

Attachment D1

**Integrative Graduate Education and Research Traineeship Program
(IGERT)
Monitoring System**

Table of Contents

IGERT: Crosswalk – Principal Investigator (PI) Survey.....	3
IGERT: Crosswalk – Trainee Survey.....	24
IGERT: Number of Respondents, Frequency of Response, and Annual Hour Burden.....	52
IGERT: Hour Burden Estimates by Each Form and Aggregate Hour Burdens.....	53
IGERT: Estimates of Annualized Cost to Respondents for the Hour Burdens.....	54
IGERT: Estimates of Costs to the Federal Government.....	55
IGERT: Questions – PI Survey.....	56
IGERT: Questions – Trainee Survey.....	71

IGERT: Crosswalk – Principal Investigator (PI) Survey

Questions	Common Collection Categories	Participant Characteristics ¹	Project Implementation Characteristics ²	Project Outputs ³
1. Project Summary				
1a. Project Characteristics				
Please indicate up to three NSF directorates that most closely correspond to your interdisciplinary research theme.				
<ul style="list-style-type: none"> • 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?				
<ul style="list-style-type: none"> • 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)				
<ul style="list-style-type: none"> • 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	
If yes, were NSF IGERT funds used for postdoctorate involvement?			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, and project role.

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

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

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<p style="text-align: center;">Yes/No</p>			
<p>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 Research.gov):</p> <p style="padding-left: 20px;">Total funds carried over to the next year</p> <p style="padding-left: 20px;">If carryover funds are entered (i.e., greater than 0), please provide an explanation for these funds</p> <p style="padding-left: 20px;">Participant support costs carried over to the next year</p> <p style="padding-left: 20px;">Stipends carried over to the next year</p>		<p>X</p>	
<p>Describe how the Competitive Innovation Incentive Fund (CIIF) was used, barriers to implementation of CIIF training activities, and notable CIIF training successes.</p>		<p>X</p>	
<p>1b. Research Achievements</p>			
<p>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.</p> <p>(Responses are limited to 1,000 characters for each achievement.)</p> <p>[The PI has an option to make each achievement available for use on the IGERT Resource Center Web site, viewable by the general public.]</p>			<p>X</p>
<p>1c. Education Achievements</p>			
<p>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.</p> <p>(Responses are limited to 1,000 characters for each achievement.)</p> <p>[The PI has an option to make each achievement available for use on the IGERT Resource Center Web site, viewable by the general public.]</p>			<p>X</p>
<p>1d. Trainee Achievements</p>			
<p>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.</p>			<p>X</p>

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<p>(Responses are limited to 1,000 characters for each achievement.)</p> <p>[The PI has an option to make each achievement available for use on the IGERT Resource Center Web site, viewable by the general public.]</p>			
<p>1e. Barriers to Implementation</p>			
<p>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.</p> <p>(Responses are limited to 1,000 characters each for each issue/challenge and corresponding response.)</p>		X	
<p>1f. Outreach Activities</p>			
<p>Please report any outreach activities involving your IGERT project 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-scientific-based professional groups, members of the government, or the general public.</p> <p>Please mark the checkbox if you do not have any Outreach Activities to report.</p> <p>For each outreach activity: Provide a short title for this activity</p> <p style="padding-left: 40px;">Name of the media outlet or organization for which outreach was done</p> <p style="padding-left: 40px;">Date of the activity</p> <p style="padding-left: 40px;">Type of activity</p> <ul style="list-style-type: none"> • Museum • Media • K-12 • Undergraduate • Government • Informal Science • Other <p style="padding-left: 40px;">Briefly describe this activity, including the names of the IGERT individuals involved.</p>			X
<p>1g. NSF Highlights</p>			

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<p>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.</p> <p>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.</p> <p>Starting with a statement of what the research team has achieved and why it is important and then explaining what problem is being solved, what obstacle is being overcome, or what new discovery was made is a great way to write a Highlight for maximum effectiveness.</p> <p>Reporting Highlights is related to requirements under the Government Performance and Results Act (GPRA).</p> <p>Please respond only if you have something relevant and significant to share for this reporting period.</p> <p>Guidelines for Writing Highlights</p> <ul style="list-style-type: none"> • 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 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 GPRA Performance Assessment, but also for illustration, in the NSF's annual Budget Requests, Performance and Accountability Reports (e.g., PAR), and other documents. Clear, colorful images (e.g., pictures, graphs, charts) 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 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 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 			X

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<p>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 ...”</p> <ul style="list-style-type: none"> • 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, 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. <p>For each Highlight: Provide a descriptive title for this Highlight.</p> <p>If a video is associated with the Highlight, please provide a URL link to the video.</p> <p>Please indicate the primary and secondary NSF strategic goals that best describe the Highlight [For each NSF goal listed, the PI selects either primary or secondary]</p> <p>Describe the achievement/result that is the Highlight.</p> <p>How does this activity address the primary and secondary NSF strategic goals that you marked above?</p> <p>[The PI has an option to make each Highlight available for use on the IGERT Resource Center Web site, viewable by the general public.]</p> <p>For each Highlight Image: Provide a descriptive title for this image.</p> <p>Upload image file (bmp, gif, jpeg, pdf, png, or tiff only)</p> <p>Does NSF have permission to use this image? Yes/No</p> <p>Image credits (Required only if you answered “yes” to the previous question)</p> <p>Description of image (optional)</p>			
<p>2. IGERT Project Personnel, Trainee, and Associate Details</p>			

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<p>Provide for each Principal Investigator</p>			
<p>Mark the checkbox if [PI Name] served as PI for the current project year</p>		X	
<p>Name: First, Middle Initial, Last, Previous Surname</p>	X		
<p>Contact Information:</p> <p style="padding-left: 20px;">Institution Name</p> <p style="padding-left: 20px;">Title</p> <ul style="list-style-type: none"> • Professor • Associate Professor • Instructor • Other <p style="padding-left: 20px;">Department at Institution</p> <p style="padding-left: 20px;">Address at Institution</p> <p style="padding-left: 20px;">Institution's City</p> <p style="padding-left: 20px;">Institution's State</p> <p style="padding-left: 20px;">ZIP Code</p> <p style="padding-left: 20px;">Phone</p> <p style="padding-left: 20px;">Extension</p> <p style="padding-left: 20px;">Fax</p> <p style="padding-left: 20px;">E-mail Address</p> <p style="padding-left: 20px;">Web URL</p>	X		
<p>Ethnicity (Choose one):</p> <ul style="list-style-type: none"> • Hispanic or Latino • Not Hispanic or Latino • Not Reported 	X		
<p>Race (Mark all that apply):</p> <ul style="list-style-type: none"> • American Indian or Alaska Native • Asian • Black or African American • Native Hawaiian or other Pacific Islander • White • Not Reported 	X		
<p>Gender (Choose one):</p> <ul style="list-style-type: none"> • Male • Female • Not Reported 	X		
<p>Disability Status (Choose one):</p> <ul style="list-style-type: none"> • Yes (Check Yes if any of the following apply): <ul style="list-style-type: none"> • 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		
<p>Citizenship (Choose one):</p>	X		

