

**Appendix B:
Crosswalk of IGERT Survey Data Elements
With New, Revised, and Deleted Items Indicated**

DATA ELEMENTS OF THE INTEGRATIVE GRADUATE EDUCATION AND RESEARCH TRAINEESHIP ONLINE SURVEY

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics ¹	Project Implementation Characteristics ²	Project Outputs ³
			2. IGERT Project's Personnel and Trainees				
			Principal Investigator				
			Project Years Active: 1998-1999, 1999-2000, 2000-2001, 2001-2002, 2002-2003			X	
			Name: First, Middle Initial, Last		X		
			Contact Information: Title, Department at Institution, Address at Institution, Institution City, Institution State, Zip Code, Phone, Fax, Email Address, Web URL		X		
			Ethnicity: -Hispanic or Latino -Not Hispanic or Latino -Not reported		X		
			Race (Choose one or more): -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 or more responses): -Hearing Impairment -Visual Impairment -Mobility/Orthopedic Impairment -Other -None -Not reported		X		

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			Citizenship (Choose one): -U.S. Citizen/U.S. National -U.S. Permanent Resident -Other non-U.S. Citizen -Not Reported	X		
			IGERT Co-PI or Trainee/Associate Advisor			
			Name: First, Middle Initial, Last	X		
			Project Years Active: 1998-1999, 1999-2000, 2000-2001, 2001-2002, 2002-2003			
			Role in Project: -Co-PI -Trainee/Associate Advisor	X		
			Contact Information: Title, Department at Institution, Address at Institution, Institution City, Institution State, Zip Code, Phone, Fax, Email Address, Web URL	X		
			Current IGERT Advisor -Yes -No		X	
			Ethnicity: -Hispanic or Latino -Not Hispanic or Latino -Not reported	X		
			Race (Choose one or more): -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 or	X		

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			more responses): -Hearing Impairment -Visual Impairment -Mobility/Orthopedic Impairment -Other -None -Not reported			
			Citizenship (Choose one): -U.S. Citizen/U.S. National -U.S. Permanent Resident -Other non-U.S. Citizen -Not Reported	X		
			IGERT Trainees and Associates			
			Name: First, Middle Initial, Last	X		
			Project Years Active: 1998-1999, 1999-2000, 2000-2001, 2001-2002, 2002-2003 Trainee Supported for X months		X	
			Current IGERT Advisor	X		
			Contact Information: Title, Department at Institution, Address at Institution, Institution City, Institution State, Zip Code, Phone, Fax, Email Address, Web URL	X		
			Citizenship (Choose one): -U.S. Citizen/U.S. National -U.S. Permanent Resident -Other non-U.S. Citizen -Not Reported	X		
			Citizenship/Residency Status -Yes, the trainee is a U.S. Citizen/U.S. National or Permanent Resident -No, the trainee does not meet IGERT Citizenship Requirement. If not, why?	X		
			Ethnicity: -Hispanic or Latino -Not Hispanic or Latino	X		

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			-Not reported			
			Race (Choose one or more): -American Indian or Alaska Native -Asian -Black or African American -Native Hawaiian or other Pacific Islander -White -Not Reported	X		
			Gender (Choose one): -Male -Female -Not reported	X		
			Disability Status (Choose one or more responses): -Hearing Impairment -Visual Impairment -Mobility/Orthopedic Impairment -Other -None -Not reported	X		
			Social Security Number	X		
			Student's personal email address			
			Contact Information of someone who will know how to reach student in three years: name, relationship to you, home address, home city, home state, home ZIP code	X		
			Undergraduate Degree Prior to IGERT Traineeship: Undergraduate Major, Double Major, Undergraduate Institution, Undergraduate Inst. City, State. -When did you receive your first undergraduate degree?		X	
			Post-Undergraduate Degree Prior to IGERT Traineeship -Did you obtain a post-undergraduate degree prior to		X	

