Attachment C1

Integrative Graduate Education and Research Traineeship Program (IGERT)

Monitoring System

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IGERT: Crosswalk - Principal Investigator (PI) Survey

Common Collection	ect	in S ²	ts ³
Categories	Proj nt ristic	ntatic	utbn
Questions	Staff and Project Participant Characteristics ¹	Project Implementation Characteristics ²	Project Outputs ³
1. Project Summary			
Project Characteristics			
Please indicate up to three NSF directorates that most closely correspond to your interdisciplinary research theme. • BIO –Biological Sciences • CISE – Computer and Information Science and Engineering • ENG–Engineering • GEO–Geosciences • MPS–Mathematical and Physical Sciences • OCI – Office of Cyberinfrastructure • OPP–Office of Polar Programs • SBE–Social, Behavioral, and Economic Sciences		X	
Did you support any IGERT trainees during the current project year? Yes/ No		X	
Considering the IGERT trainees as a group, how do they compare with graduate students you usually see in terms of their academic/research potential? • Far superior to our usual graduate students • Somewhat better than our usual graduate students • About the same as our usual graduate students • Somewhat less promising or less successful than our usual graduate students • Much less promising or less successful than our usual students		X	
 How do trainees in your program earn their doctoral degrees? [mark all that apply] Trainees earn their degrees from the IGERT multidisciplinary/interdisciplinary program. Trainees earn their degrees from traditional single-discipline departments. Trainees earn their degrees from multidisciplinary/interdisciplinary programs, centers or units other than IGERT. Other (certificates, etc.) Please specify: 		X	
Does your IGERT project include undergraduate involvement? Yes/ No		X	
If yes, were NSF IGERT funds used for undergraduate involvement? Yes/ No		X	
Does your IGERT project include postdoctoral involvement? Yes/No		X	

¹ Elements of these characteristics include: Name, address, date of birth, gender, ethnicity, race, disability status, class, major, grade point average, yearly fellowship or stipend amount, or project role.

² Elements of these characteristics include: Sources and amount of funds, fellowships, scholarships, traineeships, partnerships, training, research methods.

³ Elements of these characteristics include: research findings, publications, presentations, degrees granted, educational materials.

Common Collection Categories Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
If yes, were NSF IGERT funds used for postdoctorate involvement? Yes/ No		X	
Estimate the amount of funds from the current year of IGERT support that will be carried over to the next year as of the project anniversary date (the date when your annual report will be due in FastLane): 1. Total funds carried over to the next year 2. If carryover funds are entered (i.e., greater than 0), please provide an explanation for these funds 3. Participant support costs carried over to the next year 4. Stipends carried over to the next year		X	
Please describe up to three interdisciplinary research achievements/discoveries/outcomes that demonstrate how your IGERT project has been particularly effective in attaining the interdisciplinary research goals you set out to achieve during this reporting period. Please report achievements that include tangible outcomes such as publication, patent, discovery, or preliminary findings. Individual trainee achievements should be reserved for the "Trainee Achievements" section. (Responses are limited to 1000 characters for each achievement.) [The PI has an option to make each achievement available for use on the IGERT Resource Center Web site, viewable by the general public]			X
Education Achievements Please describe up to three achievements/outcomes that illustrate exceptional added value to the trainees' educational experience during this reporting period. Please focus on overall programmatic achievements, rather than achievements of individual trainees. (Responses are limited to 1000 characters for each achievement.) [The PI has an option to make each achievement available for use on the IGERT Resource Center Web site, viewable by the general public] Trainee Achievements			X
Please describe up to three research or education achievements/outcomes, involving either a single trainee or a group of trainees made possible through the participation of trainees in your IGERT project during this reporting period.			

Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Questions	Staff Partic Char	Project Implem Charac	Proje
(Responses are limited to 1000 characters for each achievement.)			
[The PI has an option to make each achievement available for use on the IGERT Resource Center Web site, viewable by the general public]			
Barriers to Implementation Please identify and describe up to three key barriers (e.g. programmatic, institutional) you have encountered in the process of implementing your IGERT project during this reporting period. For each barrier identified, briefly describe how your project has responded.		X	
(Responses are limited to 1000 characters for each issue/challenge and response.)			
[The system collects the barriers and responses as separate data elements]			
Outreach Activities			X
Please report any outreach activities involving your IGERT that occurred during this reporting period. Outreach activities include your IGERT project, IGERT faculty and/or IGERT Trainees being featured in the media (e.g., TV, radio, magazine articles) or talks, presentations, or workshops given to school groups, civic groups, non-scientifically based professional groups, members of the government, or the general public.			
Please mark the checkbox if you do not have any Outreach Activities to report.			
For each activity: 1. Short Title 2. Name of the media outlet or organization for which outreach was done 3. Date of the activity 4. Type of activity			
 Museum Media K-12 Undergraduate Government Informal Science 			

Common Collection	ect	i s	ts
Categories Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
 Other Briefly describe this activity, including the names of the IGERT individuals involved. 			
Each year, NSF program officers are asked to write "Highlights" (formerly known as "Nuggets") on the results of NSF research and education awards. These Highlights are used to help assess NSF's performance in attaining the strategic outcome goals outlined in the NSF Strategic Plan and to share successes with various groups. Your Highlight will probably relate to one of the achievements reported in sections 1b, c or d, but in greater detail and with images. When writing your Highlight, please clearly describe how the interdisciplinary theme of your IGERT project made this work possible, as distinct from what might have been possible through only a single-discipline research or education grant. Also, please write the Highlight such that a general audience can grasp the importance, value and merit of the research, the educational outreach or whatever results you are highlighting. Starting with a statement of what the research team has achieved and why it is important and then going on to explain what problem is being			X
solved, or obstacle is being overcome, or new discovery that was made is a great way to write a Highlight for maximum effectiveness. Reporting Highlights is related to requirements under the Government Performance and Results Act (GPRA). Please respond only if you have something relevant and significant to share for this reporting period.			
 Guidelines for Writing Highlights Write for a general audience. Common uses for highlights include the following: program monitoring by NSF staff; reporting to Congress on NSF goal attainment; demonstrating achievements in the NSF's annual Budget Requests, Performance and Accountability Reports (PAR), and other documents; and providing information for the general public. Well-written, informative Highlights submitted here may serve several purposes and thereby eliminate duplicate writing efforts later. Include images. NSF highlights and images are used not only by the Advisory Committee for GRPA Performance Assessment, but also for illustration, in the NSF's annual Budget Requests, Performance and Accountability Reports (PAR), and other documents. Clear, colorful images (pictures, graphs, charts, etc.) greatly enhance the value of highlights. 			

Common			
Collection	Staff and Project Participant Characteristics	n s	Its
Categories	roj :#:		nd:
· ·	Staff and Proje Participant Characteristics	Project Implementation Characteristics	Project Outputs
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Questions	f a tici	jec Jen Jen	jec
	Staff and P Participant Characteris	Project Implem Charac	ro,
	SAC		Ь
• Provide sufficient information to describe the research and the results so that the			
IGERT Program Officers can determine whether or not a specific objective (and			
 therefore, outcome goal) was met and its most valuable use. Start with a statement of what the research team has achieved, and then go on 			
to explain why it solves a problem or overcomes an obstacle. Do not start with a			
lengthy explanation of the problem to be solved. Example: "Prof. Blivett and her			
team at the University of Eutaw have discovered/achieved/developed XYZ. This			
was hard/remarkable/useful/world-changing because or this seminal			
development could lead to practical applications in"			
• Include the location and/or lead institution for the research and the names of all			
 principal investigators. Include an explicit statement that NSF is supporting this work (this can usually 			
be done very quickly in passing, e.g., "NSF-funded researchers at Stanford			
University have demonstrated", or "Astronomers working at NSF's Gemini			
Observatory have discovered")			
• Spell out NSF program names. Be sure to spell out acronyms.			
For each Highlight:			
1. Descriptive title for this Highlight			
2. If a video is associated with the Highlight, please provide a URL link to the video.			
3. Please indicate the primary and secondary NSF strategic goal(s)			
that best describe the Highlight			
[For each NSF goal listed, the PI selects either primary or			
secondary]			
4. Describe the achievement/result that is the Highlight			
5. How does this activity address the primary and secondary NSF			
strategic goals that you marked above?			
For each Highlight Image:			
1. Descriptive title for this Highlight image			
2. Upload image file (bmp, gif, jpeg, pdf, png, or tiff only)			
3. Does NSF have permission to use this image?			
Yes/No			
4. Image credits (Required only if you answered "yes" to the			
previous question)			
5. Description of image (optional)			
5. Description of image (optional)			
2. IGERT Project Personnel, Trainee, and Associate Details			
Provide for each Principal Investigator:			
Mark the checkbox if [PI Name] served as PI for the current project year		X	
Name: First, Middle Initial, Last, Previous Surname	X		
Contact Information: Title	X		

Common	 		
Collection	Staff and Project Participant Characteristics	on	Project Outputs
Categories	ro r sti	ati sti	tp.
	H P ant	eri	_n_
	Staff and Proje Participant Characteristics	Project Implementation Characteristics	<u> </u>
Questions	f a tici	Project Implem Charac	jec
Questions	taf ari ha	ro np ha	10.
	S P	P Ir C	Ь
Department at Institution			
Address at Institution			
Institution City			
Institution State			
Zip Code			
Phone			
Extension			
Fax			
E-mail Address			
Web URL			
Ethnicity (Choose one):			
Hispanic or Latino	X		
Not Hispanic or Latino	11		
Not reported			
Race (Choose one or more):			
American Indian or Alaska Native			
Asian Black as A Girag Associated	\mathbf{v}		
Black or African American Native Hawaiian or other Pacific Islander	X		
 Native Hawaiian or other Pacific Islander White 			
Not Reported			
Gender (Choose one):			
• Male	***		
• Female	X		
Not reported			
Planned for 2013 data collection cycle			
Disability Status (Choose one):			
Yes (check Yes if any of the following apply):			
Deaf or serious difficulty hearing			
Blind or serious difficulty seeing even when wearing glasses	X		
Serious difficulty walking or climbing stairs	11		
Other serious disability related to a physical, mental, or emotional			
condition			
• No			
• Do not wish to provide			
Citizenship (Choose one):			
U.S. Citizen/U.S. National U.S. Pormanent Posident	X		
U.S. Permanent ResidentOther Non-U.S. Citizen	Λ		
Not Reported			
Provide for each IGERT Project Coordinator:			
Name: First, Middle Initial, Last, Previous Surname	X		
Contact Information:	X		
Institution Name			
Title			

Common Collection Categories Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Staf Par Cha	Pro Imp Cha	Pro
Department at Institution			
Current Address			
Current City			
Current State			
Zip Code			
Phone			
Extension			
Fax			
E-mail Address			
Web URL			
Provide for each IGERT Co-PI and Trainee/Associate Advisor:			
Name: First, Middle Initial, Last, Previous Surname	X		
Mark the checkbox if the individual served as co-PI or trainee/associate	X		
advisor for the current project year.	Λ		
Role in Project (Mark all that apply):			
• Co-PI	X		
Trainee/Associate Advisor			
Contact Information:			
Institution Name			
Title			
Department at Institution			
Address at Institution			
Institution City			
Institution State	X		
Zip Code			
Phone			
Extension			
Fax			
E-mail Address			
Web URL			
Current IGERT Advisor			
Yes/No		X	
Ethnicity (Choose one):			
Hispanic or Latino	37		
Not Hispanic or Latino	X		
Not Reported			
Race (Choose one or more):	X		
American Indian or Alaska Native			
AsianBlack or African American			
 Black or African American Native Hawaiian or other Pacific Islander 			
White			

