



**Appendix A:
Other Data Obtained Through the
Graduate Research Traineeship (GRT) Program
Distance Monitoring Survey**





Table A-1
Characteristics of GRT principal investigators and advisors, by award cohort: Reporting year 1998

Principal investigator and advisor characteristic	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total principal investigators	42	55	36	43	176
Gender					
Male	92.9%	76.4%	83.3%	76.7%	81.8%
Female.....	7.1	20.0	16.7	23.3	17.0
Minority status ¹					
Minority	7.1	5.5	8.3	2.3	5.7
Nonminority.....	88.1	90.9	91.7	97.7	92.0
Disability status					
Disabled	0.0	0.0	2.8	0.0	0.6
Not disabled	95.2	96.4	97.2	100.0	97.2
Citizenship					
U.S. citizen.....	90.5	90.9	91.7	88.4	90.3
Permanent resident.....	9.5	5.5	8.3	11.6	8.5
Total advisors	207	262	180	196	845
Gender					
Male	87.4%	79.0%	80.6%	83.7%	82.5%
Female.....	11.6	15.6	14.4	14.3	14.1
Minority status ¹					
Minority	4.3	6.5	5.0	3.6	5.0
Nonminority.....	91.3	82.4	80.6	87.8	85.4
Disability status					
Disabled	1.9	0.8	0.6	0.5	0.9
Not disabled	91.3	81.7	79.4	87.8	85.0
Citizenship					
U.S. citizen.....	85.5	82.8	85.0	82.1	83.8
Permanent resident.....	8.2	11.8	6.1	12.2	9.8

¹Race was coded as minority if race/ethnicity was reported as black, Hispanic, Pacific Islander or American Indian/Alaskan Native. Race was coded as nonminority when race/ethnicity was reported as white or Asian.

NOTE: Percents may not add to 100 because of rounding and/or data items not reported or missing.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-2
GRT trainee characteristics, by award cohort: Reporting year 1998

Trainee characteristic	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees	449	527	320	299	1,595
Gender					
Male.....	59.9%	64.3%	60.3%	61.5%	61.8%
Female	38.5	33.2	39.7	37.5	36.8
Race/ethnicity					
White	71.7	70.4	70.0	80.9	72.7
Black.....	3.8	7.8	10.6	5.4	6.8
Hispanic.....	3.6	3.2	3.1	3.0	3.3
Asian.....	8.2	7.4	5.3	6.7	7.1
Pacific Islander	0.2	0.2	0.9	0.3	0.4
American Indian/Alaskan Native	0.9	0.8	1.3	0.3	0.8
Not reported.....	11.6	10.2	8.8	3.3	9.0
Minority status¹					
Minority.....	8.5	12.0	15.9	9.0	11.2
Nonminority.....	80.0	77.8	75.3	87.6	79.7
Not reported.....	11.6	10.2	8.8	3.3	9.0
Disability status					
Disabled.....	0.9	0.8	1.3	1.3	1.0
Not disabled.....	80.2	78.6	81.6	88.3	81.4
Not reported.....	18.9	20.7	17.2	10.4	17.6
Citizenship					
U.S. citizen	85.1	91.1	92.8	91.6	89.8
Permanent resident.....	5.6	5.3	2.5	4.7	4.7

¹Race was coded as minority if race/ethnicity was reported as black, Hispanic, Pacific Islander or American Indian/Alaskan Native. Race was coded as nonminority when race/ethnicity was reported as white or Asian.

NOTE: Percents may not add to 100 because of rounding and/or data items not reported or missing.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-3
GRT trainee gender, by broad focus area, by award cohort: Reporting year 1998

Trainee gender and focus area	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees	449	527	320	299	1,595
Male					
Biological Sciences (BIO)	59.5%	47.7%	46.2%	54.1%	52.6%
Computer and Information Sciences and Engineering (CISE)	81.8	82.6	69.7	66.7	77.3
Education and Human Resources (EHR).....	0.0	55.6	46.9	59.5	54.2
Engineering (ENG).....	68.9	72.8	90.2	64.3	71.8
Geosciences (GEO)	52.8	67.6	44.4	40.0	54.5
Mathematical and Physical Sciences (MPS).....	59.4	70.7	68.0	76.9	65.9
Social, Behavioral, and Economic Sciences (SBE)	45.8	48.1	64.2	62.5	55.3
Female					
Biological Sciences (BIO)	38.9	47.7	53.8	45.9	45.1
Computer and Information Sciences and Engineering (CISE)	18.2	17.4	30.3	20.0	21.1
Education and Human Resources (EHR).....	0.0	44.4	53.1	40.5	45.8
Engineering (ENG).....	31.1	26.4	9.8	34.5	27.6
Geosciences (GEO)	47.2	26.8	55.6	60.0	43.4
Mathematical and Physical Sciences (MPS).....	37.0	28.0	32.0	23.1	32.1
Social, Behavioral, and Economic Sciences (SBE)	54.2	51.9	35.8	37.5	44.7

NOTE: Percents may not add to 100 because of rounding and/or data items not reported or missing.
SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-4
GRT trainee race/ethnicity, by broad focus area, by award cohort: Reporting year 1998

Trainee race/ethnicity and focus area	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees	449	527	320	299	1,595
White					
Biological Sciences (BIO).....	83.3%	69.5%	66.7%	91.8%	78.3%
Computer and Information Sciences and Engineering (CISE)	63.6	82.6	51.5	73.3	71.9
Education and Human Resources (EHR).....	0.0	88.9	87.5	90.5	89.2
Engineering (ENG).....	67.8	66.4	68.3	69.0	67.6
Geosciences (GEO)	94.4	66.2	72.2	100.0	75.7
Mathematical and Physical Sciences (MPS).....	64.5	70.7	78.0	79.5	70.2
Social, Behavioral, and Economic Sciences (SBE)	54.2	66.7	64.2	66.7	61.8
Black					
Biological Sciences (BIO).....	4.8	6.0	10.3	3.5	5.5
Computer and Information Sciences and Engineering (CISE)	0.0	4.3	33.3	6.7	11.7
Education and Human Resources (EHR).....	0.0	0.0	9.4	4.8	6.0
Engineering (ENG).....	6.7	12.0	17.1	6.0	9.7
Geosciences (GEO)	0.0	1.4	6.9	0.0	3.2
Mathematical and Physical Sciences (MPS).....	2.9	9.3	4.0	5.1	5.0
Social, Behavioral, and Economic Sciences (SBE)	2.1	22.2	3.8	12.5	7.9
Hispanic					
Biological Sciences (BIO).....	3.2	4.6	0.0	1.2	3.0
Computer and Information Sciences and Engineering (CISE)	0.0	2.9	0.0	0.0	1.6
Education and Human Resources (EHR).....	0.0	11.1	0.0	2.4	2.4
Engineering (ENG).....	5.6	2.4	2.4	6.0	4.1
Geosciences (GEO)	0.0	1.4	6.9	0.0	3.2
Mathematical and Physical Sciences (MPS).....	2.2	2.7	4.0	0.0	2.3
Social, Behavioral, and Economic Sciences (SBE)	8.3	3.7	3.8	8.3	5.9
Asian					
Biological Sciences (BIO).....	3.2	3.3	0.0	3.5	3.0
Computer and Information Sciences and Engineering (CISE)	36.4	7.2	12.1	6.7	10.9
Education and Human Resources (EHR).....	0.0	0.0	3.1	2.4	2.4
Engineering (ENG).....	11.1	14.4	4.9	13.1	12.1
Geosciences (GEO)	5.6	5.6	8.3	0.0	6.3
Mathematical and Physical Sciences (MPS).....	6.5	8.0	2.0	10.3	6.6
Social, Behavioral, and Economic Sciences (SBE)	16.7	3.7	5.7	0.0	7.9
Pacific Islander					
Biological Sciences (BIO).....	0.0	0.0	0.0	0.0	0.0
Computer and Information Sciences and Engineering (CISE)	0.0	0.0	0.0	0.0	0.0
Education and Human Resources (EHR).....	0.0	0.0	0.0	0.0	0.0
Engineering (ENG).....	0.0	0.0	0.0	0.0	0.0
Geosciences (GEO)	0.0	1.4	2.8	0.0	1.6
Mathematical and Physical Sciences (MPS).....	0.0	0.0	2.0	2.6	0.7
Social, Behavioral, and Economic Sciences (SBE)	2.1	0.0	0.0	0.0	0.7