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question becoming an IGERT Trainee? Yes/No -Type and when degree received -Name of institution granting degree			
			Were you employed in the public/private sector for one or more years after receiving your first undergraduate degree and prior to becoming an IGERT Trainee? Yes/No		X	
			Total number of years (equal to or greater than one year, to the nearest year) you were employed in the public or private sector after receiving your first undergraduate degree and prior to becoming an IGERT trainee.		X	
			GRE Scores : -Verbal -Quantitative -Analytical -Subject (Biochemistry, Cell Molecular Biology, Biology, Chemistry, Computer Science, Economics, Education, Engineering, Geology, History, English, Mathematics, Music Physics, Political Science, Psychology, Music, Sociology)		X	
			When the trainee first enrolled in graduate study in an IGERT department		X	
			Educational/professional experience (check all that apply): -Training/coursework in professional writing -Training/coursework in professional speaking/presentation skills -Presentations made at the IGERT		X	

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
		Question institution -Professional conferences attended -Poster sessions presentations outside the IGERT institution -Oral presentations outside the IGERT institution -Other activities to develop or increase your ability to communicate professionally				
		Counts of professional activities: -Presentations made at the IGERT institution -Professional conferences attended -Poster sessions presentations outside the IGERT institution -Oral presentations outside the IGERT institution -Other professional activities				X
		Count of achievements -Publications (excluding articles in refereed journals) -Journal articles in refereed journals -Books -Book Chapters -Patent Applications -Approved Patents				X
		Educational/professional activities engaged in during the current reporting period (check all that apply). -Training/coursework in responsible conduct of research -Training/coursework in statistics -Training/coursework in research methods -Training/coursework in state-of-the-art instrumentation -Participation in research projects			X	

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question within your own discipline area but outside your dissertation research -Other activities to develop or increase professional skills to conduct high-quality research			
			Educational/professional activities engaged in during the current reporting period (check all that apply). -Teaching Assistantships -Mentoring of high school, undergraduate, or other graduate students -Courses developed and/or major teaching roles -Participation in any multidisciplinary/interdisciplinary course development, teaching, or other educational effort -Participation in any group education efforts (e.g., team teaching, teamwork on course development) -Other activities to develop or increase professional skills in education		X	
			Educational/professional activities engaged in during the current reporting period (check all that apply). -Participation in any research project involving multiple disciplines -Participation/experience in team research efforts -Participation in any interaction between academic research and industrial applications or between academic research and public policy development or		X	

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			<p>Question</p>			
			<p>application</p> <ul style="list-style-type: none"> -Training/experience in communications across disciplines and to different audiences (including the general public) -Educational interactions (e.g., courses, workshops, seminars) with industry professionals or with government or other public sector professionals -Research interactions (other than internships) with industry professionals or with government or other public sector professionals -Other activities to enhance your professional skills applicable to careers 			
			<p>Internship experience: type of setting and the duration (to the nearest month) of internship(s). Benefits resulting from internship(s) during the current reporting period (check all that apply).</p> <ul style="list-style-type: none"> -Experience with applied research -Experience with team approaches to problem solving -Experience communicating and working with people from different disciplinary or professional backgrounds -Increased awareness of non-academic job opportunities available to people with your education and interests -Development of a thesis and/or dissertation research topic -Financial or equipment support 			X

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
		Question				
		to complete thesis research -Likelihood of a job offer after graduation -Other Benefits				
		Educational/professional activities engaged in during the current reporting period (check all that apply). -Experience working with scientist(s) of other nationalities within the United States -Experience communicating and working with people of different cultures, nationalities, or backgrounds -Internships or other experience working with scientist(s) of other nationalities, in their own countries -Experience, outside of your studies, living and/or working in a foreign country -Other internationally oriented educational/professional activities			X	
		Will degree be granted by a multidisciplinary/interdisciplinary program or a traditional single-discipline department? -Multidisciplinary/interdisciplinary program -Traditional single-discipline department				X
		Number of courses in Home department during the current reporting period.			X	
		Number of courses in Home department during the prior reporting period.			X	
		Courses in Outside Departments				X