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<ul style="list-style-type: none"> • U.S. Citizen/U.S. National • U.S. Permanent Resident • Other Non-U.S. Citizen • Not Reported 			
<p>Provide for each IGERT Project Coordinator</p>			
<p>Name: First, Middle Initial, Last, Previous Surname</p>	X		
<p>Contact Information:</p> <p style="padding-left: 20px;">Institution Name</p> <p style="padding-left: 20px;">Title</p> <ul style="list-style-type: none"> • Professor • Associate Professor • Instructor • Other <p style="padding-left: 20px;">Department</p> <p style="padding-left: 20px;">Current Address</p> <p style="padding-left: 20px;">Current City</p> <p style="padding-left: 20px;">Current State</p> <p style="padding-left: 20px;">ZIP Code</p> <p style="padding-left: 20px;">Phone</p> <p style="padding-left: 20px;">Extension</p> <p style="padding-left: 20px;">Fax</p> <p style="padding-left: 20px;">E-mail Address</p> <p style="padding-left: 20px;">Web URL</p>	X		
<p>Provide for each IGERT Co-PI and Trainee/Associate Advisor</p>			
<p>Name: First, Middle Initial, Last, Previous Surname</p>	X		
<p>Mark the checkbox if the individual served as co-PI or trainee/associate advisor for the current project year.</p>	X		
<p>Role in Project (Mark all that apply):</p> <ul style="list-style-type: none"> • Co-PI • Trainee/Associate Advisor and/or Faculty Participant 	X		
<p>Contact Information:</p> <p style="padding-left: 20px;">Institution Name</p> <p style="padding-left: 20px;">Title</p> <ul style="list-style-type: none"> • Professor • Associate Professor • Instructor • Other <p style="padding-left: 20px;">Department at Institution</p> <p style="padding-left: 20px;">Address at Institution</p> <p style="padding-left: 20px;">Institution's City</p> <p style="padding-left: 20px;">Institution's State</p> <p style="padding-left: 20px;">ZI Code</p> <p style="padding-left: 20px;">Phone</p>	X		

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
Extension Fax E-mail Address Web URL			
Current IGERT Advisor Yes/No		X	
Ethnicity (Choose one): <ul style="list-style-type: none"> • Hispanic or Latino • Not Hispanic or Latino • Not Reported 	X		
Race (Mark all that apply): <ul style="list-style-type: none"> • American Indian or Alaska Native • Asian • Black or African American • Native Hawaiian or other Pacific Islander • White • Not Reported 	X		
Gender (Choose one): <ul style="list-style-type: none"> • Male • Female • Not Reported 	X		
Disability Status (Choose one): <ul style="list-style-type: none"> • Yes (Check Yes if any of the following apply): <ul style="list-style-type: none"> • 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): <ul style="list-style-type: none"> • U.S. Citizen/U.S. National • U.S. Permanent Resident • Other Non-U.S. Citizen • Not Reported 	X		
<p>Provide for each IGERT Trainee and Associate</p>			
Name: First, Middle Initial, Last, Previous Surname	X		
E-mail Address	X		
Verify IGERT-required Citizenship/Residency Status (Trainees only) <ul style="list-style-type: none"> • 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. 	X		

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Staff and Project Participant Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Implementation Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Outputs</p>
<p>GRE Scores: Verbal Quantitative Analytical Subject (Select GRE Subject)</p> <ul style="list-style-type: none"> • 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 	X		
<p>When did the trainee/associate first enroll in graduate study at this institution? (mm/yyyy)</p>		X	
<p>When did the trainee first began receiving IGERT funding? (Trainees only) (mm/yyyy)</p>		X	
<p>When did the associate first began participating in the IGERT project? (Associates only) (mm/yyyy)</p>		X	
<p>Funding (Trainees only) 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.)</p> <ul style="list-style-type: none"> • Funded Trainee Number of months funded • Formerly Funded Trainee (Trainees only) Has the student been engaged in IGERT activities, research, education, or training during this reporting period? Yes/No 		X	
<p>Please describe the current situation that best describes this IGERT trainee/associate. (Select one)</p> <ul style="list-style-type: none"> • Has not yet graduated, but is pursuing a Ph.D. at your institution. • Has not yet graduated, but is pursuing a master's degree at your institution. • Has graduated from your institution with a Ph.D. (Enter month/year of completion) (mm/yyyy) • Has graduated from your institution with a master's degree. (Enter month/year completed) (mm/yyyy) 		X	

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<ul style="list-style-type: none"> Has left your institution without earning degree. (Enter month/year departed) (mm/yyyy) 			
<p>3. Project Features</p>			
<p>3a. Trainee Preparation in Multidisciplinary/Interdisciplinary Research</p>			
<p>Briefly describe up to three of the promising practices for preparing IGERT trainees to conduct collaborative research that transcends traditional disciplinary boundaries.</p> <p>(Responses are limited to 1,000 characters for each practice.)</p> <p>Measure:</p> <ul style="list-style-type: none"> Formal evaluation Informal surveys Group feedback Quantitative measure Other (Please specify): _____ <p>[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.]</p>		X	
<p>Mark the following components of multidisciplinary/interdisciplinary research preparation that apply to the <u>majority</u> of IGERT trainees involved in your project during this reporting period. (Mark all that apply)</p> <ul style="list-style-type: none"> 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 Trainee Preparation in Multidisciplinary/Interdisciplinary Research applied during this reporting period. 		X	
<p>3b. Trainee Preparation in Professional Skills</p>			
<p>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.</p> <p>(Responses are limited to 1,000 characters for each activity.)</p>		X	

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<p>[The PI has an option to make each activity available for use on the IGERT Resource Center Web site, viewable by the general public.]</p>			
<p>Mark the following components of professional skills development that apply to the <u>majority</u> of IGERT trainees in your project during this reporting period. (Mark all that apply)</p> <ul style="list-style-type: none"> • 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, nonacademic 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 Trainee Preparation in Professional Skills applied during this reporting period. 		X	
<p>3c. Trainee Preparation for STEM Careers</p>			
<p>Mark the following components that apply to the <u>majority</u> of IGERT trainees in your project during this reporting period. (Mark all that apply)</p> <ul style="list-style-type: none"> • 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. • Trainees authored/coauthored 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. 		X	

