**Appendix A1:
Crosswalk of IGERT PI Survey Data Elements
With New, Revised, and Deleted Items Indicated**

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

				Data provided by Principal Investigator			
Deleted Items	**Revised Items**	**New Items**	Question	Common Collection Categories	Staff and Project Participant Characteristics [1]	Project Implementation Characteristics [2]	Project Outputs [3]
			1. IGERT Project Characteristics, Hihglights, and Other Information				
			Please indicate up to three NSF directorates that most closely correspond to your interdisciplinary research theme. BIO CISE EHR ENG GEO MPS SBE OPP			X	
			Did you support any IGERT trainees during the current project year?			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	

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			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 training? Yes/ No			X	
			Does your IGERT project include postdoctoral training? Yes/No			X	
			Indicate the amount of funds from the current year of IGERT support that will be carried over to the next year: 1. Total funds carried over to the next year 2. Participant support costs carried over to the next year 3. Stipends carried over to the next year			X	
	X		Research Please describe up to three				X

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			interdisciplinary research achievements/discoveries/outcomes 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 interdisciplinary theme research area or research advances made possible through the interdisciplinary teamwork in your IGERT project.				
	X		Education 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.				X
	X		Trainee 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
			Barriers to Implementation			X	

Data provided by Principal Investigator							
Deleted Items	**Revised Items**	**New Items**	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Please identify and describe up to three key barriers 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.				
			Outreach Please report any outreach activities involving your IGERT that occurred during this reporting period. Outreach activities include your IGERT, 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 For each activity: 1. Short Title 2. Name of the media outlet or organization for which outreach was done 3. Date of the activity 4. Brief description of the activity, including the type of activity and the names of the IGERT individuals involved.				X
			NSF Highlights Each year, NSF program officers				X

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			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. 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 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. 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				

Data provided by Principal Investigator

				Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Deleted Items	**Revised Items**	**New Items**	Question				
			a great way to write a Highlight for maximum communication. Reporting Highlights is related to requirements under the Government Performance and Results Act (GPRA). Please respond only if you have something appropriate to share for this reporting period. **Guidelines for Writing Highlights** -Write for a general audience. Common uses for highlights include the following: program monitoring by NSF staff; reporting to Congress on NSF goal attainment; demonstrating achievements in the NSF's annual Budget Requests, Performance and Accountability Reports (PAR), and other documents; and providing information for the general public, Well-written, informative highlights submitted here may serve several purposes and thereby eliminate duplicate writing efforts later. - Include images. 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				

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			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. -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. -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 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				

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			investigators. -Include an explicit statement that NSF is supporting this work (this can usually be done very quickly in passing, e.g., "NSF-funded researchers at Stanford University have demonstrated ...", or "Astronomers working at NSF's Gemini Observatory have discovered...") -Spell out NSF program names, (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." • Descriptive title for this Highlight • Please indicate the primary and secondary NSF strategic goal(s) that best describe the highlight • Describe the achievement/result that is the Highlight • How does this activity address the primary and secondary NSF Strategic Goals you indicated above?				

Data provided by Principal Investigator

Data provided by Principal Investigator						
Deleted Items	**Revised Items**	**New Items**	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			2. IGERT Project's Personnel and Trainees				
			Principal Investigator				
			Project Years Active: 1998-1999, 1999-2000, 2000-2001, 2001-2002, 2002-2003, 2003-2004, 2004-2005, 2005-2006			X	
			Name: First, Middle Initial, Last	X			
			Contact Information: Institution Name, 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	X			

				Common Collection Categories			

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			-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		
			Provide for each 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, 2003-2004, 2004-2005, 2005-2006				
			Role in Project (Mark all that apply): -Co-PI -Trainee/Associate Advisor		X		
			Contact Information: Institution Name, 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		X		

Data provided by Principal Investigator

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			-Native Hawaiian or other Pacific Islander -White -Not Reported				
			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		
			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	X			
			Project Years Active: 1998-1999, 1999-2000, 2000-2001, 2001-2002, 2002-2003 Number of Months Funded:			X	
			Citizenship/Residency Status -Yes, the trainee/associate is a U.S. Citizen/U.S. National or U.S. Permanent Resident -No, the trainee does not meet IGERT citizenship Requirement. If not, why?		X		
			GRE Scores : -Verbal -Quantitative		X		