Collection Categories Poly Service Se	Common	5	_	
Not Reported Gender (Choose one): Male Permale Premale Not reported Disability Status (Choose one): Yes (check Yes if any of the following apply): Deaf or serious difficutly hearing Disability Status (Choose one): Yes (check Yes if any of the following apply): Deaf or serious difficutly walking or climbing stairs Serious difficutly walking or climbing stairs Other serious disability related to a physical, mental, or emotional condition No Do not wish to provide Citizenship (Choose one): U.S. Citizen/U.S. National U.S. Permanent Resident Other Non-U.S. Citizen Not Reported Provide for each IGERT Trainee and Associate: Name: First, Middle Initial, Last, Previous Surname X E-mail Address Verify IGERT-required Citizenship/Residency Status [not applicable to associates] Yes, the trainee is a U.S. Citizen/U.S. National or U.S. Permanent Resident No, the trainee does not meet IGERT citizenship Requirement. If you answered No, please provide an explanation. GRE Scores: Verbal Quantitative Analytical Subject (Select GRE Subject) Biochemistry Cell & Molecular Biology Biology Chemistry Computer Science Economics Education Engineering Geology History Literature in English,		ojec ics	ion ics	att
Not Reported Gender (Choose one): Male Permale Premale Not reported Disability Status (Choose one): Yes (check Yes if any of the following apply): Deaf or serious difficutly hearing Disability Status (Choose one): Yes (check Yes if any of the following apply): Deaf or serious difficutly walking or climbing stairs Serious difficutly walking or climbing stairs Other serious disability related to a physical, mental, or emotional condition No Do not wish to provide Citizenship (Choose one): U.S. Citizen/U.S. National U.S. Permanent Resident Other Non-U.S. Citizen Not Reported Provide for each IGERT Trainee and Associate: Name: First, Middle Initial, Last, Previous Surname X E-mail Address Verify IGERT-required Citizenship/Residency Status [not applicable to associates] Yes, the trainee is a U.S. Citizen/U.S. National or U.S. Permanent Resident No, the trainee does not meet IGERT citizenship Requirement. If you answered No, please provide an explanation. GRE Scores: Verbal Quantitative Analytical Subject (Select GRE Subject) Biochemistry Cell & Molecular Biology Biology Chemistry Computer Science Economics Education Engineering Geology History Literature in English,	Categories	Pro nt ist	ıtat ist	utp
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U.S. Čitizen/U.S. National U.S. Permanent Resident Other Non-U.S. Citizen Not Reported Provide for each IGERT Trainee and Associate: Name: First, Middle Initial, Last, Previous Surname X E-mail Address Verify IGERT-required Citizenship/Residency Status [not applicable to associates] Yes, the trainee is a U.S. Citizen/U.S. National or U.S. Permanent Resident No, the trainee does not meet IGERT citizenship Requirement. If you answered No, please provide an explanation. GRE Scores: Verbal Quantitative Analytical Subject (Select GRE Subject) Bioloemistry Cell & Molecular Biology Biology Chemistry Computer Science Economics Education Engineering Geology History History Literature in English,				
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 U.S. Permanent Resident Other Non-U.S. Citizen Not Reported Provide for each IGERT Trainee and Associate: Name: First, Middle Initial, Last, Previous Surname X E-mail Address X Verify IGERT-required Citizenship/Residency Status [not applicable to associates] Yes, the trainee is a U.S. Citizen/U.S. National or U.S. Permanent Resident No, the trainee does not meet IGERT citizenship Requirement. If you answered No, please provide an explanation. GRE Scores: X Verbal Quantitative Analytical Subject (Select GRE Subject) Biochemistry Cell & Molecular Biology Biology Chemistry Computer Science Economics Education Engineering Geology History Literature in English, 				
 Other Non-U.S. Citizen Not Reported Provide for each IGERT Trainee and Associate: Name: First, Middle Initial, Last, Previous Surname X E-mail Address Verify IGERT-required Citizenship/Residency Status [not applicable to associates] Yes, the trainee is a U.S. Citizen/U.S. National or U.S. Permanent Resident No, the trainee does not meet IGERT citizenship Requirement. If you answered No, please provide an explanation. GRE Scores: Verbal Quantitative Analytical Subject (Select GRE Subject) Biochemistry Cell & Molecular Biology Biology Chemistry Computer Science Economics Education Engineering Geology History Literature in English, 		X		
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associates] • Yes, the trainee is a U.S. Citizen/U.S. National or U.S. Permanent Resident • No, the trainee does not meet IGERT citizenship Requirement. If you answered No, please provide an explanation. GRE Scores: Verbal Quantitative Analytical Subject (Select GRE Subject) • Biochemistry • Cell & Molecular Biology • Biology • Chemistry • Computer Science • Economics • Education • Engineering • Geology • History • Literature in English,		X		
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answered No, please provide an explanation. GRE Scores: Verbal Quantitative Analytical Subject (Select GRE Subject) Biochemistry Cell & Molecular Biology Biology Chemistry Computer Science Economics Education Engineering Geology History Literature in English,		X		
GRE Scores: Verbal Quantitative Analytical Subject (Select GRE Subject) Biochemistry Cell & Molecular Biology Biology Chemistry Computer Science Economics Education Engineering Geology History Literature in English,				
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Quantitative Analytical Subject (Select GRE Subject) • Biochemistry • Cell & Molecular Biology • Biology • Chemistry • Computer Science • Economics • Education • Engineering • Geology • History • Literature in English,		X		
Analytical Subject (Select GRE Subject) • Biochemistry • Cell & Molecular Biology • Biology • Chemistry • Computer Science • Economics • Education • Engineering • Geology • History • Literature in English,				
Subject (Select GRE Subject) Biochemistry Cell & Molecular Biology Biology Chemistry Computer Science Economics Education Engineering Geology History Literature in English,				
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Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
MusicPhysics			
Political Science			
• Psychology			
Revised MusicSociology			
Indicate when the trainee/associate first enrolled in graduate study at this institution (mm/yyyy)		X	
Indicate when the trainee first began receiving IGERT funding (not		***	
applicable to associates) (mm/ yyyy)		X	
Indicate when the associate first began participating in the IGERT		X	
project (not applicable to trainees) (mm/ yyyy)		Λ	
Indicate whether this trainee is a Funded Trainee or a Formerly Funded			
Trainee for this reporting period. (Note: A trainee who received IGERT			
funding for any or all of this reporting period is a Funded Trainee.) • Funded Trainees: Specify the Number of months funded		X	
• Formerly Funded Trainees (not applicable to associates)			
Has student been engaged in IGERT activities, research, education or		***	
training during this reporting period?		X	
Yes/No Please describe the current situation that best describes this IGERT			
Trainee/Associate [select one]			
Has not yet graduated, but is pursuing a PhD in your institution.			
 Has not yet graduated, but is pursuing a Master's degree at your institution. 			
Has graduated from your institution with a PhD. [Enter month/year		X	
completed] (mm/ yyyy)		11	
Has graduated from your institution with a master's degree. [Enter month/year completed] (mm/yyyyy)			
month/year completed] (mm/ yyyy) • Has left your institution without earning degree. [insert month/year			
departed] (mm/yyyy)			
3. Project Features			
Trainee Preparation in Multidisciplinary/Interdisciplinary Research		X	
Briefly describe up to three of the promising practices for preparing			
IGERT trainees to conduct collaborative research that transcends			
traditional disciplinary boundaries. (Responses are limited to 1000			
characters for each practice.) [Three pairs of textboxes and select lists for "Practice" and "Measure." Measures include: Formal evaluation,			
informal surveys, group feedback, quantitative measure, other]			
and the same of th			
[The PI has an option to make each practice and measure pair available			

Common Collection Categories Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
for use on the IGERT Resource Center Web site, viewable by the general public]			
 Mark the following components of multidisciplinary/interdisciplinary research preparation that apply to the majority of IGERT trainees involved in your project during this reporting period. (Mark all that apply) Trainees undertook formal coursework/training in research methods, practices, and instrumentation in their primary discipline equivalent to traditional graduate students. Trainees had practical, hands-on laboratory and/or field experience in conducting research across the breadth of disciplines in the IGERT program. Trainees undertook formal coursework/training across the breadth of disciplines encompassed by the IGERT project. Trainees undertook formal coursework/training in both the ethical conduct of research and ethical conduct related to the themes encompassed by your IGERT project. Other preparation to conduct high-quality research (please specify:		X	
Trainee Preparation in Professional Skills Briefly describe up to three formal training activities (e.g. coursework, workshop, professional speaker) for preparing IGERT trainees to effectively communicate science to general audiences. (Responses are limited to 1000 characters for each activity.) [Three textboxes for each activity.] [The PI has an option to make each activity available for use on the IGERT Resource Center Web site, viewable by the general public]		X	
 Mark the following components of professional skills development that apply to the majority of IGERT trainees in your project during this reporting period. (Mark all that apply) Trainees undertook coursework/training that included regular faculty critique of and feedback on professional writing. Trainees authored, submitted or published research papers in refereed journals. Trainees took coursework/training (e.g., brown bags, seminars) that included regular critique of and feedback on professional speaking/presentation skills. Trainees made presentations at academic/scientific professional conferences or meetings. 		X	

 Trainees presented results from their IGERT to professional, non-academic audiences (e.g., industry, government). Trainees undertook coursework/training to develop media-based or information technology-based communication skills. Trainees produced multimedia materials, Web sites, or other cyber-enabled 	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
 tools to communicate the results of their IGERT activities to external audiences. Trainees used multimedia materials, Web sites, or other cyber-enabled tools as part of their interdisciplinary scientific training and collaboration. Trainees received training in team-building and project management skills. Trainees received training in effective time and task management. Trainees participated as members of teams engaged in joint research, education, and/or outreach efforts. Trainees led teams engaged in research, education, and/or outreach efforts. Other preparation in professional skills development (please specify:			
ainee Preparation for STEM Careers ark the following components that apply to the majority of IGERT inees in your project during this reporting period. Iark all that apply) Trainees received training or instruction (e.g., courses, workshops) in effective teaching practices. Trainees developed and presented course and/or curriculum materials. Trainees served as mentors to others (e.g., graduate students, undergraduates, laboratory technicians). Trainees received training/mentoring in grant proposal preparation. Authored/co-authored and submitted grant proposals. Trainees received training/instruction on the interaction between academic research and industrial technical requirements. Trainees received training/instruction for applying their research to address public policy concerns or issues. Trainees had internships (off-campus, research, educational and/or work experiences) in non-academic settings (e.g., industry, government). Trainees had professional interactions other than internships with non-academic employers (e.g. industry, government) in order to learn about career opportunities and requirements. Trainees communicated, worked, or collaborated with scientists of other nationalities. Other preparation for careers in academia (please specify:). Other preparation for nonacademic careers (e.g., industry, government) (please specify:).		X	
ctics for Recruitment and Broadening Participation		X	

Common Collection Categories Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
timelines for the recruitment and retention of trainees, including specifics for broadening participation of groups underrepresented in science and engineering? Yes/No	S 4 C	— — — — — — — — — — — — — — — — — — —	Ь
If no, please explain: (Responses are limited to 1000 characters for each practice.)			
Regardless of your response to the previous question, please describe up to three of the promising tactics and results for recruiting qualified trainees to your IGERT project during this reporting period. (Responses are limited to 1000 characters for each tactic and result.) [Three textbox pairs for Tactic and Result.] [The PI has an option to make each Tactic and Result pair available for use on the IGERT Resource Center Web site, viewable by the general public]		X	
Please describe the extent to which each of the following practices been productive for recruiting trainees overall to your IGERT during this reporting period. [Four check boxes for each bulleted item. Boxes are labeled "Productive"; "Somewhat productive"; "Not productive"; "NA"] 1. Relationships with NSF programs that can provide an undergraduate pool of potential IGERT trainees (e.g., REUs, NSF Centers) 2. Relationships with faculty and programs at other academic institutions 3. Use of recruiting resources on your IGERT campus (e.g., career service office, graduate studies office) 4. Collaboration with other IGERTs on recruitment. 5. Use of professional meetings, conferences, associations to communicate with, reach out to, and market to potential IGERT trainees 6. Other (please specify:)		X	
Please describe the extent to which each of the following practices have been productive for recruiting underrepresented minority and women trainees to your IGERT during this reporting period. [Four check boxes for each bulleted item. Boxes are labeled "Productive"; "Somewhat productive"; "Not productive"; "NA"] and {Respondents respond twice for each bulleted item; once for URMs and once for women.} 1. Relationships with NSF programs that specifically focus on broadening participation of underrepresented minorities or women in		X	

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Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
STEM (e.g., LSAMP, AGEP, TCUP, or ADVANCE) 2. Use of resources on your campus (e.g., academic advancement programs, offices for campus diversity, or minority and women's student groups)			
3. Interaction with professional associations, or ganizations, or committees serving underrepresented minorities communities or women (e.g., National Action Council for Minorities in Engineering, Society of Women Engineers, committees in professional societies focused on minority communities and women)			
4. Bridge programs for entering graduate students5. Mentoring or advisement arrangements that take advantage of underrepresented minorities or women faculty or graduate students			
on campus 6. Relationships with faculty and programs at minority-serving academic institutions (e.g., historically black colleges and universities (HBCUs), Hispanic-serving institutions, or tribal colleges). {This item will be marked N/A or blanked out for women}			
7. Collaboration with other IGERT projects on recruitment 8. Other (please specify:)			
<u>International Opportunities</u>			
According to NSF records, you project [has/does not have] explicit funding for an international component. If you think this is incorrect, please contact ICF International.		X	
Briefly identify up to three training experiences or components that provided exceptional "added value" for preparing IGERT trainees to be successful in international/global science and engineering. NOTE: This can include U.Sbased experiences. [Three textboxes for Training Experiences/Components 1, 2 and 3.]			X
[The PI has an option to make each training experience or component available for use on the IGERT Resource Center Web site, viewable by the general public]			
Responding to the remaining questions is mandatory only for IGERT projects with explicit funding for the international component.			
Is International participation required for all trainees in your IGERT project? Yes/No		X	
Did one or more trainees from your IGERT project engage in an		X	

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international experience through the project during this reporting period? Yes/No			
If yes, please click on the "Add an international experience" button below to describe the experience and the country. NOTE: You will need to repeat this step for each country in which trainees engaged in an international experience during this reporting period			
For each country: 1. Country [pull-down menu]			
2. Trainee(s) involved [one checkbox per trainee]			
 3. Which of the following international actions or work in this country involved trainees? (Mark all that apply) Trainees attended conferences/workshops. Trainees undertook coursework/training. Trainee(s) worked, conducted research/field work, or interned in industrial settings. Trainee(s) worked, conducted research/field work, or interned in academic settings. Trainee(s) worked, conducted research/field work, or interned in other settings (e.g., national laboratories, non-governmental organizations). Other international actions/work (please specify:			
Identify the value/opportunities for faculty that resulted from the International experiences of IGERT Project. (Mark all that apply) • Faculty have developed new collaborations. • Faculty have developed new access to facilities/skills. • Faculty have developed new opportunities for research/education/training. • Other (please specify:)			X
Briefly identify up to three research or educational achievements resulting from the International component. Each achievement may involve a single trainee or a group of trainees. [Three textboxes for Research/Educational Achievements 1, 2 and 3.]			X
[The PI has an option to make each research or educational achievement available for use on the IGERT Resource Center Web site, viewable by the general public]			
Partnerships/Collaborations		X	
Were there active partnerships/collaborations outside of your university through your IGERT project during this reporting period? Yes/No			

