \$4,435,000.

\*\*\* Includes Research Career Programs; excludes General Research Support Grants.

## NHLBI Competing Research Project Grant Applications\*: Fiscal Years 1994-2004

### Total Cost Dollars (Millions)

	Fiscal Year										
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004**
Applications Reviewed	\$715.0	\$710.3	\$699.2	\$802.1	\$687.1	\$867.1	\$809.8	\$851.7	\$1,221.7	\$1,262.5	\$1,277.6
Awarded	180.4	207.5	182.1	240.1	252.4	330.4	418.4	424.3	437.4	463.7	477.3

\* Includes R01, R03, U01, P01, and R37; R29 in 1994-2002; R55 in 1995-1996; R15 beginning in 1996; R21 beginning in 1997; and R33 beginning in 2001.

\*\* The number for applications reviewed is based on preliminary data.

## NHLBI Competing Research Project Grant Applications\*: Fiscal Years 1994-2004

### Number Reviewed and Awarded and Percent Funded

	Fiscal Year										
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004**
Applications Reviewed	2,801	2,744	2,605	2,771	2,657	2,704	2,893	2,895	3,064	3,098	3,548
RPGs Awarded	655	740	652	821	837	959	1,003	1,033	1,018	1,064	1,034
Success Rate (percent)	23.4	27.0	25.0	29.6	31.5	35.5	34.7	35.7	33.2	34.3	29.1

\* Includes R01, R03, U01, P01, and R37; R29 in 1994-2002; R55 in 1995-1996; R15 beginning in 1996; R21 beginning in 1997; and R33 beginning in 2001.

\*\* The number for applications reviewed is based on preliminary data.

### Percent of Reviewed Applications Funded (Success Rate)

Year	Awarded
1994	23.4
1995	27
1996	25
1997	29.6
1998	31.5
1999	35.5
2000	34.7
2001	35.7
2002	33.2
2003	34.3
2004	29.1

## NHLBI Investigator-Initiated and Institute-Initiated Grant Obligations: Fiscal Years 1994-2004

Dollars (Millions)

	Fiscal Year										
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Investigator-Initiated (includes R01, U01, P01, R29, R37, R43, and R44; R03 and R41 beginning in 1994; R55 in 1995-1996; R15 and R42 beginning in 1996; R21 beginning in 1997; and R33 beginning in 2001)	\$724.8	\$750.7	\$804.1	\$867.9	\$966.6	\$1,069.9	\$1,241.6	\$1,446.2	\$1,584.9	\$1,681.9	\$1,773.4
Institute-Initiated (includes Centers Grants and Cooperative Agreement RFAs)	226.4	231.9	216.8	233.0	223.2	276.7	328.9	350.7	421.3	490.4	438.8
<b>Total</b>	<b>\$951.2</b>	<b>\$982.6</b>	<b>\$1,020.9*</b>	<b>\$1,100.9</b>	<b>\$1,189.8</b>	<b>\$1,346.6</b>	<b>\$1,570.5</b>	<b>\$1,796.9</b>	<b>\$2,006.2</b>	<b>\$2,172.3</b>	<b>\$2,257.2</b>

\* Excludes Program Evaluation Assessment of \$4,435,000.

## NHLBI Research Project Grants\*: Amount Funded by Type of Award, Fiscal Years 1994-2004

Dollars (Millions)

	Fiscal Year										
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Competing</b>											
New Competing	\$99.7	\$111.1	\$90.5	\$135.8	\$147.5	\$202.0	\$266.4	\$280.0	\$291.2	\$285.5	\$290.5
Renewal Competing	79.6	94.5	90.4	104.0	103.9	127.2	152.0	143.9	143.9	177.2	185.5
Competing Supplements	1.1	1.9	1.2	0.3	1.0	1.2	0.9	0.4	2.3	1.0	1.3
Subtotal, Competing	180.4	207.5	182.1	240.1	252.4	330.4	419.3	424.3	437.4	463.7	477.3
<b>Noncompeting</b>											
Subtotal, Noncompeting	599.9	588.4	649.9	662.4	721.3	770.6	889.3	1,101.5	1,281.3	1,390.3	1,454.9
<b>Total, Competing and Noncompeting</b>	<b>\$780.3</b>	<b>\$795.9</b>	<b>\$832.0</b>	<b>\$902.5</b>	<b>\$973.7</b>	<b>\$1,101.0</b>	<b>\$1,308.6</b>	<b>\$1,525.8</b>	<b>\$1,718.7</b>	<b>\$1,854.0</b>	<b>\$1,932.2</b>

\* Includes R01, U01, P01, R29, and R37; R03 beginning in 1994; R55 in 1995-1996; R15 beginning in 1996; R21 beginning in 1997; and R33 beginning in 2001.

## Facility and Administrative (F&A)\* Costs of NHLBI Research Project Grants\*\*\*: Fiscal Years 1994-2004

Dollars (Thousands)

Fiscal Year	Direct Cost	F&A Cost*	Total Cost	F&A Cost as a Percent of Direct Cost
1994	534,374	245,965	780,339	46.0
1995	543,502	252,423	795,925	46.4
1996	564,219	267,785	832,004	47.5
1997	611,576	290,915	902,491	47.6



<b>Fiscal Year</b>	<b>Direct Cost</b>	<b>F&amp;A Cost*</b>	<b>Total Cost</b>	<b>F&amp;A Cost as a Percent of Direct Cost</b>
1998	660,009	313,765	973,774	47.5
1999	764,198	336,756***	1,100,954	44.1
2000	891,244	417,312	1,308,556	46.8
2001	1,045,144	480,673	1,525,817	46.0
2002	1,182,408	536,324	1,718,732	45.4
2003	1,276,819	577,131	1,853,950	45.2
2004	1,385,567	618,202	2,003,769	44.6

\* Previously called Indirect Cost.

\*\* Includes R01, U01, P01, R29, and R37; R03 beginning in 1994; R55 in 1995-1996; R15 beginning in 1996; R21 beginning in 1997; and R33 beginning in 2001.

\*\*\* Excludes Program Evaluation Assessment of \$1,216,000.

### **NHLBI Research Project Grants\*: Average Costs, Fiscal Years 1994-2004**

**Dollars (Thousands)**

	<b>Fiscal Year</b>										
	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>
Noncompeting	\$294.8	\$312.8	\$317.5	\$323.0	\$322.6	\$323.4	\$346.6	\$390.7	\$418.8	\$444.4	\$458.7
Competing	275.5	280.4	279.3	292.5	301.6	344.5	418.0	410.8	409.1	406.7	419.7
<b>Total</b>	<b>\$290.1</b>	<b>\$303.7</b>	<b>\$308.3</b>	<b>\$314.2</b>	<b>\$316.9</b>	<b>\$329.4</b>	<b>\$366.6</b>	<b>\$396.1</b>	<b>\$416.2</b>	<b>\$433.8</b>	<b>\$447.9</b>

\* Includes R01, U01, P01, R29, R37, R43, and R44; R03 and R41 beginning in 1994; R55 in 1995-1996; R15 and R42 beginning in 1996; R21 beginning in 1997; and R33 beginning in 2001.

## NHLBI Cooperative Agreements (U01, U10) Programs

Cooperative Agreements were instituted to support discrete, circumscribed projects in areas of an investigator's specific interest and competency with substantial programmatic participation by the NHLBI during performance of the activity.

