

13. Research Training and Career Development Programs

NHLBI Research Training and Career Development Obligations: Fiscal Years 1994–2004

Dollars in Millions

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Graduate Training Programs (National Research Service Awards (NRSA))	\$40,022	\$39,968	\$40,237	\$41,984	\$42,014	\$50,335	\$55,215	\$63,368	\$68,135	\$75,526	\$76,627
Research Career Programs	31,398	31,675	33,862	33,912	36,069	47,670	54,184	57,470	63,514	65,817	67,794
Fellowships	7,220	7,103	7,267	6,848	7,560	9,243	8,857	8,926	9,449	8,543	8,543

Note: Numbers of awards and trainees may not agree with other tables due to the method of counting supplements.

NHLBI Full-Time Training Positions: Fiscal Years 1994–2004

Number of Trainees

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Graduate Training Programs (National Research Service Awards (NRSA))	1,469	1,449	1,437	1,365	1,475	1,238	1,603	1,670	1,730	1,784	1,828
Research Career Programs	373	371	397	398	420	422	459	509	543	552	559
Fellowships	242	241	248	230	248	252	238	223	214	185	189

Note: Numbers of awards and trainees may not agree with other tables due to the method of counting supplements.

Training Awards, Full-Time Training Positions, and Obligations by Activity: Fiscal Year 2004

	Number of Awards Obligated	Trainees (Full-time Training Positions)	Direct Cost	Indirect Cost	Total Cost	Percent of Total NHLBI Training Program Dollars
Fellowship Programs						
Predocctoral Fellowship Award (F31)	18	18	\$549,661	\$0	\$549,661	0.6%
Individual NRSA (F32)	168	168	8,127,743	0	8,127,743	9.5
Senior Fellowships NRSA (F33)	3	3	144,090	0	144,090	0.2
Subtotal, Fellowships	189	189	8,821,494	0	8,821,494	10.3
Graduate Training Programs						
Institutional NRSA (T32)	218	1,578	65,873,312	5,355,826	71,229,138	83.4
Minority Institutional NRSA (T32)	5	32	665,397	68,683	734,080	0.9
Off-Quarter Professional Student Training NRSA (T34, T35)	18	99	1,819,027	173,609	1,992,636	2.3

	Number of Awards Obligated	Trainees (Full-time Training Positions)	Direct Cost	Indirect Cost	Total Cost	Percent of Total NHLBI Training Program Dollars
Short-Term Training for Minority Students (T35M)	35	119	2,428,792	242,610	2,671,402	3.1
Subtotal, Graduate Training Programs	276	1,828	70,786,528	5,840,728	76,627,256*	89.7
Total, Training Programs	465	2,017	\$79,608,022	\$5,840,728	\$85,448,750	100.0%

* Excludes assessment of \$1,744,000.

History of Training Obligations by Activity: Fiscal Years 1994–2004

Dollars (Thousands)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Fellowship Programs											
Predocctoral Fellowship Award (F31)	199	304	551	388	466	346	\$248	264	478	563	549
Individual NRSA (F32)	6,853	6,651	6,483	6,281	6,969	8,807	8,517	8,515	8,887	7,868	8,128
Senior Fellowships NRSA (F33)	99	99	233	179	125	90	92	147	84	112	144
Intramural NRSA (F35)	69	49									
Subtotal, Fellowships	7,220	7,103	7,267	6,848	7,560	9,243	8,857	8,926	9,449	8,543	8,821
Graduate Training Programs											
Institutional NRSA (T32)	36,534A	36,270CB	36,718C	38,253D	37,904E	45,551F	50,507G	58,516H	62,999I	69,951J	71,229K
Minority Institutional NRSA (T32)	735	982	679	898	706	901	1,167	996	1,092	1,006	734
Off-Quarter Professional Student Training NRSA (T34, T35)	1,132	951	1,001	1,216	1,435	1,384	966	1,974	1,987	1,975	1,993
MARC (T36)	5	5	5	5	5	5	5	5			
Short-Term Training for Minority Students (T35M)	1,616	1,760	1,834	1,612	1,964	2,494	2,570	1,877	2,057	2,594	2,671
Subtotal, Training Grants	40,022	39,968	40,237	41,984	42,014	50,335	55,215	63,368	68,135	75,526	76,627
Total, Training Programs	47,242A	47,071B	47,504C	48,832D	49,574E	59,578F	64,072G	72,294H	77,584I	84,069J	85,448K

A Excludes Assessment of \$864,000.

B Excludes Assessment of \$964,000.

C Excludes Assessment of \$982,000.

D Excludes Assessment of \$1,004,000.

E Excludes Assessment of \$1,032,000.

F Excludes Assessment of \$1,216,000.

G Excludes Assessment of \$1,280,000.

H Excludes Assessment of \$1,424,000.

I Excludes Assessment of \$1,584,000.

J Excludes Assessment of \$1,716,000.

K Excludes Assessment of \$1,744,000.

