Attachment B1

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

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IGERT: Crosswalk – Principal Investigator (PI) Survey

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

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[1] Elements of these characteristics include name, address, date of birth, gender, ethnicity, race, disability status, class, major, grade point average, 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.

Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Common Collection Categories			
Yes/No			
Estimate the amount of funds from the current year of IGERT support that will be carried over to the next year as of the project anniversary date (the date when your annual report will be due in Research.gov): Total funds carried over to the next year If carryover funds are entered (i.e., greater than 0), please provide an explanation for these funds Participant support costs carried over to the next year Stipends carried over to the next year		X	
Describe how the Competitive Innovation Incentive Fund (CIIF) was used, barriers to implementation of CIIF training activities, and notable CIIF training successes.		X	
1b. Research Achievements			
Please describe up to three interdisciplinary research achievements/discoveries/outcomes that demonstrate how your IGERT project has been particularly effective in attaining the interdisciplinary research goals you set out to achieve during this reporting period. Please report achievements that include tangible outcomes such as publication, patent, discovery, or preliminary findings. Individual trainee achievements should be reserved for the "Trainee Achievements" section. (Responses are limited to 1,000 characters for each achievement.) [The PI has an option to make each achievement available for use on the IGERT Resource Center Web site, viewable by the general public.]			X
1c. 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 1,000 characters for each achievement.) [The PI has an option to make each achievement available for use on the IGERT Resource Center Web site, viewable by the general public.]			X
1d. 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.			X

Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Common Collection Categories			
(Responses are limited to 1,000 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.]			
1e. 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 1,000 characters each for each issue/challenge and corresponding response.)		X	
1f. Outreach Activities			
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-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 outreach activity: 　　Provide a short title for this activity 　　Name of the media outlet or organization for which outreach was done 　　Date of the activity 　　Type of activity 　　• Museum 　　• Media 　　• K-12 　　• Undergraduate 　　• Government 　　• Informal Science 　　• Other 　　Briefly describe this activity, including the names of the IGERT individuals involved.		X	X

Questions	Common Collection Categories Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
1g. 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 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. 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 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 (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			X

Questions	Common Collection Categories		
	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs

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,** 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:
    Provide a descriptive title for this Highlight.
 	
    If a video is associated with the Highlight, please provide a URL link to the video.
 	
    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]
 	
    Describe the achievement/result that is the Highlight.
 	
    How does this activity address the primary and secondary NSF strategic goals that you marked above?
 	
[The PI has an option to make each Highlight available for use on the IGERT Resource Center Web site, viewable by the general public.]
 	
For each Highlight Image:
    Provide a descriptive title for this image.
 	
    Upload image file (bmp, gif, jpeg, pdf, png, or tiff only)
 	
    Does NSF have permission to use this image?
        Yes/No
 	
    Image credits (Required only if you answered "yes" to the previous question)
 	
    Description of image (optional)			

Questions / Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
2. IGERT Project Personnel, Trainee, and Associate Details			
Provide for each Principal Investigator			
Mark the checkbox if [PI Name] served as PI for the current project year	X		
Name: First, Middle Initial, Last, Previous Surname	X		

Contact Information:
    Institution Name
    Title
        • Professor
        • Associate Professor
        • Instructor
        • Other
    Department at Institution
    Address at Institution
    Institution's City
    Institution's State
    ZIP Code
    Phone
    Extension
    Fax
    E-mail Address
    Web URL
	X		

Ethnicity (Choose one): • Hispanic or Latino • Not Hispanic or Latino • Not Reported	X		
Race (Mark all that apply): • American Indian or Alaska Native • Asian • Black or African American • Native Hawaiian or other Pacific Islander • White • Not Reported	X		
Gender (Choose one): • Male • Female • Not Reported	X		

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

Questions / Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Citizenship (Choose one): • U.S. Citizen/U.S. National • U.S. Permanent Resident • Other Non-U.S. Citizen • Not Reported	X		
Provide for each IGERT Project Coordinator			
Name: First, Middle Initial, Last, Previous Surname	X		

Contact Information:
    Institution Name
    Title
       • Professor
       • Associate Professor
       • Instructor
       • Other
    Department
    Current Address
    Current City
    Current State
    ZIP Code
    Phone
    Extension
    Fax
    E-mail Address
    Web URL
	X		

Provide for each IGERT Co-PI and Trainee/Associate Advisor			
Name: First, Middle Initial, Last, Previous Surname	X		
Mark the checkbox if the individual served as co-PI or trainee/associate advisor for the current project year.	X		
Role in Project (Mark all that apply): • Co-PI • Trainee/Associate Advisor and/or Faculty Participant	X		

Contact Information:
    Institution Name
    Title
       • Professor
       • Associate Professor
       • Instructor
       • Other
    Department at Institution
    Address at Institution
    Institution's City
    Institution's State
    ZI Code
	X		

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Phone Extension Fax E-mail Address Web URL				
Current IGERT Advisor Yes/No		X		
Ethnicity (Choose one): • Hispanic or Latino • Not Hispanic or Latino • Not Reported		X		
Race (Mark all that apply): • American Indian or Alaska Native • Asian • Black or African American • Native Hawaiian or other Pacific Islander • White • Not Reported		X		
Gender (Choose one): • Male • Female • Not Reported		X		