	<b>Total Obligations Prior to FY 2004</b>	<b>Total FY 2004 Obligations</b>	<b>Total Obligations to Date</b>
<b>Heart and Vascular Diseases</b>			
A CHF Trial Investigating Outcomes of Exercise (ACTION)	\$17,071,082	\$7,973,471	\$25,044,553
Atherosclerosis, Plaque, and CVD in Communities	0	4,099,685	4,099,685
Bypass Angioplasty Revascularization Investigation in Type 2 Diabetics (BARI 2D)	27,288,936	8,265,037	35,553,973
Cardiovascular Outcomes in Renal Atherosclerotic Lesions (CORAL)	0	4,343,389	4,343,389
Center for Fetal Monkey Gene Transfer for Heart, Lung, and Blood Diseases	1,857,162	969,939	2,827,101
Dynamic Evaluation of Percutaneous Coronary Intervention	3,971,722	742,499	4,714,221
Family Blood Pressure Program	76,405,079	8,433,080	84,838,159
Family Heart Study-Subclinical Atherosclerosis Network (FHS-SCAN)	8,864,463	1,696,913	10,561,376
Genetics of Coronary Artery Disease in Alaskan Natives (GOCADAN)	7,218,810	652,865	7,871,675
Girls Health Enrichment Multisite Studies (GEMS)	12,698,544	2,399,948	15,098,492
Hematocrit Strategy in Infant Heart Surgery	2,215,845	492,411	2,708,256
Home Automatic External Defibrillator Trial (HAT)	8,999,887	4,263,755	13,263,642
IMMEDIATE Trial: Immediate Myocardial Metabolic Enhancement During Initial Assessment and Treatment in Emergency Care	0	5,170,411	5,170,411
Interaction of Genes and Environment in Shaping Risk Factors for Heart, Lung, Blood, and Sleep Disorders	25,116,214	10,409,084	35,525,298
Multidisciplinary Study of Right Ventricular Dysplasia	4,778,935	1,473,384	6,252,319
Partnership Programs To Reduce Cardiovascular Health Disparities	0	6,468,544	6,468,544
Pediatric Cardiovascular Clinical Research Network	13,650,229	4,947,982	18,598,211
Pharmacogenetics Research Network	25,021,286	8,185,611	33,206,897
Preventing Overweight Using Novel Dietary Strategies (POUNDS LOST)	1,211,724	1,687,588	2,899,312
Programs of Excellence in Gene Therapy	49,160,962	11,979,088	61,140,050
Programs of Genomic Applications (PGAs) for Heart, Lung, and Blood Diseases	147,177,847	18,604,345	165,782,192
Resuscitation Outcome Improvement Consortium	0	6,886,109	6,886,109
Stop Atherosclerosis in Native Diabetics Study (SANDS)	4,574,684	2,106,653	6,681,337
Strong Heart Study	43,283,445	3,154,859	46,438,304
Surgical Treatment for Ischemic Heart Failure (STICH)	12,251,409	1,613,238	13,864,647
Trial of Activity for Adolescent Girls (TAAG)	21,853,035	6,349,902	28,202,937
Weight Loss Maintenance (WLM)	3,686,738	4,367,750	8,054,488
Women's Ischemia Syndrome Evaluation (WISE)	4,314,911	1,302,449	5,617,360
Subtotal, Heart and Vascular Diseases	522,672,949	139,039,989	661,712,938
<b>Lung Diseases</b>			
Asthma Clinical Research Network (ACRN), Phase II	8,181,429	8,424,129	16,605,558
Centers for Reducing Asthma Disparities	12,051,824	5,217,367	17,269,191

	<b>Total Obligations Prior to FY 2004</b>	<b>Total FY 2004 Obligations</b>	<b>Total Obligations to Date</b>
Childhood Asthma Management Program-Continuation Study (CAMP-CS)/Phase 2	1,489,491	2,043,311	3,532,802
Childhood Asthma Research and Education (CARE) Network	26,106,032	5,292,305	31,398,337
Collaborative Programs in Bronchopulmonary Dysplasia	21,135,687	5,166,906	26,302,593
COPD Clinical Research Network	6,843,405	6,848,345	13,691,750
Early Antipseudomonal Therapy in Cystic Fibrosis	0	1,064,237	1,064,237
Inhaled Nitric Oxide for the Prevention of Chronic Lung Disease	6,968,259	1,245,274	8,213,533
Inhaled Nitric Oxide in Prevention of Chronic Lung Disease	6,732,859	903,335	7,636,194
Linkage Study in Familial Pulmonary Fibrosis	2,755,951	714,001	3,469,952
Pharmacogenetics of Asthma Treatment	10,847,376	0	10,847,376
Subtotal, Lung Diseases	103,112,313	36,919,210	140,031,523
<b>Blood Diseases and Resources</b>			
Blood and Marrow Transplant Clinical Research Network	\$17,209,287	\$5,972,521	\$23,181,808
Functional Outcomes in Cardiovascular Patients Undergoing Surgical Hip Fracture Repair (FOCUS)	1,639,478	1,795,724	3,435,202
Induction of Stable Chimerism for Sickle Cell Anemia	1,541,037	550,666	2,091,703
Reference Laboratory to Evaluate Therapies for Sickle Cell Disease	1,437,153	409,694	1,846,847
Sibling Donor Cord Blood Banking and Transplantation	3,731,256	1,352,571	5,083,827
Stroke Prevention in Sickle Cell Anemia (STOP 2)	13,147,352	2,366,346	15,513,698
Thalassemia (Cooley's Anemia) Clinical Research Network	8,999,883	2,374,805	11,374,688
Transfusion Medicine/Hemostasis Clinical Research Network	12,293,630	6,092,846	18,386,476
Subtotal, Blood Diseases and Resources	59,999,076	20,915,173	80,914,249
<b>National Center on Sleep Disorders Research</b>			
Apnea Positive Pressure Long-Term Efficacy Study (APPLES)	6,244,439	3,109,570	9,354,009
Sleep Heart Health Study	16,631,681	1,477,676	18,109,357
Subtotal, National Center on Sleep Disorders Research	22,876,120	4,587,246	27,463,366
<b>Total, NHLBI Cooperative Agreements</b>	<b>\$708,660,458</b>	<b>\$201,461,618</b>	<b>\$910,122,076</b>

## Heart and Vascular Diseases Program

### A CHF Trial Investigating Outcomes of Exercise (ACTION), Initiated in Fiscal Year 2002

The purpose of this trial is to determine the long-term safety and effectiveness of exercise training for patients with heart failure. Patients receiving the exercise regimen also will receive standard care and will be compared with patients receiving standard care alone.

#### Obligations

Funding History:

Fiscal Year 2004—\$7,973,471

Fiscal Years 2002-2003—\$17,071,082

Total Funding to Date—\$25,044,553

### **Current Active Organizations and Grant Numbers**

1. Duke University  
Durham, North Carolina —HL-063747
2. Case Western Reserve University Henry Ford Health System  
Detroit, Michigan —HL-064250
3. Oregon Health & Science  
University Portland, Oregon —HL-064257
4. Washington University  
St. Louis, Missouri —HL-064264
5. University of Colorado Health Sciences Center  
Denver, Colorado —HL-064265
6. Duke University  
Durham, North Carolina —HL-066461
7. Emory University  
Atlanta, Georgia —HL-066482
8. Wake Forest University Winston-Salem,  
North Carolina —HL-066491
9. Ohio State University  
Columbus, Ohio —HL-066494
10. University of Alabama at Birmingham  
Birmingham, Alabama —HL-066497
11. Case Western Reserve  
University Cleveland, Ohio —HL-066501
12. Boston Medical Center  
Boston, Massachusetts —HL-068973
13. University of California, Los Angeles  
Los Angeles, California —HL-068980

### **Atherosclerosis, Plaque, and CVD in Communities, Initiated in Fiscal Year 2004**

The purpose of this study is to identify correlates of atherosclerotic plaque characteristics and early changes in the vascular wall in a subset of the bi-ethnic Atherosclerosis Risk in

Communities (ARIC) cohort. Investigators will use stored DNA samples to test genomic correlates of plaque characteristics and their ability to predict coronary heart disease and stroke.

### **Obligations**

Funding History:

Fiscal Year 2004—\$4,099,685

Total Funding to Date—\$4,099,685

### **Current Active Organizations and Grant Numbers**

1. University of Texas Health Science Center  
Houston, Texas —HL-075572

### **Bypass Angioplasty Revascularization Investigation in Type 2 Diabetics (BARI 2D), Initiated in Fiscal Year 2000**

The purpose of this trial is to compare alternative treatment strategies for managing Type 2 diabetic patients with angiographically proven coronary artery disease and stable angina or ischemia. Revascularization combined with aggressive medical anti-ischemia treatment will be compared to aggressive medical anti-ischemia treatment alone; simultaneously, researchers will determine whether insulin-sensitizing drugs like metformin and the glitazones for controlling blood sugar levels offer any survival advantage over drugs that increase insulin levels. Twenty percent of the patients are from minority populations.

### **Obligations**

Funding History:

Fiscal Year 2004—\$8,265,037

Fiscal Years 2000-2003—\$27,288,936

Total Funding to Date—\$35,553,973

### **Current Active Organizations and Grant Numbers**

1. University of Pittsburgh  
Pittsburgh, Pennsylvania —HL-061744
2. St. Louis University  
St. Louis, Missouri —HL-061746
3. Stanford University  
Stanford, California —HL-061748
4. University of Vermont  
Burlington, Vermont —HL-063804

## **Cardiovascular Outcomes in Renal Atherosclerotic Lesions (CORAL), Initiated in Fiscal Year 2004**

The purpose of this study is to determine whether revascularization of a stenotic renal artery plus medical therapy is associated with improved clinical outcomes compared with medical therapy alone. Thirty percent of the participants will be black.

### **Obligations**

#### **Funding History:**

Fiscal Year 2004—\$4,343,389

Total Funding to Date—\$4,343,389

### **Current Active Organizations and Grant Numbers**

1. Medical College of Ohio  
Toledo, Ohio —HL-071556
2. University of Minnesota,  
Twin Cities Minneapolis, Minnesota —HL-072734
3. University of Virginia  
Charlottesville, Virginia —HL-072735
4. Beth Israel Deaconess Medical Center  
Boston, Massachusetts —HL-072736
5. Brigham and Women's Hospital  
Boston, Massachusetts —HL-072737

## **Center for Fetal Monkey Gene Transfer for Heart, Lung, and Blood Diseases, Initiated in Fiscal Year 2001**

The purpose of this Center is to provide expertise, sources, and resources to NHLBI-supported investigators who wish to evaluate viral and nonviral gene transfer strategies in nonhuman primates.