Table A-4
GRT trainee race/ethnicity, by broad focus area, by award cohort: Reporting year 1998
(Continued)

Trainee race/ethnicity and focus area	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
American Indian/Alaskan Native					
Biological Sciences (BIO)	0.0	0.7	7.7	0.0	1.0
Computer and Information Sciences and Engineering (CISE)	0.0	0.0	0.0	0.0	0.0
Education and Human Resources (EHR).....	0.0	0.0	0.0	0.0	0.0
Engineering (ENG).....	1.1	2.4	0.0	1.2	1.5
Geosciences (GEO)	0.0	0.0	1.4	0.0	0.5
Mathematical and Physical Sciences (MPS).....	0.7	0.0	0.0	0.0	0.3
Social, Behavioral, and Economic Sciences (SBE)	4.2	0.0	0.0	0.0	1.3

NOTE: Percents may not add to 100 because of rounding and/or data items not reported or missing.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-5
GRT trainee minority status, by broad focus area, by award cohort: Reporting year 1998

Trainee minority status ¹ and focus area	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees	449	527	320	299	1,595
Minority					
Biological Sciences (BIO)	7.9%	11.3%	17.9%	4.7%	9.5%
Computer and Information Sciences and Engineering (CISE)	0.0	7.2	33.3	6.7	13.3
Education and Human Resources (EHR).....	0.0	11.1	9.4	7.1	8.4
Engineering (ENG).....	13.3	16.8	19.5	13.1	15.3
Geosciences (GEO)	0.0	4.2	18.1	0.0	8.5
Mathematical and Physical Sciences (MPS).....	5.8	12.0	10.0	7.7	8.3
Social, Behavioral, and Economic Sciences (SBE)	16.7	25.9	7.5	20.8	15.8
Nonminority					
Biological Sciences (BIO)	86.5	72.8	66.7	95.3	81.3
Computer and Information Sciences and Engineering (CISE)	100.0	89.9	63.6	80.0	82.8
Education and Human Resources (EHR).....	0.0	88.9	90.6	92.9	91.6
Engineering (ENG).....	78.9	80.8	73.2	82.1	79.7
Geosciences (GEO)	100.0	71.8	80.6	100.0	82.0
Mathematical and Physical Sciences (MPS).....	71.0	78.7	80.0	89.7	76.8
Social, Behavioral, and Economic Sciences (SBE)	70.8	70.4	69.8	66.7	69.7

¹Race was coded as minority if race/ethnicity was reported as black, Hispanic, Pacific Islander or American Indian/Alaskan Native. Race was coded as nonminority when race/ethnicity was reported as white or Asian.

NOTE: Percents may not add to 100 because of rounding and/or data items not reported or missing.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-6
GRT trainee disability status, by broad focus area, by award cohort: Reporting year 1998

Trainee disability status and focus area	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees	449	527	320	299	1,595
Disabled					
Biological Sciences (BIO)	0.8%	0.7%	0.0%	0.0%	0.5%
Computer and Information Sciences and Engineering (CISE)	0.0	0.0	6.1	6.7	2.3
Education and Human Resources (EHR).....	0.0	0.0	0.0	4.8	2.4
Engineering (ENG).....	0.0	0.0	0.0	0.0	0.0
Geosciences (GEO)	0.0	1.4	0.0	0.0	0.5
Mathematical and Physical Sciences (MPS).....	1.4	2.7	4.0	0.0	2.0
Social, Behavioral, and Economic Sciences (SBE)	2.1	0.0	0.0	4.2	1.3
Not disabled					
Biological Sciences (BIO)	92.9	83.4	71.8	96.5	88.0
Computer and Information Sciences and Engineering (CISE)	100.0	92.8	93.9	66.7	90.6
Education and Human Resources (EHR).....	0.0	100.0	100.0	88.1	94.0
Engineering (ENG).....	83.3	76.8	87.8	94.0	84.1
Geosciences (GEO)	91.7	39.4	83.3	90.0	68.8
Mathematical and Physical Sciences (MPS).....	62.3	85.3	70.0	92.3	73.2
Social, Behavioral, and Economic Sciences (SBE)	79.2	100.0	73.6	45.8	75.7

NOTE: Percents may not add to 100 because of rounding and/or data items not reported or missing.
 SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-7
GRT trainee citizenship status, by broad focus area, by award cohort: Reporting year 1998

Trainee citizenship status and focus area	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees	449	527	320	299	1,595
U.S. citizen					
Biological Sciences (BIO)	96.8%	94.0%	94.9%	94.1%	95.0%
Computer and Information Sciences and Engineering (CISE)	63.6	87.0	93.9	93.3	87.5
Education and Human Resources (EHR).....	0.0	100.0	100.0	97.6	98.8
Engineering (ENG).....	88.9	88.8	97.6	88.1	89.7
Geosciences (GEO)	100.0	97.2	93.1	90.0	95.8
Mathematical and Physical Sciences (MPS).....	70.3	85.3	84.0	89.7	78.8
Social, Behavioral, and Economic Sciences (SBE)	83.3	92.6	90.6	87.5	88.2
Permanent resident					
Biological Sciences (BIO)	1.6	2.0	0.0	0.0	1.2
Computer and Information Sciences and Engineering (CISE)	36.4	8.7	6.1	6.7	10.2
Education and Human Resources (EHR).....	0.0	0.0	0.0	0.0	0.0
Engineering (ENG).....	4.4	10.4	2.4	11.9	8.2
Geosciences (GEO)	0.0	0.0	2.8	10.0	1.6
Mathematical and Physical Sciences (MPS).....	9.4	8.0	2.0	2.6	7.0
Social, Behavioral, and Economic Sciences (SBE)	4.2	0.0	3.8	4.2	3.3

NOTE: Percents may not add to 100 because of rounding and/or data items not reported or missing.
 SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-8
Comparisons of GRT trainee participation with national graduate student enrollment, by broad focus area, by gender

Survey and focus area	Total	Male	Female
NSF GRT Monitoring System: 1998 reporting year			
Total trainees.....	1,572	985 62.7%	587 37.3%
Biological Sciences (BIO)	392	53.8	46.2
Computer and Information Sciences and Engineering (CISE).....	126	78.6	21.4
Education and Human Resources (EHR).....	83	54.2	45.8
Engineering (ENG).....	338	72.2	27.8
Geosciences (GEO)	185	55.7	44.3
Mathematical and Physical Sciences (MPS).....	296	67.2	32.8
Social, Behavioral, and Economic Sciences (SBE)	152	55.3	44.7
NSF Survey of Graduate Students and Postdoctorates in Science and Engineering: 1997			
Total, science and engineering fields	308,835	175,074 56.7%	133,761 43.3%
Biological Sciences (BIO)	55,054	50.6	49.4
Computer and Information Sciences and Engineering (CISE).....	23,202	73.3	26.7
Education and Human Resources (EHR).....	NA	NA	NA
Engineering (ENG).....	64,586	80.6	19.4
Geosciences (GEO)	12,128	60.9	39.1
Mathematical and Physical Sciences (MPS).....	31,405	68.1	31.9
Social, Behavioral, and Economic Sciences (SBE)	122,460	40.3	59.7

NA = Not available; data for this focus area were not collected by the GSS survey.