Data provided by Principal Investigator						
Deleted Items	**Revised Items**	**New Items**	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			-Analytical -Subject (Biochemistry, Cell & Molecular Biology, Biology, Chemistry, Computer Science, Economics, Education, Engineering, Geology, History, Literature in English, Mathematics, Music Physics, Political Science, Psychology, Revised Music, Sociology)				
			Indicate when the trainee/associate first enrolled in graduate study in this institution (mm/yyyy)			X	
			Indicate when the trainee/associate first began receiving NSF-IGERT funding (not applicable to associates)			X	
		X	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.) • If "Funded Trainees" box selected: Number of months funded • If "Formerly Funded Trainees" box selected Formerly Funded Trainee: Has student been engaged in IGERT activities, research, education or training during this reporting period (not applicable to associates)			X	

				Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Deleted Items	**Revised Items**	**New Items**	**Data provided by Principal Investigator**				
			Question				
	X		Please describe the current situation that best describes this IGERT Trainee/Associate [select one] • Has not yet graduated, but is still pursuing a PhD in your institution. • Has not yet graduated, but is pursuing a Masters in your institution. • Has graduated from your institution with a PhD. [insert month/year completed] • Has graduated from your institution with a Masters. [insert month/year completed] • Has left the institution with no degree. [insert month/year departed]		X	
X			Did the trainee obtain a Ph.D. associated with the IGERT project? -Yes/No			X
X			Year Ph.D. received (mm/yyyy)			X
X			Employment status in the year following receipt of Ph.D.: -Postdoctoral Position: U.S. government/U.S. National laboratory -Postdoctoral Position: College or university -Postdoctoral Position: Private foundation -Postdoctoral Position: Nonprofit,			X

				Common Collection Categories			
Deleted Items	**Revised Items**	**New Items**	Question		Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			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 - Unknown				
X			Trainees/Associates 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? (mm/yyyy) -Before leaving the program, did				X

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			the trainee receive a terminal master's degree? (Yes/No) -Why did pursuit of the Ph.D. 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 noncompletion of Ph.D. (Private sector employment, Academic research employment, Education (teaching) employment, Public sector employment, Graduate study, Unknown, Other)				
			3. Project Features				
		X	Briefly describe up to three of the best practices for IGERT trainee preparation to conduct collaborative research that transcends traditional disciplinary boundaries. For each, describe the measure(s) used by your IGERT during this reporting period to identify the practice as a best practice. (Responses are limited to 1000 characters for each best practice.) [Three textboxes for Best Practice 1, 2 and 3, with space in each for "Best Practice" and "Measure."]			X	
		X	Trainee Preparation in Multidisciplinary/Interdisciplinary Research			X	

Data provided by Principal Investigator						
Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Mark the following components of multidisciplinary/interdisciplinary research preparation that apply to the majority of IGERT trainees in your project during this reporting period. (Mark all that apply) • Trainees took 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 took formal coursework/training across the breadth of disciplines encompassed by the IGERT project. • Trainees took formal coursework/training in both ethical conduct of research and ethical conduct related to the themes encompassed by your IGERT. • Other preparation to conduct high quality				

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			research (please specify: _____) • No components of [section/question title] applied during this reporting period.				
	X		Trainee Preparation in Professional Skills 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 took coursework/training that included regular faculty critique of and feedback on professional writing. • Trainees authored, submitted or published research papers in refereed journals. • Trainees took coursework/training (e.g., brown bags, seminars) that included regular critique of and feedback on professional speaking/presentation skills. • Trainees made presentations at academic/scientific professional conferences or meetings.			X	

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			• Trainees have presented results from their IGERT to professional non-academic audiences (e.g., industry, government). • Trainees took 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, educational, and/or outreach efforts. • Trainees led teams engaged in research, educational, and/or outreach efforts.				

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
				• Other preparation in professional skills development (please specify: _____) • No components of [section/question title] applied during this reporting period.			