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<ul style="list-style-type: none"> • Trainees had internships (off-campus, research, educational, and/or work experiences) in nonacademic settings (e.g., industry, government). • Trainees had professional interactions other than internships with nonacademic 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): _____ • No components of Trainee Preparation for STEM Careers applied during this reporting period. 			
<p>3d. Tactics for Recruitment and Broadening Participation</p>			
<p>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</p> <p>If no, please explain: _____</p>		X	
<p>Regardless of your response to the previous question, please describe up to three of the promising tactics and results for <u>recruiting</u> qualified trainees to your IGERT project during this reporting period.</p> <p>(Responses are limited to 1,000 characters for each tactic and result.)</p> <p>[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.]</p>		X	
<p>Please describe the extent to which each of the following practices been productive for recruiting trainees <u>overall</u> to your IGERT during this reporting period. [Radio buttons labeled Productive, Somewhat Productive, Not Productive, and NA are provided for each of the following recruiting practices.]</p> <ul style="list-style-type: none"> • Relationships with NSF programs that can provide an undergraduate pool of potential IGERT trainees (e.g., REUs, NSF Centers) • Relationships with faculty and programs at other academic institutions • Use of recruiting resources on your campus (e.g., career service office, graduate studies office) • Collaboration with other IGERT projects on recruitment 		X	

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<ul style="list-style-type: none"> • Use of professional meetings, conferences, associations to communicate with, reach out to, and market to potential IGERT Trainees • Other (Please specify): _____ 			
<p>Please describe the extent to which each of the following practices have been productive for recruiting <u>underrepresented minority</u> and <u>women</u> trainees to your IGERT project during this reporting period. [Two sets (one for Underrepresented Minorities and another for Women) of radio buttons labeled Productive, Somewhat Productive, Not Productive, and NA are provided for each of the following recruiting practices.]</p> <ul style="list-style-type: none"> • Relationships with NSF programs that specifically focus on broadening participation of underrepresented minorities or women in STEM (e.g., LSAMP, AGEP, TCUP, or ADVANCE) • Use of resources on your campus (e.g., academic advancement programs, offices for campus diversity, or minority and women’s student groups) • 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) • Bridge programs for entering graduate students • Mentoring or advisement arrangements that take advantage of underrepresented minorities or women faculty or graduate students on campus • Relationships with faculty and programs at minority-serving academic institutions (e.g., historically black colleges and universities, Hispanic-serving institutions, or tribal colleges). {This item is marked N/A for women.} • Collaboration with other IGERT projects on recruitment • Other (Please specify): _____ 		X	
<p>3e. International Opportunities</p>			
<p>According to NSF records, you project [<u>has/does not have</u>] explicit funding for an international component. If you think this is incorrect, please contact ICF International.</p>		X	
<p>Briefly describe up to three training experiences or components that</p>			X

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<p>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.</p> <p>(Responses are limited to 1,000 characters for each training experience or component.)</p> <p>[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.]</p>			
<p>Responding to the remaining questions is mandatory only for IGERT projects with explicit funding for the international component.</p> <p>Is international participation required for all trainees in your IGERT project? Yes/No</p>		X	
<p>Did one or more trainees from your IGERT project engage in an international experience through the project during this reporting period? Yes/No</p> <p>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.</p> <p>For each country: Country [dropdown list]</p> <p>Trainee(s) involved [one checkbox per trainee]</p> <p>Which of the following international actions or work in this country involved trainees? (Mark all that apply)</p> <ul style="list-style-type: none"> • Trainees attended conferences/workshops. • Trainees undertook coursework/training. • Trainees worked, conducted research/field work, or interned in industrial settings. • Trainees worked, conducted research/field work, or interned in academic settings. • Trainees worked, conducted research/field work, or interned in other settings (e.g., national laboratories, nongovernmental organizations). • Other international actions/work (Please specify): _____ 		X	
<p>Identify the value/opportunities for faculty that resulted from the International experiences of the IGERT project. (Mark all that apply)</p>			X

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Staff and Project Participant Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Implementation Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Outputs</p>
<ul style="list-style-type: none"> • 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): _____ 			
<p>Briefly describe up to three research or educational achievements resulting from the international component. Each achievement may involve a single trainee or a group of trainees.</p> <p>(Responses are limited to 1,000 characters for each research or educational achievement.)</p> <p>[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.]</p>			X
<p>3f. Partnership Collaborations</p>			
<p>Were there active partnerships/collaborations outside of your university through your IGERT project during this reporting period? Yes/No</p> <p>NOTE: Examples include other academic institutions (including IGERT partners), industrial or business partners, government agencies and laboratories, and nonprofit organizations. If you are in doubt about whether to include information on a specific relationship between your IGERT project and another organization, please include the information.</p> <p>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.</p>		X	
<p>Provide for each Partner</p>			
<p>Institution/Agency/Business/Organization name</p>		X	
<p>If partner is an academic institution, please mark all that apply.</p> <ul style="list-style-type: none"> • Ph.D.-granting institution • Non-Ph.D.-granting institution • Minority-serving institution • K-12 institution • Foreign-based institution <p>If partner is a government agency, please select the best option.</p> <ul style="list-style-type: none"> • U.S. Federal <u>agency or department</u> • U.S. Federal laboratory or research facility • Foreign institution or foreign government/agency (If foreign, please indicate country [dropdown list]) 		X	

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Staff and Project Participant Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Implementation Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Outputs</p>
<p>If partner is a corporate or industrial partner:</p> <p>Please select the descriptions that best fit the corporate or industrial partner. (Select one)</p> <ul style="list-style-type: none"> • Large company • Small to mid-size company • Start-up company <p>Corporate headquarters (Select one)</p> <ul style="list-style-type: none"> • U.S.-based company • Foreign-based company <p>Sector</p> <p>Please select the sector that best describes the business of your corporate partner:</p> <ul style="list-style-type: none"> • Goods Producing <ul style="list-style-type: none"> ○ Agriculture, forestry, fishing and hunting ○ Construction ○ Manufacturing ○ Mining • Service Providing <ul style="list-style-type: none"> ○ Education services ○ Finance and banking services ○ Health and healthcare-related services ○ Information, communications, media services ○ Leisure and hospitality services ○ Professional, scientific, and business services ○ Public administration ○ Other services <p>If Manufacturing is selected, please select a Manufacturing Subsector:</p> <ul style="list-style-type: none"> • Chemical products (basic/specialty; polymers/plastics; consumer products) • Computer and electronic products • Electrical equipment, appliance, and components • Food, beverage, and tobacco products • Mineral and metal products • Petroleum and coal products • Pharmaceutical and biotechnological products • Textiles and apparel • Transportation • Wood products, paper products, printing • Other manufacturing 			
<p>Funding Arrangement for this Partner (Mark all that apply):</p>		X	