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question -Name of department -Number of courses taken in it during the current reporting period			
			Other educational/professional experiences in which you have participated (and that have not been mentioned in this survey) that have contributed materially to the depth and breadth of trainee scientific knowledge/understanding Yes/No			X
			Special assistance (e.g., mentoring, academic, personal received during the current reporting period (check all that apply). -Especially helpful mentoring from a faculty member, post doc, or other graduate student(s) -Special academic assistance (e.g., tutoring, arrangements to take supporting courses, time extensions) -Help with personal problems or in making social connections -Other types of mentoring or special assistance -No mentoring/assistance was received during the current reporting period			X
			Description of the most beneficial and exciting elements of being an IGERT trainee.			X
			Description of the least successful or least well-developed (to date) elements of the IGERT program with which you are associated.			X
			When the trainee first began receiving NSF-IGERT funding (not		X	

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			applicable to associates)			
			Did the trainee obtain a Ph.D. associated with the IGERT project? -Yes/No			X
			Year Ph.D. received			X
			<p>Employment status in the year following receipt of Ph.D.:</p> <ul style="list-style-type: none"> -Postdoctoral Position: U.S. government/U.S. National laboratory -Postdoctoral Position: College or university -Postdoctoral Position: Private foundation -Postdoctoral Position: Nonprofit, other than nonprofit foundation -Education Employment: U.S. 4 year college or university -Education Employment: U.S. medical school -Education Employment: U.S. junior or community college -Education Employment: U.S. elementary or secondary school -Education Employment: Foreign Institution -Government Employment: Foreign government -Government Employment: U.S. state or local government -Government Employment: U.S. government/U.S. National laboratory -Private Employment: Nonprofit organization -Private Employment: Industry or business -Private Employment: Self-employed Other Employment: Other) 			X

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			<p>Question</p> <p>Trainees NOT Receiving a Degree -Did the trainee stop pursuing a Ph.D. associated with the NSF-IGERT project? Yes, and they have left the institution/ Yes, though they are still enrolled at this institution / No -When did the trainee stop pursuing a Ph.D. associated with IGERT? -Before leaving the program, did the trainee receive a terminal master's degree? (Yes/No) -Why did pursuit stop? (Left to pursue other academic interests, Failed to meet program requirements, Left to pursue employment, Left due to family and/or economic constraints, Intended to pursue Masters Degree only, Unknown, Other) -Primary employment/education status after incompleting of Ph.D. (Private sector employment, Academic research employment, Education (teaching) employment, Public sector employment, Graduate study, Unknown, Other)</p>			X
			<p>3. Assessment of Trainee Quality and Project Success</p>			
			<p>Trainee Quality: Considering the IGERT trainees as a group, how do they compare with graduate students you usually see in terms of their academic/research potential? Select only one: -Far superior to our usual graduate students - Somewhat better than our usual</p>			X

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question students -About the same as our usual students -Somewhat less promising or less successful than our usual students -Much less promising or less successful than our usual students			
▼			Assessment of Project Success in Fostering Trainee Growth: Select Successful, Somewhat Successful, Not Successful, or Not Begun -Success in multidisciplinary/interdisciplinary coursework -Breadth and depth of knowledge -Ability to conduct high-quality research -Professional skills in education -Teaching and/or mentoring -Course Development -Professional skills applicable to work in non-academic (public or private sector) employment -Ability to function in a multidisciplinary/interdisciplinary environment -Ability to communicate across disciplines and with different audiences -Teamwork skills -Familiarity with state-of-the-art instrumentation/technology/modeling skills -Ability to communicate professionally (e.g., give presentations, write scientific articles) -International perspective (e.g.,			X

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question familiarity with different cultural perspectives, ability to work with scientists from different cultures) -Other (enter other goals)			
			4. Project Features			
			Did you support any IGERT trainees during the current project year? Yes/No		X	
			<p>Recruitment Strategies Used by the IGERT Project (mark all that apply):</p> <ul style="list-style-type: none"> -Distribute brochures, posters, or other non-electronic media citing the NSF-IGERT -Place ads in scholarly journals or electronic media (e.g., Web, email) citing the NSF-IGERT funds -Promote NSF-IGERT project at national meetings and/or graduate student fairs -Recruit from summer programs around the country -Use faculty personal contacts to identify and attract prospective trainees -Invite and support prospective trainee visits to the IGERT project on campus -Recruit undergraduate/graduate students already enrolled at the IGERT institution -Pay informational visits to predominantly undergraduate institutions -Recruit through women's science and engineering organizations -Recruit through minority science and engineering organizations -Pay informational visits to 		X	