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

Citizenship (Choose one): • U.S. Citizen/U.S. National • U.S. Permanent Resident • Other Non-U.S. Citizen • Not Reported		X		
Provide for each IGERT Trainee and Associate				
Name: First, Middle Initial, Last, Previous Surname		X		
E-mail Address		X		
Verify IGERT-required Citizenship/Residency Status (Trainees only) • 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		

Questions / Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
GRE Scores: 　Verbal 　Quantitative 　Analytical 　Subject (Select GRE Subject) 　　• Biochemistry, Cell & Molecular Biology 　　• Biology 　　• Chemistry 　　• Computer Science 　　• Economics 　　• Education 　　• Engineering 　　• Geology 　　• History 　　• Literature in English 　　• Mathematics 　　• Music 　　• Physics 　　• Political Science 　　• Psychology 　　• Revised Music 　　• Sociology	X		
When did the trainee/associate first enroll in graduate study at this institution? (mm/yyyy)	X		
When did the trainee first began receiving IGERT funding? (Trainees only) (mm/yyyy)		X	
When did the associate first began participating in the IGERT project? (Associates only) (mm/yyyy)		X	
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.) 　• 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	
Please describe the current situation that best describes this IGERT trainee/associate. (Select one) 　• 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	X		X

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
completed) (mm/yyyy) • Has left your institution without earning degree. (Enter month/year departed) (mm/yyyy)				
3. Project Features				
3a. Trainee Preparation in Multidisciplinary/Interdisciplinary Research				
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 1,000 characters for each practice.) Measure: • Formal evaluation • Informal surveys • Group feedback • Quantitative measure • Other (Please specify): _____ [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.]			X	
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) • 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	
3b. 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.			X	

Questions / **Common Collection Categories**	**Staff and Project Participant Characteristics**	**Project Implementation Characteristics**	**Project Outputs**
(Responses are limited to 1,000 characters 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 <u>majority</u> 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, 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	
3c. Trainee Preparation for STEM Careers			
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) • 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		X	

Questions	Common Collection Categories — Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
public policy concerns or issues. • 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.			
3d. 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: _____		X	
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. (Responses are limited to 1,000 characters for each tactic and result.) [The PI has an option to make each Tactic and Result pair available for use on the IGERT Resource Center Web site, viewable by the general public.]		X	
Please describe the extent to which each of the following practices been productive for recruiting trainees <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.] • 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	X

Questions / Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
• Use of professional meetings, conferences, associations to communicate with, reach out to, and market to potential IGERT Trainees • Other (Please specify): _____			
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.] • 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	X
3e. International Opportunities			
According to NSF records, you project [<u>has</u>/<u>does not have</u>] explicit funding for an international component. If you think this is incorrect, please contact ICF International.		X	
Briefly describe up to three training experiences or components that			X

Questions	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
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. (Responses are limited to 1,000 characters for each training experience or component.) [The PI has an option to make each training experience or component available for use on the IGERT Resource Center Web site, viewable by the general public.]			
Responding to the remaining questions is mandatory only for IGERT projects with explicit funding for the international component. Is international participation required for all trainees in your IGERT project? Yes/No		X	

Did one or more trainees from your IGERT project engage in an 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:
    Country [dropdown list]
 	
    Trainee(s) involved [one checkbox per trainee]
 	
    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.
• 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	

Identify the value/opportunities for faculty that resulted from the International experiences of the IGERT project. (Mark all that apply)			X

Questions / Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
• 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 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. (Responses are limited to 1,000 characters for each research or educational achievement.) [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.]			X
3f. Partnership 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 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. 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.		X	
Provide for each Partner			
Institution/Agency/Business/Organization name		X	
If partner is an academic institution, please mark 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 agency, please select the best option. • 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	

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs

If partner is a corporate or industrial partner:
 	
    Please select the descriptions that **best** fit the corporate or industrial partner. (Select one)
    • Large company
    • Small to mid-size company
    • Start-up company
 	
    Corporate headquarters (Select one)
    • U.S.-based company
    • Foreign-based company
 	
    Sector
    Please select the sector that best describes the business of your corporate partner:
    • **Goods Producing**
      o Agriculture, forestry, fishing and hunting
      o Construction
      o Manufacturing
      o Mining
    • **Service Providing**
      o Education services
      o Finance and banking services
      o Health and healthcare-related services
      o Information, communications, media services
      o Leisure and hospitality services
      o Professional, scientific, and business services
      o Public administration
      o Other services
 	
    If Manufacturing is selected, please select a Manufacturing Subsector:
    • 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				

Funding Arrangement for this Partner (Mark all that apply):			X	

Questions	**Common Collection Categories** Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Subaward to partner • 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. 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 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	
Accomplishments and Outcomes Please describe one **key** accomplishment or outcome (not activity) of **this** partnering arrangement for this reporting period. (Response limited to 1,000 characters.) [The PI has an option to make the accomplishment or outcome available for use on the IGERT Resource Center Web site, viewable by the general public.]			X
4. Project Evaluation and Institutional Impacts			
4a. Project Evaluation			
Do you have an overall plan with milestones and timelines for measuring progress toward attaining key IGERT project goals? Yes/No			X
If your IGERT project paid for professional evaluation services external to the IGERT institution or used expertise internal to your institution to			X