NOTE: For comparability, GRT data on trainees for whom gender was unknown were not included in this table. Since GSS racial/ethnic data are available only for U.S. citizens and permanent residents, percentages are calculated using only data for citizens and permanent residents. The 1995 GSS data in Table 5 of this 1998 GRT Trends Report should be used as the new baseline to compare GRT data to national trends, rather than the GSS data in Table 3-2 of the GRT baseline report, which were incorrect. Percents may not add to 100 because of rounding.

SOURCE: GRT Distance Monitoring Survey Systems, reporting year 1998, and special tabulations of the National Science Foundation 1997 Survey of Graduate Students and Postdoctorates in Science and Engineering.



Table A-9
Comparisons of GRT trainee participation with national graduate student enrollment, by broad focus area, by race/ethnicity

Survey and focus area	Total	Race/ethnicity					
		White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaskan Native	Not reported
GRT Monitoring System: 1998 reporting year							
Total trainees.....	1,595	1,159 72.7%	108 6.8%	52 3.3%	119 7.5%	13 0.8%	144 9.0%
Biological Sciences (BIO).....	401	78.3	5.5	3.0	3.0	1.0	9.2
Computer and Information Sciences and Engineering (CISE).....	128	71.9	11.7	1.6	10.9	0.0	3.9
Education and Human Resources (EHR).....	83	89.2	6.0	2.4	2.4	0.0	0.0
Engineering (ENG).....	340	67.6	9.7	4.1	12.1	1.5	5.0
Geosciences (GEO).....	189	75.7	3.2	3.2	7.9	0.5	9.5
Mathematical and Physical Sciences (MPS).....	302	70.2	5.0	2.3	7.3	0.3	14.9
Social, Behavioral, and Economic Sciences (SBE).....	152	61.8	7.9	5.9	8.6	1.3	14.5
NSF Survey of Graduate Students and Postdoctorates in Science and Engineering: 1997							
Total, science and engineering fields.....	308,835	227,936 73.8%	19,363 6.3%	14,988 4.9%	26,078 8.4%	1,599 0.5%	18,871 6.1%
Biological Sciences (BIO).....	55,054	77.7	4.4	4.3	8.7	0.5	4.4
Computer and Information Sciences and Engineering (CISE).....	23,202	60.6	5.6	3.1	20.3	0.3	10.2
Education and Human Resources (EHR).....	NA	NA	NA	NA	NA	NA	NA
Engineering (ENG).....	64,586	71.2	4.4	4.4	12.6	0.4	7.0
Geosciences (GEO).....	12,128	86.5	1.7	3.4	3.4	0.7	4.4
Mathematical and Physical Sciences (MPS).....	31,405	76.8	5.1	3.9	8.6	0.4	5.3
Social, Behavioral, and Economic Sciences (SBE).....	122,460	73.9	9.0	6.1	4.4	0.7	6.0

NA = Not available; data for this focus area were not collected by the GSS survey.

NOTE: For comparability, GRT data on trainees for whom gender was unknown were not included in this table. Since GSS racial/ethnic data are available only for U.S. citizens and permanent residents, percentages are calculated using only data for citizens and permanent residents. The GSS data on race/ethnicity for 1995 presented in Table 3-4 of the GRT Baseline Report mistakenly excluded data on women students; therefore, the 1995 GSS data in Table 6 of this 1998 GRT Trends Report should be used as the new baseline to compare GRT data to national trends. Percents may not add to 100 because of rounding.

SOURCE: GRT Distance Monitoring Survey Systems, reporting year 1998, and special tabulations of the National Science Foundation 1997 Survey of Graduate Students and Postdoctorates in Science and Engineering.



Table A-10
GRT projects reporting specific recruitment strategies, by award cohort: Reporting year 1998

Recruitment strategy	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Projects reporting 1 or more strategies	78.9%	91.7%	100.0%	92.1%	90.4%
Brochures, posters, or other non-electronic media citing NSF-GRT	55.3	79.2	78.8	76.3	72.6
Developed by GRT	61.9	81.6	76.9	86.2	78.1
Ads in scholarly journals or electronic media citing NSF-GRT funds..	34.2	56.3	48.5	57.9	49.7
Developed by GRT	61.5	85.2	81.3	90.9	82.1
Visits to minority-serving institutions or women’s colleges	23.7	47.9	33.3	42.1	37.6
Developed by GRT	66.7	73.9	72.7	75.0	72.9
Other efforts directed toward individuals from underserved					
populations	42.1	47.9	54.5	57.9	50.3
Developed by GRT	68.8	87.0	55.6	59.1	68.4
Visits to predominately undergraduate institutions.....	18.4	22.9	33.3	39.5	28.0
Developed by GRT	85.7	54.5	45.5	80.0	65.9
Promotion of GRT project at national meetings and/or graduate					
student fairs.....	21.1	45.8	48.5	57.9	43.3
Developed by GRT	75.0	86.4	75.0	86.4	82.4
Recruitment of undergraduate/graduate students already enrolled at					
GRT institutions	39.5	56.3	60.6	55.3	52.9
Developed by GRT	73.3	85.2	70.0	85.7	79.5
Financial support for bringing prospective trainees to visit GRT					
project.....	31.6	64.6	57.6	55.3	52.9
Developed by GRT	58.3	61.3	47.4	71.4	60.2
Other	18.4	20.8	33.3	31.6	25.5
Developed by GRT	71.4	80.0	63.6	91.7	77.5

NOTE: “Developed by GRT” refers to the percentage of projects reporting use of strategy that also reported it was developed by the GRT project.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-11
GRT projects reporting specific project features, by award cohort: Reporting year 1998

Project feature	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Multidisciplinary training activities	73.7%	89.6%	97.0%	100.0%	89.8%
Instruction/academic support provided by faculty from multiple departments	55.3	72.9	84.8	81.6	73.2
Developed by GRT	61.9	62.9	57.1	58.1	60.0
Supported trainees from a variety of departments	39.5	52.1	63.6	60.5	53.5
Developed by GRT	93.3	84.0	76.2	82.6	83.3
Offered multidisciplinary courses	63.2	58.3	66.7	78.9	66.2
Developed by GRT	58.3	71.4	54.5	76.7	66.3
Other multidisciplinary training activities	39.5	52.1	75.8	50.0	53.5
Developed by GRT	60.0	84.0	68.0	89.5	76.2
Public/private sector opportunities	50.0	64.6	78.8	73.7	66.2
Internships in industry/private/nonprofit/public sectors	23.7	37.5	36.4	44.7	35.7
Developed by GRT	55.6	66.7	50.0	64.7	60.7
Educational/research/advisors/collaborators from industry/private/nonprofit/public sectors	34.2	35.4	48.5	42.1	39.5
Developed by GRT	61.5	64.7	62.5	62.5	62.9
Other research/educational contact with industry/private/nonprofit/ public sectors	31.6	39.6	48.5	36.8	38.9
Developed by GRT	41.7	52.6	68.8	64.3	57.4
Other private/public sector opportunities	10.5	8.3	27.3	5.3	12.1
Developed by GRT	75.0	50.0	55.6	100.0	63.2
International opportunities	42.1	58.3	69.7	65.8	58.6
Work in university/research setting outside United States.....	18.4	31.3	33.3	26.3	27.4
Developed by GRT	71.4	86.7	54.5	60.0	69.8
Field research with foreign researchers outside United States.....	10.5	22.9	33.3	18.4	21.0
Developed by GRT	50.0	54.5	36.4	14.3	39.4
Travel to meetings/conferences outside United States.....	23.7	45.8	51.5	31.6	38.2
Developed by GRT	77.8	40.9	58.8	25.0	48.3
Work with private companies outside United States	2.6	10.4	9.1	5.3	7.0
Developed by GRT	0.0	60.0	66.7	50.0	54.5
Other international opportunities.....	2.6	14.6	21.2	26.3	15.9
Developed by GRT	0.0	14.3	42.9	70.0	44.0
Initiatives to prepare trainees for faculty positions	71.1	79.2	97.0	97.4	85.4
Instruction in effective teaching practices	28.9	50.0	51.5	44.7	43.9
Developed by GRT	9.1	37.5	29.4	17.6	26.1
Served as teaching assistants and/or or official mentors to students	50.0	60.4	90.9	78.9	68.8
Developed by GRT	36.8	34.5	56.7	26.7	38.9
Participated in teaching exercises supervised by faculty	28.9	47.9	51.5	36.8	41.4
Developed by GRT	54.5	43.5	64.7	64.3	55.4
Developed course/curriculum materials.....	10.5	20.8	60.6	34.2	29.9
Developed by GRT	25.0	20.0	65.0	61.5	51.1
Served as full instructor.....	7.9	18.8	30.3	23.7	19.7
Developed by GRT	66.7	33.3	50.0	33.3	41.9
Special instruction in how to advise/mentor students.....	10.5	14.6	18.2	10.5	13.4
Developed by GRT	25.0	42.9	16.7	25.0	28.6
Instruction in how to apply advanced technology in classroom	15.8	10.4	39.4	18.4	19.7
Developed by GRT	50.0	80.0	38.5	42.9	48.4
Other initiatives	10.5	29.2	24.2	18.4	21.0
Developed by GRT	75.0	64.3	87.5	71.4	72.7