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NOTE: Examples include other academic institutions (including IGERT			
partners), industrial or business partners, government agencies and			
laboratories, and non-profit organizations. If you are in doubt about			
whether to include information on a specific relationship between your			
IGERT and another organization, please include the information.			
S. S			
If yes, please specify one of the four partnership/collaboration types			
[academic, corporate, government, other], and click on the "go" button			
to input information on the partnership/collaboration. You will need to			
repeat this step for each additional partnership/collaboration to report.			
Provide for each Partner:			
		37	
Institution/Organization Name		X	
Details on this Partner:		X	
If partner is an academic institution, please select all that apply.			
Ph.Dgranting institution Non Ph.D. granting institution			
Non-Ph.Dgranting institutionMinority-serving institution			
K-12 institution			
Foreign-based institution			
If Partner is a government organization or agency – select the best			
option.			
U.S. federal agency or department			
U.S. federal laboratory or research facility			
Foreign institution or foreign government/agency (If yes, please indicate the			
foreign country)			
If Partner is a corporate or industrial partner			
in a differ is a corporate of industrial partitler			
1. Please select the descriptions that best fit the corporate or			
_			
industrial partner. Please use your best judgment.			
[check one]			
Large companySmall to mid-size company			
Start-up company			
Court up company			
[check one]			
U.Sbased company			
Foreign-based company			
2. Please select the sector which best describes the business of			
your corporate partner [pull down/select one]			

Common Collection Categories Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
3. Please select a Manufacturing Subsector [pull down/select one. Only applicable when Manufacturing sector is specified]			
 Funding Arrangement for this Partner: [Mark all that apply] Subaward to partner IGERT lead institution provides subaward to partner for purposes of providing IGERT traineeship stipends to trainees. IGERT project provides subaward to partner for purposes of providing services or support to IGERT Trainees. Partner provides funding Partner provides funding to the IGERT project specifically for IGERT Trainees in any way (e.g., internships, travel, training). Partner provides funding to the IGERT project for research, curriculum, or other project activities, but not directly for trainees. Other No funding/direct financial interaction is involved in this partnership. Other (Please specify:		X	
Activities for this Partner/Institution [mark all that apply] • Facilities: IGERT trainees use a partner organization's facilities for project activities. • Collaborative Research/Teaching: Partner organization's personnel work with IGERT project staff on collaborative research/teaching. • Personnel Exchange: IGERT trainees and/or partner organization personnel use each other's facilities or work at each other's site, on an ad hoc or as-need basis. • Internships: IGERT trainees work in a partner's facilities specifically as interns.		X	
Accomplishments and Outcomes Please describe one key accomplishment or outcome (not activity) of this partnering arrangement for the reporting period. (Response limited to 1000 characters.) [Textbox] [The PI has an option to make the accomplishment or outcome available for use on the IGERT Resource Center Web site, viewable by the general public]			X
4: Project Evaluation and Institutional Impacts			

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Project Evaluation			
Do you have an overall plan with milestones and timelines for			X
measuring progress toward attaining key IGERT project goals?			Λ
Yes/No			
If your IGERT paid for professional evaluation services external to the			
IGERT institution or used expertise internal to your institution to aid in			
the evaluation process, please share contact information			
the evaluation process, pieuse share contact information			
Organization/individual name			
Address			
			X
E-mail			
Phone			
Website			
Was this an external evaluation service provider?			
Yes/No			
<u>Institutional Impacts</u>			
Please describe a key insight, and your response to it (if any), that has			
been identified through assessment and evaluation during this reporting			X
period. (Response is limited to 1000 characters total for the <u>insight</u> and			Λ
1000 characters for the <u>response</u> .)			
[Textbox for "Insight/Learning" and for "Response."]			
Please consider your responses to the following in light of			X
changes/impacts that have occurred in your institution as a result of the			
IGERT during this reporting period. [mark all that apply]			
The institution(s) involved in your IGERT has/have been successful in obtaining			
large- scale Federal grants (e.g., STC, ERC, MRSEC).			
Interdisciplinary/multidisciplinary courses have been developed for IGERT			
Trainees and Associates.			
Interdisciplinary/multidisciplinary courses are being delivered to IGERT Trainees			
and Associates.			
Interdisciplinary/multidisciplinary courses that have been developed for IGERT Interdisciplinary course that have been developed			
are being delivered to non-IGERT students.			
• New certificate or degree programs have been developed and are available on the IGERT campus(es).			
Department curriculum or policy changes took place to emphasize or require			
interdisciplinary/multidisciplinary preparation for all graduate students.			
Institutional changes that support and encourage team			
multidisciplinary/interdisciplinary course development and teaching have			
occurred.			
Institutional changes that support and encourage team-based graduate student			
learning and assessment have occurred.			
Institutional changes that support and encourage graduate students to gain Solution Solut			
laboratory and research experiences across disciplines have occurred.			
Institutional changes incorporating improved recruitment and retention policies			<u>I</u>

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Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
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and practices for underrepresented groups and women based on IGERT. • Other (Please specify:)	S D	<u> </u>	Ь
Please describe a demonstrable institutional change (if any) that has occurred during this reporting period due to IGERT. (Response is limited to 1000 characters.) [Textbox]			
infinited to 1000 characters.) [Textbox]			X
[The PI has an option to make the demonstrable institutional change available for use on the IGERT Resource Center Web site, viewable by the general public]			
5. Publications/Presentations			
Please provide citations in American Psychological Association (APA) format for all the Journal Articles in Refereed Publications emanating from your IGERT project to which you (the PI) or any other personnel or trainees (co-PI or advisors, funded trainees, formerly funded trainees, associates) associated with your IGERT project contributed. It is recommended that you create one document to upload that lists the appropriate Journal Articles in Refereed Publications since the last annual report.			X
Journal Articles in Refereed Publications			
Mark the checkbox if you do not have any Journal Articles in Referred Publications during the current reporting period			
Provide for each Journal Article in Refereed Publications (that has been published either electronically or in print): 1. Citation, with author(s) who ever received funding for the IGERT project as IGERT trainees with asterisks(*).			
Journal Articles in Non-Refereed Publications			
Mark the checkbox if you do not have any Journal Articles in Non-Referred Publications during the current reporting period			
Provide for each Journal Article in Non-Refereed Publications (that has been published either electronically or in print): 1. Citation, with author(s) who ever received funding for the IGERT project as IGERT trainees with asterisks(*).			
Books			

Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Questions	Staff and P Participant Characteris	Project Implen Charac	Project
Mark the checkbox if you do not have any Books during the current reporting period			
Provide for each Book (that has been published in print): 1. Citation, with author(s) who ever received funding for the IGERT project as IGERT trainees with asterisks(*).			
Book Chapters			
Mark the checkbox if you do not have any Book Chapters during the current reporting period			
Provide for each Book Chapter (that has been published in print): 1. Citation, with author(s) who ever received funding for the IGERT project as IGERT trainees with asterisks(*).			
Patent Applications			
Mark the checkbox if you do not have any Patent Applications during the current reporting period			
Provide for each Patent Application: 1. Citation, with author(s) who ever received funding for the IGERT project as IGERT trainees with asterisks(*).			
Patents Awarded			
Mark the checkbox if you do not have any Patents Awarded during the current reporting period			
Provide for each Patent Awarded: 1. Citation, with author(s) who ever received funding for the IGERT project as IGERT trainees with asterisks(*).			
Conference Publications			
Mark the checkbox if you do not have any Conference Publications during the current reporting period			
Provide for each Conference Publication (that has been published either			

Common Collection Categories Questions	Participant Characteristics	Project Implementation Characteristics	Project Outputs
electronically or in print): 1. Citation, with author(s) who ever received funding for the IGERT project as IGERT trainees with asterisks(*).			
Conference Presentations			
Mark the checkbox if you do not have any Conference Presentations during the current reporting period			
Provide for each Conference Presentation: 1. Citation, with author(s) who ever received funding for the IGERT project as IGERT trainees with asterisks(*).			

IGERT: Crosswalk – Trainee Survey

New Elements	Common Collection Categories Questions	Staff and Project Participant Characteristics ⁴	Project Implementation Characteristics ⁵	Project Outputs ⁶
	1. About You			
	Name & Contact Information Contact Information: Name: (First, Middle Initial, Last, Previous Surname) Department at Institution Address at Institution Institution City Institution State Zip Code Phone Extension Fax E-mail Address Web URL Permanent Contact Information (Voluntary) Social Security Number Personal E-mail Address Contact Information of someone who will know how to reach student in three years: Name Relationship to You Address City State Zip Code Country Phone Extension	X		
	E-mail Address Demographics Ethnicity (Choose one) Hispanic or Latino Not Hispanic or Latino Not Reported	X		
	Race (Choose one or more)	X		

⁴ Elements of these characteristics include: Name, address, date of birth, gender, ethnicity, race, disability status, class, major, grade point average, yearly fellowship or stipend amount, or project role.

Elements of these characteristics include: Sources and amount of funds, fellowships, scholarships, traineeships, partnerships, training, research methods.
 Elements of these characteristics include: research findings, publications, presentations, degrees granted, educational

⁶ Elements of these characteristics include: research findings, publications, presentations, degrees granted, educational materials.

New Elements	Common Collection Categories Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Native Hawaiian or Other Pacific IslanderWhiteNot Reported			
	Gender (Choose one) • Male • Female • Not reported	X		
	Planned for 2013 data collection cycle Disability Status (Choose one): • Yes (check Yes if any of the following apply): • Deaf or serious difficulty hearing • Blind or serious difficulty seeing even when wearing glasses • Serious difficulty walking or climbing stairs • Other serious disability related to a physical, mental, or emotional condition • No • Do not wish to provide	X		
	Citizenship (Choose one):	X		
	Permanent residents only provide:	X		
	Permanent Resident Alien Status Granted (mm/yyyy) State or Country of Birth	X		
	Your Major & Interests Major [Respondent chooses from the list of academic disciplines shown in the footnote] ⁷	X		

⁷ List of Academic Disciplines:

- Chemistry Analytical
- Chemistry Bio-inorganic
- Chemistry Bio-organic
- Chemistry Biophysical Chemistry Environmental
- Chemistry Inorganic
- Chemistry Materials
- Chemistry-Physical
- Chemistry Polymer Chemistry Theoretical
- Chemistry Other (please specify):
- Comp/IS/Eng Artificial Intelligence (including Robotics, Computer Vision, and Human Language Processing)
- Comp/IS/Eng Computer Architecture and Grids
- Comp/IS/Eng Computer Science Languages and Systems
- Comp/IS/Eng Computer Science Theoretical Foundations

New Elements	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	 Degree Sought Master of Arts (MA) Master of Science (MS) 	X		

- Comp/IS/Eng Database Information Retrieval and Web Search
- Comp/IS/Eng Graphics and Visualization
- Comp/IS/Eng Human Computer Interaction
- Comp/IS/Eng Information Security and Assurance
- Comp/IS/Eng Information Technology and Organizations
- Comp/IS/Eng Networks and Communications
- Comp/IS/Eng Operating Systems and Middleware
- Comp/IS/Eng Scientific Computing and Informatics
- Comp/IS/Eng Software Engineering
- Comp/IS/Eng Other (please specify):
- Engineering Aeronautical and Aerospace
- Engineering Agricultural
- Engineering Bioengineering
- Engineering Biomedical
- Engineering Chemical
- Engineering Civil
- Engineering Computer Engineering
- Engineering Electrical and Electronic
- Engineering Energy
- Engineering Engineering Mechanics
- Engineering Engineering Science
- Engineering Environmental
- Engineering Industrial
- Engineering Materials
- Engineering Mechanical
- Engineering Metallurgical
- Engineering Nuclear
- Engineering Ocean
- Engineering Petroleum
- Engineering Polymer
- Engineering Systems Engineering
- Engineering Other (please specify):
- Geosciences Aeronomy
- Geosciences Atmospheric Chemistry
- Geosciences Chemical Oceanography
- Geosciences Climate Dynamics
- Geosciences Geochemistry
- Geosciences Geology
- Geosciences Geophysics
- Geosciences Hydrologic Sciences
- Geosciences Large Scale Dynamics Meteorology
- Geosciences Magnetospheric Physics
- Geosciences Marine Geology and Geophysics
- Geosciences Mesoscale Dynamic Meteorology
- Geosciences Paleoclimate
- Geosciences Paleontology

New Elements	Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Doctorate (PhD)Professional Degree (MD, JD etc)				
	• Other				