Questions	Common Collection Categories		
	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
aid in the evaluation process, please share their contact information. Organization/individual name Address E-mail address Phone Web site Was this an external evaluation service provider? Yes/No			
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 1,000 characters each for the insight/learning and corresponding response.			X
4b. Institutional Impacts			
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) • 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
Please describe a demonstrable institutional change, if any, that has occurred during this reporting period due to IGERT.			X

Questions	**Common Collection Categories**		
	Staff and Project Participant Characteristics	**Project Implementation Characteristics**	**Project Outputs**
(Response is limited to 1,000 characters.) [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			
5a. Journal Articles in Referred Publications			
Did your IGERT project have any journal articles published in referred publications during the current reporting period? Yes/No If yes, please provide citations. STEP 1: Prepare a list of citations for these articles. STEP 2: Upload the citations list in .txt format.			X
5b. Journal Articles in Non-Referred Publications			
Did your IGERT project have any journal articles published in non-referred publications during the current reporting period? Yes/No If yes, please provide citations. STEP 1: Prepare a list of citations for these articles. STEP 2: Upload the citations list in .txt format.			X
5c. Books			
Did your IGERT project have any books published during the current reporting period? Yes/No If yes, please provide citations. STEP 1: Prepare a list of citations for these books. STEP 2: Upload the citations list in .txt format.			X
5d. Book Chapters			
Did your IGERT project have any book chapters published during the current reporting period? Yes/No			X

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

Questions	Common Collection Categories	Participant Characteristics	Project Implementation Characteristics	Project Outputs
STEP 1: Prepare a list of citations for these conference presentations. STEP 2: Upload the citations list in .txt format				

Questions / **Common Collection Categories**	Staff and Project Participant Characteristics[4]	Project Implementation Characteristics[5]	Project Outputs[6]
1. About You			
1a. Name and Contact Info			

Name: (First, Middle Initial, Last, Previous Surname)
 	
Your Current Address:
    Institution Name
    Department
    Current Address
    Current City
    Current State
    ZIP Code
    Phone
    Extension
    Fax
    E-mail Address
    Web URL
 	
Your Permanent Contact Information (Voluntary)
    Your Social Security Number
    Personal E-mail Address
 	
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
	X		

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[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.

Questions	Common Collection Categories		
	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
1b. Demographics			
Ethnicity (Choose one): • Hispanic or Latino • Not Hispanic or Latino • Not Reported	X		
Race (Mark all that apply): • American Indian or Alaska Native • Asian • Black or African American • Native Hawaiian or Other Pacific Islander • White • Not Reported	X		
Gender (Choose one): • Male • Female • Not Reported	X		

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

Citizenship (Choose one): • 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		

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[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): • 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

	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Questions				
• 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

Questions	Common Collection Categories		
	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Your Research Interests			
Provide a brief description of your research interest/topic		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)

Questions	**Common Collection Categories**		
	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
(Responses are limited to 300 characters.)			
Does your research involve any of the following? (Mark all that apply) • Bioinformatics • Biological evolution and development • Biotechnology • Civil infrastructure monitoring and improvement • Climate change: impacts and factors • Computational science and engineering • Device development • Energy: alternate and renewable resources and conservation • Entrepreneurialism • Human, social, and community sciences • Imaging • Materials science and engineering • 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): _____

Questions	Common Collection Categories		
	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
(For each advisor) How often was this person involved in your IGERT activities? • Always • Often • Sometimes • Never		X	
1e. Graduation Plans			
Expected or Actual Graduation Date (mm/yyyy)	X		X
If you have graduated, or you expect to graduate within 1 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 • Nontenure-track faculty • Staff Nonprofit • Postdoctoral • Full-time position • Part-time position Self-Employed/Entrepreneur			X
2. Prior Experiences (Funded Trainees only)			

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): _____
 	
  City
  U.S. State/U.S. Territory
  ZIP Code
	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)
  • Bachelor of Arts (BA)
  • Bachelor of Science (BS)
  • Other (please specify): _____
Major [dropdown list]
  • Bachelor of Arts (BA)
  • Bachelor of Science (BS)
  • Other (please specify): _____
For double majors, select second major [dropdown list]
	X		

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. Institution name City State Non-U.S. post-undergraduate country [dropdown list] Major [dropdown list] Department [dropdown list][8]	X		

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[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

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Post-undergraduate degree type • Master of Arts (M.A.) • Master of Science (M.S.)				

- 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
- Geosciences – Geology
- Geosciences – Geophysics
- Geosciences – Hydrologic Sciences

Questions	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
• Doctorate (Ph.D.) • Professional Degree (MD, JD, etc.) • Other Postbacc. Degree				

- 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
- Life Sciences – Virology
- Life Sciences – Zoology
- Life Sciences – Other (Please specify): _____

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

- 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)
- Social Sciences – Geography
- Social Sciences – History of Science
- Social Sciences – International Relations

Questions	Common Collection Categories		
	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Employment Prior to IGERT Traineeship Were you employed in the public or private sector for 1 or more years after receiving your first undergraduate degree and prior to becoming an IGERT trainee? (Do not include employment as a research assistant or teaching assistant while pursuing a master's degree.) Yes/No 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 prior to becoming an IGERT trainee. • 1 year • 2 years • 3 years • 4 years • 5 years • More than 5 years	X		
3. Achievements			
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.]			X

_____

• 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): _____

Questions	Common Collection Categories		
	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs

3b. Fellowships, scholarships, and grants other than IGERT
 	
Provide for each fellowship, scholarship, and grant other than IGERT received during the current reporting period.
 	
