

**Appendix A2:
Crosswalk of IGERT Trainee Survey Data Elements
With New, Revised, and Deleted Items Indicated**

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

Data provided by IGERT Trainee						
Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			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		
			Ethnicity (Choose one): -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		

Data provided by IGERT Trainee						
Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
	X		<p>Expected graduation date (mm/yyyy) -If expected to graduate within one year, what type of employment are you pursuing? <i>[mark all that apply]</i></p> <p>Government</p> <ul style="list-style-type: none"> • Post doc • Full time position • Part time position <p>Industry/Business</p> <ul style="list-style-type: none"> • Post doc • Full time position • Part time position <p>Educational Institution (college, university, or K-12)</p> <ul style="list-style-type: none"> • Post doc • Tenure track faculty • Non-tenure track faculty • Staff <p>Nonprofit</p> <ul style="list-style-type: none"> • Post doc • Full time position • Part time position <p>Self-employed/entrepreneur</p>	X		
			Current IGERT Advisor (Mark all that apply)	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		
			Academic/Professional Background Prior to IGERT Traineeship -Undergraduate Degree Prior to		X	

Data provided by IGERT Trainee						
Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			IGERT Traineeship: Undergraduate Major, Double Major, Undergraduate Institution, Undergraduate Inst. City, State. -When did you receive your first undergraduate degree? (yyyy)			
			Post-Undergraduate Degree Prior to IGERT Traineeship -Did you obtain a post-undergraduate degree prior to becoming an IGERT Trainee? Yes/No -Type and when degree received -Name of institution granting degree		X	
			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	
			Publications, Presentations, and Patents Provided by the PI			X
	X		Fellowship, Scholarship, and Grants Other Than IGERT - Title of Fellowship, Scholarship, Grant (if any) - Proposal Title - Year Awarded - Awarding Agency/Organization			X
	X		Other Honors and Recognition			X

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Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			<ul style="list-style-type: none"> - Title of Honor or Recognition - Year - Society/Granting Organization 			
		X	<p>Please indicate which of the following activities you engaged in during this reporting period. [Mark all that apply]</p> <ul style="list-style-type: none"> • Took 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. • Took formal coursework/training across the breadth of disciplines encompassed by the IGERT project. • 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 research (please specify) • Please check here if you were not engaged in any of the activities listed above during this reporting period. 		X	

Data provided by IGERT Trainee						
Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
		X	How many courses/seminars did you take in disciplines outside of your primary discipline during this reporting period?		X	
		X	How many courses/seminars did you take specifically covering interdisciplinary topics of your IGERT during this reporting period?		X	
		X	<p>Please indicate which of the following activities you engaged in during this reporting period. [Mark all that apply]</p> <ul style="list-style-type: none"> • Took coursework/training that included regular faculty critique of and feedback on professional writing. • Authored, submitted or published research papers in refereed journals. • Took 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 non-academic audiences (e.g., industry, government). • Took coursework/training to develop media-based or information technology-based communication skills. 		X	

Data provided by IGERT Trainee

Deleted Items	Revised Items	New Items	Common Collection Categories Question	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			<ul style="list-style-type: none"> • 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 members of teams engaged in joint research, educational, and/or outreach efforts. • Led teams engaged in research, educational, and/or outreach efforts. • Other preparation in professional skills development (please specify: _____) • Please check here if you were not engaged in any of the activities listed above during this reporting period. 			
		X	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.			X

Data provided by IGERT Trainee						
Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			Note: This can include U.S.-based experiences. (word limit: 250) [Textbox]			
		X	<p>Please indicate which of the following activities you engaged in during this reporting period. [Mark all that apply]</p> <ul style="list-style-type: none"> • Received training or instruction (e.g., courses, workshops) in effective teaching practices. • Developed and presented course and/or curriculum materials. • Served as mentors 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 non-academic setting (e.g., industry, government). • Had professional interactions other than internships with non-academic employers (e.g. 		X	

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Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			<p>industry, government) in order to learn about career opportunities and requirements.</p> <ul style="list-style-type: none"> • 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, government) (please specify: _____). 			
X			<p>Educational/professional experience (check all that apply):</p> <ul style="list-style-type: none"> -Training/coursework in professional writing -Training/coursework in professional speaking/presentation skills -Presentations made at the IGERT 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 			
X			<p>Counts of professional activities:</p> <ul style="list-style-type: none"> -Presentations made at the IGERT institution -Professional conferences attended -Poster sessions presentations outside the IGERT institution -Oral presentations outside the 			X

Data provided by IGERT Trainee						
Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			IGERT institution -Other professional activities			
X			Professional Skills To Conduct High-Quality Research 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 within your own discipline area but outside your dissertation research -Other activities to develop or increase professional skills to conduct high-quality research		X	
X			Professional Skills in Education 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		X	

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Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			development) -Other activities to develop or increase professional skills in education			
X			<p>Professional Skills Applicable to Careers in Industry, Government, or the Public Sector</p> <p>Educational/professional activities engaged in (check all that apply).</p> <ul style="list-style-type: none"> -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 application -Training/experience in communications across disciplines and with 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 		X	
	X		Have you taken part in any			X

Data provided by IGERT Trainee						
Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			<p>Question</p> <p>internship(s) lasting a month or more with industries or businesses, with government laboratories or agencies, or with non-profit organizations during the current reporting period?</p> <p>Internship setting (pull-down options) U.S. Location Foreign Location Country Number of Months</p> <p>If you took part in an internship during this reporting period, please describe what you consider to be the most beneficial professional or career-related aspect. (Word limit: 250) [Textbox]</p>			
	X		<p>Please indicate which of the following international activities (if any) you engaged in during this reporting period as part of your IGERT project/activities. [Mark all that apply]</p> <ul style="list-style-type: none"> • Attended conferences/workshops outside the U.S. • Took coursework/training outside the U.S. • Worked, conducted research/fieldwork, or interned outside the U.S. • Other (Please specify: _____) • Please check here if you were not engaged in any of the 		X	

Data provided by IGERT Trainee						
Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			activities listed above during this reporting period.			
		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. Please identify the primary country in which the international activities occurred. (Word limit: 250) [Textbox with space for country name]		X	
X			International Perspective 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	
X			Will degree be granted by a multidisciplinary/interdisciplinary program or a traditional single-discipline department?			X

Data provided by IGERT Trainee						
Deleted Items	Revised Items	New Items	Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
			Question			
			-Multidisciplinary/interdisciplinary program -Traditional single-discipline department			
X			Name of Home Department/Program Number of courses in Home department during the current reporting period.		X	
X			Number of courses in Home department during the prior reporting period.		X	
X			Courses in Outside Departments -Name of department -Number of courses taken in it during the current reporting period		X	
X			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
			During your time as an IGERT trainee, have you received any form of special assistance (e.g. mentoring, academic, personal) beyond the support typically received by graduate students you know in other Ph.D. programs at this university? Yes/No		X	
X			Mentoring or special assistance received during the current reporting period (check all that apply):		X	

Data provided by IGERT Trainee						
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			Question			
			<ul style="list-style-type: none"> -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		In the text box below, please describe what you consider to be the most beneficial aspect of being an IGERT trainee during this reporting period. This might include 1) an opportunity you have had as a result of being an IGERT trainee that has significantly affected your professional development, 2) an aspect of the project that provided exceptional "added value" to your educational experience, or 3) an aspect of the project that has been especially successful and/or represents a real change from the way that graduate students are usually educated at your institution.			X
	X		Please describe what you consider to be the most important opportunity for improvement in the IGERT program with which you are associated.			X