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			<p>Question</p> <p>women's colleges -Pay informational visits to minority-serving colleges -Seek recruits through national institutional initiatives (e.g., McNair, AMP) -Seek recruits through initiatives that focus on minority enrollment in graduate programs (e.g., QEM1, NACME2, GEM3) -Seek applicants from institutional initiatives that may exist in regional state universities, private colleges, or community colleges -Ensure that entry requirements do not unnecessarily exclude prospective students -Offer competitive stipends and other support to prospective trainees -Offer undergraduate exchange programs with historically black colleges and universities (HBCUs) -Offer a Research Experiences for Undergraduates (REU) program at your institution -Other recruitment strategies (specify)</p>			
▶			<p>Admissions Criteria (Enter a rating (with 1=most important, 4=least important, 0=not used) for each admissions criteria factor.):</p> <p>-Quality of Undergraduate School -GRE Scores -Undergraduate GPA -Recommendations -Background and Experience -Student's Goal Statement -Other</p>		X	

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
▼			<p>Question</p> <p>Multidisciplinary/Interdisciplinary Training Activities Fostered or Funded by IGERT Project (mark all that apply):</p> <ul style="list-style-type: none"> -Instruction provided by faculty from multiple disciplinary fields -Funded trainees from a variety of disciplinary fields -Required courses that drew on two or more disciplinary fields -Trainees participated in research projects with faculty from a variety of disciplinary fields -Other multidisciplinary/interdisciplinary training activities 			X
			<p>Trainee Preparation in Communication and Teamwork Provided by the IGERT Project (mark all that apply):</p> <ul style="list-style-type: none"> -Trainees take coursework/training that includes regular faculty critique and feedback in professional writing -Trainees take coursework/training (e.g., brown bags, seminars) that include regular faculty critique and feedback in professional speaking/presentation skills -Trainees receive experience in communication across disciplinary boundaries and with different audiences -Trainees participate as members of teams engaged in joint educational and/or research efforts -Trainees attend and/or make 			X

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
		Question				
		<p>presentations at professional conferences</p> <p>-Trainees publish research papers in refereed journals before receiving their doctorate (In general, X such articles are expected.)</p> <p>-Other preparation in communication and teamwork</p>				
		<p>Trainee Preparation to Conduct High-Quality Research Provided by the IGERT Project (mark all that apply):</p> <p>Trainees have coursework/training in research methods</p> <p>-Trainees have coursework/training in statistics</p> <p>-Trainees have coursework/training in the ethical conduct of research</p> <p>-Trainees have coursework/training in state-of-the-art instrumentation</p> <p>-Other preparation to conduct high-quality research</p>				X
		<p>Trainee Preparation for Careers in Industry, Government, or Public Sector Provided by the IGERT Project (mark all that apply):</p> <p>-Trainees participate in research projects involving multiple disciplines</p> <p>-Trainees participate in team research efforts</p> <p>-Trainees participate in any application of research to industry or public policy</p> <p>-Trainees have experience in communicating across disciplines</p>				X

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			<p>Question</p>			
			<p>and/or with different audiences (including the general public) -Trainees have educational interactions (e.g., courses, workshops, seminars) with government/public sector or with industry professionals -Trainees have research interactions with government/public sector or with industry professionals (other than internships) -Trainees have internships (off-campus work experiences of one month or more) in government/public sector or in industry settings -Other preparation for careers in industry, government, or public sector</p>			
			<p>Trainee Preparation for Faculty Positions Provided by the IGERT Project (mark all that apply): -Trainees receive instruction (e.g., courses, workshops) in effective teaching practices -Trainees serve as teaching assistants -Trainees serve as official mentors to students (grad, undergrad, or high school) -Trainees complete teaching exercises supervised by IGERT or other faculty -Trainees develop course and/or curriculum materials -Trainees serve as full instructors (i.e., unsupervised preparation, teaching, and grading for a course) -Trainees receive special</p>			X