    Title of fellowship, scholarship, or grant [dropdown list]
    If other fellowship, please specify: _____
    Proposal Title
    Year Awarded
    Awarding Agency/Organization
			X

3c. Other Honors and Recognition
 	
Provide for each honor and recognition received during the current reporting period.
 	
    Title of honor or recognition [dropdown list]
    If other title, please specify: _____
    Year
    Society/Granting Organization
			X

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. (Responses are limited to 1,000 characters.)		X	X
4. Research Preparation (Funded Trainees only)			
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.		X	
How many courses/seminars did you take in disciplines outside of your primary discipline during this reporting period?		X	

Questions / Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
How many courses/seminars did you take in your primary discipline this reporting period?		X	
How many courses/seminars did you take that specifically covered interdisciplinary topics related to your IGERT during this reporting period?		X	X
5. Professional Skills (Funded Trainees only)			
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, 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	
6. Career Preparation (Funded Trainees only)			
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. (Responses are limited to 1,000 characters.)			X
Please indicate which of the following activities you engaged in during this reporting period. (Mark all that apply) • Received training or instruction (e.g., courses, workshops) in effective		X	

Questions	Common Collection Categories Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
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			
7. Internships			
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 If Yes, the respondent can specify up to four internships. The following data are collected for each internship.		X	
Company/Agency Name		X	
Duration [dropdown list (1-52 weeks)]		X	
Setting (Choose one): • Industry/business • Nonprofit organization • Government laboratory • Public sector agency • Other		X	

Location (Choose one):
• U.S. Location
    City
    State/U.S. Territory
• Foreign Location
    If non-U.S. internship, please specify country
    [dropdown list]
		X	

Please indicate the internship contributions that have prepared you			X

Questions	Common Collection Categories		
	Staff and Project Participant Characteristics	**Project Implementation Characteristics**	**Project Outputs**
for your career during this reporting period (Mark all that apply) • Received training/instruction on the interaction between academic research and industrial technical requirements • Received training/instruction for applying your research to address public policy concerns or issues • Engaged in professional interactions other than internships with nonacademic employers (e.g., industry, government) in order to learn about career opportunities and requirements • Communicated, worked, or collaborated with scientists of other nationalities • Other preparation for nonacademic careers (e.g., industry, government) (Please specify): _____			
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. (Responses are limited to 1,000 characters.)		X	X
8. International Experiences			
Did you have an international experiences this year? 　Yes/No If Yes, the respondent can specify up to five international experiences. The following data are collected for each international experience:		X	
Was this international experience related to your IGERT research? 　Yes/No		X	
International experience duration [dropdown list (1-52 weeks)]		X	
Please identify the primary country in which the international activities occurred. [dropdown list]		X	
What activities were you engaged in during your international experience? (Mark all that apply) • Attended conferences/workshops outside the United States • Undertook coursework/training outside the United States • Worked, conducted research/fieldwork, or interned outside the United States • Other (Please specify): _____		X	
Were you formally prepared for your international experience? 　Yes/No		X	
If yes, what experiences were included in the preparation for your international experience? (Mark all that apply) • How to work in a foreign laboratory/field work • Graduate education/education/laboratory differences in country to be visited • Language		X	

Questions / Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
• Cultural differences • Learning about the area • Other (Please specify): _____			
What did you accomplish during your international experience? (Mark all that apply) • Awards/honors/recognitions • Broader impacts • Invention/patent • Presentations • Publications • Other (Please specify): _____			X
If you took part in international activities during this reporting period, please describe what you consider to be the most beneficial professional or career-related aspect of these activities. (Responses are limited to 1,000 characters.)			X
9. Comments (Funded Trainees only)			
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. (Responses are limited to 1,000 characters.)			X
Opportunity for Improvement Please describe what you consider to be the most important opportunity for improvement in the IGERT program with which you are associated. (Responses are limited to 1,000 characters.)			X
10. Training Confirmation (Funded Trainees only)			
Training Confirmation			
How many hours spent per week did you spend on programmatic activities?		X	
Did you participate in regular training throughout the year? Yes/No		X	

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

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

The estimated average number of annual respondents is 513 (24 award PIs and 489 IGERT trainees and associates), with an estimated annual response burden total of 2,342 hours. The Web-based collection is an annual activity of the IGERT program. Data are collected from each award with one PI and multiple trainees/associates reporting for each award. Awards not in their final year submit an annual report, while awards in their final year submit both an annual report and a final report. PIs complete the PI questionnaire (both for the annual and final reports). All IGERT trainees are required to complete the IGERT trainee questionnaire (for the annual report only), and the associates are requested but not required to complete the IGERT associate questionnaire (again, for the annual report only). The last new awards began in 2013. Awards are generally for 5 years but can receive (potentially multiple) no-cost extensions; no-cost extensions are decided by NSF on an annual basis. No new awards will be added to the population, thus, the number of respondents will decline over time. The estimated average annual hour burden per respondent was determined using the burden information reported by respondents for the last three collection cycles. For the PI respondents, the total burden hours reported for both annual and final reports over the last three collection cycles was divided by the total number of awards reporting over that period, thus the burden estimate accounts for both annual and final reports.