	X		Trainee Preparation for STEM Careers
			
			Mark the following components that apply to the majority of IGERT trainees in your project during this reporting period. (Mark all that apply)
			  • Trainees received training or instruction (e.g., courses, workshops) in effective teaching practices.
			  • Trainees developed and presented course and/or curriculum materials.
			  • Trainees served as mentors to others (e.g., graduate students, undergraduates, laboratory technicians).
			  • Trainees received training/mentoring in grant proposal preparation.
			  • Authored/co-authored and submitted grant proposals.
			  • Trainees have received training/instruction on
						X	

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			the interaction between academic research and industrial technical requirements. • Trainees have received training/instruction for applying their research to address public policy concerns or issues. • Trainees have internships (off-campus, research, educational and/or work experiences) in non-academic settings (e.g., industry, government). • Trainees have professional interactions other than internships with non-academic employers (e.g. industry, government) in order to learn about career opportunities and requirements. • Trainees communicated, worked, or collaborated with scientists of other nationalities. • Other preparation for careers in academia (please specify: _____). • Other preparation for non-academic careers (e.g., industry,				

				Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Data provided by Principal Investigator							
Deleted Items	**Revised Items**	**New Items**	Question				
			government) (please specify: _____). • No components of [section/question title] applied during this reporting period.				
		X	Do you have an overall plan in place and active with a specific set of goals and timelines for recruitment and retention of Trainees including specifics for broadening participation of groups underrepresented in science and engineering? [yes, no]			X	
		X	Regardless of your response to the prior question, please describe up to three of the best practices for recruiting qualified trainees to your IGERT during this reporting period. (Responses are limited to 1000 characters for each practice.) *[Three textboxes for Best Practice 1, 2 and 3.]*			X	
		X	Please describe the extent to which each of the following practices been productive for recruiting trainees overall to your IGERT during this reporting period. [Three check boxes for each bulleted item. Boxes are labeled "Productive"; "Somewhat productive"; "Not productive"; "NA" • Relationships with NSF programs that can provide an undergraduate pool of			X	

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			potential IGERT trainees (e.g., REU's, NSF Centers). • Relationships with faculty and programs at other academic institutions • Use of recruiting resources on your IGERT campus (e.g., career service office, graduate studies office). • Collaboration with other IGERTs on recruitment. • Use of professional meetings, conferences, associations to communicate, reach out and market to potential IGERT trainees. • Other (please specify: _____).				
		X	Please describe the extent to which each of the following practices been productive for recruiting underrepresented minority and women trainees to your IGERT during this reporting period. [Three check boxes for each bulleted item. Boxes are labeled "Productive"; "Somewhat productive"; "Not productive"; "NA" {Respondents respond twice for each bulleted item; once for URMs and once for women.} • Relationships with NSF programs that specifically focus on broadening participation of women or			X	

Data provided by Principal Investigator							
Deleted Items	**Revised Items**	**New Items**	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			underrepresented minorities 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 women or underrepresented minority communities (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 (HBCUs), Hispanic serving institutions, or tribal colleges). {This item will be marked N/A or blanked out for women } • Collaboration with other IGERTs on recruitment.				

23

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			• Other (please specify: _____)				
		X	According to NSF records, you project [has / does not have] explicit funding for an international component. If you think this is incorrect, please contact Macro International			X	
		X	Briefly identify up to three training experiences or components that provided exceptional "added value" for preparing IGERT trainees to be successful in international/global science and engineering. (Please use a separate text box for each response. Limit: 1000 characters for each.) Note: This can include U.S.-based experiences. *[Three textboxes for Training Experiences/Components 1, 2 and 3.]*				X
		X	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? [yes/no]			X	
		X	Did a trainee or multiple trainees from your project engage in an international experience through the IGERT project during this reporting			X	

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			period? [yes/no] If yes, please click HERE 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 Country [pull-down menu] Trainee(s) involved [pull-down menu] Mark the following international actions/work involving trainees that occurred. • Trainee(s) attended conferences/workshops. • Trainee(s) took coursework/training. • Trainee(s) worked, conducted research/field work, or interned in industrial settings. • Trainee(s) worked, conducted research/field work, or interned in academic settings. • Trainee(s) worked, conducted research/field work, or interned in other settings (e.g., national labs, non-governmental organizations). • Other international				

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			actions/work (please specify: _____)				
		X	Identify the value/opportunities for faculty which resulted from the International experiences of IGERT. (Mark all that apply) • Faculty has developed new collaborations. • Faculty has developed new access to facilities/skills. • Faculty has developed new opportunities for research/education/training. • Other (please specify: _____)				X
			Briefly identify up to three research or educational achievements resulting from the International component. Each achievement may involve a single trainee or a group of trainees*. [Three textboxes for Research/Educational Achievements 1, 2 and 3.]*				X
			Partnerships				
		X	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			X	