### **Obligations**

#### **Funding History:**

Fiscal Year 2004—\$969,939

Fiscal Years 2001-2003—\$1,857,162

Total Funding to Date—\$2,827,101

### **Current Active Organization and Grant Number**

1. University of California,  
Davis Davis, California —HL-069748

## **Dynamic Evaluation of Percutaneous Coronary Intervention, Initiated in Fiscal Year 1997**

This program, which complements prior NHLBI percutaneous transluminal coronary angioplasty (PTCA) registries and the New Approaches to Coronary Intervention Registry, is evaluating patterns of device usage, as well as immediate and follow-up outcomes in patients undergoing percutaneous transluminal coronary revascularization. Results will provide guidance to the cardiology community in selecting appropriate therapies and in designing clinical trials to evaluate competing devices.

### **Obligations**

#### **Funding History:**

Fiscal Year 2004—\$742,499

Fiscal Years 1997-2003—\$3,971,722

Total Funding to Date—\$4,714,221

### **Current Active Organization and Grant Number**

1. University of Pittsburgh  
Pittsburgh, Pennsylvania —HL-033292

## **Family Blood Pressure Program, Initiated in Fiscal Year 1995**

The objectives of this program are to identify major genes associated with high blood pressure and to investigate the interactions between genetic and environmental determinants of hypertension in defined populations, many of which consist of specific minority groups. The study consists of collaborative networks that share technology, data, skills, biological materials, and population resources.

### **Obligations**

#### **Funding History:**

Fiscal Year 2004—\$8,433,080

Fiscal Years 1995-2003—\$76,405,079

Total Funding to Date—\$84,838,159

### **Current Active Organizations and Grant Numbers**

1. University of Michigan at Ann Arbor  
Ann Arbor, Michigan —HL-054457
2. University of Mississippi Medical Center  
Jackson, Mississippi —HL-054463
3. Mayo Foundation  
Rochester, Minnesota —HL-054464
4. The Johns Hopkins University  
Baltimore, Maryland —HL-054466

5. University of Utah  
Salt Lake City, Utah —HL-054471
6. University of Minnesota,  
Twin Cities Minneapolis, Minnesota —HL-054472
7. Washington University  
St. Louis, Missouri —HL-054473
8. University of Texas Health Science Center  
Houston, Texas —HL-054481
9. Loyola University Medical Center  
Maywood, Illinois —HL-054485
10. University of Alabama at Birmingham  
Birmingham, Alabama —HL-054495
11. University of Minnesota,  
Twin Cities Minneapolis, Minnesota —HL-054496
12. Boston University  
Boston, Massachusetts —HL-054497
13. Staub Pacific Health Foundation Health Research Institute  
Honolulu, Hawaii —HL-054498
14. University of Texas Health Science Center  
Houston, Texas —HL-054504
15. Medical College of Wisconsin  
Milwaukee, Wisconsin —HL-054508
16. University of North Carolina at Chapel Hill  
Chapel Hill, North Carolina —HL-054509
17. University of Michigan at Ann Arbor  
Ann Arbor, Michigan —HL-054512
18. University of Pittsburgh  
Pittsburgh, Pennsylvania —HL-054526
19. Stanford University  
Stanford, California —HL-054527
20. University of California,  
San Diego La Jolla, California —HL-064777



## **Family Heart Study-Subclinical Atherosclerosis Network (FHS-SCAN),\* Initiated in Fiscal Year 2001**

The purpose of this program is to examine vascular calcification and inflammation in patients who have previously been examined and extensively genotyped by the NHLBI Family Heart Study, in order to identify genetic factors influencing susceptibility to coronary and aortic atherosclerosis and individual variability in the inflammatory response. The study includes approximately 600 blacks.

\* Formerly called Genetics of Coronary and Aortic Calcification (GENCAC).

### **Obligations**

#### **Funding History:**

Fiscal Year 2004—\$1,696,913

Fiscal Years 2001-2003—\$8,864,463

Total Funding to Date—\$10,561,376

### **Current Active Organizations and Grant Numbers**

1. University of North Carolina at Chapel Hill  
Chapel Hill, North Carolina —HL-067893
2. University of Utah  
Salt Lake City, Utah —HL-067894
3. Wake Forest University  
Winston-Salem, North Carolina —HL-067895
4. Boston University  
Boston, Massachusetts —HL-067896
5. Wake Forest University  
Winston-Salem, North Carolina —HL-067897
6. University of Alabama at Birmingham  
Birmingham, Alabama —HL-067898
7. Washington University  
St. Louis, Missouri —HL-067899
8. University of Minnesota,  
Twin Cities Minneapolis, Minnesota —HL-067900
9. University of Minnesota,  
Twin Cities Minneapolis, Minnesota —HL-067901
10. University of Texas Health Science Center  
Houston, Texas —HL-067902

## **Genetics of Coronary Artery Disease in Alaskan Natives (GOCADAN), Initiated in Fiscal Year 2000**

The purpose of this study is to document CVD and CVD risk factors in approximately 40 extended families (1,214 members from villages in Northern Alaska). Scientists seek to identify and characterize genes that contribute to CVD in this unique and understudied population.

### **Obligations**

#### **Funding History:**

Fiscal Year 2004—\$652,865

Fiscal Years 2000-2003—\$7,218,810

Total Funding to Date—\$7,871,675

### **Current Active Organization and Grant Number**

1. MedStar Research Institute  
Washington, DC —HL-064244

## **Girls Health Enrichment Multisite Studies (GEMS), Initiated in Fiscal Year 1999**

The objective of this project is to develop and test interventions to prevent obesity by decreasing weight gain during the high-risk transitional period from prepuberty to puberty in black girls who are at risk for developing obesity. Phase 1 (developmental and pilot studies) was completed in FY 2002. Two sites began Phase 2 trials in FY 2003.

### **Obligations**

#### **Funding History:**

Fiscal Year 2004—\$2,399,948

Fiscal Years 2001-2003—\$12,698,544

Total Funding to Date—\$15,098,492

### **Current Active Organizations and Grant Numbers**

1. University of Memphis  
Memphis, Tennessee —HL-062662

2. Stanford University  
Stanford, California —HL-062663

## **Hematocrit Strategy in Infant Heart Surgery, Initiated in Fiscal Year 2000**

The purpose of this study is to determine which hematocrit level—30 or 20 percent—provides the optimal degree of hemodilution during infant open heart surgery to repair congenital heart defects. Scientists will compare the effects of the two hematocrit levels with respect to cardiovascular and neurodevelopmental outcomes in the infants during the immediate postoperative period and at 1 year of age.

## **Obligations**

### Funding History:

Fiscal Year 2004—\$492,411

Fiscal Years 2000-2003—\$2,215,845

Total Funding to Date—\$2,708,256

## **Current Active Organization and Grant Number**

1. Children's Hospital, Boston

Boston, Massachusetts

—HL-063411

## **Home Automatic External Defibrillator Trial (HAT), Initiated in Fiscal Year 2002**

The purpose of this trial is to compare standard response (call 911 and give cardiopulmonary resuscitation) to sudden cardiac arrest to standard response augmented with automatic external defibrillator use provided by a spouse or other family member in 7,000 survivors of an anterior wall MI. The primary end point is mortality.

## **Obligations**

### Funding History:

Fiscal Year 2004—\$4,263,755

Fiscal Years 2002-2003—\$8,999,887

Total Funding to Date—\$13,263,642

## **Current Active Organization and Grant Number**

1. Seattle Institute for Cardiac Research

Seattle, Washington

—HL-067972

## **IMMEDIATE Trial: Immediate Myocardial Metabolic Enhancement During Initial Assessment and Treatment in Emergency Care, Initiated in Fiscal Year 2004**

The purpose of this program is to study the effects of early administration of glucose, insulin, and potassium (GIK) in reducing mortality in patients from acute coronary syndrome (ACS). Patients experiencing an ACS (including acute MI and unstable angina pectoris) will be treated with GIK as soon as possible in prehospital emergency medical service settings (EMS), or immediately upon arrival for those presenting to emergency departments (EDs).

## **Obligations**

### Funding History:

Fiscal Year 2004—\$5,170,411

Total Funding to Date—\$5,170,411

### **Current Active Organizations and Grant Numbers**

1. New England Medical Center Hospitals  
Boston, Massachusetts —HL-077821
2. New England Medical Center Hospitals  
Boston, Massachusetts —HL-077823
3. New England Medical Center Hospitals  
Boston, Massachusetts —HL-077826

### **Interaction of Genes and Environment in Shaping Risk Factors for Heart, Lung, Blood, and Sleep Disorders, Initiated in Fiscal Year 2002**

The purpose of this study is to identify novel genes that interact with specific environmental exposures to modify risk factors for heart, lung, blood, and sleep disorders. The genetic aspects of response to environmental change and related biological mechanisms will be studied using short-term, focused interventions in families. Subgroups will be identified based on genotype that are most likely to benefit from targeted environmental changes designed to reduce the development or progression of heart, lung, blood, or sleep diseases.