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<p>Subaward to partner</p> <ul style="list-style-type: none"> IGERT lead institution provides subaward to partner for the purposes of providing IGERT traineeship stipends to trainees. IGERT project provides subaward to partner for purposes of providing services or support to IGERT Trainees. <p>Partner provides funding</p> <ul style="list-style-type: none"> 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. <p>Other</p> <ul style="list-style-type: none"> No funding/direct financial interaction is involved in this partnership. Other (Please specify): _____ 			
<p>Activities for this Partner/Institution (Mark all that apply)</p> <ul style="list-style-type: none"> Facilities: IGERT trainees of faculty 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, faculty and/or partner organization personnel use each other's facilities or work at each other's sites on an ad hoc or as-need basis. Internships: IGERT Trainees work in a partner's facilities specifically as interns. 		X	
<p>Accomplishments and Outcomes</p> <p>Please describe one key accomplishment or outcome (not activity) of this partnering arrangement for this reporting period.</p> <p>(Response limited to 1,000 characters.)</p> <p>[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.]</p>			X
<p>4. Project Evaluation and Institutional Impacts</p>			
<p>4a. Project Evaluation</p>			
<p>Do you have an overall plan with milestones and timelines for measuring progress toward attaining key IGERT project goals? Yes/No</p>			X
<p>If your IGERT project 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 their contact information.</p>			X

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<p>Organization/individual name Address E-mail address Phone Web site</p> <p>Was this an external evaluation service provider? Yes/No</p>			
<p>Please describe a key insight, and your response to it, if any, that has been identified through assessment and evaluation during this reporting period.</p> <p>(Response is limited to 1,000 characters each for the insight/learning and corresponding response.)</p>			X
<p>4b. Institutional Impacts</p>			
<p>Please consider your responses to the following in light of changes/impacts that have occurred in your institution as a result of your IGERT during this reporting period. (Mark all that apply)</p> <ul style="list-style-type: none"> • The institution(s) involved in your IGERT project 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 have occurred. • Other (Please specify): _____ 			X
<p>Please describe a demonstrable institutional change, if any, that has occurred during this reporting period due to IGERT.</p> <p>(Response is limited to 1,000 characters.)</p>			X

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<p>[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.]</p>			
<p>5. Publications/Presentations</p>			
<p>5a. Journal Articles in Referred Publications</p>			
<p>Did your IGERT project have any journal articles published in referred publications during the current reporting period? Yes/No</p> <p>If yes, please provide citations.</p> <p>STEP 1: Prepare a list of citations for these articles.</p> <p>STEP 2: Upload the citations list in .txt format.</p>			X
<p>5b. Journal Articles in Non-Referred Publications</p>			
<p>Did your IGERT project have any journal articles published in non-referred publications during the current reporting period? Yes/No</p> <p>If yes, please provide citations.</p> <p>STEP 1: Prepare a list of citations for these articles.</p> <p>STEP 2: Upload the citations list in .txt format.</p>			X
<p>5c. Books</p>			
<p>Did your IGERT project have any books published during the current reporting period? Yes/No</p> <p>If yes, please provide citations.</p> <p>STEP 1: Prepare a list of citations for these books.</p> <p>STEP 2: Upload the citations list in .txt format.</p>			X
<p>5d. Book Chapters</p>			
<p>Did your IGERT project have any book chapters published during the current reporting period? Yes/No</p> <p>If yes, please provide citations.</p>			X

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<p>STEP 1: Prepare a list of citations for these book chapters.</p> <p>STEP 2: Upload the citations list in .txt format.</p>			
<p>5e. Patent Applications</p> <p>Did your IGERT project submit any patent applications during the current reporting period? Yes/No</p> <p>If yes, please provide citations.</p> <p>STEP 1: Prepare a list of citations for these patent applications.</p> <p>STEP 2: Upload the citations list in .txt format</p>			X
<p>5f. Patents Awarded</p> <p>Was your IGERT project awarded any patents during the current reporting period? Yes/No</p> <p>If yes, please provide citations.</p> <p>STEP 1: Prepare a list of citations for these awarded patents.</p> <p>STEP 2: Upload the citations list in .txt format</p>			X
<p>5g. Conference Publications</p> <p>Did your IGERT project have any conference publications during the current reporting period? Yes/No</p> <p>If yes, please provide citations.</p> <p>STEP 1: Prepare a list of citations for these conference publications.</p> <p>STEP 2: Upload the citations list in .txt format</p>			X
<p>5h. Conference Presentations</p> <p>Did your IGERT project have any conference presentations during the current reporting period? Yes/No</p> <p>If yes, please provide citations.</p> <p>STEP 1: Prepare a list of citations for these conference presentations.</p>			X

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
STEP 2: Upload the citations list in .txt format				

IGERT: Crosswalk – Trainee Survey

<p align="center">Common Collection Categories</p> <p>Questions</p>	<p align="center">Staff and Project Participant Characteristics⁴</p>	<p align="center">Project Implementation Characteristics⁵</p>	<p align="center">Project Outputs⁶</p>
<p>1. About You</p>			
<p>1a. Name and Contact Info</p>			
<p>Name: (First, Middle Initial, Last, Previous Surname)</p> <p>Your Current Address: Institution Name Department Current Address Current City Current State ZIP Code Phone Extension Fax E-mail Address Web URL</p> <p>Your Permanent Contact Information (Voluntary) Your Social Security Number Personal E-mail Address</p> <p>Who will know how to reach you in the future? Please provide the name and address of a person likely to know how to reach you in 3 years. Contact Person’s Name Relationship to You Contact Person’s Address Contact Person’s City Contact Person’s State Contact Person’s ZIP Code Contact Person’s Country Contact Peron’s Phone Number Extension Contact Person’s E-mail Address</p>	<p align="center">X</p>		

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, and project role.

⁵ Elements of these characteristics include: Sources and amount of funds, fellowships, scholarships, traineeships, partnerships, training, and research methods.

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

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
1b. Demographics			
Ethnicity (Choose one): <ul style="list-style-type: none"> • Hispanic or Latino • Not Hispanic or Latino • Not Reported 	X		
Race (Mark all that apply): <ul style="list-style-type: none"> • American Indian or Alaska Native • Asian • Black or African American • Native Hawaiian or Other Pacific Islander • White • Not Reported 	X		
Gender (Choose one): <ul style="list-style-type: none"> • Male • Female • Not Reported 	X		
Disability Status (Choose one): <ul style="list-style-type: none"> • Yes (Check Yes if any of the following apply): <ul style="list-style-type: none"> • 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): <ul style="list-style-type: none"> • U.S. Citizen/U.S. National • U.S. Permanent Resident Date Permanent Resident Alien Status Was Granted (MM/YY) • Other Non-U.S. Citizen • Not Reported 	X		
State or Country of Birth (Choose one): State/U.S. Territory of Birth [dropdown list] Or Country of Birth (if not U.S. or U.S. Territory) [dropdown list]	X		
1c. Your Major and Interests			
Your Current Major			
Major [dropdown list ⁷]	X		

