## **APPENDIX B**

**CREST Monitoring System Crosswalk** 

## DATA ELEMENTS OF THE CENTERS OF RESEARCH EXCELLENCE IN SCIENCE AND TECHNOLOGY MONITORING SYSTEM (CREST)

New Elements	Common Collection Categories Questions	Staff and Project Participant	Project Implementation Characteristics <sup>ii</sup>	Project Outputs <sup>iii</sup>
	1. Center Information			
	Center Name		X	
	Street Address 1			
	Street Address 2			
	City	X		
	State			
	ZIP Code			
	Phone Number	X		
	Fax Number	X		
	E-mail Address	X		
	URL	X		
	Undergraduate Enrollment in CREST Program		X	
	Graduate Enrollment in CREST Program		X	
	2. Institutions			
	Institution Name	X		
	Type of Institution (Select one)  • Federal Government  • Industry  • Local Government  • Non-Profit  • State Government  • University or College  • Other	X		
	City State/Region Country	X		
	3. Participant Information			$\vdash \vdash \vdash$
	Principal Investigator (PI)/ Co-Principal Investigator (Co-PI)			
	Name (First Name, Middle Name, Last Name)	X		

New Elements	Common Collection Categories Questions	Staff and Project Participant	Project Implementation Characteristics	Project Outputs
	Contact Information:     Institution     Address at institution     City     State/Region     Country     ZIP Code     Phone Number     Fax Number     E-mail Address	X		
	Gender: (Select one)  • Female  • Male  • Not Reported	X		
X	Ethnicity: (Select one)  • Hispanic or Latino  • Not Hispanic or Latino  • Not Reported	X		
X	Race: (Mark one or more)  Black or African American  American Indian or Alaska Native  Native Hawaiian or Other Pacific Islander  Asian  White  Not Reported	X		
X	Disability: (Mark one or more)	X		
X	Citizenship: (Select one)  U. S. Citizen Permanent Resident Other Non-U.S. Citizen Not Reported	X		
	Thrust areas in which this participant participated during the current reporting period: (Mark all that apply)  • Thrust Area 1  • Thrust Area 2  •		X	
	Faculty/Postdoc Name (First Name, Middle Name, Last Name)	X X		

New Elements	Common Collection Categories Questions	Staff and Project Participant	Project Implementation Characteristics	Project Outputs
	Contact Information: Institution (Name, Type, City, State/Region) Academic Rank (Select one)  • Assistant Professor • Associate Professor • Instructor or Lecturer • Not Applicable • Postdoctoral Associate • Professor Address at Institution City State/Region Country ZIP Code Phone Number Fax Number E-mail Address URL	X		
	Gender: (Select one)  • Female  • Male  • Not Reported	X		
	Ethnicity: (Select one)  • Hispanic or Latino  • Not Hispanic or Latino  • Not Reported	X		
	Race: (Mark one or more)  Black or African American  American Indian or Alaska Native  Native Hawaiian or Other Pacific Islander  Asian  White  Not Reported	X		
	Disability: (Mark one or more)  • Hearing Impairment • Visual Impairment • Mobility or Orthopedic Impairment • Other (please specify) • None • Not Reported	X		

	Common				
nts	Collection	ject t i	ion ics	uts	
me	Categories	Pro Jan	ct ıtat rist	utp	
[i]	Cutegories	nd 1 ticip	Project lementa ıracteris	t 0	
New Elements		Staff and Project Participant	Project Implementation Characteristics	Project Outputs	
Ne.	Questions	Sta	Im Cł	Pre	
	Citizenship: (Select one)				
	• U. S. Citizen				
	Permanent Resident	X			
	Other Non-U.S. Citizen				
	Not Reported				
	Thrust areas in which this participant participated during the current				
	reporting period: (Mark all that apply)		X		
	<ul><li>Thrust Area 1</li><li>Thrust Area 2</li></ul>		Λ		
	• Tillust Area 2				
	Provide the total number of person-months this participant contributed to				
	CREST during the reporting period by the source of funding.				
	NSF CREST				
	Other NSF		X		
	Other Federal Government				
	Other (please specify)				
	Student				
	Name (First Name, Middle Name, Last Name)	X			
	Contact Information:				
	Institution (Name, Type, City, State/Region)				
	Address at Institution				
	City				
	State/Region				
	Country	X			
	ZIP Code				
	Phone Number				
	Fax Number				
	E-mail Address				
	URL				
	Gender: (Select one)				
	• Female	X			
	• Male	1			
	Not Reported				
	Ethnicity: (Select one)				
	Hispanic or Latino     Net Hispanic on Letino	X			
	<ul><li>Not Hispanic or Latino</li><li>Not Reported</li></ul>				
	- Not reported				