#### **Obligations**

##### **Funding History:**

Fiscal Year 2004—\$10,409,084  
Fiscal Years 2002-2003—\$25,116,214  
Total Funding to Date—\$35,525,298

### **Current Active Organizations and Grant Numbers**

1. Tulane University  
New Orleans, Louisiana —HL-072507
2. LSU Pennington Biomedical Research Center  
Baton Rouge, Louisiana —HL-072510
3. The Johns Hopkins University  
Baltimore, Maryland —HL-072518
4. University of Minnesota, Twin Cities  
Minneapolis, Minnesota —HL-072524
5. University of Maryland Baltimore Professional School  
Baltimore, Maryland —HL-072525

### **Multidisciplinary Study of Right Ventricular Dysplasia, Initiated in Fiscal Year 2001**

The purpose of this multidisciplinary, multicenter study is to investigate the cardiac, clinical, and genetic aspects of arrhythmogenic right ventricular dysplasia (ARVD). A North American

ARVD registry of patients and their families will be established. Researchers seek to identify chromosomal loci and specific genetic mutations associated with this disorder.

### **Obligations**

Funding History:

Fiscal Year 2004—\$1,473,384

Fiscal Years 2001-2003—\$4,778,935

Total Funding to Date—\$6,252,319

### **Current Active Organizations and Grant Numbers**

1. University of Arizona  
Tucson, Arizona —HL-065594
2. Baylor College of Medicine  
Houston, Texas —HL-065652
3. University of Rochester  
Rochester, New York —HL-065961

### **Partnership Programs To Reduce Cardiovascular Health Disparities, Initiated in Fiscal Year 2004**

The objectives of this study are to improve the provider and patient approaches to treatment of hypertension and diabetes, modify physician related barriers to minority enrollment in clinical trials, and improve patient adherence to treatment plans.

### **Obligations**

Funding History:

Fiscal Year 2004—\$6,468,544

Total Funding to Date—\$6,468,544

### **Current Active Organizations and Grant Numbers**

1. Bon Secours Hospital Baltimore, Inc.  
Baltimore, Maryland —HL-079150
2. University of Maryland Baltimore Professional School  
Baltimore, Maryland —HL-079151
3. Queen's Medical Center  
Honolulu, Hawaii —HL-079152
4. Cooper Green Hospital (Birmingham)  
Birmingham, Alabama —HL-079153
5. Emory University  
Atlanta, Georgia —HL-079156

6. Denver Health and Hospital Authority  
Denver, Colorado —HL-079160
7. University of Hawaii at Manoa  
Honolulu, Hawaii —HL-079163
8. University of Alabama at Birmingham  
Birmingham, Alabama —HL-079171
9. University of Colorado Health Sciences Center  
Denver, Colorado —HL-079208
10. Morehouse School of Medicine  
Atlanta, Georgia —HL-079214
11. Jackson Hinds Comprehensive Health Center  
Jackson, Mississippi —HL-079378
12. University of Mississippi Medical Center  
Jackson, Mississippi —HL-079458

## **Pediatric Cardiovascular Clinical Research Network, Initiated in Fiscal Year 2001**

See Chapter 11. Clinical Trials.

## **Pharmacogenetics Research Network, Initiated in Fiscal Year 2001**

The purpose of this study is to establish a network to systematically evaluate candidate genes that may influence pharmacologic response to drug treatments for arrhythmia, heart failure, hypertension, and lipid disorders. Investigators seek to identify gene polymorphisms capable of predicting drug toxicity and efficacy. One of the projects has 50 percent minority participation.

### **Obligations**

Funding History:

Fiscal Year 2004—\$8,185,611

Fiscal Years 2001-2003—\$25,021,286

Total Funding to Date—\$33,206,897

### **Current Active Organizations and Grant Numbers**

1. Vanderbilt University  
Nashville, Tennessee —HL-065962
2. Children's Hospital and Research Center at Oakland  
Oakland, California —HL-069757
3. University of California,  
San Diego La Jolla, California —HL-069758

## **Preventing Overweight Using Novel Dietary Strategies (POUNDS LOST), Initiated in Fiscal Year 2003**

The purpose of this study is to compare the effects of four diets low in saturated fat and differing in macronutrient composition on weight loss and its maintenance in 800 overweight or obese adults. The diet consists of moderate fat (35 percent energy) or low fat (20 percent energy) with two different protein levels (15 and 25 percent). Approximately 20 percent of the participants will be minority.

### **Obligations**

#### Funding History:

Fiscal Year 2004—\$1,687,588

Fiscal Year 2003—\$1,211,724

Total Funding to Date—\$2,899,312

### **Current Active Organization and Grant Number**

1. Harvard School of Public Health  
Boston, Massachusetts —HL-073286

## **Programs of Excellence in Gene Therapy, Initiated in Fiscal Year 2000**

The objective of these programs is to create an environment that will enable rapid translation of preclinical studies in cardiovascular, pulmonary, and hematologic diseases into human pilot experiments. In addition, the programs are offering training at the interface between basic science and clinical application. Six national cores provide access to specialized services, such as generating vectors for clinical use, performing morphologically based studies, producing and processing hematopoietic stem cells, and performing primate transplantation studies.

### **Obligations**

#### Funding History:

Fiscal Year 2004—\$11,979,088

Fiscal Years 2000-2003—\$49,160,962

Total Funding to Date—\$61,140,050

### **Current Active Organizations and Grant Numbers**

1. University of Washington  
Seattle, Washington —HL-066947
2. Stanford University  
Stanford, California —HL-066948
3. University of Pittsburgh  
Pittsburgh, Pennsylvania —HL-066949
4. Weill Medical College of Cornell University  
New York, New York —HL-066952

5. Weill Medical College of Cornell University  
New York, New York —HL-067738

## **Programs of Genomic Applications (PGAs) for Heart, Lung, and Blood Diseases, Initiated in Fiscal Year 2000**

The goal of this program is to develop information, tools, and resources to link genes to biological function. Specifically, researchers seek to identify human genes relevant to heart, lung, blood, and sleep functions. In addition, the PGAs will establish training programs for NHLBI-supported investigators in the use of genomic information and technologies.

### **Obligations**

#### Funding History:

Fiscal Year 2004—\$18,604,345

Fiscal Years 2000-2003—\$147,177,847

Total Funding to Date—\$165,782,192

### **Current Active Organizations and Grant Numbers**

1. Medical College of Wisconsin  
Milwaukee, Wisconsin —HL-066579
2. Institute for Genomic Research  
Rockville, Maryland —HL-066580
3. Harvard University School of Medicine  
Boston, Massachusetts —HL-066582
4. The Johns Hopkins University  
Baltimore, Maryland —HL-066583
5. University of California, San Francisco  
San Francisco, California —HL-066600
6. Jackson Laboratory  
Bar Harbor, Maine —HL-066611
7. Institute for Genomic Research  
Rockville, Maryland —HL-066619
8. J. David Gladstone Institutes  
San Francisco, California —HL-066621
9. Fred Hutchinson Cancer Research Center  
Seattle, Washington —HL-066642
10. Massachusetts General Hospital  
Boston, Massachusetts —HL-066678



11. University of California, Berkley Lawrence Berkeley Laboratory  
Berkeley, California —HL-066681
12. University of Washington  
Seattle, Washington —HL-066682
13. Brigham and Women’s Hospital  
Boston, Massachusetts —HL-066795
14. University of Arizona  
Tucson, Arizona —HL-066801
15. Brigham and Women’s Hospital  
Boston, Massachusetts —HL-066804
16. Brigham and Women’s Hospital  
Boston, Massachusetts —HL-066805
17. University of Arizona  
Tucson, Arizona —HL-066806
18. University of Texas Southwestern Medical Center  
Dallas, Texas —HL-066880

### **Resuscitation Outcome Improvement Consortium, Initiated in Fiscal Year 2004**

The purpose of this program is to establish a resuscitation research consortium to conduct clinical research in the areas of cardiopulmonary arrest and traumatic injury leading to arrest. The consortium will enable investigators to conduct multiple collaborative trials to expedite the translation of promising scientific and clinical advances to improve resuscitation outcomes.

#### **Obligations**

Funding History:

Fiscal Year 2004—\$6,886,109

Total Funding to Date—\$6,886,109

#### **Current Active Organizations and Grant Numbers**

1. University of Washington  
Seattle, Washington —HL-077863
2. University of Iowa  
Iowa City, Iowa —HL-077865
3. Medical College of Wisconsin  
Milwaukee, Wisconsin —HL-077866
4. University of Washington  
Seattle, Washington —HL-077867

5. University of Pittsburgh  
Pittsburgh, Pennsylvania —HL-077871
6. St. Michael's Hospital  
Toronto, Ontario —HL-077872
7. Oregon Health & Science University  
Portland, Oregon —HL-077873
8. University of Alabama at Birmingham  
Birmingham, Alabama —HL-077881
9. Ottawa Health Research Institute  
Ottawa, Ontario —HL-077885
10. University of Texas Southwestern Medical  
Center Dallas, Texas —HL-077887
11. University of California, San Diego  
La Jolla, California —HL-077908

### **Stop Atherosclerosis in Native Diabetics Study (SANDS), Initiated in Fiscal Year 2002**

This study will address the high incidence of cardiovascular disease in a population with a high prevalence of diabetes, but relatively low levels of LDL cholesterol and blood pressure. It will compare aggressive lowering of LDL cholesterol and blood pressure to the usual care standard.