⁷ List of Academic Disciplines:

- Chemistry – Analytical
- Chemistry – Bio-inorganic
- Chemistry – Bio-organic
- Chemistry – Biophysical
- Chemistry – Environmental
- Chemistry – Inorganic
- Chemistry – Materials

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Degree sought (current): <ul style="list-style-type: none"> • Master of Arts (MA) • Master of Science (MS) 		X		

- Chemistry – Physical
- Chemistry – Polymer
- Chemistry – Theoretical
- Chemistry – Other (Please specify): _____
- Computer Science/Information Systems/Engineering – Artificial Intelligence (including Robotics, Computer Vision, and Human Language Processing)
- Computer Science/Information Systems/Engineering – Computer Architecture and Grids
- Computer Science/Information Systems/Engineering – Computer Science – Languages and Systems
- Computer Science/Information Systems/Engineering – Computer Science – Theoretical Foundations
- Computer Science/Information Systems/Engineering – Database Information Retrieval and Web Search
- Computer Science/Information Systems/Engineering – Graphics and Visualization
- Computer Science/Information Systems/Engineering – Human Computer Interaction
- Computer Science/Information Systems/Engineering – Information Security and Assurance
- Computer Science/Information Systems/Engineering – Information Technology and Organizations
- Computer Science/Information Systems/Engineering – Networks and Communications
- Computer Science/Information Systems/Engineering – Operating Systems and Middleware
- Computer Science/Information Systems/Engineering – Scientific Computing and Informatics
- Computer Science/Information Systems/Engineering – Software Engineering
- Computer Science/Information Systems/Engineering – 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

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
<ul style="list-style-type: none"> • Doctorate (Ph.D.) • Professional Degree (MD, JD etc) • Other Postbacc. Degree 				

-
- 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
 - 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

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
Your Research Interests			
Provide a brief description of your research interest/topic (Responses are limited to 300 characters.)		X	

- 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
- 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)

Common Collection Categories Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Does your research involve any of the following? (Mark all that apply) <ul style="list-style-type: none"> • 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 • Nanoscience: 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	
1d. IGERT Advisors			
Who are your IGERT advisors? (Mark all that apply) [Checkbox for each IGERT advisor as entered via PI survey.]		X	

-
- 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): _____

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<p>(For each advisor) How often was this person involved in your IGERT activities?</p> <ul style="list-style-type: none"> • Always • Often • Sometimes • Never 		X	
<p>1e. Graduation Plans</p>			
<p>Expected or Actual Graduation Date (mm/yyyy)</p>	X		
<p>If you have graduated, or you expect to graduate within 1 year, what type of employment opportunities are you pursuing? (Mark all that apply) <i>[Indicate top choice if more than one opportunity is selected.]</i></p> <p>Government</p> <ul style="list-style-type: none"> • Postdoctoral • Full-time position • Part-time position <p>Industry/Business</p> <ul style="list-style-type: none"> • Postdoctoral • Full-time position • Part-time position <p>Educational Institution (college, university, or K-12)</p> <ul style="list-style-type: none"> • Postdoctoral • Tenure-track faculty • Nontenure-track faculty • Staff <p>Nonprofit</p> <ul style="list-style-type: none"> • Postdoctoral • Full-time position • Part-time position <p>Self-Employed/Entrepreneur</p>			X
<p>2. Prior Experiences (Funded Trainees only)</p>			
<p>High School Background</p> <p>Name of high school/secondary school/institution from which you graduated/received a diploma</p> <p>School type (Select one):</p> <ul style="list-style-type: none"> • Public • Private • Other (Please specify): _____ <p>City</p> <p>U.S. State/U.S. Territory</p> <p>ZIP Code</p>	X		

Questions Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Non-U.S. high school country [dropdown list]			
Undergraduate Background Prior to IGERT Traineeship Institution name If other institution, please specify: _____ City State Non-U.S. undergraduate country [dropdown list] When did you receive your first undergraduate degree (mm/yyyy) Undergraduate Degree Type (Choose one) <ul style="list-style-type: none"> • Bachelor of Arts (BA) • Bachelor of Science (BS) • Other (please specify): _____ Major [dropdown list ⁸]	X		

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): _____
- Computer Science/Information Systems/Engineering – Artificial Intelligence (including Robotics, Computer Vision, and Human Language Processing)
- Computer Science/Information Systems/Engineering – Computer Architecture and Grids
- Computer Science/Information Systems/Engineering – Computer Science – Languages and Systems
- Computer Science/Information Systems/Engineering – Computer Science – Theoretical Foundations
- Computer Science/Information Systems/Engineering – Database Information Retrieval and Web Search
- Computer Science/Information Systems/Engineering – Graphics and Visualization
- Computer Science/Information Systems/Engineering – Human Computer Interaction
- Computer Science/Information Systems/Engineering – Information Security and Assurance
- Computer Science/Information Systems/Engineering – Information Technology and Organizations
- Computer Science/Information Systems/Engineering – Networks and Communications
- Computer Science/Information Systems/Engineering – Operating Systems and Middleware
- Computer Science/Information Systems/Engineering – Scientific Computing and Informatics
- Computer Science/Information Systems/Engineering – Software Engineering
- Computer Science/Information Systems/Engineering – Other (Please specify): _____
- Engineering – Aeronautical and Aerospace
- Engineering – Agricultural
- Engineering – Bioengineering
- Engineering – Biomedical
- Engineering – Chemical

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
<ul style="list-style-type: none"> • Bachelor of Arts (BA) • Bachelor of Science (BS) • Other (please specify): _____ 				

-
- 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
 - 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

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
For double majors, select second major [dropdown list ⁹]				
Post-Undergraduate Degree Prior to IGERT Traineeship		X		

- 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
- 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): _____

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Did you obtain a post-undergraduate degree prior to becoming an IGERT trainee? Yes/No				

- 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
- 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): _____

⁹ List of Academic Disciplines:

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
<p>If Yes, provide the following information.</p>				

- 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): _____
- Computer Science/Information Systems/Engineering – Artificial Intelligence (including Robotics, Computer Vision, and Human Language Processing)
- Computer Science/Information Systems/Engineering – Computer Architecture and Grids
- Computer Science/Information Systems/Engineering – Computer Science – Languages and Systems
- Computer Science/Information Systems/Engineering – Computer Science – Theoretical Foundations
- Computer Science/Information Systems/Engineering – Database Information Retrieval and Web Search
- Computer Science/Information Systems/Engineering – Graphics and Visualization
- Computer Science/Information Systems/Engineering – Human Computer Interaction
- Computer Science/Information Systems/Engineering – Information Security and Assurance
- Computer Science/Information Systems/Engineering – Information Technology and Organizations
- Computer Science/Information Systems/Engineering – Networks and Communications
- Computer Science/Information Systems/Engineering – Operating Systems and Middleware
- Computer Science/Information Systems/Engineering – Scientific Computing and Informatics
- Computer Science/Information Systems/Engineering – Software Engineering
- Computer Science/Information Systems/Engineering – 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

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Institution name City State				

- 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
- Life Sciences – Microbiology
- Life Sciences – Molecular Biology
- Life Sciences – Neurosciences

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Non-U.S. post-undergraduate country [dropdown list] Major [dropdown list ¹⁰] Department [dropdown list ¹¹]				

- 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
- Psychology – Social
- Psychology – Other (Please specify): _____
- Social Sciences – Archaeology

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Post-undergraduate degree type <ul style="list-style-type: none"> • Master of Arts (M.A.) • Master of Science (M.S.) 				