Full-Time Training Positions by Activity: Fiscal Years 1994–2004

Number of Positions

	Fiscal Year										
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Fellowship Programs											
Predocctoral Fellowship Award (F31)	7	13	21	15	19	13	11	12	18	19	18
Individual NRSA (F32)	229	222	220	210	225	237	225	208	194	164	168
Senior Fellowships NRSA (F33)	4	4	7	5	4	2	2	3	2	2	3
Intramural NRSA (F35)	2	2									
Subtotal, Fellowships	242	241	248	230	248	252	238	223	214	185	1,578
Graduate Training Programs											
Institutional NRSA (T32)	1,237	1,201	1,216	1,179	1,423	1,185	1,368	1,425	1,482	1,542	32
Minority Institutional NRSA(T32)	30	47	30	43	52	53	48	43	39	42	99
Off-Quarter Professional Student Training NRSA (T34,T35)	100	76	78	68			51	109	179	93	119
Short-Term Training for Minority Students (T35M)	102	125	113	75			136	93	30	107	119
Subtotal, Training Grants	1,469	1,449	1,437	1,365	1,475	1,238	1,603	1,670	1,730	1,784	1,828
Total, Training Positions	1,711	1,690	1,685	1,595	1,723	1,490	1,841	1,893	1,944	1,969	2,017

NHLBI Research Career Programs: Fiscal Years 1994–2004

Number of Awards

	Fiscal Year										
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Mentored Research Scientist Development Award for Minority Faculty (K01)	0	0	0	5	19	30	29	44	54	47	46
Minority Institution Faculty Mentored Research Scientist Development Award (K01)	0	0	0	1	0	0	11	9	2	7	6
Mentored Scientist Development Award in Research Ethics (K01)	0	0	0	0	0	0	0	0	0	2	2
Independent Scientist Award (K02)	0	0	3	8	14	18	27	34	33	32	31
Research Career Development Award (K04)	34	30	25	18	10	6	1	0	0	0	0
Research Career Award (K06)	3	3	3	3	3	2	2	2	2	2	1
Preventive Cardiology Academic Award (K07)	11	7	0	0	0	0	0	0	0	0	0
Preventive Pulmonary Academic Award (K07)	8	4	0	0	0	0	0	0	0	0	0
Transfusion Medicine Academic Award (K07)	9	5	2	0	0	0	0	0	0	0	0
Systemic Pulmonary and Vascular Disease Academic Award (K07)	11	15	11	9	3	3	1	0	0	0	0
Asthma Academic Award (K07)	6	9	9	9	6	3	0	0	0	0	0

	Fiscal Year										
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Tuberculosis Academic Award (K07)	12	15	19	23	20	13	9	5			
Sleep Academic Award (K07)			8	12	20	20	20	12	8		
Nutrition Academic Award (K07)					10	10	19	19	19	9	9
Cultural Competence and Health Disparities Academic Award (K07)											8
Clinical Investigator Development Award (K08)	208	222	254	267	278	262	257	241	236	240	229
Physician Scientist Award (K11)	46	22	12								
Minority School Faculty Development Award (K14)	12	11	15	9			4	1			
Research Development Award for Minority Faculty (K14)	13	28	36	34	37	22	7				
Career Enhancement Award for Stem Cell Research (K18)										1	5
NHLBI Career Transition Award (K22)											1
Mentored Patient-Oriented Research Career Development Award (K23)						13	36	58	90	110	122
Midcareer Investigator Award in Patient-Oriented Research (K24)						11	20	27	37	38	32
Mentored Quantitative Research Career Development Award (K25)								2	7	9	12
Clinical Research Curriculum Award (K30)						9	16	55	55	55	55
Total, Research Career Programs	373	371	397	398	420	422	459	509	543	552	559

NHLBI Research Career Program Obligations: Fiscal Years 1994–2004

Dollars (Thousands)

	Fiscal Year										
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Mentored Research Scientist Development Award for Minority Faculty (K01)				460	1,723	2,738	3,650	5,556	5,711	6,156	6,150
Minority Institution Faculty Mentored Research Scientist Award (K01)				106	101	905	1,300	1,143	1,703	991	867
Mentored Scientist Development Award in Research Ethics (K01)										255	253
Independent Scientist Award (K02)			207	545	933	1,548	2,350	3,202	3,130	3,099	3,079
Research Career Development Award (K04)	2,224	2,006	1,693	1,226	684	568	69				
Research Career Award (K06)	102	104	105	103	103	70	70	70	69	69	34
Preventive Cardiology Academic Award (K07)	1,397	957									
Preventive Pulmonary Academic Award (K07)	726	309									
Transfusion Medicine Academic Award (K07)	868	485	326								
Systemic Pulmonary and Vascular Diseases Academic Award (K07)	1,863	2,295	1,715	1,415	386	423	113				
Asthma Academic Award (K07)	502	749	740	764	509	248					