#### **Obligations**

##### **Funding History:**

Fiscal Year 2004—\$2,106,653

Fiscal Year 2003—\$4,574,684

Total Funding to Date—\$6,681,337

#### **Current Active Organization and Grant Number**

1. MedStar Research Institute  
Washington, DC —HL-067031

### **Strong Heart Study, Initiated in Fiscal Year 1988**

The objectives of this study are to survey CVD morbidity and mortality rates among three geographically diverse groups of American Indians and to estimate their levels of CVD risk factors. Phases II and III of the cohort study extended surveillance of community mortality and assessed development of CVD and changes in CVD risk factors. In Phase III, investigators added a substudy of asthma and a pilot family study. The purpose of Phase IV is to enlarge the family study to 120 families comprising 3,600 members to investigate genetic and environmental contributors of CVD.

## **Obligations**

### Funding History:

Fiscal Year 2004—\$3,154,859

Fiscal Years 1988-2003—\$43,283,445

Total Funding to Date—\$46,438,304

## **Current Active Organizations and Grant Numbers**

1. MedStar Research Institute  
Washington, DC —HL-041642
2. Missouri Breaks Research, Inc.  
Timberlake, South Dakota —HL-041652
3. University of Oklahoma Health Sciences Center  
Oklahoma City, Oklahoma —HL-041654
4. Southwest Foundation for Biomedical Research  
San Antonio, Texas —HL-065520
5. Weill Medical College of Cornell University  
New York, New York —HL-065521

## **Surgical Treatment for Ischemic Heart Failure (STICH), Initiated in Fiscal Year 2002**

The purpose of this clinical trial is: to determine whether CABG plus intensive medical therapy improves long-term survival of patients with heart failure and left ventricular (LV) dysfunction who have coronary artery disease amenable to surgical revascularization, compared to medical therapy alone; and to determine whether CABG plus surgical ventricular restoration to a more normal LV size improves survival free of subsequent hospitalizations of patients with anterior LV dysfunction, compared to CABG alone.

### **Obligations:**

#### Funding History:

Fiscal Year 2004—\$1,613,238

Fiscal Years 2002-2003—\$12,251,409

Total Funding to Date—\$13,864,647

## **Current Active Organizations and Grant Numbers**

1. Thomas Jefferson University  
Philadelphia, Pennsylvania —HL-069009
2. Mayo Clinic  
Rochester, Minnesota —HL-069010
3. Duke University  
Durham, North Carolina —HL-069011

- |   |            |
|---|------------|
| 4. Northwestern University<br>Chicago, Illinois                 | —HL-069012 |
| 5. Duke University<br>Durham, North Carolina                    | —HL-069013 |
| 6. Duke University<br>Durham, North Carolina                    | —HL-069015 |
| 7. University of Southern California<br>Los Angeles, California | —HL-072683 |

### **Trial of Activity for Adolescent Girls (TAAG), Initiated in Fiscal Year 2000**

See Chapter 11. Clinical Trials.

### **Weight Loss Maintenance (WLM), Initiated in Fiscal Year 2003**

The purpose of this multicenter trial is to evaluate the effectiveness of two strategies to maintain weight loss for 2½ years in approximately 800 overweight or obese adults. Individuals who are taking medication for hypertension or dyslipidemia or who are diabetic will enter a 6-month weight program. Those who lose at least 9 pounds will be randomized into one of three groups: one that provides monthly personal contacts with a trained interventionist, primarily by telephone; one that provides frequent contacts through an interactive Web-based program; or usual care. Forty percent of the participants will be black.

#### **Obligations**

##### **Funding History:**

Fiscal Year 2004—\$4,367,750

Fiscal Year 2003—\$3,686,738

Total Funding to Date—\$8,054,488

#### **Current Active Organizations and Grant Numbers**

- |  |            |
|--|------------|
| 1. Center for Health Research<br>Portland, Oregon                      | —HL-068676 |
| 2. Duke Hypertensive Center<br>Durham, North Carolina                  | —HL-068734 |
| 3. Center for Health Research<br>Portland, Oregon                      | —HL-068790 |
| 4. The Johns Hopkins University<br>Baltimore, Maryland                 | —HL-068920 |
| 5. LSU Pennington Biomedical Research Center<br>Baton Rouge, Louisiana | —HL-068955 |

## **Women’s Ischemia Syndrome Evaluation (WISE), Initiated in Fiscal Year 2001**

The purpose of this study is to extend the follow-up of WISE patients to determine the incremental long-term prognostic value of novel testing developed in WISE, develop sex-specific incremental outcome models to evaluate the prognostic value of female reproductive variables, and maintain a WISE database and infrastructure to facilitate further investigations into the mechanisms underlying ischemic syndromes in women.

### **Obligations**

Funding History:

Fiscal Year 2004—\$1,302,449

Fiscal Years 2001-2003—\$4,314,911

Total Funding to Date—\$5,617,360

### **Current Active Organizations and Grant Numbers**

1. University of Pittsburgh  
Pittsburgh, Pennsylvania —HL-064829
2. University of Florida  
Gainesville, Florida —HL-064924

## **Lung Diseases Program**

### **Asthma Clinical Research Network (ACRN) Phase II, Initiated in Fiscal Year 2003**

The objective of ACRN Phase I was to establish a network of interactive asthma clinical research groups to assess novel treatment methods and to ensure that findings on optimal management of patients with asthma are rapidly disseminated to practitioners and health care professionals. A new program was funded in 2003 as a result of a national competition for participation in the successful 10-year-old asthma clinical research network. The minority patient population will be approximately 33 percent for each protocol.

### **Obligations**

Funding History:

Fiscal Year 2004—\$8,424,129

Fiscal Year 2003—\$8,181,429

Total Funding to Date—\$16,605,558

### **Current Active Organizations and Grant Numbers**

1. National Jewish Medical and Research Center  
Denver, Colorado —HL-074073
2. University of California, San Francisco  
San Francisco, California —HL-074204

- |  |            |
|--|------------|
| 3. University of Pittsburgh<br>Pittsburgh, Pennsylvania        | —HL-074206 |
| 4. Washington University<br>St. Louis, Missouri                | —HL-074208 |
| 5. University of Wisconsin<br>Madison, Wisconsin               | —HL-074212 |
| 6. University of California,<br>San Diego La Jolla, California | —HL-074218 |
| 7. Wake Forest University<br>Winston-Salem, North Carolina     | —HL-074225 |
| 8. Brigham and Women’s Hospital<br>Boston, Massachusetts       | —HL-074227 |
| 9. Pennsylvania State University<br>Hershey, Pennsylvania      | —HL-074231 |

### **Centers for Reducing Asthma Disparities, Initiated in Fiscal Year 2002**

The purpose of this study is to establish cooperative centers of research to reduce asthma disparities between whites and minorities and economically disadvantaged populations. The mission of the centers, comprising partnerships between minority servicing medical institutions and research-intensive institutions, is to promote interdisciplinary investigation of factors that contribute to disparities in asthma, accelerate development and evaluation of strategies to promote effective asthma management among minority and economically disadvantaged populations, encourage training and career development for minority clinical research investigators, and improve the effectiveness of NHLBI-supported research-intensive institutions in developing and sustaining culturally appropriate research and demonstration activities on reducing disparities.

#### **Obligations**

Funding History:

Fiscal Year 2004—\$5,217,367

Fiscal Years 2002-2003—\$12,051,824

Total Funding to Date—\$17,269,191

#### **Current Active Organizations and Grant Numbers**

- |  |            |
|--|------------|
| 1. Meharry Medical College<br>Nashville, Tennessee   | —HL-072431 |
| 2. Howard University<br>Washington, DC               | —HL-072433 |
| 3. Rhode Island Hospital<br>Providence, Rhode Island | —HL-072438 |

4. The Johns Hopkins University  
Baltimore, Maryland —HL-072455
5. Vanderbilt University  
Nashville, Tennessee —HL-072471
6. Northwestern University  
Chicago, Illinois —HL-072478
7. Hektoen Institute for Medical Research  
Chicago, Illinois —HL-072496
8. University of Puerto Rico Medical Sciences  
San Juan, Puerto Rico —HL-072519

### **Childhood Asthma Management Program-Continuation Study (CAMP-CS)/Phase 2, Initiated in Fiscal Year 2003**

The objectives of this observational study are to follow the original CAMP cohort for 4 more years into early adulthood to determine the effects of long-term (3.5 to 5.5 years) corticosteroid therapy, started at ages 5 to 12, on outcomes of pulmonary function, height, bone density, and clinical course of asthma; 31 percent of the participants are from minority groups.