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
Award PIs	24	67	1,608
IGERT trainees and associates	489	1.5	734
Total	**513**		**2,342**

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

As mentioned above respondents are award PIs and IGERT trainees and associates. The estimated total annual response burden is 2,342 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	Award PIs	24	67	1,608
Trainee and associate form	IGERT trainees and associates	489	1.5	734
Total		**513**		**2,342**

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

The overall annualized cost to the respondents is estimated to be $84,237. 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, "The Annual Report on the Economic Status of the Profession, 2017–18," Survey Report Table 1. 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 $95,176. The hourly rate for trainees and associates is based on their annual stipend of $30,000. Both of these figures were 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
Award PIs	24	67	$46	$73,968
IGERT trainees and associates	489	1.5	$14	$10,269
Total	**513**			**$84,237**

IGERT: Estimates of Costs to the Federal Government

Computing the annualized cost to NSF for the IGERT data collection was done by taking the projected budget for the next three years and calculating the cost 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)	$140,571
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)	$253,028
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 Follow-up Activities (e.g., providing data to other consultants)	$168,685
Three-Year Total for All Operational Activities	**$562,284**

The annual cost was computed as one-third of the total three-year cost; therefore, the annualized cost to NSF for the IGERT data collection is $187,428.

1. Project Summary
1a. Project Characteristics

Please indicate up to three NSF directorates that most closely correspond to your interdisciplinary research theme.
  • BIO–Biological Sciences
  • CISE–Computer and Information Science and Engineering
  • ENG–Engineering
  • GEO–Geosciences
  • MPS–Mathematical and Physical Sciences
  • OCI–Office of Cyberinfrastructure
  • OPP–Office of Polar Programs
  • SBE–Social, Behavioral, and Economic Sciences

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

Considering the IGERT trainees as a group, how do they compare with graduate students you usually see in terms of their academic/research potential?
  • Far superior to our usual graduate students
  • Somewhat better than our usual graduate students
  • About the same as our usual graduate students
  • Somewhat less promising or less successful than our usual graduate students
  • Much less promising or less successful than our usual students

How do trainees in your program earn their doctoral degrees? (Mark all that apply)
  • Trainees earn their degrees from the IGERT multidisciplinary/interdisciplinary program.
  • Trainees earn their degrees from traditional single-discipline departments.
  • Trainees earn their degrees from multidisciplinary/interdisciplinary programs, centers or units other than IGERT.
  • Other (certificates, etc.) (Please specify): _____

Does your IGERT project include undergraduate involvement?   Yes/No
If yes, were NSF IGERT funds used for undergraduate involvement?   Yes/No
Does your IGERT project include postdoctoral involvement?   Yes/No
If yes, were NSF IGERT funds used for postdoctorate involvement?   Yes/No

Estimate the amount of funds from the current year of IGERT support that will be carried over to the next year as of the project anniversary date (the date when your annual report will be due in Research.gov):
    Total funds carried over to the next year
    If carryover funds are entered (i.e., greater than 0), please provide an explanation for these funds
    Participant support costs carried over to the next year
    Stipends carried over to the next year

Describe how the Competitive Innovation Incentive Fund (CIIF) was used, barriers to implementation of CIIF training activities, and notable CIIF training successes.
1b. Research Achievements
Please describe up to three interdisciplinary research achievements/discoveries/outcomes that demonstrate how your IGERT project has been particularly effective in attaining the interdisciplinary research goals you set out to achieve during this reporting period. Please report achievements that include tangible outcomes such as publication, patent, discovery, or

preliminary findings. Individual trainee achievements should be reserved for the "Trainee Achievements" section.
(Responses are limited to 1,000 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.]

1c. 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 1,000 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.]

1d. 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 1,000 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.]

1e. 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 1,000 characters each for each issue/challenge and corresponding response.)

1f. Outreach Activities

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-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 outreach activity:
> Provide a short title for this activity

> Name of the media outlet or organization for which outreach was done

> Date of the activity

> Type of activity
> - Museum

	• Media
	• K-12
	• Undergraduate
	• Government
	• Informal Science
	• Other

Briefly describe this activity, including the names of the IGERT individuals involved.

1g. 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 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.

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 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 (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 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,** 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:

        Provide a descriptive title for this Highlight.

        If a video is associated with the Highlight, please provide a URL link to the video.

        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]

        Describe the achievement/result that is the Highlight.

        How does this activity address the primary and secondary NSF strategic goals that you marked above?

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

For each Highlight Image:

        Provide a descriptive title for this image.

        Upload image file (bmp, gif, jpeg, pdf, png, or tiff only)

        Does NSF have permission to use this image?
                Yes/No

        Image credits (Required only if you answered "yes" to the previous question)

        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:
        Institution Name
        Title
              • Professor
              • Associate Professor
              • Instructor
              • Other
        Department at Institution
        Address at Institution
        Institution's City
        Institution's State
        ZIP Code
        Phone
        Extension
        Fax
        E-mail Address
        Web URL

Ethnicity (Choose one):
    • Hispanic or Latino
    • Not Hispanic or Latino
    • Not Reported

Race (Mark all that apply):
    • 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

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

Citizenship (Choose one):
    • U.S. Citizen/U.S. National
    • U.S. Permanent Resident
    • Other Non-U.S. Citizen
    • Not Reported

Provide for each IGERT Project Coordinator
Name: First, Middle Initial, Last, Previous Surname

Contact Information:
    Institution Name
    Title
        • Professor
        • Associate Professor
        • Instructor
        • Other
    Department
    Current Address
    Current City
    Current State
    ZIP Code
    Phone
    Extension
    Fax
    E-mail Address
    Web URL