- 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): _____

¹⁰ 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): _____
- Computer Science/Information Systems/Engineering – Artificial Intelligence (including Robotics, Computer Vision, and Human Language Processing)
- Computer Science/Information Systems/Engineering – Computer Architecture and Grids
- Computer Science/Information Systems/Engineering – Computer Science – Languages and Systems

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
<ul style="list-style-type: none"> • Doctorate (Ph.D.) • Professional Degree (MD, JD, etc.) • Other Postbacc. Degree 				

- Computer Science/Information Systems/Engineering – Computer Science – Theoretical Foundations
- Computer Science/Information Systems/Engineering – Database Information Retrieval and Web Search
- Computer Science/Information Systems/Engineering – Graphics and Visualization
- Computer Science/Information Systems/Engineering – Human Computer Interaction
- Computer Science/Information Systems/Engineering – Information Security and Assurance
- Computer Science/Information Systems/Engineering – Information Technology and Organizations
- Computer Science/Information Systems/Engineering – Networks and Communications
- Computer Science/Information Systems/Engineering – Operating Systems and Middleware
- Computer Science/Information Systems/Engineering – Scientific Computing and Informatics
- Computer Science/Information Systems/Engineering – Software Engineering
- Computer Science/Information Systems/Engineering – 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

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
When did you receive your post-undergraduate degree (mm/yyyy)				
Employment Prior to IGERT Traineeship		X		

- 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
- 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

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
<p>Were you employed in the public or private sector for 1 or more years after receiving your first undergraduate degree</p>				

- 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
- 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

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
and prior to becoming an IGERT trainee? (Do not include employment as a research assistant or teaching assistant				

- 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): _____

¹¹ 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): _____
- Computer Science/Information Systems/Engineering – Artificial Intelligence (including Robotics, Computer Vision, and Human Language Processing)
- Computer Science/Information Systems/Engineering – Computer Architecture and Grids
- Computer Science/Information Systems/Engineering – Computer Science – Languages and Systems
- Computer Science/Information Systems/Engineering – Computer Science – Theoretical Foundations
- Computer Science/Information Systems/Engineering – Database Information Retrieval and Web Search
- Computer Science/Information Systems/Engineering – Graphics and Visualization
- Computer Science/Information Systems/Engineering – Human Computer Interaction
- Computer Science/Information Systems/Engineering – Information Security and Assurance
- Computer Science/Information Systems/Engineering – Information Technology and Organizations
- Computer Science/Information Systems/Engineering – Networks and Communications
- Computer Science/Information Systems/Engineering – Operating Systems and Middleware
- Computer Science/Information Systems/Engineering – Scientific Computing and Informatics
- Computer Science/Information Systems/Engineering – Software Engineering
- Computer Science/Information Systems/Engineering – Other (Please specify): _____
- Engineering – Aeronautical and Aerospace
- Engineering – Agricultural
- Engineering – Bioengineering
- Engineering – Biomedical

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
while pursuing a master's degree.) Yes/No				

- 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
- 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

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Total number of years (equal to or greater than 1 year, to the nearest year) you were employed in the public or private sector after receiving your first undergraduate degree and				

- 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
- 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

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
<p>prior to becoming an IGERT trainee.</p> <ul style="list-style-type: none"> • 1 year • 2 years 				

- 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
- 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): _____

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<ul style="list-style-type: none"> • 3 years • 4 years • 5 years • More than 5 years 			
<p>3. Achievements</p>			
<p>3a. 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.]</p>			X
<p>3b. Fellowships, scholarships, and grants other than IGERT</p> <p>Provide for each fellowship, scholarship, and grant other than IGERT received during the current reporting period.</p> <p style="padding-left: 40px;">Title of fellowship, scholarship, or grant [dropdown list] If other fellowship, please specify: _____ Proposal Title Year Awarded Awarding Agency/Organization</p>			X
<p>3c. Other Honors and Recognition</p> <p>Provide for each honor and recognition received during the current reporting period.</p> <p style="padding-left: 40px;">Title of honor or recognition [dropdown list] If other title, please specify: _____ Year Society/Granting Organization</p>			X
<p>3d. Please describe what you consider to be your major research or education accomplishment made possible as a result of your participation in your IGERT project during this reporting year.</p> <p>(Responses are limited to 1,000 characters.)</p>		X	
<p>4. Research Preparation (Funded Trainees only)</p>			
<p>Please indicate which of the following activities you engaged in during this reporting period. (Mark all that apply)</p> <ul style="list-style-type: none"> • 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 		X	

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<ul style="list-style-type: none"> • 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. 			
<p>How many courses/seminars did you take in disciplines outside of your primary discipline during this reporting period?</p>		X	
<p>How many courses/seminars did you take in your primary discipline this reporting period?</p>		X	
<p>How many courses/seminars did you take that specifically covered interdisciplinary topics related to your IGERT during this reporting period?</p>		X	
<p>5. Professional Skills (Funded Trainees only)</p>			
<p>Please indicate which of the following activities you engaged in during this reporting period. (Mark all that apply)</p> <ul style="list-style-type: none"> • 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, education, and/or outreach efforts • Led teams engaged in research, education, and/or outreach efforts • Other preparation in professional skills development (Please specify): _____ • Please check here if you were not engaged in any of the activities listed above during this reporting period 		X	
<p>6. Career Preparation (Funded Trainees only)</p>			

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<p>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.</p> <p>(Responses are limited to 1,000 characters.)</p>			X
<p>Please indicate which of the following activities you engaged in during this reporting period. (Mark all that apply)</p> <ul style="list-style-type: none"> • 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 		X	
<p>7. Internships</p>			
<p>Have you taken part in any internships lasting 1 month or more with industries or businesses, government laboratories or agencies, or nonprofit organizations during this current reporting period? Yes/No</p> <p>If Yes, the respondent can specify up to four internships. The following data are collected for each internship.</p>			X
<p>Company/Agency Name</p>			X
<p>Duration [dropdown list (1-52 weeks)]</p>			X
<p>Setting (Choose one):</p> <ul style="list-style-type: none"> • Industry/business • Nonprofit organization • Government laboratory 			X