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			business partners, government agencies and labs, and non-profit organizations. If you are in doubt about whether to include information on a specific relationship between your IGERT and another organization, please include the information. If yes, please click on the following link to input information on the partnership/collaboration. You will need to repeat this step for each additional partnership/collaboration to report.				
		X	Institution/Organization Name			X	
		X	Detail on this partner If partner is an academic institution, please select all that apply. • Ph.D.-granting institution • Non-Ph.D.-granting institution • Minority serving institution • K-12 institution • Foreign-based institution If Partner is a government organization or agency – select the best option. • U.S. federal agency or department. • U.S. federal laboratory or research facility. • Foreign institution or foreign			X	

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs

			government/agency (If yes, please indicate the foreign country _____)
			
			If Partner is a corporate or industrial partner
			
			• Please select the descriptions that best fit the corporate or industrial partner. Please use your best judgment.
			
			 [check one]
			    Large company
			    Small to mid-size company
			    Start-up company
			
			[check one]
			     U.S.-based company
			    Foreign-based company
			
			• Please select the sector which best describes the business of your corporate partner [pull down/select one]
			• Other type of organization (e.g., nonprofit, community-based organization, professional association) [yes/no]				

		X	Funding arrangement for this partner: [Mark all that apply] Sub-award to partner • IGERT lead institution provides sub-award to			X	

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			partner for purposes of providing IGERT traineeship stipends to trainees. • IGERT project provides sub-award to partner for purposes of providing services or support to IGERT trainees. Partner provides funding • Partner provides funding to the IGERT project specifically for IGERT trainees in any way (e.g., internships, travel, training). • Partner provides funding to the IGERT project for research, curriculum, or other project activities, but not directly for trainees. Other • No funding/direct financial interaction is involved in this partnership. • Other (Please specify: _____)				
	X		Activities for this partner/institution *[mark all that apply]* • Facilities: IGERT trainees use a partner organization's facilities for project activities. • Collaborative Research/Teaching: Partner organization's			X	

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			personnel works with IGERT project staff on collaborative research/teaching. • Personnel Exchange: IGERT trainees and/or partner organization personnel use each other's facilities or work at each other's site, on an ad hoc or as-need basis. • Internships: IGERT trainees work in a partner's facilities specifically as interns.				
		X	Accomplishments and Outcomes Please describe one key accomplishment or outcome (not activity) of this partnering arrangement for the reporting period. (Response limited to 1000 characters.) [Textbox]				X
X			Recruitment Strategies Used by the IGERT Project (mark all that apply): -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			X	

Data provided by Principal Investigator							
Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			around the country -Use faculty personal contacts to identify and attract prospective trainees -Invite and support prospective trainees to visits to the IGERT project on campus and support these visits -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 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				

Data provided by Principal Investigator						
Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			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 - Recruit through the IGERT National Recruitment Program managed by the University of Michigan team (www.igert.org) -Other recruitment strategies (specify) Expand on those strategies identified above that have been implemented in an interesting or unusual way or have proven unusually successful in attracting in applicants. Also, discuss particular challenges you have encountered in recruiting for your IGERT program. [text box]				
X			Trainee Preparation to Conduct High-Quality Research Provided by the IGERT Project (mark all that apply): Trainees have coursework/training in research methods -Trainees have coursework/training in statistics -Trainees have			X	

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			coursework/training in the ethical conduct of research -Trainees have coursework/training in state-of-the-art instrumentation -Other preparation to conduct high-quality research				
X			Trainee Preparation for Careers in Industry, Government, or Public Sector Provided by the IGERT Project (mark all that apply): -Trainees participate in research projects involving multiple disciplines -Trainees participate in team research efforts -Trainees participate in any application of research to industry or public policy -Trainees have experience in communicating across disciplines 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			X	

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			industry settings -Other preparation for careers in industry, government, or public sector Please specify: _____				
X			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	
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	
X			Additional Funding Sources Funding Source Name			X	
			Funding Source Type: -National Science Foundation			X	

				Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Deleted Items	**Revised Items**	**New Items**	Question				
			-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	
X			Estimated value of in-kind dollars for the current reporting period			X	
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
			4: Project Evaluation and Institutional Impacts				
		X	Do you have an overall plan with milestones and timelines for measuring progress toward attaining key IGERT project goals? [yes/no]				X
		X	If your IGERT paid for professional evaluation services external to the IGERT institution or used expertise internal to your institution to aid in the evaluation process, please share contact information				X

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Organization/individual name Address Email Phone Website Was this an external evaluation service provider? *[yes/no]*				
		X	Please describe a key insight or learning, and your response to it (if any), that has been identified through assessment and evaluation during this reporting period. (Response is limited to 1000 characters total for the <u>issue/challenge</u> and 1000 characters for the <u>response</u>.) *[Textbox for "Insight/Learning" and "Response."]*				X
X			Impacts on Faculty (check all that apply): - There were no changes in IGERT faculty activities during the current reporting period. -Faculty increased their participation in non-home-discipline meetings, conferences, etc. and similar activities -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				X

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			-Faculty are sharing mentorship of students (other than membership on dissertation committees) 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 activities during the current reporting period.				
		X	Please consider your responses to the following in light of changes/impacts that have occurred in your institution as a result of the IGERT during this reporting period. *[mark all that apply]* • The institution(s) involved in your IGERT has/have been successful in obtaining large-scale federal grants (e.g., STC, ERC, MRSEC). • Interdisciplinary/ multidisciplinary courses have been developed for IGERT trainees and				X

				Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Deleted Items	**Revised Items**	**New Items**	**Question**				
			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 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 lab and research experiences across disciplines have occurred.			
			• Institutional changes incorporating improved recruitment and retention			

Data provided by Principal Investigator						
Deleted Items	**Revised Items**	**New Items**	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			policies and practices for underrepresented groups and women based on IGERT. • Other (Please specify: _____)				
		X	Please describe a demonstrable institutional change (if any) that has occurred during this reporting period due to IGERT. (Response is limited to 1000 characters.) *[Textbox]*				X
		X	Please provide information on any publications/presentations/patents emanating from your IGERT project to which you (the PI) or any other personnel or trainees (co-PI or advisor, funded trainees, formerly funded trainees, associates) associated with your IGERT project contributed. Please use APA format for all uploads, as described in the examples under each heading below. Only .txt or .htm documents will be accepted. <u>Please be sure that the names of all funded or formerly funded trainees are marked with an asterisk</u>.*				X
X			Institutional Impact: New Course Offerings, Requirements: Count for current Project Year (counts for all that apply) - Inter/multidisciplinary courses developed for the IGERT project - Other courses developed for				X

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			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			What IGERT features have been institutionalized? (Mark all that apply) - No IGERT features have been institutionalized during the current reporting period -New entrance requirements -New paradigms for graduate student assessment or advancement to candidacy - New procedures or activities that reduce barriers to multi/interdisciplinary training and research -New paradigms for integrating research and education at the graduate level -Other				X
X			Do you intend to maintain part 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)				

			Data provided by Principal Investigator			
Deleted Items	**Revised Items**	**New Items**	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			-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			Assessment: -Who has performed your project assessment? (Mark all the apply) -The PI of the IGERT project -An individual or group of IGERT participants (other than the PI) -An individual or group within your university but not in a department that is part of the research focus of your IGERT project -An individual or group outside your university (e.e., an external evaluator, an advisory committee of peer scientists) -Other. Please specify: -What methods have been part of your project assessment? (Mark all the apply) -Informal feedback from trainees and faculty to the PI or faculty serving on an assessment or management committee -Annual or more frequent			X	

Deleted Items	Revised Items	New Items	Question	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			meeting or project faculty members serving on an assessment committee -Annual or more frequent meetings of project participants to discuss project management and problems in program implementation or function -Annual or more frequent surveys of trainees to learn about their concerns -Annual or more frequent surveys of participating faculty members to learn about their concerns -Ongoing observation by an external evaluator of project governance meetings and activities -Annual or more frequent site visits by an advisory committee or external evaluator that included interviews of trainees and faculty and observation of classes, seminars, and laboratories -A means for feedback from the evaluator/evaluating group to be received disseminated to all members of the project, and acted upon -Other (Please Specify)				

---

[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.