- Geosciences Physical Meteorology
- Geosciences Physical Oceanography
- Geosciences Solar-Terrestrial
- Geosciences Other (please specify):
- Life Sciences Agriculture
- Life Sciences Agronomy
- Life Sciences Anatomy
- Life Sciences Animal Behavior
- Life Sciences Animal Science
- Life Sciences Biochemistry
- Life Sciences Biological Oceanography
- Life Sciences Biophysics
- Life Sciences Botany (including Plant Physiology)
- Life Sciences Cell Biology
- Life Sciences Computational Biology
- Life Sciences Developmental Biology
- Life Sciences Ecology
- Life Sciences Ecosystem Ecology
- Life Sciences Entomology
- Life Sciences Environmental Sciences
- Life Sciences Evolutionary Biology
- Life Sciences Fish and Wildlife
- Life Sciences Forestry
- Life Sciences Genetics
- Life Sciences Horticulture
- Life Sciences Immunology
- Life Sciences Marine Biology
- Life Sciences Microbiology
- Life Sciences Molecular Biology
- Life Sciences Neurosciences
- Life Sciences Nutrition
- Life Sciences Pharmacology
- Life Sciences Physiology
- Life Sciences Plant Pathology
- Life Sciences Population and Community Ecology
- Life Sciences Soil Science
- Life Sciences Structural Biology
- Life Sciences Virology
- Life Sciences Zoology
- Life Sciences Other (please specify):
- Mathematical Sciences Algebra or Number Theory
- Mathematical Sciences Analysis
- Mathematical Sciences Applications of Mathematics (including Biometrics and Biostatistics)
- Mathematical Sciences Geometry
- Mathematical Sciences Logic or Foundations of Mathematics
- Mathematical Sciences Operations Research

New Elements	Common Collection Categories Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Brief description of your research interest/topic (not program specific) (word limit: 300) [Textbox]		X	

- Mathematical Sciences Probability and Statistics
- Mathematical Sciences Topology
- Mathematical Sciences Other (please specify):
- Physics and Astronomy Astronomy
- Physics and Astronomy Astrophysics
- Physics and Astronomy Atomic and Molecular
- Physics and Astronomy Condensed Matter Physics
- Physics and Astronomy Nuclear
- Physics and Astronomy Optics
- Physics and Astronomy Particle Physics
- Physics and Astronomy Physics of Fluids
- Physics and Astronomy Plasma
- Physics and Astronomy Solid State
- Physics and Astronomy Theoretical Physics
- Physics and Astronomy Other (please specify):
- Psychology Cognitive
- Psychology Cognitive Neuroscience
- Psychology Computational Psychology
- Psychology Developmental
- Psychology Experimental or Comparative
- Psychology Industrial/Organizational
- Psychology Neuropsychology
- Psychology Perception and Psychophysics
- Psychology Personality and Individual Differences
- Psychology Physiological
- Psychology Psycholinguistics
- Psychology Quantitative
- Psychology Social
- Psychology Other (please specify):
- Social Sciences Archaeology
- Social Sciences Cliometric History
- Social Sciences Communications
- Social Sciences Cultural Anthropology
- Social Sciences Decision Making
- Social Sciences Demography
- Social Sciences Econometrics
- Social Sciences Economics (except Business Administration)
- Social Sciences Geography
- Social Sciences History of Science
- Social Sciences International Relations
- Social Sciences Law and Social Science
- Social Sciences Linguistics Anthropology
- Social Sciences Linguistics
- Social Sciences Medical Anthropology
- Social Sciences Philosophy of Science
- Social Sciences Physical Anthropology

New Elements	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Does your research involve any of the following (Mark all that apply) Bioinformatics Biological evolution and development Biotechnology Civil infrastructure monitoring and improvement Climate change: impacts and factors Computational science and engineering Device development Energy: alternate and renewable resources and conservation Entrepreneurialism Human, social and community sciences Imaging Materials science and engineering Materials science: engineering and technology Neuroscience: biology and psychology Sensing, signals and signal processing Sustainability: ecology and the environment Water resources: conservation, utilization and quality Other (please specify)		X	
	IGERT Advisors Current IGERT Advisor(s) (Mark all that apply) [Checkbox for each IGERT advisor as entered via PI survey]		X	
	How Involved Was Your Advisor in Programmatic Activities		X	
	Graduation Plans Expected Graduation Date (mm/yyyy)	X		

Social Sciences – Political Science

Social Sciences – Public Policy

Social Sciences – Risk Analysis

Social Sciences – Science Policy

Social Sciences – Sociology (except Social Work)

Social Sciences – Urban and Regional Planning

Social Sciences – Other (please specify):

STEM Education and Learning Research – Engineering Education STEM Education and Learning Research – Mathematics Education

STEM Education and Learning Research – Science Education

STEM Education and Learning Research – Technology Education

STEM Education and Learning Research – Other (please specify):

Other (please specify):

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New Elements	Collection	Staff and Project Participant Characteristics	on	uts
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×		Staff and Proje Participant Characteristics	Project Implementation Characteristics	Project Outputs
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	If expected to graduate within one year, what type of employment			
	opportunities are you pursuing? [mark all that apply] [indicate top			
	choice if more than one opportunity is selected]			
	Government			
	Postdoctoral Full time position			
	Full-time positionPart-time position			
	Industry/Business			
	Postdoctoral			
	Full-time position			X
	Part-time position			Λ
	Educational Institution (college, university, or K-12) • Postdoctoral			
	Tenure track faculty			
	Non-tenure track faculty			
	• Staff			
	Nonprofit			
	Postdoctoral Trill simp position			
	Full-time positionPart-time position			
	Self-Employed/Entrepreneur			
	2. Prior Experiences (Not applicable to formerly funded trainees)			
	High School Background:			
	Name of high school/secondary school/institution from which you	v		
	graduated/received a diploma	X		
	School type (select one)			
	• Public	X		
	• Private	71		
	Other (please specify):	***		
	High School City	X		
	High School State	X		
	High School Zip Code	X		
	High School Country (if outside the U.S.)	X		
	Undergraduate Background Prior to IGERT Traineeship:			
	Undergraduate Institution Name	X		
	Undergraduate Institution City	X		
	Undergraduate Institution State	X		
	Undergraduate Institution Country (if outside the U.S.)	X		
	When did you receive your first undergraduate degree? (mm/yyyy)	X		
	Undergraduate Degree Type (Choose one)			
	Bachelor of Arts (BA)	X		
	Bachelor of Science (BS)	1		
	Other (please specify): Live designs designs to Mainer.	37		
	Undergraduate Major	X		

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New Elements	Categories Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	[Respondent chooses from the list of academic disciplines shown in the			
	endnotes] If Other, please specify			
	Double Major [Respondent chooses from the list of academic disciplines shown in the	X		
	endnotes] If Other, please specify			
	Post-Undergraduate Degree Prior to IGERT Traineeship:			
	Did you obtain a post-undergraduate degree prior to becoming an			
	IGERT Trainee?			
	Yes/No	X		
	If Yes, provide the following information:			
	Post-Undergraduate Institution Name	X		
	Post-Undergraduate Institution City	X		
	Post-Undergraduate Institution State	X		
	Post-Undergraduate Institution Country (if outside the U.S.)	X		
	Post-Undergraduate Major			
	[Respondent chooses from the dropdown list of academic disciplines shown in the endnotes] If Other, please specify	X		
	Post-Undergraduate Degree Type Master of Arts (M.A.) Master of Science (M.S.) Doctorate (Ph.D.) Professional degree (M.D., J.D.) Other Postbaccalaureate degree (please specify):	X		
	When did you receive your post-undergraduate degree (mm/yyyy)	X		
	Employment Prior to IGERT Traineeship			
	Were you employed in the public/private sector for one or more years after receiving your first undergraduate degree and prior to becoming an IGERT Trainee? (Do not include employment as a Research Assistant (R.A.) or Teaching Assistant (T.A.) while pursuing a Master's degree) Yes/No	X		
	Total number of years (equal to or greater than one year, to the nearest year) you were employed in the public or private sector after receiving your first undergraduate degree and prior to becoming an IGERT trainee. (Do not count employment as a Research Assistant (R.A.) or Teaching Assistant (T.A.) while pursuing a Master's degree)	X		
	2 Achievements			
-	3. Achievements Publications, Patents, and Presentations Provided by the PI			X
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	[The list of publications, patents, and presentations that were				
	entered via the PI survey that included this trainee as an author				
	are presented for the trainee to review]				
	<u> </u>				
	Fellowships, Scholarships, and Grants Other Than IGERT				
	Provide for each Fellowship, Scholarship, or Grant Other Than				
	IGERT:				
				X	
	Title of Fellowship, Scholarship, or Grant	-			
	Proposal Title			X	
	Year Awarded			X	
	Awarding Agency/Organization			X	
				71	
	Other Honors and Recognition				
	Provide for each honor or recognition:				
	Title of Honor or Recognition			X	
	Year			X	
	Society/Granting Organization			X	
	Research or Education Accomplishment				
	Major research or education accomplishment during the reporting				
	period		X		
	•		Λ		
	(word limit: 1000) [Textbox]				
	4. Research Preparation (Not applicable to formerly funded				
	trainees)				
	Please indicate which of the following activities you engaged in				
	during this reporting period. [Mark all that apply]				
	 Undertook formal coursework/training in research methods, practices and 				
	instrumentation in your primary discipline equivalent to traditional graduate				
	students				
	 Had practical, hands-on laboratory and/or field experience in conducting 				
	research across the breadth of disciplines in the IGERT program				
	 Undertook formal coursework/training across the breadth of disciplines 		X		
	encompassed by the IGERT project		4		
	Undertook formal coursework/training in both ethical conduct of research				
	and ethical conduct related to the themes encompassed by your IGERT				
	project				
	• Other preparation to conduct high-quality research (Please specify)				
	• Please check here if you were not engaged in any of the activities listed				
	above during this reporting period				
			<u> </u>		
	How many courses/seminars did you take in disciplines outside of				
	your primary discipline during this reporting period?		X		
			37		
	How many courses/seminars did you take that specifically covered	1	X		

New Elements	Common Collection Categories Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	interdisciplinary topics related to your IGERT during this reporting period?			
	How many courses/seminars were in the primary discipline		X	
	 5. Professional Skills (Not applicable to formerly funded trainees) Please indicate which of the following activities you engaged in during this reporting period. [Mark all that apply] Undertook coursework/training that included regular faculty critique of and feedback on professional writing Authored, submitted or published research papers in refereed journals Undertook coursework/training (e.g., brown bags, seminars) that included regular critique of and feedback on professional speaking/presentation skills Made presentations at academic/scientific professional conferences or meetings Presented results from IGERT activities to professional nonacademic audiences (e.g., industry, government) Undertook coursework/training to develop media-based or information technology-based communication skills Produced multimedia materials, Web sites, or other cyber-enabled tools to communicate the results of IGERT activities to external audiences Used multimedia materials, Web sites, or other cyber-enabled tools as part of the interdisciplinary scientific training and collaboration Received training in team-building and project management skills Received training in effective time and task management Participated as a members of teams engaged in joint research, educational, and/or outreach efforts Led teams engaged in research, educational, and/or outreach efforts Other preparation in professional skills development (Please specify: 		X	
	6. Career Preparation (Not applicable to formerly funded			
	trainees) Please describe what you consider to be the most beneficial IGERT training experience or component that has prepared you to be successful in a science or engineering career in an international/global setting. Note: This can include U.Sbased experiences. (word limit: 1000) [Textbox]			X
	Please indicate which of the following activities you engaged in during this reporting period. [Mark all that apply] Received training or instruction (e.g., courses, workshops) in effective teaching practices and student mentoring Developed and presented course and/or curriculum materials Served as a mentor to others (e.g., graduate students, undergraduates,		X	

New Elements	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	 laboratory technicians) Received training/mentoring in grant proposal preparation Authored/co-authored and submitted grant proposals Received training/instruction on the interaction between academic research and industrial technical requirements Received training/instruction for applying your research to address public policy concerns or issues Had an internship (an off-campus, research, educational and/or work experience) in a nonacademic setting (e.g., industry, government). Had professional interactions other than internships with nonacademic employers (e.g. industry, government) in order to learn about career opportunities and requirements Communicated, worked, or collaborated with scientists of other nationalities Other preparation for careers in academia (Please specify:) Other preparation for nonacademic careers (e.g., industry, government) (Please specify:) Please check here if you were not engaged in any of the activities listed above during this reporting period 			
X	Are you aware of career-life balance policies at your institution or in your department? Yes/No		X	
X	If Yes, please describe them: [Limit: 1,000 characters]		X	
	7. Internships			
	Have you taken part in any internships lasting one month or more with industries or businesses, government laboratories or agencies, or with nonprofit organizations during the current reporting period? Yes/No			X
	If yes, please indicate the setting, duration (to the nearest month), and location of the internship(s). [The respondent can specify up to four internships. The following data is collected for each internship]			
	Internship Company/agongy namo			X
	Company/agency name Internship Duration (1-52 weeks)			X
	Internship Setting (pull-down options) Industry/business			Λ
	Nonprofit organization Government laboratory Public sector agency			X
	Other Internship location U.S. If U.S. please indicate the state and city Foreign.			X