#### **Obligations**

##### Funding History:

Fiscal Year 2004—\$2,043,311

Fiscal Year 2003—\$1,489,491

Total Funding to Date—\$3,532,802

#### **Current Active Organizations and Grant Numbers**

1. Washington University  
St. Louis, Missouri —HL-075232
2. Hospital for Sick Children  
Toronto, Ontario —HL-075407
3. The Johns Hopkins University  
Baltimore, Maryland —HL-075408
4. Asthma, Inc.  
Seattle, Washington —HL-075409
5. University of California, San Diego  
La Jolla, California —HL-075415
6. National Jewish Medical and Research Center  
Denver, Colorado —HL-075416

7. The Johns Hopkins University  
Baltimore, Maryland —HL-075417
8. Brigham and Women's Hospital  
Boston, Massachusetts —HL-075419
9. University of New Mexico  
Albuquerque, New Mexico —HL-075420

### **Childhood Asthma Research and Education (CARE) Network, Initiated in Fiscal Year 1999**

See Chapter 11. Clinical Trials.

### **Collaborative Program in Bronchopulmonary Dysplasia, Initiated in Fiscal Year 1999**

The objectives of this program are to support a multi-institutional collaborative research effort, by providing a well-defined model of prematurity and bronchopulmonary dysplasia to investigators, and to study mechanisms of lung pathobiology that underlie development of chronic lung disease of prematurity.

#### **Obligations**

Funding History:

Fiscal Year 2004—\$5,166,906

Fiscal Years 1999-2003—\$21,135,687

Total Funding to Date—\$26,302,593

#### **Current Active Organizations and Grant Numbers**

1. Southwest Foundation for Biomedical Research  
San Antonio, Texas —HL-052636
2. Brigham and Women's Hospital  
Boston, Massachusetts —HL-052638
3. University of California, San Francisco  
San Francisco, California —HL-056061
4. National Jewish Medical and Research Center  
Denver, Colorado —HL-056263
5. Barnes Jewish Hospital  
St. Louis, Missouri —HL-063387
6. National Jewish Medical and Research Center  
Denver, Colorado —HL-063397



7. University of Texas Southwestern Medical Center  
Dallas, Texas —HL-063399

8. University of Rochester  
Rochester, New York —HL-063400

9. Children's Hospital of Philadelphia  
Philadelphia, Pennsylvania —HL-075900

10. Children's Hospital  
Boston, Massachusetts —HL-075904

### **COPD Clinical Research Network, Initiated in Fiscal Year 2003**

See Chapter 11. Clinical Trials.

### **Early Antipseudomonal Therapy in Cystic Fibrosis, Initiated in Fiscal Year 2004**

The purpose of this study is to determine a safe, effective, and systematic approach for treating young children (1 to 12 years) with cystic fibrosis who are found to be infected with *Pseudomonas aeruginosa* (Pa). The goal is to intervene with antipseudomonal therapy at the first isolation of Pa to delay or prevent chronic infections that lead to irreversible lung destruction.

#### **Obligations**

Funding History:

Fiscal Year 2004—\$1,064,237

Total Funding to Date—\$1,064,237

#### **Current Active Organization and Grant Number**

1. Children's Hospital and Regional Medical Center  
Seattle, Washington —HL-080310

### **Inhaled Nitric Oxide for the Prevention of Chronic Lung Disease, Initiated in Fiscal Year 2000**

The objective of this clinical trial is to determine whether low-dose inhaled nitric oxide (NO), administered within the first 48 hours of life to premature newborns (weighing between 500 and 1,250 grams) with respiratory failure requiring mechanical ventilation, will prevent development of chronic lung disease.

#### **Obligations**

Funding History:

Fiscal Year 2004—\$1,245,274

Fiscal Years 2000-2003—\$6,968,259

Total Funding to Date—\$8,213,533

### **Current Active Organization and Grant Number**

1. The Children's Hospital University of Colorado  
Denver, Colorado —HL-064857

### **Inhaled Nitric Oxide in Prevention of Chronic Lung Disease, Initiated in Fiscal Year 2000**

The objective of this clinical trial is to determine whether low-dose inhaled NO, administered to preterm infants (weighing between 500 and 1,250 grams) who continue to require mechanical ventilation at 14 days of age, will reduce the incidence of chronic lung disease.

#### **Obligations**

Funding History:

Fiscal Year 2004—\$903,335

Fiscal Years 2000-2003—\$6,732,859

Total Funding to Date—\$7,636,194

### **Current Active Organization and Grant Number**

1. Children's Hospital of Philadelphia,  
Philadelphia, Pennsylvania —HL-062514

### **Linkage Study in Familial Pulmonary Fibrosis, Initiated in Fiscal Year 2000**

The purpose of this study is to identify a group of genetic loci that may subsequently prove to contain novel genes involved in the development of familial pulmonary fibrosis. Investigators will use standard genetic methodology (linkage analysis) to determine the distribution of polymorphisms for genetic markers in families with familial pulmonary fibrosis.

#### **Obligations**

Funding History:

Fiscal Year 2004—\$714,001

Fiscal Years 2000-2003—\$2,755,951

Total Funding to Date—\$3,469,952

### **Current Active Organization and Grant Number**

1. Duke University  
Durham, North Carolina —HL-067467

### **Pharmacogenetics of Asthma Treatment, Initiated in Fiscal Year 2000**

The objective of this project is to bring together research experts in asthma, epidemiology, statistics, bio-informatics, physiology, clinical trials, genetics, and genomics to focus on the pharmacogenetics of asthma treatment.

## **Obligations**

### **Funding History:**

Fiscal Year 2004—\$0

Fiscal Years 2000-2003—\$10,847,376

Total Funding to Date—\$10,847,376

## **Current Active Organization and Grant Number**

1. Brigham and Women's Hospital  
Boston, Massachusetts —HL-065899

## **Blood Diseases and Resources**

### **Blood and Marrow Transplant Clinical Research Network, Initiated in Fiscal Year 2001**

See Chapter 11. Clinical Trials.

### **Functional Outcomes in Cardiovascular Patients Undergoing Surgical Hip Fracture Repair (FOCUS), Initiated in Fiscal Year 2003**

The purpose of this trial is to test whether a more aggressive transfusion strategy that maintains postoperative Hgb levels above 10 g/dl improves functional outcome in cardiovascular patients who are over age 50 and undergoing surgical hip fracture surgery compared to a more conservative strategy that withholds blood transfusion until the patient develops symptoms of anemia.

## **Obligations**

### **Funding History:**

Fiscal Year 2004—\$1,795,724

Fiscal Year 2003—\$1,639,478

Total Funding to Date—\$3,435,202

## **Current Active Organizations and Grant Numbers**

1. Robert Wood Johnson Medical School, University of Medicine and Dentistry of New Jersey  
Piscataway, New Jersey —HL-073958
2. Maryland Medical Research Institute, Inc.  
Baltimore, Maryland —HL-074815

### **Induction of Stable Chimerism for Sickle Cell Anemia, Initiated in Fiscal Year 2001**

The purpose of this study is to investigate a transplant procedure for SCD that significantly reduces the toxicity of allogeneic hematopoietic cell transplantation while retaining its therapeutic benefit.

## **Obligations**

### Funding History:

Fiscal Year 2004—\$550,666

Fiscal Years 2001-2003—\$1,541,037

Total Funding to Date—\$2,091,703

## **Current Active Organization and Grant Number**

1. Children's Hospital Oakland  
Oakland, California —HL-068091

## **Reference Laboratory to Evaluate Therapies for Sickle Cell Disease, Initiated Fiscal Year 1997**

The purpose of this study is to establish a reference laboratory that will evaluate potentially useful compounds for the treatment of SCD.

## **Obligations**

### Funding History:

Fiscal Year 2004—\$409,694

Fiscal Years 1997-2003\*—\$1,437,153

Total Funding to Date—\$1,846,847

\* Became U01 in 2001.

## **Current Active Organization and Grant Number**

1. Children's Hospital of Philadelphia  
Philadelphia, Pennsylvania —HL-058930

## **Sibling Donor Cord Blood Banking and Transplantation, Initiated in Fiscal Year 2001**

The purpose of this study is to establish a cord blood bank for collecting sibling donor cord blood in families that currently have a child with sickle cell anemia or thalassemia with the intent of future transplantation.

## **Obligations**

### Funding History:

Fiscal Year 2004—\$1,352,571

Fiscal Years 2001-2003—\$3,731,256

Total Funding to Date—\$5,083,827

## **Current Active Organization and Grant Number**

1. Children's Hospital Oakland  
Oakland, California —HL-061877

## **Stroke Prevention in Sickle Cell Anemia (STOP 2), Initiated in Fiscal Year 2000**

The purpose of this study is to optimize, in high-risk patients with sickle cell anemia, the primary prevention strategy proven effective in STOP. Ninety-eight percent of the patients are expected to come from minority populations.