Provide for each IGERT Co-PI and Trainee/Associate Advisor
Name: First, Middle Initial, Last, Previous Surname
Mark the checkbox if the individual served as co-PI or trainee/associate advisor for the current project year.
Role in Project (Mark all that apply):   • Co-PI

• Trainee/Associate Advisor and/or Faculty Participant

Contact Information:
    Institution Name
    Title
        • Professor
        • Associate Professor
        • Instructor
        • Other
    Department at Institution
    Address at Institution
    Institution's City
    Institution's State
    ZI Code
    Phone
    Extension
    Fax
    E-mail Address
    Web URL

Current IGERT Advisor   Yes/No

Ethnicity (Choose one):
    • Hispanic or Latino
    • Not Hispanic or Latino
    • Not Reported

Race (Mark all that apply):
    • 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

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

Citizenship (Choose one):
    • U.S. Citizen/U.S. National
    • U.S. Permanent Resident
    • Other Non-U.S. Citizen
    • Not Reported

Provide for each IGERT Trainee and Associate
Name: First, Middle Initial, Last, Previous Surname
E-mail Address

Verify IGERT-required Citizenship/Residency Status (Trainees only) • Yes, the trainee is a U.S. citizen/U.S. national or U.S. permanent resident • No, the trainee does not meet IGERT citizenship Requirement. If you answered No, please provide an explanation.

GRE Scores:
       Verbal
       Quantitative
       Analytical
       Subject (Select GRE Subject)
         • Biochemistry, Cell & Molecular Biology
         • Biology
         • Chemistry
         • Computer Science
         • Economics
         • Education
         • Engineering
         • Geology
         • History
         • Literature in English
         • Mathematics
         • Music
         • Physics
         • Political Science
         • Psychology
         • Revised Music
         • Sociology

When did the trainee/associate first enroll in graduate study at this institution? (mm/yyyy)
When did the trainee first began receiving IGERT funding? (Trainees only) (mm/yyyy)
When did the associate first began participating in the IGERT project? (Associates only) (mm/yyyy)

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.)
    • 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

Please describe the current situation that best describes this IGERT trainee/associate. (Select one)
    • 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)
    • Has left your institution without earning degree. (Enter month/year departed) (mm/yyyy)

3. Project Features
3a. Trainee Preparation in Multidisciplinary/Interdisciplinary Research
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 1,000 characters for each practice.)

Measure:
- Formal evaluation
- Informal surveys
- Group feedback
- Quantitative measure
- Other (Please specify): _____

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

Mark the following components of multidisciplinary/interdisciplinary research preparation that apply to the majority of IGERT trainees involved in your project during this reporting period. (Mark all that apply)
- Trainees undertook formal coursework/training in research methods, practices, and instrumentation in their primary discipline equivalent to traditional graduate students.
- Trainees had practical, hands-on laboratory and/or field experience in conducting research across the breadth of disciplines in the IGERT program.
- Trainees undertook formal coursework/training across the breadth of disciplines encompassed by the IGERT project.
- Trainees undertook formal coursework/training in both the ethical conduct of research and ethical conduct related to the themes encompassed by your IGERT project.
- Other preparation to conduct high-quality research. (Please specify): _____
- No components of Trainee Preparation in Multidisciplinary/Interdisciplinary Research applied during this reporting period.

3b. 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 1,000 characters 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, 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.

3c. Trainee Preparation for STEM Careers

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)
- 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.
- 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.

3d. 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: _____

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.

(Responses are limited to 1,000 characters for each 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 <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.]

- 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
- Use of professional meetings, conferences, associations to communicate with, reach out to, and market to potential IGERT Trainees
- 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 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.]

- 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): _____

3e. International Opportunities

According to NSF records, you project [has/does not have] explicit funding for an international component. If you think this is incorrect, please contact ICF International.

Briefly describe 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.

(Responses are limited to 1,000 characters for each training experience or component.)

[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:

Country [dropdown list] Trainee(s) involved [one checkbox per trainee] 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. • 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): _____
Identify the value/opportunities for faculty that resulted from the International experiences of the 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 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. (Responses are limited to 1,000 characters for each research or educational achievement.) [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.]
3f. Partnership 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 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. 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/Agency/Business/Organization name
If partner is an academic institution, please mark 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 agency, please select the best option. • 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])

If partner is a corporate or industrial partner:

Please select the descriptions that **best** fit the corporate or industrial partner. (Select one)
- Large company
- Small to mid-size company
- Start-up company

Corporate headquarters (Select one)
- U.S.-based company
- Foreign-based company

Sector
Please select the sector that best describes the business of your corporate partner:
- **Goods Producing**
  o Agriculture, forestry, fishing and hunting
  o Construction
  o Manufacturing
  o Mining
- **Service Providing**
  o Education services
  o Finance and banking services
  o Health and healthcare-related services
  o Information, communications, media services
  o Leisure and hospitality services
  o Professional, scientific, and business services
  o Public administration
  o Other services

If Manufacturing is selected, please select a Manufacturing Subsector:
- 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

Funding Arrangement for this Partner (Mark all that apply):

Subaward to partner
- 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.

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 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.