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	If foreign, please indicate the foreign country			
	Internship contributions that have prepared you for your career			
	during this reporting period: (mark all that apply)			
	Received training/instruction on the interaction between academic			
	research and industrial technical requirements			
	Received training/instruction for applying your research to address			
	public policy concerns or issues			
	 Engaged in professional interactions other than internships with 		X	
	nonacademic employers (e.g. industry, government) in order to learn			
	about career opportunities and requirements			
	 Communicated, worked, or collaborated with scientists of other 			
	nationalities			
	 Other preparation for nonacademic careers (e.g., industry, government) 			
	- please specify (text box)			
	Please describe what you consider to be the most beneficial			X
	professional or career-related aspect. [Limit: 1,000 characters]			Λ
	8. International Experiences			
	Have you taken part in any international experiences during this			
	reporting period?			
	Yes/No		X	
	If Yes, the respondent can specify up to five international			
	experiences. The following data is collected for each international			
	experience:			
	International Experience			
	Was this international experience related to your IGERT research?		X	
	Yes/No	-	37	
	International experience duration (1-52 weeks)		X	
	Please identify the primary country in which the international		X	
	activities occurred.		71	
	Please indicate the international activities you engaged in during			
	this reporting period (Mark all that apply)			
	Attended conferences/workshops outside the United States		X	
	 Undertook coursework/training outside the United States 			
	 Worked, conducted research/fieldwork, or interned outside the United 			
	States			
	Other (Please specify:)			
	Were you formally prepared for your international experience?		X	
	Yes/No			
	If yes to previous question,		X	
	What experiences were included in the preparation for your			

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New Elements	Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	 international experience? How to work in a foreign laboratory/field work Graduate education/Education/ laboratory differences in country to be visited Language Cultural differences Learning about the area Other (Please specify:) What did you accomplish during your international experience 			
	(Mark all that apply) • Awards/Honors/Recognitions • Broader Impacts • Invention/Patent • Presentations • Publications • Other		X	
	If you took part in international activities during this reporting period, please describe what you consider to be the most beneficial professional or career-related aspect of these activities. [Limit: 1,000 characters]		X	
	9. Comments (Not applicable to formerly funded trainees)			
	Benefit of IGERT In the text box below, please describe what you consider to be the most beneficial aspect of being an IGERT trainee during this reporting period. This might include 1) an opportunity you have had as a result of being an IGERT trainee that has significantly affected your professional development, 2) an aspect of the project that provided exceptional "added value" to your educational experience, or 3) an aspect of the project that has been especially successful and/or represents a real change from the way that graduate students are usually educated at your institution.			X
	Opportunity for Improvement Please describe what you consider to be the most important opportunity for improvement in the IGERT program with which you are associated.			X
	10. Training Confirmation (Not applicable to formerly trainees)			
	Training Confirmation How many hours spent per week did you spend on programmatic activities?	X		
	Did you participate in regular training throughout the year?	X		
	Describe training received [Limit: 1,000 characters]	X		

New Elements	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	 How frequently did you receive training Weekly Bimonthly Monthly Other- please specify (text box) 	X		
	Funding Confirmation What was your stipend amount • \$30,000 gross annually (\$2,500 gross per month) • Other- please specify (text box)	X		
	How does your traineeship stipend compare to stipends received by regular teaching or research assistants at your organization (Choose one) • Greater than others • Equal to others • Less than others	X		
	NSF provides your affiliated organization with a \$10,500 cost-of-education allowance with a 1 year traineeship in lieu of all required tuition and fees. How much would it cost if you had to pay the normal charges yourself? (text box)	X		
	[This question is only asked of funded trainees] Did you have to pay any tuition or fees this year? Yes/No If Yes, how much did you have to pay? (text box)	X		

IGERT: Number of Respondents, Frequency of Response, and Annual Hour Burden

The estimated average number of annual respondents is 4,658 (163 project PIs and 4,495 IGERT trainees and associates), with an estimated annual response burden total of 12,156 hours. The Webbased collection is an annual activity of the IGERT program. There are currently 163 IGERT awards, and data are collected from each award site. PIs complete the PI questionnaire, all IGERT trainees are required to complete the IGERT trainee questionnaire, and the associates are requested but not required to complete the IGERT associate questionnaire. We anticipate that new awards may be added, but at about the same rate that active awards expire; thus, on average, the number of respondents will remain constant over time. The annualized burden was computed by taking the number of respondents from the 2011 data collection cycle and estimating their response burden, based on a question in the Webbased data collection asking how long it takes respondents to complete the form.

The burden estimates for each type of respondent are outlined below:

Respondent Type	Estimated Average No. of Respondents	Estimated Average Burden Hours Per Respondent	Estimated Annual Burden Hour Total
Project PIs	163	2	7,661
IGERT trainees and associates	4,495		1 4,495
Total	4,658		12,156

IGERT: Hour Burden Estimates by Each Form and Aggregate Hour Burdens

As mentioned above respondents are project PIs and IGERT trainees and associates. The estimated total annual response burden is 12,156 hours. There is a different Web-based form for each respondent type. The annual burden by form was calculated as follows:

Form Type	Respondent Type	Number of Respondents	Burden Hours Per Respondent	Total Burden Hours
Principal Investigator form	Project PIs	163	47	7,661
Trainee and associate form	IGERT trainees and associates	4,495	1	4,495
Total		4,658		12,156

IGERT: Estimates of Annualized Cost to Respondents for the Hour Burdens

The overall annualized cost to the respondents is estimated to be \$359,051. The following table shows the annualized estimates of costs to respondents. These estimated hourly rate for PIs is based on a American Association of University Professors, "Annual Report on the Economic Status of the Profession, 2011-12," *Academe*, March–April 2012, Survey Report Table 4. According to this report, the average salary of an associate professor across all types of doctoral-granting institutions (public, private-independent, religiously affiliated) was \$86,319. When divided by the number of standard annual work hours (2,080), this calculates to approximately \$41 per hour.

Respondent Type	No. of Respondents	Burden Hours Per Respondent	Average Hourly Rate	Estimated Annual Cost
Project PIs	163	47	\$41	\$314,101
IGERT trainees and associates	4,495	1	\$10	\$44,950
Total	4,658			\$359,051

IGERT: Estimates of Costs to the Federal Government

Computing the annualized cost to NSF for the IGERT data collection was done by taking the budgets for three years and calculating the costs for each of the following operational activities involved in producing, maintaining, and conducting the IGERT data collection:

Operational Activities	Cost Over Three Years		
System Development (includes initial development of the database			
and Web-based application and later changes requested by the	\$664,796		
program, e.g., increased reporting tools, additional validations)			
System Maintenance, Updates, and Technical Support (system			
requires updates each year before opening the collection;	\$332,360		
maintenance is required to keep the system current with technology,			
e.g., database servers, operating systems)			
Data Collection Opening and Support (e.g., online and telephone			
support to respondents and contacting respondents to encourage	\$398,753		
completion of the questions), Reporting (as defined by the DGE), and	\$390,733		
Followup Activities (e.g., providing data to other consultants)			
Three-Year Total for All Operational Activities	\$1,395,909		

The annual costs of the clearance were computed as one-third of the total three-year costs; therefore, the annualized cost to NSF for the IGERT data collection is \$465,303.

IGERT: Questions – PI Survey

1. Project Summary

Project Characteristics

Please indicate up to three NSF directorates that most closely correspond to your interdisciplinary research theme.

- BIO –Biological Sciences
- CISE Computer and Information Science and Engineering
- ENG–Engineering
- GEO–Geosciences
- MPS–Mathematical and Physical Sciences
- OCI Office of Cyberinfrastructure
- OPP–Office of Polar Programs
- SBE–Social, Behavioral, and Economic Sciences

Did you support any IGERT trainees during the current project year? Yes/ No

Considering the IGERT trainees as a group, how do they compare with graduate students you usually see in terms of their academic/research potential?

- Far superior to our usual graduate students
- Somewhat better than our usual graduate students
- About the same as our usual graduate students
- Somewhat less promising or less successful than our usual graduate students
- Much less promising or less successful than our usual students

How do trainees in your program earn their doctoral degrees? [mark all that apply]

- Trainees earn their degrees from the IGERT multidisciplinary/interdisciplinary program.
- Trainees earn their degrees from traditional single-discipline departments.
- Trainees earn their degrees from multidisciplinary/interdisciplinary programs, centers or units other than IGERT.
- Other (certificates, etc.)
- Please specify:

Does your IGERT project include undergraduate involvement?

If yes, were NSF IGERT funds used for undergraduate involvement? Yes/ No

Does your IGERT project include postdoctoral involvement?

Yes/No

If yes, were NSF IGERT funds used for postdoctorate involvement? Yes/ No

Estimate the amount of funds from the current year of IGERT support that will be carried over to the next year as of the project anniversary date (the date when your annual report will be due in FastLane):

- 5. Total funds carried over to the next year
- 6. If carryover funds are entered (i.e., greater than 0), please provide an explanation for these funds
- 7. Participant support costs carried over to the next year
- 8. Stipends carried over to the next year

Research Achievements

Please describe up to three interdisciplinary research achievements/discoveries/outcomes that demonstrate how your IGERT project has been particularly effective in attaining the interdisciplinary research goals you set out to achieve during this reporting period. Please report achievements that include tangible outcomes such as publication, patent, discovery, or

preliminary findings. Individual trainee achievements should be reserved for the "Trainee Achievements" section.

(Responses are limited to 1000 characters for each achievement.)

[The PI has an option to make each achievement available for use on the IGERT Resource Center Web site, viewable by the general public]

Education Achievements

Please describe up to three achievements/outcomes that illustrate exceptional added value to the trainees' educational experience during this reporting period. Please focus on overall programmatic achievements, rather than achievements of individual trainees.

(Responses are limited to 1000 characters for each achievement.)

[The PI has an option to make each achievement available for use on the IGERT Resource Center Web site, viewable by the general public]

Trainee Achievements

Please describe up to three research or education achievements/outcomes, involving either a single trainee or a group of trainees made possible through the participation of trainees in your IGERT project during this reporting period.

(Responses are limited to 1000 characters for each achievement.)

[The PI has an option to make each achievement available for use on the IGERT Resource Center Web site, viewable by the general public]

Barriers to Implementation

Please identify and describe up to three key barriers (e.g. programmatic, institutional) you have encountered in the process of implementing your IGERT project during this reporting period. For each barrier identified, briefly describe how your project has responded.

(Responses are limited to 1000 characters for each issue/challenge and response.)

[The system collects the barriers and responses as separate data elements]

Outreach Activities

Please report any outreach activities involving your IGERT that occurred during this reporting period. Outreach activities include your IGERT project, IGERT faculty and/or IGERT Trainees being featured in the media (e.g., TV, radio, magazine articles) or talks, presentations, or workshops given to school groups, civic groups, non-scientifically based professional groups, members of the government, or the general public.

Please mark the checkbox if you do not have any Outreach Activities to report.

For each activity:

- 1. Short Title
- 2. Name of the media outlet or organization for which outreach was done
- 3. Date of the activity

- 4. Type of activity
 - Museum
 - Media
 - K-12
 - Undergraduate
 - Government
 - Informal Science
 - Other
- 5. Briefly describe this activity, including the names of the IGERT individuals involved.

NSF Highlights

Each year, NSF program officers are asked to write "Highlights" (formerly known as "Nuggets") on the results of NSF research and education awards. These Highlights are used to help assess NSF's performance in attaining the strategic outcome goals outlined in the NSF Strategic Plan and to share successes with various groups.

Your Highlight will probably relate to one of the achievements reported in sections 1b, c or d, but in greater detail and with images. When writing your Highlight, please clearly describe how the interdisciplinary theme of your IGERT project made this work possible, as distinct from what might have been possible through only a single-discipline research or education grant. Also, please write the Highlight such that a general audience can grasp the importance, value and merit of the research, the educational outreach or whatever results you are highlighting.

Starting with a statement of what the research team has achieved and why it is important and then going on to explain what problem is being solved, or obstacle is being overcome, or new discovery that was made is a great way to write a Highlight for maximum effectiveness.

Reporting Highlights is related to requirements under the Government Performance and Results Act (GPRA).

Please respond only if you have something relevant and significant to share for this reporting period.

Guidelines for Writing Highlights

- Write for a general audience. Common uses for highlights include the following: program monitoring by NSF staff; reporting to Congress on NSF goal attainment; demonstrating achievements in the NSF's annual Budget Requests, Performance and Accountability Reports (PAR), and other documents; and providing information for the general public. Well-written, informative Highlights submitted here may serve several purposes and thereby eliminate duplicate writing efforts later.
- **Include images.** NSF highlights and images are used not only by the Advisory Committee for GRPA Performance Assessment, but also for illustration, in the NSF's annual Budget Requests, Performance and Accountability Reports (PAR), and other documents. Clear, colorful images (pictures, graphs, charts, etc.) greatly enhance the value of highlights.
- **Provide sufficient information** to describe the research and the results so that the IGERT Program Officers can determine whether or not a specific objective (and therefore, outcome goal) was met and its most valuable use.
- Start with a statement of what the research team has achieved, and then go on to explain why it solves a problem or overcomes an obstacle. Do not start with a lengthy explanation of the problem to be solved. Example: "Prof. Blivett and her team at the University of Eutaw have discovered/achieved/developed XYZ. This was hard/remarkable/useful/world-changing because ... or this seminal development could lead to practical applications in ..."

- **Include the location and/or lead institution** for the research and the names of all principal investigators.
- **Include an explicit statement that NSF is supporting this work** (this can usually be done very quickly in passing, e.g., "NSF-funded researchers at Stanford University have demonstrated ...", or "Astronomers working at NSF's Gemini Observatory have discovered...")
- **Spell out NSF program names.** Be sure to spell out acronyms.