Table A-11
GRT projects reporting specific project features, by award cohort: Reporting year 1998
(Continued)

Project feature	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Other structural components	15.8	54.2	63.6	63.2	49.0
Developed by GRT	66.7	69.2	76.2	87.5	76.6

NOTE: "Developed by GRT" refers to the percentage of projects reporting use of strategy that also reported it was developed by the GRT project.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-12
GRT projects reporting consortial agreements, by award cohort: Reporting year 1998

Consortial agreement	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total number of project awards	38	48	33	38	157
Projects reporting at least one consortial agreement¹	28.9%	52.1%	39.4%	47.4%	42.7%
Nongraduate consortial agreements ²	13.2	14.6	21.2	21.1	17.2
Graduate consortial agreements ³	15.8	27.1	18.2	28.9	22.9
Minority consortial agreements ⁴	21.1	31.3	18.2	26.3	24.8

¹Combinations or groups formed to undertake an enterprise beyond the resources of any one member.

²Nongraduate institution serves as a feeder school for a GRT project by identifying students for recruiting purposes.

³Consortial arrangements with another graduate-degree-granting institution. Under this arrangement, trainees might be provided opportunities to engage in special research and training at lower institutions.

⁴Arrangements that are specifically designed to increase the pool of minority trainees at GRT projects.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-13
Average number of achievements per GRT trainee, overall and by broad focus area, by award cohort: Reporting year 1998

Trainee achievement ¹ and focus area	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Average number of achievements per trainee.....	2.1	1.6	2.4	3.0	2.2
Average number of achievements by broad focus area					
Biological Sciences (BIO)	2.8	2.3	2.8	2.4	2.5
Computer and Information Sciences and Engineering (CISE)	0.2	1.1	2.0	2.7	1.5
Education and Human Resources (EHR).....	0.0	2.6	5.0	5.5	5.0
Engineering (ENG).....	2.3	1.3	2.4	3.0	2.1
Geosciences (GEO)	1.6	1.1	2.6	1.8	1.8
Mathematical and Physical Sciences (MPS).....	1.8	1.6	1.3	2.1	1.7
Social, Behavioral, and Economic Sciences (SBE)	2.1	1.6	1.6	2.4	1.9
Percentage of trainees with at least one achievement.....	45.4%	47.2%	66.9%	70.6%	55.0%

¹Achievements include journal articles, books, book chapters, presentations, patent applications, patents, and other scholarly achievements.
 SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-14
GRT trainee Ph.D. completion, by award cohort: Reporting year 1998

Trainee characteristic	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees who completed Ph.D.	101	56	23	14	194
Percentage of trainees who completed Ph.D.	22.5%	10.6%	7.2%	4.7%	12.2%
Gender					
Male.....	22.7	10.9	8.3	5.4	12.6
Female	23.1	9.7	5.5	3.6	11.6
Minority status ¹					
Minority.....	7.9	1.6	5.9	0.0	3.9
Nonminority	25.1	10.2	7.9	5.0	12.9
Disability status					
Disabled.....	0.0	25.0	0.0	25.0	12.5
Not disabled.....	24.2	9.9	7.3	4.5	12.2
Broad focus area					
Biological Sciences (BIO)	26.2	8.6	7.7	8.2	14.0
Computer and Information Sciences and Engineering (CISE)	18.2	15.9	6.1	0.0	11.7
Education and Human Resources (EHR).....	0.0	0.0	18.8	9.5	12.0
Engineering (ENG).....	17.8	5.6	2.4	2.4	7.6
Geosciences (GEO)	38.9	14.1	2.8	0.0	13.8
Mathematical and Physical Sciences (MPS).....	21.0	18.7	14.0	2.6	16.9
Social, Behavioral, and Economic Sciences (SBE)	14.6	3.7	3.8	0.0	6.6

¹Race was coded as minority if race/ethnicity was reported as black, Hispanic, Pacific Islander or American Indian/Alaskan Native. Race was coded as nonminority when race/ethnicity was reported as white or Asian.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-15
Average years required for GRT trainees to complete Ph.D., by award cohort: Reporting year 1998

Trainee characteristic	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees who completed Ph.D.	101	56	23	14	194
Average for trainees who completed Ph.D.	5.5	5.4	5.6	5.8	5.5
Gender					
Male.....	5.6	5.9	5.6	5.0	5.6
Female	5.5	5.1	5.6	6.1	5.4
Minority status¹					
Minority.....	6.3	4.0	5.3	--	5.6
Nonminority	5.5	5.5	5.5	5.8	5.5
Disability status					
Disabled.....	--	7.0	--	11.0	9.0
Not disabled.....	5.5	5.4	5.5	5.7	5.5
Broad focus area					
Biological Sciences (BIO)	5.7	5.5	5.0	5.3	5.5
Computer and Information Sciences and Engineering (CISE)	3.5	6.1	6.5	--	5.8
Education and Human Resources (EHR).....	--	--	5.8	7.0	6.3
Engineering (ENG).....	5.3	4.4	3.0	6.0	5.0
Geosciences (GEO)	5.4	5.4	5.5	--	5.4
Mathematical and Physical Sciences (MPS).....	5.7	5.1	4.7	4.0	5.3
Social, Behavioral, and Economic Sciences (SBE)	6.0	6.0	9.0	--	6.8

--No one in this category completed a Ph.D.