	Fiscal Year										
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Tuberculosis Academic Award (K07)	906	1,155	1,496	1,831	1,566	1,161	745	396			
Sleep Academic Award (K07)			699	1,027	1,734	1,736	1,760	1,081	722		
Nutrition Academic Award (K07)					1,491	1,480	2,829	2,869	2,906	1,472	1,516
Cultural Competence and Health Disparities Academic Award (K07)											925
Clinical Investigator Development Award (K08)	16,635	18,090	21,093	22,238	23,122	29,741	30,189	29,263	29,295	30,288	29,037
Physician Scientist Award (K11)	3,993	1,903	1,023								
Minority School Faculty Development Award (K14)	893	810	1,158	729	618	445	862	98			
Research Development Award for Minority Faculty (K14)	1,289	2,812	3,607	3,468	3,099	2,093	393				
Career Enhancement Award for Stem Cell Research (K18)										243	980
NHLBI Career Transition Award (K22)											185
Mentored Patient-Oriented Research Career Development Award (K23)						1,687	4,619	7,570	11,909	14,571	16,216
Midcareer Investigator Award in Patient-Oriented Research (K24)						1,054	2,072	2,877	4,058	4,368	3,815
Mentored Quantitative Research Career Development Award (K25)								272	921	1,195	1,622
Clinical Research Curriculum Award (K30)						1,772	3,163	3,073	3,090	3,110	3,115
Total, Research Career Program Obligations	31,398	31,675	33,862	33,912	36,069	47,669	54,184	57,470	63,514	65,817	67,794

NHLBI Minority Biomedical Research Training, Career Development, and Research Supplements Program Obligations: Fiscal Years 1994–2004

Dollars (Thousands)

	Fiscal Year										
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MARC Summer Research Training Program	31	28	32	17		10	4	20	15	4	
Mentored Research Scientist Development Award for Minority Faculty				460	1,723	2,738	3,650	5,556	5,711	6,156	6,150
MARC			5	5	5		5	5			
Minority Biomedical Research Support (MBRS)	2,433	2,313	2,503	2,722	2,978	3,423	3,873	3,165	2,793	3,600	2,806
Minority Institution Faculty Mentored Research Scientist Development Award				106	101	905	1,300	1,143	1,703	991	867
Minority Institution Research Training Program	735	982	679	898	706	901	1,167	996	1,092	1,006	734
Minority Predoctoral Fellowship	199	304	551	388	436	345	248	264	278	308	374
Minority Research Supplements Program	6,754	7,265	6,714	7,070	7,043	7,440	8,304	8,587	9,822	9,323	10,938

	Fiscal Year										
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Minority School Faculty Development Award	893	810	1,158	729	618	445	862	98			
Reentry Supplements			140	152	249	106	176	384			
Research Development Award for Minority Faculty	1,289	2,812	3,607	3,468	3,099	2,093	393				
Short-Term Training for Minority Students	1,616	1,760	1,834	1,612	1,964	2,494	2,570	1,876	2,057	2,594	2,671
Total, Minority Programs	13,950	16,274	17,223	17,627	18,922	20,900	22,552	22,095	23,471	23,982	24,540

NHLBI Research Supplements Program by Award Type: Fiscal Years 1994–2004

Number of Awards

	Fiscal Year										
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Minority Supplements											
Investigator	46	49	42	38	31	32	33	33	46	47	35
Postdoctoral	31	39	49	47	50	47	42	41	33	38	37
Graduate	55	42	37	36	48	53	47	43	45	57	61
Undergraduate	35	27	12	23	25	17	19	12	17	18	17
High School	15	10	8	9	11	6		3	3	4	3
Post-Master/Post-Baccalaureate									2	8	17
Reentry Supplements			2	2	3	2	1	3			3
Disability Supplements	8	4	3	3	2	1	5	4	5	4	3
Total, Research Supplements Program	190	171	153	158	170	158	147	139	151	176	176

NHLBI Research Supplements Program Obligations by Award Type: Fiscal Years 1994–2004

Dollars (Thousands)

	Fiscal Year										
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Minority Supplements											
Investigator	2,894	3,319	2,552	2,412	2,185	2,331	3,262	3,430	5,046	3,844	4,256
Postdoctoral	1,882	2,153	2,899	3,172	3,032	3,110	3,053	3,086	2,554	2,655	2,713
Graduate	1,585	1,402	1,116	1,181	1,527	1,806	1,791	1,818	1,864	2,181	2,439
Undergraduate	332	351	120	273	246	166	198	235	260	301	282
High School	61	40	27	32	53	27	0	18	33	33	13
Post-Master/Post-Baccalaureate	0	0	0	0	0	0	0	0	65	309	597
Reentry Supplements	0	0	140	152	249	106	176	384	0	0	495
Disability Supplements	357	277	194	165	96	72	282	187	474	360	143
Total, Research Supplements Program	7,111	7,542	7,048	7,387	7,388	7,618	8,762	9,158	10,296	9,683	10,938