### **Obligations**

#### **Funding History:**

Fiscal Year 2004—\$2,366,346

Fiscal Years 2000-2003—\$13,147,352

Total Funding to Date—\$15,513,698

### **Current Active Organizations and Grant Numbers**

1. New England Research Institutes, Inc.  
Watertown, Massachusetts —HL-052016
2. Medical College of Georgia  
Augusta, Georgia —HL-052193

## **Thalassemia (Cooley's Anemia) Clinical Research Network**

See Chapter 11. Clinical Trials.

## **Transfusion Medicine/Hemostasis Clinical Research Network**

See Chapter 11. Clinical Trials.

## **National Center on Sleep Disorders Research**

### **Apnea Positive Pressure Long-Term Efficacy Study (APPLES), Initiated in Fiscal Year 2002**

The purpose of this study is to evaluate the effectiveness of continuous positive airway pressure (CPAP) therapy to provide significant, stable, and long-term neurocognitive or other benefits to patients with obstructive sleep apnea (OSA). Investigators will identify specific neurocognitive deficits associated with OSA and determine which ones are reversible and most sensitive to the effects of CPAP therapy.

### **Obligations**

#### **Funding History:**

Fiscal Year 2004—\$3,109,570

Fiscal Year 2002-2003—\$6,244,439

Total Funding to Date—\$9,354,009

## **Current Active Organization and Grant Number**

1. Stanford University  
Stanford, California —HL-068060

## **Sleep Heart Health Study, Initiated in Fiscal Year 1999**

The purpose of this multicenter observational study is to determine the degree to which sleep apnea is an independent or contributing risk factor for the development of cardiovascular or cerebrovascular disease.

### **Obligations**

Funding History:

Fiscal Year 2004—\$1,477,676

Fiscal Years 1999-2003—\$16,631,681

Total Funding to Date—\$18,109,357

### **Current Active Organizations and Grant Numbers**

1. University of California, Davis  
Davis, California —HL-053916

2. New York University Medical Center  
New York, New York —HL-053931

3. University of Minnesota, Twin Cities  
Minneapolis, Minnesota —HL-053934

4. The Johns Hopkins University  
Baltimore, Maryland —HL-053937

5. University of Arizona  
Tucson, Arizona —HL-053938

6. Boston University  
Boston, Massachusetts —HL-053941

7. Missouri Breaks Research, Inc.  
Timberlake, South Dakota —HL-063429

8. Case Western Reserve University  
Cleveland, Ohio —HL-063463

9. The Johns Hopkins University  
Baltimore, Maryland —HL-064360

10. University of Pittsburgh  
Pittsburgh, Pennsylvania —HL-077813

## NHLBI Research Centers (P50, U54, P30) Programs

### Specialized Centers of Research (P50) and Specialized Centers of Clinically Oriented Research (P50) Programs

The NHLBI initiated the Specialized Centers of Research (SCOR) program in 1971 to encourage translational research—converting basic science findings to the clinic—in high priority areas. The SCOR concept emphasizes multidisciplinary research (i.e., basic science and clinical investigations) on diseases relevant to the Institute’s mission. In 2002, the NHLBI revised the SCOR program—primarily on recommendation from the NHLBAC—to place more emphasis on clinical research projects. The newly developed SCCOR program still requires clinical and basic scientists to work together on a unified theme, but now requires at least 50 percent of the projects to be clinical. Listed below is the funding history for the individual SCORs/SCCORs supported by the Institute.

#### Obligations (Dollars in Thousands)

Area of Concentration	Period of Operation	Prior to FY 2004	FY 2004	Total to Date
<b>Heart and Vascular Diseases Program</b>				
Ischemic Heart Disease in Blacks	1995-	\$24,334	\$3,083	\$27,417
Ischemic Heart Disease, Sudden Cardiac Death, Heart Failure	1995-	128,615	14,473	143,088
Molecular Genetics of Hypertension	1996-	72,661	9,973	82,634
Molecular Medicine and Atherosclerosis	1997-	51,852	8,383	60,235
Pediatric Heart Development and Disease (SCCOR)	2004-	0	13,245	13,245
Subtotal, Heart and Vascular Diseases Program		277,462	49,157	326,619
<b>Lung Diseases Program</b>				
Airway Biology and Pathogenesis of Cystic Fibrosis	1988-	55,246	3,512	58,758
Cellular and Molecular Mechanisms of Asthma	1996-	87,237	15,650	102,887
Pathobiology of Fibrotic Lung Disease	1997-	33,727	5,296	39,023
Pathobiology of Lung Development	1996-	55,268	7,404	62,672
Translational Research in Acute Lung Injury (SCCOR)	2003-	11,502	11,824	23,326
Subtotal, Lung Diseases Program		242,980	43,686	286,666
<b>Blood Diseases and Resources Program</b>				
Hematopoietic Stem Cell Biology	1995-	40,026	5,742	45,768
Hemostatic and Thrombotic Disorders	1996-	162,439	7,393	169,832
Transfusion Biology and Medicine	1996-	58,839	3,256	62,095
Subtotal, Blood Diseases and Resources Program		261,304	16,391	277,695
National Center on Sleep Disorders Research Neurobiology of Sleep and Sleep Apnea	1998-	29,030	6,072	35,102
Subtotal, National Center on Sleep Disorders Research		29,030	6,072	35,102
<b>Total, Specialized Centers of Research (P50)</b>		<b>\$810,776</b>	<b>\$115,306</b>	<b>\$926,082</b>

## **Heart and Vascular Diseases Program**

### **Ischemic Heart Disease in Blacks**

The purpose of this SCOR is to promote interdisciplinary study of issues surrounding ischemic heart disease in blacks. Investigators are using molecular, cellular, and genetic studies; animal experiments; and human studies to advance knowledge in this area.

#### **Obligations**

Fiscal Year 2004—\$3,083,183

#### **Current Active Organizations and Grant Numbers**

1. Boston University  
Boston, Massachusetts —HL-055993
2. Medical College of Wisconsin  
Milwaukee, Wisconsin —HL-065203

### **Ischemic Heart Disease, Sudden Cardiac Death, Heart Failure**

The purpose of this SCOR is to elucidate the etiology and pathophysiology of these diseases at the molecular, cellular, and tissue levels and to translate research findings into improved diagnosis, treatment, and prevention.

#### **Obligations**

Fiscal Year 2004—\$14,473,066

#### **Current Active Organizations and Grant Numbers**

1. The Johns Hopkins University  
Baltimore, Maryland —HL-052307
2. University of Cincinnati  
Cincinnati, Ohio —HL-052318
3. University of California, Los Angeles  
Los Angeles, California —HL-052319
4. Brigham and Women's Hospital  
Boston, Massachusetts —HL-052320
5. University of Utah  
Salt Lake City, Utah —HL-052338
6. University of California, San Diego  
La Jolla, California —HL-053773
7. Baylor College of Medicine  
Houston, Texas —HL-054313



8. New England Medical Center  
Boston, Massachusetts —HL-063494

9. Harvard University  
Boston, Massachusetts —HL-063609

## **Molecular Genetics of Hypertension**

The purpose of this SCOR is to elucidate the etiology and pathogenesis of hypertension and to translate the knowledge into improved diagnosis and management of the disease.

### **Obligations**

Fiscal Year 2004—\$9,972,655

### **Current Active Organizations and Grant Numbers**

1. Medical College of Wisconsin  
Milwaukee, Wisconsin —HL-054998

2. Brigham and Women's Hospital  
Boston, Massachusetts —HL-055000

3. Boston University Medical Center  
Boston, Massachusetts —HL-055001

4. University of Iowa Hospitals  
Iowa City, Iowa —HL-055006

5. Yale University School of Medicine  
New Haven, Connecticut —HL-055007

## **Molecular Medicine and Atherosclerosis**

The goal of this SCOR is to advance understanding of the etiology and pathobiology of the atherosclerotic lesion at the molecular level through modern methods and approaches of molecular medicine. Some of the subprojects have a large minority patient population.

### **Obligations**

Fiscal Year 2004—\$8,382,971

### **Current Active Organizations and Grant Numbers**

1. Columbia University  
New York, New York —HL-056984

2. Brigham and Women's Hospital  
Boston, Massachusetts —HL-056985

3. University of California, San Diego  
La Jolla, California —HL-056989

4. University of Pennsylvania  
Philadelphia, Pennsylvania —HL-070128

## **Pediatric Heart Development and Disease**

The purpose of this SCCOR is to foster multidisciplinary collaborations so that basic research advances can be translated rapidly to clinical care for children with heart disease. Research focus ranges from the genetic basis of heart valve disease to clinical trials of novel surgical strategies for congenital heart disease repair and immune modulation in pediatric heart transplantation. Two of the centers will have Clinical Research Skills Development Cores to train fellows and junior faculty in clinical research methods.

### **Obligations**

Fiscal Year 2004—\$13,244,817

### **Current Active Organizations and Grant Numbers**

1. Children's Hospital Medical Center  
Cincinnati, Ohio —HL-074728
2. Children's Hospital of Philadelphia  
Philadelphia, Pennsylvania —HL-074731
3. University of Pittsburgh  
Pittsburgh, Pennsylvania —HL-074732
4. Children's Hospital  
Boston, Massachusetts —HL-074734

## **Lung Diseases Program**

### **Airway Biology and Pathogenesis of Cystic Fibrosis**

The goals of this SCOR are to investigate the basic mechanisms underlying cystic fibrosis, develop new hypotheses, and apply innovative strategies for approaching clinical and fundamental issues.