¹Race was coded as minority if race/ethnicity was reported as black, Hispanic, Pacific Islander or American Indian/Alaskan Native. Race was coded as nonminority when race/ethnicity was reported as white or Asian.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-16
Years required for GRT trainees to complete Ph.D., by award cohort: Reporting year 1998

Years to complete Ph.D.	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees who completed Ph.D.	101	56	23	14	194
Years to complete Ph.D.					
3 years or less	3.0%	14.3%	17.4%	7.1%	8.2%
4 years.....	13.9	12.5	8.7	14.3	12.9
5 years.....	28.7	28.6	13.0	7.1	25.3
6 years.....	27.7	19.6	39.1	57.1	28.9
7 or more years	15.8	25.0	21.7	14.3	19.1

NOTE: Percents may not add to 100 because of rounding and/or data not reported or missing.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-17
Years required for GRT trainees to complete Ph.D., by gender and minority status, by award cohort: Reporting year 1998

Years to complete Ph.D. and trainee characteristics	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
3 years or less					
Gender					
Male.....	3.3%	16.2%	25.0%	0.0%	9.7%
Female	2.5	11.8	0.0	25.0	5.9
Minority status ¹					
Minority.....	0.0	0.0	0.0	0.0	0.0
Nonminority	2.2	11.9	21.1	7.7	7.3
4 years					
Gender					
Male.....	14.8	16.2	6.3	20.0	14.5
Female	12.5	5.9	14.3	0.0	10.3
Minority status ¹					
Minority.....	0.0	100.0	33.3	0.0	28.6
Nonminority	13.3	11.9	5.3	15.4	12.2
5 years					
Gender					
Male.....	32.8	27.0	12.5	10.0	26.6
Female	22.5	29.4	14.3	0.0	22.1
Minority status ¹					
Minority.....	0.0	0.0	0.0	0.0	0.0
Nonminority	31.1	28.6	15.8	7.7	26.8
6 years					
Gender					
Male.....	23.0	18.9	25.0	50.0	24.2
Female	35.0	17.6	71.4	75.0	36.8
Minority status ¹					
Minority.....	66.7	0.0	66.7	0.0	57.1
Nonminority	25.6	19.0	36.8	53.8	27.4
7 or more years					
Gender					
Male.....	18.0	21.6	31.3	20.0	21.0
Female	12.5	35.3	0.0	0.0	16.2
Minority status ¹					
Minority.....	33.3	0.0	0.0	0.0	14.3
Nonminority	15.6	28.6	21.1	15.4	19.5

¹Race was coded as minority if race/ethnicity was reported as black, Hispanic, Pacific Islander or American Indian/Alaskan Native. Race was coded as nonminority when race/ethnicity was reported as white or Asian.

NOTE: Percents may not add to 100 because of rounding and/or data not reported or missing.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-18
Years required for GRT trainees to complete Ph.D., by broad focus area, by award cohort:
Reporting year 1998

Years to complete Ph.D.	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
3 years or less					
Biological Sciences (BIO).....	0.0%	23.1%	33.3%	14.3%	8.9%
Computer and Information Sciences and Engineering (CISE).....	50.0	0.0	0.0	0.0	6.7
Education and Human Resources (EHR).....	0.0	0.0	0.0	0.0	0.0
Engineering (ENG).....	0.0	28.6	100.0	0.0	11.5
Geosciences (GEO).....	7.1	10.0	0.0	0.0	7.7
Mathematical and Physical Sciences (MPS).....	3.4	14.3	28.6	0.0	9.8
Social, Behavioral, and Economic Sciences (SBE).....	0.0	0.0	0.0	0.0	0.0
4 years					
Biological Sciences (BIO).....	9.1	7.7	0.0	14.3	8.9
Computer and Information Sciences and Engineering (CISE).....	50.0	0.0	0.0	0.0	6.7
Education and Human Resources (EHR).....	0.0	0.0	0.0	0.0	0.0
Engineering (ENG).....	43.8	14.3	0.0	0.0	30.8
Geosciences (GEO).....	0.0	10.0	0.0	0.0	3.8
Mathematical and Physical Sciences (MPS).....	6.9	28.6	28.6	100.0	17.6
Social, Behavioral, and Economic Sciences (SBE).....	14.3	0.0	0.0	0.0	10.0
5 years					
Biological Sciences (BIO).....	21.2	15.4	0.0	0.0	16.1
Computer and Information Sciences and Engineering (CISE).....	0.0	45.5	0.0	0.0	33.3
Education and Human Resources (EHR).....	0.0	0.0	16.7	25.0	20.0
Engineering (ENG).....	25.0	42.9	0.0	0.0	26.9
Geosciences (GEO).....	42.9	20.0	50.0	0.0	34.6
Mathematical and Physical Sciences (MPS).....	37.9	28.6	14.3	0.0	31.4
Social, Behavioral, and Economic Sciences (SBE).....	14.3	0.0	0.0	0.0	10.0
6 years					
Biological Sciences (BIO).....	36.4	30.8	66.7	57.1	39.3
Computer and Information Sciences and Engineering (CISE).....	0.0	18.2	50.0	0.0	20.0
Education and Human Resources (EHR).....	0.0	0.0	83.3	50.0	70.0
Engineering (ENG).....	12.5	0.0	0.0	100.0	15.4
Geosciences (GEO).....	35.7	40.0	50.0	0.0	38.5
Mathematical and Physical Sciences (MPS).....	27.6	0.0	0.0	0.0	15.7
Social, Behavioral, and Economic Sciences (SBE).....	14.3	100.0	0.0	0.0	20.0



Table A-18
Years required for GRT trainees to complete Ph.D., by broad focus area, by award cohort:
Reporting year 1998 (Continued)

Years to complete Ph.D.	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
7 or more years					
Biological Sciences (BIO).....	12.1	23.1	0.0	14.3	14.3
Computer and Information Sciences and Engineering (CISE).....	0.0	36.4	50.0	0.0	33.3
Education and Human Resources (EHR).....	0.0	0.0	0.0	25.0	10.0
Engineering (ENG).....	18.8	14.3	0.0	0.0	15.4
Geosciences (GEO).....	14.3	20.0	0.0	0.0	15.4
Mathematical and Physical Sciences (MPS).....	17.2	28.6	28.6	0.0	21.6
Social, Behavioral, and Economic Sciences (SBE).....	28.6	0.0	100.0	0.0	40.0

NOTE: Percents may not add to 100 because of rounding and/or data not reported or missing.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-19
Employment status of GRT trainees who completed Ph.D., by award cohort: Reporting year 1998

Employment status	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees who completed Ph.D.....	101	56	23	14	194
Postdoctoral position.....	52.5%	41.1%	47.8%	57.1%	49.0%
Education employment.....	15.8	14.3	43.5	14.3	18.6
Government employment.....	6.9	3.6	0.0	7.1	5.2
Private employment.....	16.8	37.5	8.7	14.3	21.6
Other employment.....	5.0	1.8	0.0	0.0	3.1
Unknown.....	3.0	1.8	0.0	7.1	2.6

NOTE: Percents may not add to 100 because of rounding.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-20
Employment status of GRT trainees who completed Ph.D., by gender and minority status, by award cohort: Reporting year 1998

Employment status and trainee characteristics	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees who completed Ph.D.	101	56	23	14	194
Postdoctoral position					
Gender					
Male.....	50.8%	45.9%	43.8%	60.0%	49.2%
Female	55.0	35.3	57.1	50.0	50.0
Minority status ¹					
Minority.....	66.7	100.0	0.0	0.0	42.9
Nonminority	54.4	38.1	52.6	61.5	50.6
Education employment					
Gender					
Male.....	13.1	16.2	50.0	10.0	18.5
Female	20.0	11.8	28.6	25.0	19.1
Minority status ¹					
Minority.....	0.0	0.0	100.0	0.0	42.9
Nonminority	14.4	14.3	36.8	15.4	17.1
Government employment					
Gender					
Male.....	9.8	0.0	0.0	10.0	5.6
Female	2.5	11.8	0.0	0.0	4.4
Minority status ¹					
Minority.....	33.3	0.0	0.0	0.0	14.3
Nonminority	6.7	4.8	0.0	7.7	5.5
Private employment					
Gender					
Male.....	19.7	37.8	6.3	10.0	22.6
Female	12.5	35.3	14.3	25.0	19.1
Minority status ¹					
Minority.....	0.0	0.0	0.0	0.0	0.0
Nonminority	17.8	40.5	10.5	7.7	22.0
Other employment					
Gender					
Male.....	3.3	0.0	0.0	0.0	1.6
Female	7.5	5.9	0.0	0.0	5.9
Minority status ¹					
Minority.....	0.0	0.0	0.0	0.0	0.0
Nonminority	3.3	2.4	0.0	0.0	2.4
Unknown					
Gender					
Male.....	3.3	0.0	0.0	10.0	2.4
Female	2.5	0.0	0.0	0.0	1.5
Minority status ¹					
Minority.....	0.0	0.0	0.0	0.0	0.0
Nonminority	3.3	0.0	0.0	7.7	2.4

¹Race was coded as minority if race/ethnicity was reported as black, Hispanic, Pacific Islander or American Indian/Alaskan Native. Race was coded as nonminority when race/ethnicity was reported as white or Asian.