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<ul style="list-style-type: none"> • Public sector agency • Other 			
<p>Location (Choose one):</p> <ul style="list-style-type: none"> • U.S. Location City State/U.S. Territory • Foreign Location If non-U.S. internship, please specify country [dropdown list] 			X
<p>Please indicate the internship contributions that have prepared you for your career during this reporting period (Mark all that apply)</p> <ul style="list-style-type: none"> • 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): _____ 		X	
<p>Please identify the name of the company, agency, or organization at which the internship was served and describe what you consider to be the most beneficial professional or career-related aspect.</p> <p>(Responses are limited to 1,000 characters.)</p>			X
<p>8. International Experiences</p>			
<p>Did you have an international experiences this year? Yes/No</p> <p>If Yes, the respondent can specify up to five international experiences. The following data are collected for each international experience:</p>		X	
<p>Was this international experience related to your IGERT research? Yes/No</p>		X	
<p>International experience duration [dropdown list (1-52 weeks)]</p>		X	
<p>Please identify the primary country in which the international activities occurred. [dropdown list]</p>		X	
<p>What activities were you engaged in during your international experience? (Mark all that apply)</p> <ul style="list-style-type: none"> • Attended conferences/workshops outside the United States • Undertook coursework/training outside the United States 		X	

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<ul style="list-style-type: none"> • Worked, conducted research/fieldwork, or interned outside the United States • Other (Please specify): _____ 			
<p>Were you formally prepared for your international experience? Yes/No</p>		X	
<p>If yes, what experiences were included in the preparation for your international experience? (Mark all that apply)</p> <ul style="list-style-type: none"> • 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): _____ 		X	
<p>What did you accomplish during your international experience? (Mark all that apply)</p> <ul style="list-style-type: none"> • Awards/honors/recognitions • Broader impacts • Invention/patent • Presentations • Publications • Other (Please specify): _____ 		X	
<p>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.</p> <p>(Responses are limited to 1,000 characters.)</p>		X	
<p>9. Comments (Funded Trainees only)</p>			
<p>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 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.</p> <p>(Responses are limited to 1,000 characters.)</p>			X
<p>Opportunity for Improvement Please describe what you consider to be the most important opportunity for improvement in the IGERT program with which</p>			X

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<p>you are associated.</p> <p>(Responses are limited to 1,000 characters.)</p>			
<p>10. Training Confirmation (Funded Trainees only)</p>			
<p>Training Confirmation</p>			
<p>How many hours spent per week did you spend on programmatic activities?</p>	X		
<p>Did you participate in regular training throughout the year? Yes/No</p>	X		
<p>Describe training you received (Responses are limited to 1,000 characters.)</p>	X		
<p>How frequently did you receive training? (Choose one)</p> <ul style="list-style-type: none"> • Weekly • Bimonthly • Monthly • Other (Please specify): _____ 	X		
<p>Funding Confirmation</p> <p>What was your stipend amount? (Choose one)</p> <ul style="list-style-type: none"> • \$30,000 gross annually (\$2,500 gross per month) • Other gross amount per year (Please specify): _____ 	X		
<p>How does your traineeship stipend compare to stipends received by regular teaching or research assistants at your organization? (Choose one)</p> <ul style="list-style-type: none"> • Greater than others • Equal to others • Less than others 	X		
<p>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?</p>	X		
<p>[This question is only asked of funded trainees.]</p> <p>Did you have to pay any tuition or fees this year? Yes/No</p> <p>If Yes, how much did you have to pay?</p>	X		

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

The estimated average number of annual respondents is 3,307 (109 project PIs and 3,198 IGERT trainees and associates), with an estimated annual response burden total of 12,282 hours. The Web-based collection is an annual activity of the IGERT program. There are currently 109 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 no new awards will be added, thus, the number of respondents will decline over time. The reported annualized burden was computed by taking the number of respondents from the 2015 data collection cycle and multiplying by the average burden hours reported from the last three collection cycles.

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

Respondent Type	Estimated Average Annual No. of Respondents	Estimated Average Annual Burden Hours Per Respondent	Estimated Annual Burden Hour Total
Project PIs	109	54	5,886
IGERT trainees and associates	3,198	2	6,396
Total	3,307		12,282

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 12,282 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	No. of Respondents	Burden Hours Per Respondent	Total Burden Hours
Principal Investigator form	Project PIs	109	54	5,886
Trainee and associate form	IGERT trainees and associates	3,198	2	6,396
Total		3,307		12,282

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

The overall annualized cost to the respondents is estimated to be \$336,756. The following table shows the annualized estimate of cost to respondents. The estimated hourly rate for PIs is based on a report from the American Association of University Professors, “Annual Report on the Economic Status of the Profession, 2014-15,” *Academe*, March–April 2015, Survey Report Table 4. According to this [report](#), the average salary across all academic ranks and across all types of doctoral-granting institutions (public, private-independent, religiously affiliated) was \$87,838. The hourly rate for trainees and associates is based on their annual stipend of \$30,000. Both of these figures was then divided by the number of standard annual work hours (2,080) to determine an average hourly rate for each respondent type. Those rates and the corresponding total annual costs are indicated in the table below:

Respondent Type	No. of Respondents	Burden Hours Per Respondent	Average Hourly Rate	Estimated Annual Cost
Project PIs	109	54	\$42	\$247,212
IGERT trainees and associates	3,198	2	\$14	\$89,544
Total	3,307			\$336,756

IGERT: Estimates of Costs to the Federal Government

Computing the annualized cost to NSF for the IGERT data collection was done by taking the budget for the most recent year and calculating the costs for each of the following operational activities involved in producing, maintaining, and conducting the 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 program, e.g., increased reporting tools, additional validations)	\$345,493
System Maintenance, Updates, and Technical Support (system requires updates each year before opening the collection; maintenance is required to keep the system current with technology, e.g., database servers, operating systems)	\$172,727
Data Collection Opening and Support (e.g., online and telephone support to respondents and contacting respondents to encourage completion of the questions), Reporting (as defined by the DGE), and Followup Activities (e.g., providing data to other consultants)	\$207,231
Three-Year Total for All Operational Activities	\$725,452

The annual cost was computed as one-third of the total three-year costs; therefore, the annualized cost to NSF for the IGERT data collection is \$241,817.