### **Obligations**

Fiscal Year 2004—\$3,512,149

### **Current Active Organizations and Grant Numbers**

1. University of North Carolina at Chapel Hill  
Chapel Hill, North Carolina —HL-060280
2. University of Iowa  
Iowa City, Iowa —HL-061234

## **Cellular and Molecular Mechanisms of Asthma**

The objective of this SCOR is to apply critical science and technology to increase understanding of cellular and molecular mechanisms of asthma, including those mechanisms underlying the biological impact of environmental factors.

### **Obligations**

Fiscal Year 2004—\$15,649,934

### **Current Active Organizations and Grant Numbers**

1. University of New Mexico  
Albuquerque, New Mexico —HL-056384
2. University of California, San Francisco  
San Francisco, California —HL-056385
3. University of Wisconsin  
Madison, Wisconsin —HL-056396
4. University of Chicago  
Chicago, Illinois —HL-056399
5. Washington University  
St. Louis, Missouri —HL-056419
6. University of Pennsylvania  
Philadelphia, Pennsylvania —HL-067663
7. Beth Israel Deaconess Medical Center  
Boston, Massachusetts —HL-067664
8. University of Arizona  
Tucson, Arizona —HL-067672
9. Stanford University  
Stanford, California —HL-067674

## **Pathobiology of Fibrotic Lung Disease**

The purpose of this SCOR is to study cellular and molecular mechanisms involved in transition from inflammatory events associated with early fibrotic disease to later processes involving wound healing, repair, and fibrosis.

### **Obligations**

Fiscal Year 2004—\$5,295,879

## **Current Active Organizations and Grant Numbers**

1. University of Michigan at Ann Arbor  
Ann Arbor, Michigan —HL-056402
2. University of California, Los Angeles  
Los Angeles, California —HL-067665
3. National Jewish Center for Immunology and Respiratory Diseases,  
Denver, Colorado —HL-067671

## **Pathobiology of Lung Development**

The objective of this SCOR is to foster multidisciplinary research enabling basic science findings to be rapidly applied to clinical problems related to lung development. The program focuses on identification of the molecular variables involved in lung development and assessment of the impact of injury during critical periods.

### **Obligations**

Fiscal Year 2004—\$7,403,692

## **Current Active Organizations and Grant Numbers**

1. Children's Hospital Medical Center  
Cincinnati, Ohio —HL-056387
2. Children's Hospital of Philadelphia  
Philadelphia, Pennsylvania —HL-056401
3. University of Colorado Health Sciences Center  
Denver, Colorado —HL-057144
4. Children's Hospital of Boston  
Boston, Massachusetts —HL-067669

## **Translational Research in Acute Lung Injury**

The purpose of this SCCOR is to foster multidisciplinary research to improve the prevention, diagnosis, and treatment of acute lung injury and its more severe form—adult respiratory distress syndrome. This program includes phase II clinical trials and studies of molecular mechanisms of inflammation and coagulation, gene and protein expression, and cell and animal models of lung injury.

### **Obligations**

Fiscal Year 2004—\$11,824,005

## **Current Active Organizations and Grant Numbers**

1. The Johns Hopkins University  
Baltimore, Maryland —HL-073994
2. University of Washington  
Seattle, Washington —HL-073996
3. University of California, San Francisco  
San Francisco, California —HL-074005
4. University of Michigan at Ann Arbor  
Ann Arbor, Michigan —HL-074024

## **Blood Diseases and Resources Program**

### **Hematopoietic Stem Cell Biology**

The goal of this SCOR is to advance knowledge of basic stem cell biology in areas of stem cell isolation, quantitation by in vivo assay, in vitro and in vivo growth and replication, gene insertion, and engraftment.

#### **Obligations**

Fiscal Year 2004—\$5,741,924

### **Current Active Organizations and Grant Numbers**

1. Dana Farber Cancer Institute  
Boston, Massachusetts —HL-054785
2. Children's Hospital  
Los Angeles, California —HL-054850
3. Fred Hutchinson Cancer Research Center  
Seattle, Washington —HL-054881

### **Hemostatic and Thrombotic Disorders**

The purpose of this SCOR is to investigate pathogenic mechanisms involved in human thrombotic disease and to develop improved methods for its diagnosis and treatment. One of the studies has a large minority patient population.

#### **Obligations**

Fiscal Year 2004—\$7,392,619

### **Current Active Organizations and Grant Numbers**

1. Mt. Sinai School of Medicine  
New York, New York —HL-054469

2. University of Pennsylvania  
Philadelphia, Pennsylvania —HL-054500
3. University of Oklahoma  
Oklahoma City, Oklahoma —HL-054502
4. Baylor College of Medicine  
Houston, Texas —HL-065967

## **Transfusion Biology and Medicine**

The purpose of this SCOR is to foster new approaches for improving the availability, efficacy, safety, and quality of blood and blood products for therapeutic uses. One of the centers has a large minority population.

### **Obligations**

Fiscal Year 2004—\$3,255,812

### **Current Active Organizations and Grant Numbers**

1. New York Blood Center  
New York, New York —HL-054459
2. University of California, San Francisco  
San Francisco, California —HL-054476

## **National Center on Sleep Disorders Research**

### **Neurobiology of Sleep and Sleep Apnea**

The objective of this SCOR is to integrate molecular, cellular, and genetic approaches to sleep control with clinical investigations on the etiology and pathogenesis of sleep disorders, particularly sleep apnea.

### **Obligations**

Fiscal Year 2004—\$6,071,676

### **Current Active Organizations and Grant Numbers**

1. University of Pennsylvania  
Philadelphia, Pennsylvania —HL-060287
2. Brigham and Women's Hospital  
Boston, Massachusetts —HL-060292
3. University of California, Los Angeles  
Los Angeles, California —HL-060296

## **Comprehensive Sickle Cell Centers (U54) Program**

The Comprehensive Sickle Cell Centers (CSCC) were instituted in FY 1972 to bridge the gap between research and service by combining basic and clinical research, clinical trials and applications training, and community service projects into one program. The patients recruited for the clinical studies are primarily from minority populations.

### **Obligations**

Fiscal Year 2004—\$21,010,342

### **Current Active Organizations and Grant Numbers**

1. Children's Hospital and Research Center  
Oakland, California —HL-070583
2. Thomas Jefferson University  
Philadelphia, Pennsylvania —HL-070585
3. Rho Federal Systems Division, Inc.  
Chapel Hill, North Carolina —HL-070587
4. University of Texas Southwestern Medical Center  
Dallas, Texas —HL-070588
5. St. Jude Children's Research Hospital  
Memphis, Tennessee —HL-070590
6. University of Southern California  
Los Angeles, California —HL-070595
7. Children's Hospital of Philadelphia  
Philadelphia, Pennsylvania —HL-070596
8. Duke University  
Durham, North Carolina —HL-070769
9. Boston Medical Center  
Boston, Massachusetts —HL-070819
10. Children's Hospital Research Center  
Cincinnati, Ohio —HL-070871
11. Yeshiva University  
New York, New York —HL-070994

## **Centers for AIDS Research (P30) Program**

The NHLBI, along with five other NIH Institutes, contributes to the support of six Centers for AIDS Research that were established to provide a multidisciplinary environment that promotes basic, clinical, behavioral, and translational research activities in the prevention, detection, and

treatment of HIV infection and AIDS. Almost half of the patient population comes from minority groups.

### **Obligations**

Fiscal Year 2004—\$2,645,483

### **Current Active Organizations and Grant Numbers**

1. New York University School of Medicine  
New York, New York —AI-27742
2. University of Washington  
Seattle, Washington —AI-27757
3. University of California, San Francisco  
San Francisco, California —AI-27763
4. University of Alabama at Birmingham  
Birmingham, Alabama —AI-27767
5. University of California, Los Angeles  
Los Angeles, California —AI-28697
6. Baylor University  
Houston, Texas —AI-36211
7. University of California, San Diego  
La Jolla, California —AI-36214
8. Case Western Reserve University  
Cleveland, Ohio —AI-36219
9. University of Massachusetts Medical School  
Worcester, Massachusetts —AI-42845
10. Miriam Hospital  
Providence, Rhode Island —AI-42853
13. The Johns Hopkins University  
Baltimore, Maryland —AI-42855
12. University of Pennsylvania  
Philadelphia, Pennsylvania —AI-45008
13. Emory University  
Atlanta, Georgia —AI-50409
14. University of North Carolina at Chapel Hill  
Chapel Hill, North Carolina —AI-50410



15. Yeshiva University  
New York, New York —AI-51519
16. University of Colorado Health Sciences Center  
Denver, Colorado —AI-54907
17. Vanderbilt University  
Nashville, Tennessee —AI-54999
18. Harvard Medical School  
Boston, Massachusetts —AI-60354