Accomplishments and Outcomes
Please describe one **key** accomplishment or outcome (not activity) of **this** partnering arrangement for this reporting period. (Response limited to 1,000 characters.) [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
4a. 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 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. Organization/individual name Address E-mail address Phone Web site Was this an external evaluation service provider? Yes/No

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 1,000 characters each for the insight/learning and corresponding response.
4b. Institutional Impacts

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) • 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): _____

Please describe a demonstrable institutional change, if any, that has occurred during this reporting period due to IGERT.

(Response is limited to 1,000 characters.)

[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

5a. Journal Articles in Referred Publications

Did your IGERT project have any journal articles published in referred publications during the current reporting period?
    Yes/No

If yes, please provide citations.

STEP 1: Prepare a list of citations for these articles.

STEP 2: Upload the citations list in .txt format.

5b. Journal Articles in Non-Referred Publications

Did your IGERT project have any journal articles published in non-referred publications during the current reporting period?
    Yes/No

If yes, please provide citations.

STEP 1: Prepare a list of citations for these articles.

STEP 2: Upload the citations list in .txt format.

5c. Books

Did your IGERT project have any books published during the current reporting period?
    Yes/No

If yes, please provide citations.

STEP 1: Prepare a list of citations for these books.

STEP 2: Upload the citations list in .txt format.

5d. Book Chapters
Did your IGERT project have any book chapters published during the current reporting period?
Yes/No
If yes, please provide citations.
STEP 1: Prepare a list of citations for these book chapters.
STEP 2: Upload the citations list in .txt format.
5e. Patent Applications
Did your IGERT project submit any patent applications during the current reporting period?
Yes/No
If yes, please provide citations.
STEP 1: Prepare a list of citations for these patent applications.
STEP 2: Upload the citations list in .txt format
5f. Patents Awarded
Was your IGERT project awarded any patents during the current reporting period?
Yes/No
If yes, please provide citations.
STEP 1: Prepare a list of citations for these awarded patents.
STEP 2: Upload the citations list in .txt format
5g. Conference Publications
Did your IGERT project have any conference publications during the current reporting period?
Yes/No
If yes, please provide citations.
STEP 1: Prepare a list of citations for these conference publications.
STEP 2: Upload the citations list in .txt format
5h. Conference Presentations
Did your IGERT project have any conference publications during the current reporting period?
Yes/No
If yes, please provide citations.
STEP 1: Prepare a list of citations for these conference presentations.
STEP 2: Upload the citations list in .txt format

1. About You
1a. Name and Contact Info

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

Your Current Address:
       Institution Name
       Department
       Current Address
       Current City
       Current State
       ZIP Code
       Phone
       Extension
       Fax
       E-mail Address
       Web URL

Your Permanent Contact Information (Voluntary)
       Your Social Security Number
       Personal E-mail Address

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

1b. Demographics

Ethnicity (Choose one):
- Hispanic or Latino
- Not Hispanic or Latino
- Not Reported

Race (Mark all that apply):
- 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

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

Citizenship (Choose one):
• U.S. Citizen/U.S. National
• U.S. Permanent Resident
Date Permanent Resident Alien Status Was Granted (MM/YY)
• Other Non-U.S. Citizen
• Not Reported

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]

1c. Your Major and Interests
Your Current Major

Major [dropdown list]

Degree sought (current):
• Master of Arts (MA)
• Master of Science (MS)
• Doctorate (Ph.D.)
• Professional Degree (MD, JD etc)
• Other Postbacc. Degree

Your Research Interests

Provide a brief description of your research interest/topic
(Responses are limited to 300 characters.)

Does your research involve any of the following? (Mark all that apply)
• Bioinformatics
• Biological evolution and development
• Biotechnology
• Civil infrastructure monitoring and improvement
• Climate change: impacts and factors
• Computational science and engineering
• Device development
• Energy: alternate and renewable resources and conservation
• Entrepreneurialism
• Human, social, and community sciences
• Imaging
• Materials science and engineering
• 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): _____

1d. IGERT Advisors
Who are your IGERT advisors?
(Mark all that apply)
[Checkbox for each IGERT advisor as entered via PI survey.]

(For each advisor)

How often was this person involved in your IGERT activities?
   • Always
   • Often
   • Sometimes
   • Never

1e. Graduation Plans
Expected or Actual Graduation Date (mm/yyyy)

If you have graduated, or you expect to graduate within 1 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
       • Nontenure-track faculty
       • Staff
    Nonprofit
       • Postdoctoral
       • Full-time position
       • Part-time position
    Self-Employed/Entrepreneur

2. Prior Experiences (Funded Trainees only)

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): _____
 	
    City
    U.S. State/U.S. Territory
    ZIP Code
    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)
    • Bachelor of Arts (BA)
    • Bachelor of Science (BS)
    • Other (please specify): _____
Major [dropdown list]
    • Bachelor of Arts (BA)
    • Bachelor of Science (BS)
    • Other (please specify): _____
For double majors, select second major [dropdown list]

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.

Institution name
City
State
Non-U.S. post-undergraduate country [dropdown list]
Major [dropdown list]
Department [dropdown list]
Post-undergraduate degree type
  • Master of Arts (M.A.)
  • Master of Science (M.S.)
  • Doctorate (Ph.D.)
  • Professional Degree (MD, JD, etc.)
  • Other Postbacc. Degree
When did you receive your post-undergraduate degree (mm/yyyy)

Employment Prior to IGERT Traineeship

Were you employed in the public or private sector for 1 or more years after receiving your first undergraduate degree and prior to becoming an IGERT trainee? (Do not include employment as a research assistant or teaching assistant while pursuing a master's degree.)
Yes/No

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 prior to becoming an IGERT trainee.
  • 1 year
  • 2 years
  • 3 years
  • 4 years
  • 5 years
  • More than 5 years

3. Achievements

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.]