NOTE: Percents may not add to 100 because of rounding and/or data not reported or missing.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-21
Employment status of GRT trainees who completed Ph.D., by broad focus area, by award cohort:
Reporting year 1998

Employment status and focus area	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees who completed Ph.D.	101	56	23	14	194
Postdoctoral position					
Biological Sciences (BIO).....	75.8%	84.6%	66.7%	71.4%	76.8%
Computer and Information Sciences and Engineering (CISE)	100.0	9.1	100.0	0.0	33.3
Education and Human Resources (EHR).....	0.0	0.0	66.7	50.0	60.0
Engineering (ENG).....	37.5	14.3	0.0	50.0	30.8
Geosciences (GEO)	64.3	50.	50.0	0.0	57.7
Mathematical and Physical Sciences (MPS).....	27.6	35.7	14.3	0.0	27.5
Social, Behavioral, and Economic Sciences (SBE)	42.9	0.0	50.0	0.0	40.0
Education employment					
Biological Sciences (BIO).....	15.2	7.7	33.3	14.3	14.3
Computer and Information Sciences and Engineering (CISE)	0.0	36.4	0.0	0.0	26.7
Education and Human Resources (EHR).....	0.0	0.0	33.3	25.0	30.0
Engineering (ENG).....	12.5	0.0	100.0	0.0	11.5
Geosciences (GEO)	7.1	20.0	0.0	0.0	11.5
Mathematical and Physical Sciences (MPS).....	13.8	0.0	71.4	0.0	17.6
Social, Behavioral, and Economic Sciences (SBE)	57.1	100.0	50.0	0.0	60.0
Government employment					
Biological Sciences (BIO).....	6.1	0.0	0.0	0.0	3.6
Computer and Information Sciences and Engineering (CISE)	0.0	0.0	0.0	0.0	0.0
Education and Human Resources (EHR).....	0.0	0.0	0.0	0.0	0.0
Engineering (ENG).....	12.5	0.0	0.0	0.0	7.7
Geosciences (GEO)	14.3	0.0	0.0	0.0	7.7
Mathematical and Physical Sciences (MPS).....	3.4	14.3	0.0	100.0	7.8
Social, Behavioral, and Economic Sciences (SBE)	0.0	0.0	0.0	0.0	0.0
Private employment					
Biological Sciences (BIO).....	3.0	0.0	0.0	14.3	3.6
Computer and Information Sciences and Engineering (CISE)	0.0	54.5	0.0	0.0	40.0
Education and Human Resources (EHR).....	0.0	0.0	0.0	0.0	0.0
Engineering (ENG).....	37.5	85.7	0.0	50.0	50.0
Geosciences (GEO)	14.3	20.0	50.0	0.0	19.2
Mathematical and Physical Sciences (MPS).....	27.6	50.0	14.3	0.0	31.4
Social, Behavioral, and Economic Sciences (SBE)	0.0	0.0	0.0	0.0	0.0
Other employment					
Biological Sciences (BIO).....	0.0	7.7	0.0	0.0	1.8
Computer and Information Sciences and Engineering (CISE)	0.0	0.0	0.0	0.0	0.0
Education and Human Resources (EHR).....	0.0	0.0	0.0	0.0	0.0
Engineering (ENG).....	0.0	0.0	0.0	0.0	0.0
Geosciences (GEO)	0.0	0.0	0.0	0.0	0.0
Mathematical and Physical Sciences (MPS).....	17.2	0.0	0.0	0.0	9.8
Social, Behavioral, and Economic Sciences (SBE)	0.0	0.0	0.0	0.0	0.0



Table A-21
Employment status of GRT trainees who completed Ph.D., by broad focus area, by award cohort:
Reporting year 1998 (continued)

Employment status and focus area	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Unknown					
Biological Sciences (BIO)	0.0	0.0	0.0	0.0	0.0
Computer and Information Sciences and Engineering (CISE)	0.0	0.0	0.0	0.0	0.0
Education and Human Resources (EHR).....	0.0	0.0	0.0	25.0	10.0
Engineering (ENG).....	0.0	0.0	0.0	0.0	0.0
Geosciences (GEO)	0.0	10.0	0.0	0.0	3.8
Mathematical and Physical Sciences (MPS).....	10.3	0.0	0.0	0.0	5.9
Social, Behavioral, and Economic Sciences (SBE)	0.0	0.0	0.0	0.0	0.0

NOTE: Percents may not add to 100 because of rounding and/or data not reported or missing.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-22
GRT trainee attrition prior to Ph.D. completion, by award cohort: Reporting year 1998

Trainee characteristic	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees who terminated Ph.D.	75	114	56	35	280
Percentage of trainees who terminated Ph.D.	16.7%	21.6%	17.5%	11.7%	17.5%
Gender					
Male.....	14.1	23.3	17.6	9.2	17.1
Female	20.8	19.4	17.3	16.1	18.7
Minority status ¹					
Minority.....	26.3	25.4	23.5	14.8	23.5
Nonminority	16.2	21.7	14.9	11.8	16.8
Disability status					
Disabled.....	25.0	25.0	50.0	0.0	25.0
Not disabled.....	16.1	20.0	15.7	12.9	16.6
Broad focus area					
Biological Sciences (BIO)	8.7	10.6	25.6	5.9	10.5
Computer and Information Sciences and Engineering (CISE)	27.3	23.2	27.3	13.3	23.4
Education and Human Resources (EHR).....	0.0	0.0	6.3	7.1	6.0
Engineering (ENG).....	22.2	43.2	19.5	20.2	29.1
Geosciences (GEO)	19.4	8.5	9.7	0.0	10.6
Mathematical and Physical Sciences (MPS).....	17.4	18.7	28.0	17.9	19.5
Social, Behavioral, and Economic Sciences (SBE)	20.8	29.6	11.3	4.2	16.4

¹Race was coded as minority if race/ethnicity was reported as black, Hispanic, Pacific Islander or American Indian/Alaskan Native. Race was coded as nonminority when race/ethnicity was reported as white or Asian.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-23
Reasons for GRT trainee attrition prior to Ph.D. completion, by award cohort: Reporting year 1998

Reason for attrition	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees who terminated Ph.D.	75	114	56	35	280
Left to pursue other academic interests.....	28.0%	22.8%	30.4%	34.3%	27.1%
Left to pursue employment	40.0	54.4	32.1	42.9	44.6
Failed to meet requirements.....	6.7	7.0	7.1	2.9	6.4
Left due to family and /or economic constraints.....	4.0	5.3	10.7	17.1	7.5
Other	12.0	5.3	14.3	2.9	8.6
Unknown	8.0	5.3	5.4	0.0	5.4
Not reported.....	1.3	0.0	0.0	0.0	0.4

NOTE: Percents may not add to 100 because of rounding.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-24
Reasons for GRT trainee attrition prior to Ph.D. completion, by gender and minority status, by award cohort: Reporting year 1998