For each Highlight:

- 1. Descriptive title for this Highlight
- 2. If a video is associated with the Highlight, please provide a URL link to the video.
- 3. Please indicate the primary and secondary NSF strategic goal(s) that best describe the Highlight

[For each NSF goal listed, the PI selects either primary or secondary]

- 4. Describe the achievement/result that is the Highlight
- 5. How does this activity address the primary and secondary NSF strategic goals that you marked above?

For each Highlight Image:

- 1. Descriptive title for this Highlight image
- 2. Upload image file (bmp, gif, jpeg, pdf, png, or tiff only)
- 3. Does NSF have permission to use this image? Yes/No
- 4. Image credits (Required only if you answered "yes" to the previous question)
- 5. Description of image (optional)

2. IGERT Project Personnel, Trainee, and Associate Details

Provide for each Principal Investigator:

Mark the checkbox if [PI Name] served as PI for the current project year

Name: First, Middle Initial, Last, Previous Surname

Contact Information: Title Department at Institution

Address at Institution

Institution City

Institution State

Zip Code

Phone

Extension

Fax

E-mail Address

Web URL

Ethnicity (Choose one):

- Hispanic or Latino
- Not Hispanic or Latino
- Not reported

Race (Choose one or more):

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or other Pacific Islander
- White
- Not Reported

Gender (Choose one):

- Male
- Female
- Not reported

Planned for 2013 data collection cycle

Disability Status (Choose one):

- Yes (check Yes if any of the following apply):
 - Deaf or serious difficulty hearing
 - Blind or serious difficulty seeing even when wearing glasses
 - Serious difficulty walking or climbing stairs
 - Other serious disability related to a physical, mental, or emotional condition
- No
- Do not wish to provide

Citizenship (Choose one):

- U.S. Citizen/U.S. National
- U.S. Permanent Resident
- Other Non-U.S. Citizen
- Not Reported

Provide for each IGERT Project Coordinator:

Name: First, Middle Initial, Last, Previous Surname

Contact Information:

Institution Name

Title

Department at Institution

Current Address

Current City

Current State

Zip Code

Phone

Extension

Fax

E-mail Address

Web URL

Provide for each IGERT Co-PI and Trainee/Associate Advisor:

Name: First, Middle Initial, Last, Previous Surname

Mark the checkbox if the individual served as co-PI or trainee/associate advisor for the current project year.

Role in Project (Mark all that apply):

- Co-PI
- Trainee/Associate Advisor

Contact Information:

Institution Name

Title

Department at Institution

Address at Institution

Institution City

Institution State

Zip Code

Phone

Extension

Fax

E-mail Address

Web URL

Current IGERT Advisor

Yes/No

Ethnicity (Choose one):

- Hispanic or Latino
- Not Hispanic or Latino
- Not Reported

Race (Choose one or more):

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or other Pacific Islander
- White
- Not Reported

Gender (Choose one):

- Male
- Female
- Not reported

Planned for 2013 data collection cycle

Disability Status (Choose one):

- Yes (check Yes if any of the following apply):
 - Deaf or serious difficulty hearing
 - Blind or serious difficulty seeing even when wearing glasses
 - Serious difficulty walking or climbing stairs
 - Other serious disability related to a physical, mental, or emotional condition
- No
- Do not wish to provide

Citizenship (Choose one):

- U.S. Citizen/U.S. National
- U.S. Permanent Resident
- Other Non-U.S. Citizen
- Not Reported

Provide for each IGERT Trainee and Associate:

Name: First, Middle Initial, Last, Previous Surname

E-mail Address

Verify IGERT-required Citizenship/Residency Status [not applicable to associates]

- Yes, the trainee is a U.S. Citizen/U.S. National or U.S. Permanent Resident
- No, the trainee does not meet IGERT citizenship Requirement. If you answered No, please provide an explanation.

GRE Scores:

Verbal

Quantitative

Analytical

Subject (Select GRE Subject)

- Biochemistry
- Cell & Molecular Biology
- Biology
- Chemistry
- Computer Science
- Economics
- Education
- Engineering

- Geology
- History
- Literature in English,
- Mathematics
- Music
- Physics
- Political Science
- Psychology
- Revised Music
- Sociology

Indicate when the trainee/associate first enrolled in graduate study at this institution (mm/yyyy)

Indicate when the trainee first began receiving IGERT funding (not applicable to associates) (mm/ yyyy)

Indicate when the associate first began participating in the IGERT project (not applicable to trainees) (mm/ yyyy)

Indicate whether this trainee is a Funded Trainee or a Formerly Funded Trainee for this reporting period. (Note: A trainee who received IGERT funding for any or all of this reporting period is a Funded Trainee.)

- Funded Trainees: Specify the Number of months funded
- Formerly Funded Trainees (not applicable to associates)

Has student been engaged in IGERT activities, research, education or training during this reporting period?

Yes/No

Please describe the current situation that best describes this IGERT Trainee/Associate [select one]

- Has not yet graduated, but is pursuing a PhD in your institution.
- Has not yet graduated, but is pursuing a Master's degree at your institution.
- Has graduated from your institution with a PhD. [Enter month/year completed] (mm/yyyy)
- Has graduated from your institution with a master's degree. [Enter month/year completed] (mm/ yyyy)
- Has left your institution without earning degree. [insert month/year departed] (mm/yyyy)

3. Project Features

<u>Trainee Preparation in Multidisciplinary/Interdisciplinary Research</u>

Briefly describe up to three of the promising practices for preparing IGERT trainees to conduct collaborative research that transcends traditional disciplinary boundaries. (Responses are limited to 1000 characters for each practice.) [Three pairs of textboxes and select lists for "Practice" and "Measure." Measures include: Formal evaluation, informal surveys, group feedback, quantitative measure, other]

[The PI has an option to make each practice and measure pair available for use on the IGERT Resource Center Web site, viewable by the general public]

Mark the following components of multidisciplinary/interdisciplinary research preparation that apply to the majority of IGERT trainees involved in your project during this reporting period. (Mark all that apply)

- Trainees undertook formal coursework/training in research methods, practices, and instrumentation in their primary discipline equivalent to traditional graduate students.
- Trainees had practical, hands-on laboratory and/or field experience in conducting research across the

- breadth of disciplines in the IGERT program.
- Trainees undertook formal coursework/training across the breadth of disciplines encompassed by the IGERT project.
- Trainees undertook formal coursework/training in both the ethical conduct of research and ethical conduct related to the themes encompassed by your IGERT project.
- Other preparation to conduct high-quality research (please specify:
- No components of [section/question title] applied during this reporting period.

Trainee Preparation in Professional Skills

Briefly describe up to three formal training activities (e.g. coursework, workshop, professional speaker) for preparing IGERT trainees to effectively communicate science to general audiences.

(Responses are limited to 1000 characters for each activity.) [Three textboxes for each activity.]

[The PI has an option to make each activity available for use on the IGERT Resource Center Web site, viewable by the general public]

Mark the following components of professional skills development that apply to the majority of IGERT trainees in your project during this reporting period. (Mark all that apply)

- Trainees undertook coursework/training that included regular faculty critique of and feedback on professional writing.
- Trainees authored, submitted or published research papers in refereed journals.
- Trainees took coursework/training (e.g., brown bags, seminars) that included regular critique of and feedback on professional speaking/presentation skills.
- Trainees made presentations at academic/scientific professional conferences or meetings.
- Trainees presented results from their IGERT to professional, non-academic audiences (e.g., industry, government).
- Trainees undertook coursework/training to develop media-based or information technology-based communication skills.
- Trainees produced multimedia materials, Web sites, or other cyber-enabled tools to communicate the results of their IGERT activities to external audiences.
- Trainees used multimedia materials, Web sites, or other cyber-enabled tools as part of their interdisciplinary scientific training and collaboration.
- Trainees received training in team-building and project management skills.
- Trainees received training in effective time and task management.
- Trainees participated as members of teams engaged in joint research, education, and/or outreach efforts.
- Trainees led teams engaged in research, education, and/or outreach efforts.
- Other preparation in professional skills development (please specify: _______
- No components of [section/question title] applied during this reporting period.

Trainee Preparation for STEM Careers

Mark the following components that apply to the majority of IGERT trainees in your project during this reporting period.

(Mark all that apply)

- Trainees received training or instruction (e.g., courses, workshops) in effective teaching practices.
- Trainees developed and presented course and/or curriculum materials.
- Trainees served as mentors to others (e.g., graduate students, undergraduates, laboratory technicians).
- Trainees received training/mentoring in grant proposal preparation.
- Authored/co-authored and submitted grant proposals.
- Trainees received training/instruction on the interaction between academic research and industrial technical requirements.

- Trainees received training/instruction for applying their research to address public policy concerns or issues.
- Trainees had internships (off-campus, research, educational and/or work experiences) in non-academic settings (e.g., industry, government).
- Trainees had professional interactions other than internships with non-academic employers (e.g. industry, government) in order to learn about career opportunities and requirements.
- Trainees communicated, worked, or collaborated with scientists of other nationalities.

- No components of Trainee Preparation for STEM Careers applied during this reporting period.

Tactics for Recruitment and Broadening Participation

Do you have an overall, active plan with a specific set of goals and timelines for the recruitment and retention of trainees, including specifics for broadening participation of groups underrepresented in science and engineering? Yes/No

If no, please explain: (Responses are limited to 1000 characters for each practice.)

Regardless of your response to the previous question, please describe up to three of the promising tactics and results for recruiting qualified trainees to your IGERT project during this reporting period. (Responses are limited to 1000 characters for each tactic and result.) [Three textbox pairs for Tactic and Result.]

[The PI has an option to make each Tactic and Result pair available for use on the IGERT Resource Center Web site, viewable by the general public]

Please describe the extent to which each of the following practices been productive for recruiting trainees overall to your IGERT during this reporting period. [Four check boxes for each bulleted item. Boxes are labeled "Productive"; "Somewhat productive"; "NA"]

- 7. Relationships with NSF programs that can provide an undergraduate pool of potential IGERT trainees (e.g., REUs, NSF Centers)
- 8. Relationships with faculty and programs at other academic institutions
- 9. Use of recruiting resources on your IGERT campus (e.g., career service office, graduate studies office)
- 10. Collaboration with other IGERTs on recruitment.
- 11. Use of professional meetings, conferences, associations to communicate with, reach out to, and market to potential IGERT trainees
- 12. Other (please specify: _____)

Please describe the extent to which each of the following practices have been productive for recruiting underrepresented minority and women trainees to your IGERT during this reporting period. [Four check boxes for each bulleted item. Boxes are labeled "Productive"; "Somewhat productive"; "Not productive"; "NA"] and {Respondents respond twice for each bulleted item; once for URMs and once for women.}

- 9. Relationships with NSF programs that specifically focus on broadening participation of underrepresented minorities or women in STEM (e.g., LSAMP, AGEP, TCUP, or ADVANCE)
- 10. Use of resources on your campus (e.g., academic advancement programs, offices for campus diversity, or minority and women's student groups)

- 11. Interaction with professional associations, organizations, or committees serving underrepresented minorities communities or women (e.g., National Action Council for Minorities in Engineering, Society of Women Engineers, committees in professional societies focused on minority communities and women)
- 12. Bridge programs for entering graduate students
- 13. Mentoring or advisement arrangements that take advantage of underrepresented minorities or women faculty or graduate students on campus
- 14. Relationships with faculty and programs at minority-serving academic institutions (e.g., historically black colleges and universities (HBCUs), Hispanic-serving institutions, or tribal colleges). {This item will be marked N/A or blanked out for women}
- 15. Collaboration with other IGERT projects on recruitment
- 16. Other (please specify: ______

<u>Innovation Skills Training (Per NSF, "similar to International Opportunities" section)</u>

Briefly identify up to three training experiences or components that provided exceptional "added value" for preparing IGERT trainees to be successful in international/global science and engineering. NOTE: This can include U.S.-based experiences. [Three textboxes for Training Experiences/Components 1, 2 and 3.]

[The PI has an option to make each training experience or component available for use on the IGERT Resource Center Web site, viewable by the general public]

Responding to the remaining questions is mandatory only for IGERT projects with explicit funding for the international component.

Is International participation required for all trainees in your IGERT project? Yes/No

Did one or more trainees from your IGERT project engage in an international experience through the project during this reporting period? Yes/No

If yes, please click on the "Add an international experience" button below to describe the experience and the country.

NOTE: You will need to repeat this step for each country in which trainees engaged in an international experience during this reporting period

For each country:

- 4. Country [pull-down menu]
- 5. Trainee(s) involved [one checkbox per trainee]
- 6. Which of the following international actions or work in this country involved trainees? (Mark all that apply)
 - Trainees attended conferences/workshops.
 - Trainees undertook coursework/training.
 - Trainee(s) worked, conducted research/field work, or interned in industrial settings.
 - Trainee(s) worked, conducted research/field work, or interned in academic settings.
 - Trainee(s) worked, conducted research/field work, or interned in other settings (e.g., national laboratories, non-governmental organizations).

Identify the value/opportunities for faculty that resulted from the International experiences of

IGERT Project. (Mark all that apply)

- Faculty have developed new collaborations.
- Faculty have developed new access to facilities/skills.
- Faculty have developed new opportunities for research/education/training.
- Other (please specify: _____)

Briefly identify up to three research or educational achievements resulting from the International component. Each achievement may involve a single trainee or a group of trainees. [Three textboxes for Research/Educational Achievements 1, 2 and 3.]