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question instruction (e.g., courses, workshops) on how to advise and mentor students -Trainees receive instruction in how to apply advanced technology in the classroom -Other activities to prepare trainees for faculty positions			
			International Opportunities Provided by the IGERT Project (mark all that apply): -Trainees attend international meetings/conferences -Trainees work with private companies outside the U.S. -Trainees work with foreign scientists/engineers outside the U.S. (e.g., in a university/research setting (public or private sector) or doing field research) -Trainees work with foreign scientists/engineers (e.g., students, faculty, other researchers) inside the U.S. in university/research setting (public or private sector) -Other trainee opportunities for international experience			X
▶			In the text box below, expand on the activities identified above that you have found to be particularly effective in increasing trainees' capacity to work productively with people from other cultures.			X
		▶	Briefly identify up to three training experiences or components that provided exceptional "added value" for preparing IGERT trainees to be			X

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			successful in International STEM. (Please use a separate text box for each response. Limit: 1000 characters for each.)			
		▶	Briefly identify up to three research or educational achievements resulting from the International component. Each achievement may involve a single trainee or a group of trainees. (Please use a separate text box for each response. Limit:1000 characters for each.)			X
			Other Structural Components Provided by the IGERT Project (mark all that apply): -Other structural components that enhance the educational and/or research experience of the trainees			X
			5. Consortial Arrangements			
			Institution/Partner Name			X
			Consortial Arrangement Type (check ALL that apply): -Consortial Partnership with a Ph.D.-granting institution -Consortial Partnership to increase participation by individuals from underserved populations -Consortial Partnership with a non-Ph.D.-granting institution			X
			Consortial Activities (check ALL that apply): -Facilities. Project staff use partner organization's facilities for project activities -Collaborative Research. Partner organization's staff work with project staff on collaborative research/teaching.			X

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			-Personnel Exchange. Project staff and/or partner organization staff use each other's facilities, work at each other's site.			
			Choose Partner Type: -National Science Foundation -Institutions -State or Local Govt -Federal Agencies -Federal Laboratories -Foreign Governments -Corporations -Foundations and Other Nonprofit -Other			X
			6. Additional Funding			
			Funding Source Name		X	
			Funding Source Type: -National Science Foundation -Institutions -State or Local Govt -Federal Agencies -Federal Laboratories -Foreign Governments -Corporations -Foundations and Other Nonprofit -Project Generated -Other		X	
			Funding dollars for the current reporting period		X	
			Estimated value of in-kind dollars for the current reporting period		X	
			Describe progress from September 1, 2000, to August 31, 2001, on how this funding source: (1) promoted the IGERT project's goals and (2) impacted trainees and/or the IGERT department(s) overall. (word limit: 500)		X	
			7. Institutional Impacts and Assessment			

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			<p>Question</p>			
			<p>Institutional Impact: New Course Offerings, Requirements: Count for current Project Year (counts for all that apply)</p> <ul style="list-style-type: none"> - Inter/multidisciplinary courses developed for the IGERT project - Other courses developed for the IGERT project (e.g., ethics, statistics, reinforcement in particular disciplines) - New course requirements, specifically for the IGERT PhD program - New seminar series, workshops, and/or conferences resulting from the IGERT project -New, IGERT-inspired, multidisciplinary offering in university programs other than the IGERT program -Other 			X
▶			<p>For each institutional impact item counted above, for the current reporting period, please describe: (1) the item (include the item title and when it was first offered (mm/yyyy)), (2) how each item promoted the IGERT project's goals, and (3) how each item impacted trainees, the IGERT department(s), and/or the institution.</p>			X
			<p>What IGERT features have been institutionalized? (Mark all that apply)</p> <ul style="list-style-type: none"> -New entrance requirements -New paradigms for graduate student assessment or advancement to candidacy - New procedures or activities 			X