Reason for attrition and trainee characteristic	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees who terminated Ph.D.	75	114	56	35	280
Left to pursue other academic interests					
Gender					
Male	39.5%	15.2%	35.3%	41.2%	27.4%
Female.....	16.7	41.2	22.7	27.8	27.3
Minority status ¹					
Minority	40.0	18.8	16.7	25.0	23.8
Nonminority.....	29.3	22.5	36.1	35.5	28.5
Left to pursue employment					
Gender					
Male	31.6	63.3	29.4	41.2	47.0
Female.....	47.2	35.3	36.4	44.4	40.9
Minority status ¹					
Minority	20.0	37.5	50.0	50.0	38.1
Nonminority.....	41.4	58.4	27.8	41.9	46.3
Failed to meet requirements					
Gender					
Male	5.3	5.1	8.8	5.9	6.0
Female.....	8.3	11.8	4.5	0.0	7.3
Minority status ¹					
Minority	0.0	25.0	8.3	25.0	14.3
Nonminority.....	6.9	4.5	5.6	0.0	4.7
Left due to family and/or economic constraints					
Gender					
Male	0.0	5.1	8.8	11.8	5.4
Female.....	8.3	5.9	13.6	22.2	10.9
Minority status ¹					
Minority	0.0	6.3	8.3	0.0	4.8
Nonminority.....	3.4	5.6	11.1	19.4	7.9
Other					
Gender					
Male	13.2	6.3	11.8	0.0	8.3
Female.....	11.1	2.9	18.2	5.6	9.1
Minority status ¹					
Minority	30.0	6.3	16.7	0.0	14.3
Nonminority.....	10.3	4.5	13.9	3.2	7.5

¹Race was coded as minority if race/ethnicity was reported as black, Hispanic, Pacific Islander or American Indian/Alaskan Native. Race was coded as nonminority when race/ethnicity was reported as white or Asian.

NOTE: Percents may not add to 100 because of rounding and/or "unknown" or "not reported" data categories.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-25
Reasons for GRT trainee attrition prior to Ph.D. completion, by broad focus area, by award cohort: Reporting year 1998

Reason for attrition and focus area	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees who terminated Ph.D.	75	114	56	35	280
Left to pursue other academic interests					
Biological Sciences (BIO).....	45.5%	50.0%	10.0%	60.0%	40.5%
Computer and Information Sciences and Engineering (CISE)	66.7	6.3	33.3	0.0	20.0
Education and Human Resources (EHR).....	0.0	0.0	100.0	66.7	80.0
Engineering (ENG).....	25.0	24.1	25.0	17.6	23.2
Geosciences (GEO)	28.6	33.3	28.6	0.0	30.0
Mathematical and Physical Sciences (MPS).....	29.2	14.3	28.6	57.1	28.8
Social, Behavioral, and Economic Sciences (SBE)	0.0	0.0	50.0	0.0	12.0
Left to pursue employment					
Biological Sciences (BIO).....	36.4	18.8	40.0	40.0	31.0
Computer and Information Sciences and Engineering (CISE)	0.0	81.3	33.3	0.0	53.3
Education and Human Resources (EHR).....	0.0	0.0	0.0	33.3	20.0
Engineering (ENG).....	50.0	59.3	50.0	52.9	55.6
Geosciences (GEO)	42.9	33.3	14.3	0.0	30.0
Mathematical and Physical Sciences (MPS).....	37.5	57.1	28.6	28.6	39.0
Social, Behavioral, and Economic Sciences (SBE)	40.0	50.0	33.3	100.0	44.0
Failed to meet requirements					
Biological Sciences (BIO).....	0.0	12.5	0.0	0.0	4.8
Computer and Information Sciences and Engineering (CISE)	0.0	0.0	11.1	50.0	6.7
Education and Human Resources (EHR).....	0.0	0.0	0.0	0.0	0.0
Engineering (ENG).....	10.0	3.7	12.5	0.0	5.1
Geosciences (GEO)	0.0	16.7	0.0	0.0	5.0
Mathematical and Physical Sciences (MPS).....	12.5	7.1	14.3	0.0	10.2
Social, Behavioral, and Economic Sciences (SBE)	0.0	25.0	0.0	0.0	8.0
Left due to family and/or economic constraints					
Biological Sciences (BIO).....	9.1	0.0	10.0	0.0	4.8
Computer and Information Sciences and Engineering (CISE)	0.0	0.0	11.1	50.0	6.7
Education and Human Resources (EHR).....	0.0	0.0	0.0	0.0	0.0
Engineering (ENG).....	5.0	3.7	12.5	23.5	8.1
Geosciences (GEO)	0.0	16.7	14.3	0.0	10.0
Mathematical and Physical Sciences (MPS).....	4.2	14.3	14.3	14.3	10.2
Social, Behavioral, and Economic Sciences (SBE)	0.0	12.5	0.0	0.0	4.0
Other					
Biological Sciences (BIO).....	0.0	12.5	30.0	0.0	11.9
Computer and Information Sciences and Engineering (CISE)	0.0	0.0	0.0	0.0	0.0
Education and Human Resources (EHR).....	0.0	0.0	0.0	0.0	0.0
Engineering (ENG).....	10.0	5.6	0.0	5.9	6.1
Geosciences (GEO)	14.3	0.0	42.9	0.0	20.0
Mathematical and Physical Sciences (MPS).....	4.2	0.0	14.3	0.0	5.1
Social, Behavioral, and Economic Sciences (SBE)	50.0	12.5	0.0	0.0	24.0

NOTE: Percents may not add to 100 because of rounding and/or data not reported or missing.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-26
Employment status of GRT trainees who terminated Ph.D., by award cohort: Reporting year 1998

Employment status	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees who terminated Ph.D.	75	114	56	35	280
Private sector	30.7%	46.5%	26.8%	51.4%	38.9%
Public sector	8.0	5.3	3.6	2.9	5.4
Academic setting.....	8.0	4.4	7.1	8.6	6.4
Other	9.3	3.5	7.1	0.0	5.4
Graduate study at GRT institution	8.0	11.4	19.6	25.7	13.9
Study outside GRT institution	12.0	11.4	12.5	5.7	11.1
Unknown	24.0	17.5	23.2	5.7	18.9

NOTE: Percents may not add to 100 because of rounding.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-27
Employment status of GRT trainees who terminated Ph.D., by gender and minority status, by award cohort: Reporting year 1998

Employment status and trainee characteristics	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees who terminated Ph.D.	75	114	56	35	280
Private sector					
Gender					
Male.....	28.9%	54.4%	26.5%	47.1%	42.3%
Female.....	33.3	29.4	27.3	55.6	34.5
Minority status ¹					
Minority.....	10.0	43.8	33.3	75.0	35.7
Nonminority.....	36.2	49.4	25.0	48.4	41.6
Public sector					
Gender					
Male.....	2.6	5.1	0.0	5.9	3.6
Female.....	11.1	5.9	9.1	0.0	7.3
Minority status ¹					
Minority.....	0.0	0.0	16.7	0.0	4.8
Nonminority.....	5.2	6.7	0.0	3.2	4.7
Academic setting					
Gender					
Male.....	5.3	5.1	11.8	11.8	7.1
Female.....	11.1	2.9	0.0	5.6	5.5
Minority status ¹					
Minority.....	20.0	12.5	16.7	0.0	14.3
Nonminority.....	6.9	2.2	5.6	9.7	5.1
Graduate study at GRT institution					
Gender					
Male.....	2.6	7.6	20.6	23.5	10.7
Female.....	13.9	20.6	18.2	27.8	19.1
Minority status ¹					
Minority.....	0.0	12.5	16.7	25.0	11.9
Nonminority.....	10.3	11.2	22.2	25.8	15.0
Graduate study outside GRT institution					
Gender					
Male.....	18.4	8.9	11.8	11.8	11.9
Female.....	5.6	17.6	13.6	0.0	10.0
Minority status ¹					
Minority.....	20.0	18.8	8.3	0.0	14.3
Nonminority.....	12.1	9.0	11.1	6.5	9.8
Other					
Gender					
Male.....	15.8	2.5	5.9	0.0	6.0
Female.....	2.8	5.9	9.1	0.0	4.5
Minority status ¹					
Minority.....	10.0	0.0	0.0	0.0	2.4
Nonminority.....	10.3	3.4	11.1	0.0	6.1



Table A-27

Employment status of GRT trainees who terminated Ph.D., by gender and minority status, by award cohort: Reporting year 1998 (Continued)

Employment status and trainee characteristics	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Unknown					
Gender					
Male.....	26.3	16.5	23.5	0.0	18.5
Female.....	22.2	17.6	22.7	11.1	19.1
Minority status ¹					
Minority.....	40.0	12.5	8.3	0.0	16.7
Nonminority.....	19.0	18.0	25.0	6.5	17.8

¹Race was coded as minority if race/ethnicity was reported as black, Hispanic, Pacific Islander or American Indian/Alaskan Native. Race was coded as nonminority when race/ethnicity was reported as white or Asian.