3b. Fellowships, scholarships, and grants other than IGERT

Provide for each fellowship, scholarship, and grant other than IGERT received during the current reporting period.

     Title of fellowship, scholarship, or grant [dropdown list]
     If other fellowship, please specify: _____
     Proposal Title
     Year Awarded
     Awarding Agency/Organization

3c. Other Honors and Recognition

Provide for each honor and recognition received during the current reporting period.

     Title of honor or recognition [dropdown list]
     If other title, please specify: _____
     Year
     Society/Granting Organization

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.

(Responses are limited to 1,000 characters.)

4. Research Preparation (Funded Trainees only)

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 in your primary discipline this reporting period?

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

5. Professional Skills (Funded Trainees only)

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, 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

6. Career Preparation (Funded Trainees only)

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.

(Responses are limited to 1,000 characters.)

Please indicate which of the following activities you engaged in during this reporting period. (Mark all that apply)
- Received training or instruction (e.g., courses, workshops) in effective teaching practices and student mentoring
- Developed and presented course and/or curriculum materials
- Served as a mentor to others (e.g., graduate students, undergraduates, laboratory technicians)
- Received training/mentoring in grant proposal preparation
- Authored/co-authored and submitted grant proposals
- Received training/instruction on the interaction between academic research and industrial technical requirements
- Received training/instruction for applying your research to address public policy concerns or issues
- Had an internship (an off-campus, research, educational and/or work experience) in a nonacademic setting (e.g., industry, government)
- Had professional interactions other than internships with nonacademic employers (e.g., industry, government) in order to learn about career opportunities and requirements
- Communicated, worked, or collaborated with scientists of other nationalities
- Other preparation for careers in academia (Please specify): _____
- Other preparation for nonacademic careers (e.g., industry, government) (Please specify): _____
- Please check here if you were not engaged in any of the activities listed above during this reporting period

7. Internships

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

If Yes, the respondent can specify up to four internships. The following data are collected for each internship.

Company/Agency Name

Duration [dropdown list (1-52 weeks)]

Setting (Choose one):
- Industry/business
- Nonprofit organization
- Government laboratory
- Public sector agency
- Other

Location (Choose one):
- U.S. Location

City State/U.S. Territory • Foreign Location   If non-U.S. internship, please specify country [dropdown list]
Please indicate the internship contributions that have prepared you for your career during this reporting period (Mark all that apply) • Received training/instruction on the interaction between academic research and industrial technical requirements • Received training/instruction for applying your research to address public policy concerns or issues • Engaged in professional interactions other than internships with nonacademic employers (e.g., industry, government) in order to learn about career opportunities and requirements • Communicated, worked, or collaborated with scientists of other nationalities • Other preparation for nonacademic careers (e.g., industry, government) (Please specify): _____
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. (Responses are limited to 1,000 characters.)
8. International Experiences
Did you have an international experiences this year?   Yes/No If Yes, the respondent can specify up to five international experiences. The following data are collected for each international experience:
Was this international experience related to your IGERT research?   Yes/No
International experience duration [dropdown list (1-52 weeks)]
Please identify the primary country in which the international activities occurred. [dropdown list]
What activities were you engaged in during your international experience? (Mark all that apply) • Attended conferences/workshops outside the United States • Undertook coursework/training outside the United States • Worked, conducted research/fieldwork, or interned outside the United States • Other (Please specify): _____
Were you formally prepared for your international experience?   Yes/No
If yes, what experiences were included in the preparation for your international experience? (Mark all that apply) • How to work in a foreign laboratory/field work • Graduate education/education/laboratory differences in country to be visited • Language • Cultural differences • Learning about the area • Other (Please specify): _____
What did you accomplish during your international experience? (Mark all that apply) • Awards/honors/recognitions • Broader impacts • Invention/patent • Presentations • Publications • Other (Please specify): _____
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.
(Responses are limited to 1,000 characters.)
9. Comments (Funded Trainees only)
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.   (Responses are limited to 1,000 characters.)
Opportunity for Improvement
Please describe what you consider to be the most important opportunity for improvement in the IGERT program with which you are associated.   (Responses are limited to 1,000 characters.)
10. Training Confirmation (Funded Trainees only)
Training Confirmation
How many hours spent per week did you spend on programmatic activities?
Did you participate in regular training throughout the year?   Yes/No
Describe training you received   (Responses are limited to 1,000 characters.)
How frequently did you receive training? (Choose one)   • Weekly   • Bimonthly   • Monthly   • Other (Please specify): _____
Funding Confirmation   What was your stipend amount? (Choose one)   • $30,000 gross annually ($2,500 gross per month)   • Other gross amount per year (Please specify: _____
How does your traineeship stipend compare to stipends received by regular teaching or research assistants at your organization? (Choose one)   • Greater than others   • Equal to others   • Less than others
NSF provides your affiliated organization with a $10,500 cost of education allowance with a 1-year traineeship in lieu of all required tuition and fees. How much would it cost if you had to pay the normal charges yourself?
[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?