IGERT: Questions – PI Survey

1. Project Summary
<u>Project Characteristics</u>
<p>Please indicate up to three NSF directorates that most closely correspond to your interdisciplinary research theme.</p> <ul style="list-style-type: none"> • 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
<p>Did you support any IGERT trainees during the current project year? Yes/ No</p>
<p>Considering the IGERT trainees as a group, how do they compare with graduate students you usually see in terms of their academic/research potential?</p> <ul style="list-style-type: none"> • 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
<p>How do trainees in your program earn their doctoral degrees? <i>[mark all that apply]</i></p> <ul style="list-style-type: none"> • 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:
<p>Does your IGERT project include undergraduate involvement? Yes/ No</p>
<p>If yes, were NSF IGERT funds used for undergraduate involvement? Yes/ No</p>
<p>Does your IGERT project include postdoctoral involvement? Yes/No</p>
<p>If yes, were NSF IGERT funds used for postdoctorate involvement? Yes/ No</p>
<p>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):</p> <ol style="list-style-type: none"> 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
<u>Research Achievements</u>
<p>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</p>

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):

<ul style="list-style-type: none"> • Male • Female • Not reported
<p>Planned for 2013 data collection cycle</p> <p>Disability Status (Choose one):</p> <ul style="list-style-type: none"> • Yes (check Yes if any of the following apply): <ul style="list-style-type: none"> • 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
<p>Citizenship (Choose one):</p> <ul style="list-style-type: none"> • U.S. Citizen/U.S. National • U.S. Permanent Resident • Other Non-U.S. Citizen • Not Reported
<p>Provide for each IGERT Project Coordinator:</p>
<p>Name: First, Middle Initial, Last, Previous Surname</p>
<p>Contact Information:</p> <p>Institution Name</p> <p>Title</p> <p>Department at Institution</p> <p>Current Address</p> <p>Current City</p> <p>Current State</p> <p>Zip Code</p> <p>Phone</p> <p>Extension</p> <p>Fax</p> <p>E-mail Address</p> <p>Web URL</p>
<p>Provide for each IGERT Co-PI and Trainee/Associate Advisor:</p>
<p>Name: First, Middle Initial, Last, Previous Surname</p>
<p>Mark the checkbox if the individual served as co-PI or trainee/associate advisor for the current project year.</p>
<p>Role in Project (Mark all that apply):</p> <ul style="list-style-type: none"> • Co-PI • Trainee/Associate Advisor
<p>Contact Information:</p> <p>Institution Name</p> <p>Title</p> <p>Department at Institution</p> <p>Address at Institution</p> <p>Institution City</p> <p>Institution State</p> <p>Zip Code</p> <p>Phone</p> <p>Extension</p> <p>Fax</p> <p>E-mail Address</p>

Web URL
Current IGERT Advisor Yes/No
Ethnicity (Choose one): <ul style="list-style-type: none"> • Hispanic or Latino • Not Hispanic or Latino • Not Reported
Race (Choose one or more): <ul style="list-style-type: none"> • American Indian or Alaska Native • Asian • Black or African American • Native Hawaiian or other Pacific Islander • White • Not Reported
Gender (Choose one): <ul style="list-style-type: none"> • Male • Female • Not reported
Disability Status (Choose one): <ul style="list-style-type: none"> • Yes (Check Yes if any of the following apply): <ul style="list-style-type: none"> • 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): <ul style="list-style-type: none"> • 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] <ul style="list-style-type: none"> • 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) <ul style="list-style-type: none"> • Biochemistry • Cell & Molecular Biology • Biology • Chemistry • Computer Science • Economics • Education • Engineering • Geology • History

<ul style="list-style-type: none"> • 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.) <ul style="list-style-type: none"> • 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] <ul style="list-style-type: none"> • 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) <ul style="list-style-type: none"> • 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.
- Other preparation for careers in academia (please specify: _____).
- Other preparation for nonacademic careers (e.g., industry, government) (please specify: _____).
- 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”; “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: _____)

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 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, 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)

4. Bridge programs for entering graduate students
5. 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: _____)

Innovation Skills Training (Per NSF, "similar to International Opportunities" section)

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:

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: _____)

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

1. 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
2. Please select the sector which best describes the business of your corporate partner [pull down/select one]
 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: _____)

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

Institutional Impacts

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 insight and 1000 characters for the response.)

[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: _____)

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):

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-Refereed 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

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 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: 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

<p>Citizenship (Choose one):</p> <ul style="list-style-type: none"> • U.S. Citizen/U.S. National • U.S. Permanent Resident • Other Non-U.S. Citizen • Not Reported
<p>Permanent residents only provide:</p>
<p>Permanent Resident Alien Status Granted (mm/yyyy)</p>
<p>State or Country of Birth</p>
<p><u>Your Major & Interests</u></p> <p>Major</p> <p>[Respondent chooses from the list of academic disciplines shown in the footnote]¹²</p>

¹² 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
- Engineering – Ocean

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 – 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
 - Life Sciences – Microbiology

- 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 – 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
 - Psychology – Social

<ul style="list-style-type: none"> • Sensing, signals and signal processing • Sustainability: ecology and the environment • Water resources: conservation, utilization and quality • Other (please specify)
<u>IGERT Advisors</u> 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 <ul style="list-style-type: none"> • Always • Often • Sometimes • Never
<u>Graduation Plans</u> Expected Graduation Date (mm/yyyy)

-
- 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 Major

[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 <ul style="list-style-type: none"> • 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)
<i>Employment Prior to IGERT Traineeship</i>
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
<u>Publications, Patents, and Presentations Provided by the PI</u> <i>[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]</i>
<i>Fellowships, Scholarships, and Grants Other Than IGERT</i>
Provide for each Fellowship, Scholarship, or Grant Other Than IGERT:
Title of Fellowship, Scholarship, or Grant
Proposal Title
Year Awarded
Awarding Agency/Organization
<i>Other Honors and Recognition</i>
Provide for each honor or recognition:
Title of Honor or Recognition
Year
Society/Granting Organization
<i>Research or Education Accomplishment</i>
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
- Other preparation in professional skills development (Please specify: _____)
- 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)

<ul style="list-style-type: none"> • 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? Yes/No
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 <ul style="list-style-type: none"> • U.S. If U.S. please indicate the state and city • Foreign. If foreign, please indicate the foreign country
Internship contributions that have prepared you for your career during this reporting period: (mark all that apply) <ul style="list-style-type: none"> • 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? Yes/No
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)
<ul style="list-style-type: none"> • 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? Yes/No
If yes to previous question, What experiences were included in the preparation for your international experience?
<ul style="list-style-type: none"> • 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)
<ul style="list-style-type: none"> • 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)
<u>Benefit of IGERT</u>
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.
<u>Opportunity for Improvement</u>
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)
<u>Training Confirmation</u>
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 <ul style="list-style-type: none"> • Weekly • Bimonthly • Monthly • Other- please specify (text box)
<u>Funding Confirmation</u>
What was your stipend amount <ul style="list-style-type: none"> • \$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) <ul style="list-style-type: none"> • 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)