NOTE: Percents may not add to 100 because of rounding and/or data not reported or missing.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-28
Employment status of GRT trainees who terminated Ph.D., by broad focus area, by award cohort:
Reporting year 1998

Employment status and focus area	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total trainees who terminated Ph.D.	75	114	56	35	280
Private sector					
Biological Sciences (BIO).....	27.3%	12.5%	20.0%	20.0%	19.0%
Computer and Information Sciences and Engineering (CISE)	33.3	75.0	0.0	100.0	50.0
Education and Human Resources (EHR).....	0.0	0.0	0.0	33.3	20.0
Engineering (ENG).....	40.0	48.1	62.5	58.8	49.5
Geosciences (GEO)	42.9	33.3	0.0	0.0	25.0
Mathematical and Physical Sciences (MPS).....	16.7	42.9	42.9	42.9	32.2
Social, Behavioral, and Economic Sciences (SBE)	40.0	62.5	33.3	100.0	48.0
Public sector					
Biological Sciences (BIO).....	9.1	6.3	0.0	0.0	4.8
Computer and Information Sciences and Engineering (CISE)	0.0	6.3	22.2	0.0	10.0
Education and Human Resources (EHR).....	0.0	0.0	0.0	0.0	0.0
Engineering (ENG).....	5.0	5.6	0.0	5.9	5.1
Geosciences (GEO)	0.0	0.0	0.0	0.0	0.0
Mathematical and Physical Sciences (MPS).....	16.7	7.1	0.0	0.0	8.5
Social, Behavioral, and Economic Sciences (SBE)	0.0	0.0	0.0	0.0	0.0
Academic setting					
Biological Sciences (BIO).....	18.2	6.3	0.0	20.0	9.5
Computer and Information Sciences and Engineering (CISE)	0.0	6.3	22.2	0.0	10.0
Education and Human Resources (EHR).....	0.0	0.0	50.0	0.0	20.0
Engineering (ENG).....	10.0	0.0	0.0	5.9	3.0
Geosciences (GEO)	0.0	0.0	0.0	0.0	0.0
Mathematical and Physical Sciences (MPS).....	8.3	7.1	7.1	14.3	8.5
Social, Behavioral, and Economic Sciences (SBE)	0.0	25.0	0.0	0.0	8.0
Graduate study at GRT institution					
Biological Sciences (BIO).....	9.1	6.3	30.0	40.0	16.7
Computer and Information Sciences and Engineering (CISE)	0.0	6.3	11.1	0.0	6.7
Education and Human Resources (EHR).....	0.0	0.0	50.0	33.3	40.0
Engineering (ENG).....	10.0	14.8	25.0	23.5	16.2
Geosciences (GEO)	14.3	0.0	14.3	0.0	10.0
Mathematical and Physical Sciences (MPS).....	4.2	21.4	14.3	28.6	13.6
Social, Behavioral, and Economic Sciences (SBE)	10.0	0.0	16.7	0.0	8.0
Graduate study outside GRT institution					
Biological Sciences (BIO).....	18.2	43.8	0.0	0.0	21.4
Computer and Information Sciences and Engineering (CISE)	0.0	0.0	22.2	0.0	6.7
Education and Human Resources (EHR).....	0.0	0.0	0.0	33.3	20.0
Engineering (ENG).....	10.0	9.3	0.0	0.0	7.1
Geosciences (GEO)	0.0	16.7	14.3	0.0	10.0
Mathematical and Physical Sciences (MPS).....	16.7	0.0	14.3	14.3	11.9
Social, Behavioral, and Economic Sciences (SBE)	10.0	0.0	33.3	0.0	12.0



Table A-28
Employment status of GRT trainees who terminated Ph.D., by broad focus area, by award cohort:
Reporting year 1998 (Continued)

Employment status and focus area	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Other					
Biological Sciences (BIO).....	66.7	0.0	0.0	0.0	0.0
Computer and Information Sciences and Engineering (CISE)	0.0	0.0	0.0	0.0	6.7
Education and Human Resources (EHR).....	0.0	0.0	0.0	-	0.0
Engineering (ENG).....	0.0	5.6	0.0	0.0	3.0
Geosciences (GEO)	14.3	16.7	42.9	0.0	25.0
Mathematical and Physical Sciences (MPS).....	8.3	0.0	7.1	0.0	5.1
Social, Behavioral, and Economic Sciences (SBE)	20.0	0.0	0.0	0.0	8.0
Unknown					
Biological Sciences (BIO).....	18.2	25.0	50.0	20.0	28.6
Computer and Information Sciences and Engineering (CISE)	0.0	6.3	22.2	0.0	10.0
Education and Human Resources (EHR).....	0.0	0.0	0.0	0.0	0.0
Engineering (ENG).....	25.0	16.7	12.5	5.9	16.2
Geosciences (GEO)	28.6	33.3	28.6	0.0	30.0
Mathematical and Physical Sciences (MPS).....	29.2	21.4	14.3	0.0	20.3
Social, Behavioral, and Economic Sciences (SBE)	20.0	12.5	16.7	0.0	16.0

¹Race was coded as minority if race/ethnicity was reported as black, Hispanic, Pacific Islander or American Indian/Alaskan Native. Race was coded as nonminority when race/ethnicity was reported as white or Asian.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-29
Number of GRT course features, by award cohort: Reporting year 1998

Course feature ¹	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total number of project awards	38	48	33	38	157
New courses ² developed by GRT project	18	23	20	18	79
New requirements ³ resulting from GRT project	12	13	15	2	42
New interdepartmental offerings ⁴ resulting from GRT project.....	4	5	12	14	35
Seminars, workshops, conferences resulting from GRT project.....	12	45	36	37	130
Other.....	3	4	7	16	30
Total new GRT course features.....	49	90	90	87	316

¹Projects may report multiple new course features. Numbers reflect counts of new course features, rather than counts of projects reporting new course features.

²The number of new course requirements developed by a department to serve the primary GRT focus subfocus area.

³The number of new requirements developed by a department for a trainee to complete a doctorate in the primary GRT subfocus area.

⁴The number of interdepartmental courses developed to serve the primary GRT subfocus area.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.



Table A-30
Projects reporting GRT course features, by award cohort: Reporting year 1998

Course feature ¹	Award cohort				All cohorts: 1998
	1992	1993	1994	1995	
Total number of project awards	38	48	33	38	157
Projects reporting at least one new course feature.	36.8%	54.2%	84.8%	78.9%	62.4%
Projects reporting at least one new course ¹	21.1	22.9	36.4	34.2	28.0
Projects reporting at least one new requirement ²	5.3	10.4	15.2	5.3	8.9
Projects reporting at last one new interdepartmental offering ³	10.5	6.3	27.3	26.3	16.6
Projects reporting at least one seminar, workshop, conference ⁴	18.4	35.4	57.6	47.4	38.9
Projects reporting some other new course feature	7.9	8.3	12.1	26.3	13.4

¹Projects may report multiple new course features.

²The number of new course requirements developed by a department to serve the primary GRT focus subfocus area.

³The number of new requirements developed by a department for a trainee to complete a doctorate in the primary GRT subfocus area.

⁴The number of interdepartmental courses developed.

SOURCE: GRT Distance Monitoring Survey System. Survey completed in 1998.