[The PI has an option to make each research or educational achievement available for use on the IGERT Resource Center Web site, viewable by the general public]

Partnerships/Collaborations

Were there active partnerships/collaborations outside of your university through your IGERT project during this reporting period? Yes/No

NOTE: Examples include other academic institutions (including IGERT partners), industrial or business partners, government agencies and laboratories, and non-profit organizations. If you are in doubt about whether to include information on a specific relationship between your IGERT and another organization, please include the information.

If yes, please specify one of the four partnership/collaboration types [academic, corporate, government, other], and click on the "go" button to input information on the partnership/collaboration. You will need to repeat this step for each additional partnership/collaboration to report.

Provide for each Partner:

Institution/Organization Name

Details on this Partner:

If partner is an academic institution, please select all that apply.

- Ph.D.-granting institution
- Non-Ph.D.-granting institution
- Minority-serving institution
- K-12 institution
- Foreign-based institution

If Partner is a government organization or agency – select the best option.

- U.S. federal agency or department
- U.S. federal laboratory or research facility
- Foreign institution or foreign government/agency (If yes, please indicate the foreign country

If Partner is a corporate or industrial partner

4. Please select the descriptions that best fit the corporate or industrial partner. Please use your best judgment.

[check one]

- Large company
- Small to mid-size company
- Start-up company

[check one]

- U.S.-based company
- Foreign-based company
- 5. Please select the sector which best describes the business of your corporate partner [pull down/select one]
- 6. Please select a Manufacturing Subsector [pull down/select one. Only applicable when Manufacturing sector is specified]

Funding Arrangement for this Partner:

[Mark all that apply]

Subaward to partner

- IGERT lead institution provides subaward to partner for purposes of providing IGERT traineeship stipends to trainees.
- IGERT project provides subaward to partner for purposes of providing services or support to IGERT Trainees.

Partner provides funding

- Partner provides funding to the IGERT project specifically for IGERT Trainees in any way (e.g., internships, travel, training).
- Partner provides funding to the IGERT project for research, curriculum, or other project activities, but not directly for trainees.

Other

- No funding/direct financial interaction is involved in this partnership.
- Other (Please specify: _____)

Activities for this Partner/Institution

[mark all that apply]

- Facilities: IGERT trainees use a partner organization's facilities for project activities.
- Collaborative Research/Teaching: Partner organization's personnel work with IGERT project staff on collaborative research/teaching.
- Personnel Exchange: IGERT trainees and/or partner organization personnel use each other's facilities or work at each other's site, on an ad hoc or as-need basis.
- Internships: IGERT trainees work in a partner's facilities specifically as interns.

Accomplishments and Outcomes

Please describe one key accomplishment or outcome (not activity) of this partnering arrangement for the reporting period. (Response limited to 1000 characters.) [Textbox]

[The PI has an option to make the accomplishment or outcome available for use on the IGERT Resource Center Web site, viewable by the general public]

4: Project Evaluation and Institutional Impacts

Project Evaluation

Do you have an overall plan with milestones and timelines for measuring progress toward attaining key IGERT project goals? Yes/No

If your IGERT paid for professional evaluation services external to the IGERT institution or used expertise internal to your institution to aid in the evaluation process, please share contact

information

Organization/individual name

Address

E-mail

Phone

Website

Was this an external evaluation service provider? Yes/No

<u>Institutional Impacts</u>

Please describe a key insight, and your response to it (if any), that has been identified through assessment and evaluation during this reporting period. (Response is limited to 1000 characters total for the <u>insight</u> and 1000 characters for the <u>response</u>.)

[Textbox for "Insight/Learning" and for "Response."]

Please consider your responses to the following in light of changes/impacts that have occurred in your institution as a result of the IGERT during this reporting period. [mark all that apply]

- The institution(s) involved in your IGERT has/have been successful in obtaining large- scale Federal grants (e.g., STC, ERC, MRSEC).
- Interdisciplinary/multidisciplinary courses have been developed for IGERT Trainees and Associates.
- Interdisciplinary/multidisciplinary courses are being delivered to IGERT Trainees and Associates.
- Interdisciplinary/multidisciplinary courses that have been developed for IGERT are being delivered to non-IGERT students.
- New certificate or degree programs have been developed and are available on the IGERT campus(es).
- Department curriculum or policy changes took place to emphasize or require interdisciplinary/multidisciplinary preparation for all graduate students.
- Institutional changes that support and encourage team multidisciplinary/interdisciplinary course development and teaching have occurred.
- Institutional changes that support and encourage team-based graduate student learning and assessment have occurred.
- Institutional changes that support and encourage graduate students to gain laboratory and research experiences across disciplines have occurred.
- Institutional changes incorporating improved recruitment and retention policies and practices for underrepresented groups and women based on IGERT.

•	Other	(Please specify:	`
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Please describe a demonstrable institutional change (if any) that has occurred during this reporting period due to IGERT. (Response is limited to 1000 characters.) [Textbox]

[The PI has an option to make the demonstrable institutional change available for use on the IGERT Resource Center Web site, viewable by the general public]

5. Publications/Presentations

Please provide citations in American Psychological Association (APA) format for all the Journal Articles in Refereed Publications emanating from your IGERT project to which you (the PI) or any other personnel or trainees (co-PI or advisors, funded trainees, formerly funded trainees, associates) associated with your IGERT project contributed. It is recommended that you create one document to upload that lists the appropriate Journal Articles in Refereed Publications since the last annual report.

Journal Articles in Refereed Publications

Mark the checkbox if you do not have any Journal Articles in Referred Publications during the current reporting period

Provide for each Journal Article in Refereed Publications (that has been published either electronically or in print):

2. Citation, with author(s) who ever received funding for the IGERT project as IGERT trainees with asterisks(*).

Journal Articles in Non-Refereed Publications

Mark the checkbox if you do not have any Journal Articles in Non-Referred Publications during the current reporting period

Provide for each Journal Article in Non-Refereed Publications (that has been published either electronically or in print):

2. Citation, with author(s) who ever received funding for the IGERT project as IGERT trainees with asterisks(*).

Books

Mark the checkbox if you do not have any Books during the current reporting period

Provide for each Book (that has been published in print):

2. Citation, with author(s) who ever received funding for the IGERT project as IGERT trainees with asterisks(*).

Book Chapters

Mark the checkbox if you do not have any Book Chapters during the current reporting period

Provide for each Book Chapter (that has been published in print):

2. Citation, with author(s) who ever received funding for the IGERT project as IGERT trainees with asterisks(*).

Patent Applications

Mark the checkbox if you do not have any Patent Applications during the current reporting period

Provide for each Patent Application:

2. Citation, with author(s) who ever received funding for the IGERT project as IGERT trainees with asterisks(*).

Patents Awarded

Mark the checkbox if you do not have any Patents Awarded during the current reporting period

Provide for each Patent Awarded:

2. Citation, with author(s) who ever received funding for the IGERT project as IGERT trainees with asterisks(*).

Conference Publications

Mark the checkbox if you do not have any Conference Publications during the current reporting period

Provide for each Conference Publication (that has been published either electronically or in print):

2. Citation, with author(s) who ever received funding for the IGERT project as IGERT trainees with asterisks(*).

Conference Presentations

Mark the checkbox if you do not have any Conference Presentations during the current reporting period

Provide for each Conference Presentation:

2. Citation, with author(s) who ever received funding for the IGERT project as IGERT trainees with asterisks(*).

IGERT: Questions – Trainee Survey

1. About You

Name & Contact Information

Contact Information:

Name: (First, Middle Initial, Last, Previous Surname)

Department at Institution

Address at Institution

Institution City

Institution State

Zip Code

Phone

Extension

Fax

E-mail Address

Web URL

Permanent Contact Information (Voluntary)

Social Security Number

Personal E-mail Address

Contact Information of someone who will know how to reach student in three years:

Name

Relationship to You

Address

City

State

Zip Code

Country

Phone

Extension

E-mail Address

Demographics

Ethnicity (Choose one)

- Hispanic or Latino
- Not Hispanic or Latino
- Not Reported

Race (Choose one or more)

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Not Reported

Gender (Choose one)

- Male
- Female
- Not reported

Planned for 2013 data collection cycle

Disability Status (Choose one):

- Yes (check Yes if any of the following apply):
 - Deaf or serious difficulty hearing
 - Blind or serious difficulty seeing even when wearing glasses
 - Serious difficulty walking or climbing stairs
 - Other serious disability related to a physical, mental, or emotional condition
- No
- Do not wish to provide

Citizenship (Choose one):

- U.S. Citizen/U.S. National
- U.S. Permanent Resident
- Other Non-U.S. Citizen
- Not Reported

Permanent residents only provide:

Permanent Resident Alien Status Granted (mm/yyyy)

State or Country of Birth

Your Major & Interests

Major

[Respondent chooses from the list of academic disciplines shown in the footnote]⁸

- ⁸ List of Academic Disciplines:
 - Chemistry Analytical
 - Chemistry Bio-inorganic
 - Chemistry Bio-organic
 - Chemistry Biophysical
 - Chemistry Environmental
 - Chemistry Inorganic
 - Chemistry Materials
 - Chemistry Physical
 - Chemistry Polymer
 - Chemistry Theoretical
 - Chemistry Other (please specify):
 - Comp/IS/Eng Artificial Intelligence (including Robotics, Computer Vision, and Human Language Processing)
 - Comp/IS/Eng Computer Architecture and Grids
 - Comp/IS/Eng Computer Science Languages and Systems
 - Comp/IS/Eng Computer Science Theoretical Foundations
 - Comp/IS/Eng Database Information Retrieval and Web Search
 - Comp/IS/Eng Graphics and Visualization
 - Comp/IS/Eng Human Computer Interaction
 - Comp/IS/Eng Information Security and Assurance
 - Comp/IS/Eng Information Technology and Organizations
 - Comp/IS/Eng Networks and Communications
 - Comp/IS/Eng Operating Systems and Middleware
 - Comp/IS/Eng Scientific Computing and Informatics
 - Comp/IS/Eng Software Engineering
 - Comp/IS/Eng Other (please specify):
 - Engineering Aeronautical and Aerospace
 - Engineering Agricultural
 - Engineering Bioengineering
 - Engineering Biomedical
 - Engineering Chemical
 - Engineering Civil
 - Engineering Computer Engineering
 - Engineering Electrical and Electronic
 - Engineering Energy
 - Engineering Engineering Mechanics
 - Engineering Engineering Science
 - Engineering Environmental
 - Engineering Industrial
 - Engineering Materials
 - Engineering Mechanical
 - Engineering Metallurgical
 - Engineering Nuclear

Degree Sought

- Master of Arts (MA)
- Master of Science (MS)
- Doctorate (PhD)
- Professional Degree (MD, JD etc)
- Other

Brief description of your research interest/topic (not program specific) (word limit: 300) [Textbox]

Does your research involve any of the following (Mark all that apply)

- Bioinformatics
- Biological evolution and development
- Engineering Ocean
- Engineering Petroleum
- Engineering Polymer
- Engineering Systems Engineering
- Engineering Other (please specify):
- Geosciences Aeronomy
- Geosciences Atmospheric Chemistry
- Geosciences Chemical Oceanography
- Geosciences Climate Dynamics
- Geosciences Geochemistry
- Geosciences Geology
- Geosciences Geophysics
- Geosciences Hydrologic Sciences
- Geosciences Large Scale Dynamics Meteorology
- Geosciences Magnetospheric Physics
- Geosciences Marine Geology and Geophysics
- Geosciences Mesoscale Dynamic Meteorology
- Geosciences Paleoclimate
- Geosciences Paleontology
- Geosciences Physical Meteorology
- Geosciences Physical Oceanography
- Geosciences Solar-Terrestrial
- Geosciences Other (please specify):
- Life Sciences Agriculture
- Life Sciences Agronomy
- Life Sciences Anatomy
- Life Sciences Animal Behavior
- Life Sciences Animal Science
- Life Sciences Biochemistry
- Life Sciences Biological Oceanography
- Life Sciences Biophysics
- Life Sciences Botany (including Plant Physiology)
- Life Sciences Cell Biology
- Life Sciences Computational Biology
- Life Sciences Developmental Biology
- Life Sciences Ecology
- Life Sciences Ecosystem Ecology
- Life Sciences Entomology
- Life Sciences Environmental Sciences
- Life Sciences Evolutionary Biology
- Life Sciences Fish and Wildlife
- Life Sciences Forestry
- Life Sciences Genetics
- Life Sciences Horticulture
- Life Sciences Immunology
- Life Sciences Marine Biology