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question that reduce barriers to multi/interdisciplinary training and research -New paradigms for integrating research and education at the graduate level -Other			
▶			In the text box below, expand on any features checked above. Explain how they have been institutionalized. Be sure to indicate the locale of institutionalization (e.g., within the IGERT departments, by other multidisciplinary teams on campus, by other multidisciplinary teams at other institutions). If no features have been institutionalized, please explain why.			X
			Are you intending to maintain some or all of this IGERT project beyond its 5-year funding period? Yes/No If yes, what steps have you taken toward this goal? (Mark all that apply) -No steps were taken during the current reporting period -Written plans for continuation by IGERT leadership -Worked with administration and/or funding sources -Planned for continuation of IGERT initiatives, concepts, collaborations -Other steps taken toward maintaining IGERT beyond the 5-year funding period			X
▶			In the text box below, please			X

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			provide descriptions of the steps you have taken, during the current reporting period , toward institutionalization of aspects of the IGERT project after the 5-year funding period ends. If no steps toward institutionalization were made, please explain why that is the case.			
			<p>Impacts on Faculty (check all that apply):</p> <ul style="list-style-type: none"> -Faculty increased their participation in non-home-discipline meetings, conferences, etc. -Faculty are teaching new courses that cross traditional disciplinary boundaries -Faculty are using new pedagogical approaches -Faculty are team-teaching courses across disciplines more often -Faculty are sharing mentorship of students across disciplines more often -Faculty are participating on multidisciplinary dissertation committees more often -Faculty are jointly authoring papers across disciplines more often -Faculty are members of multidisciplinary teams winning new grant support more often -Other faculty activities indicative of growth stimulated by participation in the IGERT project -Please check if there were no changes in IGERT faculty 			X

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			activities during the current reporting period.			
▼			For each activity selected, please estimate the proportion (e.g., three of eight) of IGERT faculty increasing their activity in this area and describe how the activity has affected participating faculty, promoted the IGERT project's goals, and/or generated changes at the faculty, departmental, or institutional level beyond the IGERT project. If "no changes" is checked, please explain why the project has had no effect on participating faculty.			X
			Assessment: -Who has performed your project assessment? -What methods have been part of your project assessment?			
▼			-Have you made any changes in your IGERT project this year as a result of your self-assessment procedure? Yes/No -If changes were made, describe what changes your IGERT project self-assessment has caused you to make and why. -If no changes were made, describe the results of your self-assessment that led you to believe that no changes in your IGERT project were called for at this time.		X	
			1. IGERT Project Summary Characteristics			
	▼		Please indicate up to three NSF directorates that most closely correspond to your		X	

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question interdisciplinary research theme. BIO CISE EHR ENG GEO MPS SBE OPP			
▼			Multidisciplinary Theme		X	
			Did you support any IGERT trainees during the current project year? <i>(moved to Section 1 from Section 4 in previous collections)</i>		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 <i>(moved to Section 1 from Section 4 in previous collections)</i>		X	
			How do trainees in your program earn their doctoral degrees? <i>[mark all that apply]</i> Trainees earn their degrees		X	

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			<p>Question</p> <p>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.)</p> <p>Please specify:</p> <p><i>(moved to Section 1 from Section 4 in previous collections)</i></p>			
			Does your IGERT project include undergraduate training?		X	
			Does your IGERT project include postdoctoral training?		X	
			Indicate the amount of funds from the current year of IGERT support to be carried over to the next year.		X	
			Effective Practice (briefly describe)			X
			<p>Research</p> <p>Please describe up to three interdisciplinary research achievements that demonstrate how your IGERT has been particularly effective in attaining the interdisciplinary research goals you set out to achieve during this reporting period. These might be important research findings extending knowledge in your</p>			X

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question interdisciplinary theme research area or research advances made possible through the interdisciplinary teamwork in your IGERT.			
	▼	Education	Please describe up to three achievements of the project that illustrate exceptional "added value" to the trainees' educational experience. Please focus on programmatic achievements rather than achievements of individual trainees.			X
	▼	Trainee	Please describe up to three research or educational achievements, involving either a single trainee or a group of trainees, made possible through the participation of trainees in your IGERT project.			X
	▼	Barriers to Implementation (briefly describe)	In the process of implementing your IGERT project during this reporting period, please identify and describe up to three key barriers you have encountered. For each barrier identified, briefly describe how your project has responded.		X	
		▼ Outreach	Outreach activities include your IGERT, IGERT faculty and/or IGERT Trainees being featured on			X

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			<p>Question</p> <p>TV, radio, in magazine articles or otherwise in the media; talks, presentations, workshops given by IGERT faculty, trainees and/or associates to school groups, civic groups, non-scientific based professional groups, members of the government or the general public.</p> <p>Please separately list in the text box below the type of outreach activity, the organization/magazine/radio station/etc. for which the outreach was done, the location, who in your IGERT did the outreach and date. Please allow for a space between entries.</p>			
		▶	<p>NSF Highlights</p> <p>Each year, NSF program officers are asked to write "Highlights" (formerly known as "Nuggets") on the results of NSF research and education awards. These Highlights are used to help assess the Foundation's performance in attaining the strategic outcome goals outlined in the NSF 2006-2011 Strategic Plan and to share successes with various groups.</p> <p>Your Highlight will probably relate to one of the achievements reported in sections 1b, c or d, but in greater detail and with images. When writing your Highlight please clearly describe how the</p>			X

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		<p>interdisciplinary theme of your IGERT made this work possible - as distinct from what might have been possible through only single discipline research or education grant. Also, please write the Highlight such that a general audience can grasp the importance, value and merit of the research, the educational outreach or whatever results you are Highlighting.</p> <p>Starting with a statement of what the research team has achieved and why it is important and then going on to explain what problem is being solved or obstacle is being overcome or new discovery that was made is a great way to write a Highlight for maximum communication.</p> <p>Reporting Highlights is related to requirements under the Government Performance and Results Act (GPRA).</p> <p>Please respond only if you have something appropriate to share.</p> <p>Guidelines for Writing Highlights -Write for a general audience. Common uses for highlights include the following: program monitoring by NSF staff; reporting to Congress on NSF goal attainment; demonstrating achievements in the NSF's annual Budget Requests, Performance and</p>	Question			

Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			<p>Question</p>			
			<p>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.</p> <p>- Include images. Why are images important? NSF highlights and images are used not only by the Advisory Committee for GRPA Performance Assessment, but also for illustration in the Foundation's annual Budget Requests, Performance and Accountability Reports (PAR), and other documents. Clear, colorful images (pictures, graphs, charts, etc.) greatly enhance the value of highlights and often tell a story by themselves.</p> <p>-Provide sufficient information to describe the research and the results so that the IGERT Program Officers can make the determination whether or not a specific objective (and therefore, outcome goal) was met and its most valuable use.</p> <p>-Start with a statement of what the research team has achieved, and only then go on to explain why it solves a problem or overcomes an obstacle. Do not start with a lengthy explanation of the problem to be solved. Example: "Prof. Blivett and her</p>			

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		<p>team at the University of Eutaw have discovered/achieved/developed XYZ. This was hard/remarkable/useful/world-changing because ... or this seminal development could lead to practical applications in ..."</p> <p>-Include the location and/or lead institution for the research and the names of all principal investigators.</p> <p>-Include an explicit statement that NSF is supporting this work (this can usually be done very quickly in passing, e.g., "NSF-funded researchers at Stanford University have demonstrated ...", or "Astronomers working at NSF's Gemini Observatory have discovered...")</p> <p>-Spell out NSF program names, (e.g. not everyone knows what an IGERT is.) Again, be sure to spell out acronyms. Better: spell out "The Center for Advanced Blivitivity" on the first mention, and thereafter refer to "the center", or "the blivitivity center."</p> <ul style="list-style-type: none"> • Please indicate the primary and secondary NSF strategic goal(s) that best describe the highlight • Describe the achievement/result that is the Highlight 				

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			Question			
			<ul style="list-style-type: none"> <li data-bbox="331 457 873 600">How does this activity address the primary and secondary NSF Strategic Goals you indicated above? 			

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

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

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