- Biotechnology
- Civil infrastructure monitoring and improvement
- Climate change: impacts and factors
- Computational science and engineering
- Device development
- Energy: alternate and renewable resources and conservation
- Entrepreneurialism
- Human, social and community sciences
- Imaging
- Materials science and engineering
- Nanoscience: engineering and technology
- Neuroscience: biology and psychology
- Life Sciences Microbiology
- Life Sciences Molecular Biology
- Life Sciences Neurosciences
- Life Sciences Nutrition
- Life Sciences Pharmacology
- Life Sciences Physiology
- Life Sciences Plant Pathology
- Life Sciences Population and Community Ecology
- Life Sciences Soil Science
- Life Sciences Structural Biology
- Life Sciences Virology
- Life Sciences Zoology
- Life Sciences Other (please specify):
- Mathematical Sciences Algebra or Number Theory
- Mathematical Sciences Analysis
- Mathematical Sciences Applications of Mathematics (including Biometrics and Biostatistics)
- Mathematical Sciences Geometry
- Mathematical Sciences Logic or Foundations of Mathematics
- Mathematical Sciences Operations Research
- Mathematical Sciences Probability and Statistics
- Mathematical Sciences Topology
- Mathematical Sciences Other (please specify):
- Physics and Astronomy Astronomy
- Physics and Astronomy Astrophysics
- Physics and Astronomy Atomic and Molecular
- Physics and Astronomy Condensed Matter Physics
- Physics and Astronomy Nuclear
- Physics and Astronomy Optics
- Physics and Astronomy Particle Physics
- Physics and Astronomy Physics of Fluids
- Physics and Astronomy Plasma
- Physics and Astronomy Solid State
- Physics and Astronomy Theoretical Physics
- Physics and Astronomy Other (please specify):
- Psychology Cognitive
- Psychology Cognitive Neuroscience
- Psychology Computational Psychology
- Psychology Developmental
- Psychology Experimental or Comparative
- Psychology Industrial/Organizational
- Psychology Neuropsychology
- Psychology Perception and Psychophysics
- Psychology Personality and Individual Differences
- Psychology Physiological
- Psychology Psycholinguistics
- Psychology Quantitative

- Sensing, signals and signal processing
- Sustainability: ecology and the environment
- Water resources: conservation, utilization and quality
- Other (please specify)

IGERT Advisors

Current IGERT Advisor(s)

(Mark all that apply)

[Checkbox for each IGERT advisor as entered via PI survey]

How Involved Was Your Advisor in Programmatic Activities

- Always
- Often
- Sometimes
- Never

Graduation Plans

Expected Graduation Date (mm/yyyy)

- Psychology Social
- Psychology Other (please specify):
- Social Sciences Archaeology
- Social Sciences Cliometric History
- Social Sciences Communications
- Social Sciences Cultural Anthropology
- Social Sciences Decision Making
- Social Sciences Demography
- Social Sciences Econometrics
- Social Sciences Economics (except Business Administration)
- Social Sciences Geography
- Social Sciences History of Science
- Social Sciences International Relations
- Social Sciences Law and Social Science
- Social Sciences Linguistics Anthropology
- Social Sciences Linguistics
- Social Sciences Medical Anthropology
- Social Sciences Philosophy of Science
- Social Sciences Physical Anthropology
- Social Sciences Political Science
- Social Sciences Public Policy
- Social Sciences Risk Analysis
- Social Sciences Science Policy
- Social Sciences Sociology (except Social Work)
- Social Sciences Urban and Regional Planning
- Social Sciences Other (please specify):
- STEM Education and Learning Research Engineering Education
- STEM Education and Learning Research Mathematics Education
- STEM Education and Learning Research Science Education
- STEM Education and Learning Research Technology Education
- STEM Education and Learning Research Other (please specify):
- Other (please specify):

If expected to graduate within one year, what type of employment opportunities are you pursuing? [mark all that apply] [indicate top choice if more than one opportunity is selected]

Government

- Postdoctoral
- Full-time position
- Part-time position

Industry/Business

- Postdoctoral
- Full-time position
- Part-time position

Educational Institution (college, university, or K-12)

- Postdoctoral
- Tenure track faculty
- Non-tenure track faculty
- Staff

Nonprofit

- Postdoctoral
- Full-time position
- Part-time position

Self-Employed/Entrepreneur

2. Prior Experiences (Not applicable to formerly funded trainees)

High School Background:

Name of high school/secondary school/institution from which you graduated/received a diploma

School type (select one)

- Public
- Private

Other (please specify): _

High School City

High School State

High School Zip Code

High School Country (if outside the U.S.)

Undergraduate Background Prior to IGERT Traineeship:

Undergraduate Institution Name

Undergraduate Institution City

Undergraduate Institution State

Undergraduate Institution Country (if outside the U.S.)

When did you receive your first undergraduate degree? (mm/yyyy)

Undergraduate Degree Type (Choose one)

- Bachelor of Arts (BA)
- Bachelor of Science (BS)
- Other (please specify):

Undergraduate Maior

[Respondent chooses from the list of academic disciplines shown in the endnotes]

If Other, please specify

Double Major

[Respondent chooses from the list of academic disciplines shown in the endnotes]

If Other, please specify

Post-Undergraduate Degree Prior to IGERT Traineeship:

Did you obtain a post-undergraduate degree prior to becoming an IGERT Trainee? Yes/No

If Yes, provide the following information:

Post-Undergraduate Institution Name

Post-Undergraduate Institution City

Post-Undergraduate Institution State

Post-Undergraduate Institution Country (if outside the U.S.)

Post-Undergraduate Major

[Respondent chooses from the dropdown list of academic disciplines shown in the endnotes]

If Other, please specify

Post-Undergraduate Degree Type

- Master of Arts (M.A.)
- Master of Science (M.S.)
- Doctorate (Ph.D.)
- Professional degree (M.D., J.D.)
- Other Postbaccalaureate degree (please specify):

When did you receive your post-undergraduate degree (mm/yyyy)

Employment Prior to IGERT Traineeship

Were you employed in the public/private sector for one or more years after receiving your first undergraduate degree and prior to becoming an IGERT Trainee? (Do not include employment as a Research Assistant (R.A.) or Teaching Assistant (T.A.) while pursuing a Master's degree)

Yes/No

Total number of years (equal to or greater than one year, to the nearest year) you were employed in the public or private sector after receiving your first undergraduate degree and prior to becoming an IGERT trainee. (Do not count employment as a Research Assistant (R.A.) or Teaching Assistant (T.A.) while pursuing a Master's degree)

3. Achievements

Publications, Patents, and Presentations Provided by the PI

[The list of publications, patents, and presentations that were entered via the PI survey that included this trainee as an author are presented for the trainee to review]

Fellowships, Scholarships, and Grants Other Than IGERT

Provide for each Fellowship, Scholarship, or Grant Other Than IGERT:

Title of Fellowship, Scholarship, or Grant

Proposal Title

Year Awarded

Awarding Agency/Organization

Other Honors and Recognition

Provide for each honor or recognition:

Title of Honor or Recognition

Year

Society/Granting Organization

Research or Education Accomplishment

Major research or education accomplishment during the reporting period (word limit: 1000) [Textbox]

4. Research Preparation (Not applicable to formerly funded trainees)

Please indicate which of the following activities you engaged in during this reporting period.

[Mark all that apply]

- Undertook formal coursework/training in research methods, practices and instrumentation in your primary discipline equivalent to traditional graduate students
- Had practical, hands-on laboratory and/or field experience in conducting research across the breadth of disciplines in the IGERT program
- Undertook formal coursework/training across the breadth of disciplines encompassed by the IGERT project
- Undertook formal coursework/training in both ethical conduct of research and ethical conduct related to the themes encompassed by your IGERT project
- Other preparation to conduct high-quality research (Please specify)
- Please check here if you were not engaged in any of the activities listed above during this reporting period

How many courses/seminars did you take in disciplines outside of your primary discipline during this reporting period?

How many courses/seminars did you take that specifically covered interdisciplinary topics related to your IGERT during this reporting period?

How many courses/seminars were in the primary discipline

5. Professional Skills (Not applicable to formerly funded trainees)

Please indicate which of the following activities you engaged in during this reporting period. [Mark all that apply]

- Undertook coursework/training that included regular faculty critique of and feedback on professional writing
- Authored, submitted or published research papers in refereed journals
- Undertook coursework/training (e.g., brown bags, seminars) that included regular critique of and feedback on professional speaking/presentation skills
- Made presentations at academic/scientific professional conferences or meetings
- Presented results from IGERT activities to professional nonacademic audiences (e.g., industry, government)
- Undertook coursework/training to develop media-based or information technology-based communication skills
- Produced multimedia materials, Web sites, or other cyber-enabled tools to communicate the results of IGERT activities to external audiences
- Used multimedia materials, Web sites, or other cyber-enabled tools as part of the interdisciplinary scientific training and collaboration
- Received training in team-building and project management skills
- Received training in effective time and task management
- Participated as a members of teams engaged in joint research, educational, and/or outreach efforts
- Led teams engaged in research, educational, and/or outreach efforts
- Please check here if you were not engaged in any of the activities listed above during this reporting period

6. Career Preparation (Not applicable to formerly funded trainees)

Please describe what you consider to be the most beneficial IGERT training experience or component that has prepared you to be successful in a science or engineering career in an international/global setting. Note: This can include U.S.-based experiences. (word limit: 1000) [Textbox]

Please indicate which of the following activities you engaged in during this reporting period. [Mark all that apply]

- Received training or instruction (e.g., courses, workshops) in effective teaching practices and student mentoring
- Developed and presented course and/or curriculum materials
- Served as a mentor to others (e.g., graduate students, undergraduates, laboratory technicians)
- Received training/mentoring in grant proposal preparation

Authored/co-authored and submitted grant proposals Received training/instruction on the interaction between academic research and industrial technical requirements Received training/instruction for applying your research to address public policy concerns or issues Had an internship (an off-campus, research, educational and/or work experience) in a nonacademic setting (e.g., industry, government). Had professional interactions other than internships with nonacademic employers (e.g. industry, government) in order to learn about career opportunities and requirements Communicated, worked, or collaborated with scientists of other nationalities Other preparation for careers in academia (Please specify: _ Other preparation for nonacademic careers (e.g., industry, government) (Please specify: Please check here if you were not engaged in any of the activities listed above during this reporting period Are you aware of career-life balance policies at your institution or in your department? If Yes, please describe them: [Limit: 1,000 characters] 7. Internships Have you taken part in any internships lasting one month or more with industries or businesses, government laboratories or agencies, or with nonprofit organizations during the current reporting period? Yes/No If yes, please indicate the setting, duration (to the nearest month), and location of the internship(s). [The respondent can specify up to four internships. The following data is collected for each internship] **Internship** Company/agency name Internship Duration (1-52 weeks) Internship Setting (pull-down options) Industry/business

Nonprofit organization

Government laboratory

Public sector agency

Other

Internship location

U.S.

If U.S. please indicate the state and city

If foreign, please indicate the foreign country

Internship contributions that have prepared you for your career during this reporting period: (mark all that apply)

- Received training/instruction on the interaction between academic research and industrial technical requirements
- Received training/instruction for applying your research to address public policy concerns or issues
- Engaged in professional interactions other than internships with nonacademic employers (e.g. industry, government) in order to learn about career opportunities and requirements
- Communicated, worked, or collaborated with scientists of other nationalities
- Other preparation for nonacademic careers (e.g., industry, government) please specify (text box)

Please describe what you consider to be the most beneficial professional or career-related aspect. [Limit: 1,000 characters]

8. International Experiences

Have you taken part in any international experiences during this reporting period? Yes/No

If Yes, the respondent can specify up to five international experiences. The following data is collected for each international experience:

International Experience

Was this international experience related to your IGERT research?

International experience duration (1-52 weeks)

Please identify the primary country in which the international activities occurred.

Please indicate the international activities you engaged in during this reporting period (Mark all that apply)

- Attended conferences/workshops outside the United States
- Undertook coursework/training outside the United States
- Worked, conducted research/fieldwork, or interned outside the United States
- Other (Please specify: _______)

Were you formally prepared for your international experience?

If yes to previous question,

What experiences were included in the preparation for your international experience?

- How to work in a foreign laboratory/field work
- Graduate education/Education/ laboratory differences in country to be visited
- Language
- Cultural differences
- Learning about the area
- Other (Please specify: _____

What did you accomplish during your international experience

(Mark all that apply)

- Awards/Honors/Recognitions
- · Broader Impacts
- Invention/Patent
- · Presentations
- Publications
- Other

If you took part in international activities during this reporting period, please describe what you consider to be the most beneficial professional or career-related aspect of these activities. [Limit: 1,000 characters]

9. Comments (Not applicable to formerly funded trainees)

Benefit of IGERT

In the text box below, please describe what you consider to be the most beneficial aspect of being an IGERT trainee during this reporting period. This might include 1) an opportunity you have had as a result of being an IGERT trainee that has significantly affected your professional development, 2) an aspect of the project that provided exceptional "added value" to your educational experience, or 3) an aspect of the project that has been especially successful and/or represents a real change from the way that graduate students are usually educated at your institution.

Opportunity for Improvement

Please describe what you consider to be the most important opportunity for improvement in the IGERT program with which you are associated.

10. Training Confirmation (Not applicable to formerly funded trainees)

Training Confirmation

How many hours spent per week did you spend on programmatic activities?

Did you participate in regular training throughout the year?

Describe training received [Limit: 1,000 characters]

How frequently did you receive training

- Weekly
- Bimonthly
- Monthly
- Other- please specify (text box)

Funding Confirmation

What was your stipend amount

- \$30,000 gross annually (\$2,500 gross per month)
- Other- please specify (text box)

How does your traineeship stipend compare to stipends received by regular teaching or research assistants at your organization (Choose one)

- Greater than others
- Equal to others
- Less than others

NSF provides your affiliated organization with a \$10,500 cost-of-education allowance with a 1 year traineeship in lieu of all required tuition and fees. How much would it cost if you had to pay the normal charges yourself? (text box)

[This question is only asked of funded trainees]

Did you have to pay any tuition or fees this year? Yes/No

If Yes, how much did you have to pay? (text box)