<b>'</b>	Common			
ııtş	Collection	jecı it	Project Implementation Characteristics	Project Outputs
l me	Categories	Pro pan	ect ntat rrist	l utp
[] []	Cutegories	taff and Projec Participant	Project dementa aracteris	t 0
×		f an Part	Pr oler ara	jec
New Elements	Questions	Staff and Project Participant	ImJ Ch	Pro
	Race: (Mark one or more)			
	Black or African American			
	American Indian or Alaska Native			
	Native Hawaiian or Other Pacific Islander	X		
	Asian			
	White			
	Not Reported			
	Disability: (Mark one or more)			
	Hearing Impairment			
	Visual Impairment			
	Mobility or Orthopedic Impairment	X		
	Other (please specify)			
	• None			
	Not Reported			
	Citizenship: (Select one)			
	Not Reported	v		
	Other Non-U.S. Citizen     Provided to the second sec	X		
	<ul><li>Permanent Resident</li><li>U. S. Citizen</li></ul>			
	Thrust areas in which this participant participated during the current			
	reporting period: (Mark all that apply)			
	• Thrust Area 1		X	
	• Thrust Area 2		71	
	• Tillust Area 2			
	Provide the total number of person-months this participant contributed to			
	CREST during the reporting period by the source of funding.			
	NSF CREST			
			X	
	Other NSF			
	Other Federal Government			
	Other (please specify)			
	Academic Level as of the September 1 20yy:			
	Undergraduate Freshman			
	Undergraduate Sophomore			
	Undergraduate Junior	$\mathbf{v}$		
	Undergraduate Senior     Hadron data Others	X		
	Undergraduate Other     Graduate Masters			
	<ul><li>Graduate Masters</li><li>Graduate Doctorate</li></ul>			
	<ul><li>Graduate Doctorate</li><li>Graduate Other</li></ul>			
	• Graduate Other			

New Elements	Common Collection Categories Questions	Staff and Project Participant	Project Implementation Characteristics	Project Outputs
	If the student received a degree during current reporting period:  Degree Received: (Select one):  Bachelor's  Master's  Ph.D.  Area of Study: (Select one)  Agricultural Studies  Chemical and Biological Sciences  Computer and Information Sciences  Crosscutting Programs  Education  Engineering  English  Environmental Sciences/ Renewable Natural Resources  Geosciences  International  Life Sciences  Mathematics  Natural Sciences  Physical Sciences  Science Statistics  Social, Behavioral Sciences  Other  Title of Thesis or Dissertation	X		
	Which of the following kinds of financial support did this individual receive through the CREST program during the current reporting period? (Mark all that apply):  • Tuition • Stipend(s) • Other (please specify)		X	
	Did the student receive stipends from the CREST project for at least one academic term (including summer) during the current reporting period?  • Yes • No		X	
	What is the student's status at the end of the current reporting period? (Mark all that apply)  • Still in the CREST Program  • Postdoctoral Position  • Faculty Appointment  • Research Appointment  • Employment in private Industry  • Employment in public Industry  • Employment in K-12 Schools  • Other (please specify)		X	

New Elements	Common Collection Categories Questions	Staff and Project Participant	Project Implementation Characteristics	Project Outputs
	Provide the total number of person-months this individual contributed to CREST during the reporting period by the source of funding.  NSF CREST Other NSF Other Federal Government Other (please specify)		Х	
	Other Personnel	37		
	Name (First Name, Middle Name, Last Name)	X		
	Contact Information: Institution (Name, Type, City, State/Region) Phone Fax E-mail	X		
	This individual fulfills the definition of a CREST participant (i.e., any individual who received the equivalent of at least one month's salary from the CREST project during the current reporting period).  • Yes • No		X	
	Gender: (Select one)  • Female  • Male  • Not Reported	X		
	Ethnicity: (Select one)  • Hispanic or Latino  • Not Hispanic or Latino  • Not Reported	X		
	Race: (Mark one or more)  Black or African American  American Indian or Alaska Native  Native Hawaiian or Other Pacific Islander  Asian  White  Not Reported	X		
	Disability: (Mark one or more)  • Hearing Impairment • Visual Impairment • Mobility or Orthopedic Impairment • Other (please specify) • None • Not Reported	X		

New Elements	Common Collection Categories	Staff and Project Participant	Project Implementation Characteristics	Project Outputs
New F	Questions	Staff an Part	Pr Impler Chara	Projec
	Citizenship (Select one):  Not Reported Other Non-U.S. Citizen Permanent Resident U. S. Citizen	X		
	Thrust areas in which this participant participated during the current reporting period: (Mark all that apply)  • Thrust Area 1  • Thrust Area 2  •		X	
	Contributor			
	Name (First Name, Middle Name, Last Name) Institution (Name, Type, City, State/Region)	X		
	4. Proposals/Awards			
	Status  • Proposal  • Award			X
	Title of Proposal/Award			X
	Thrust Area (Select one)  Thrust Area 1 Thrust Area 2		X	
	Funding Source Type:			X
	Funding Source Name			X
X	Was this an NSF funding source? (Select one)  • Yes  • No			X
	Type of Award: (Select one)  • Education • Research • Other			X
	Center Award Amount (for Awards only)			X
	Grant Award Amount (for Awards only)			X

ements	Common Collection Categories	Staff and Project Participant	Project Implementation Characteristics	Outputs
New Elements	Questions	Staff and Projec Participant	Project Implementa Characteris	Project Outputs
	Key Participants:			
	Primary Participant Name (First Name, Middle Name, Last Name)			
	Institution			
	Participant/Contributor 2	X		
	Name (First Name, Middle Name, Last Name)			
	Institution			
	Participant/Contributor 3			
	Description of How CREST Contributed to This Accomplishment			X
	5. Presentations			
	Presentation Title			X
	Thrust Area (Select one)			
	• Thrust 1		X	
	• Thrust 2			
	Presentation Location			
	Institution (Name, Type, City, State/Region)			
	OR			v
	Conference name and location:			X
	Conference Name			
	City			
	State			
	Approximate Audience Size			X
	Presentation Date			X
	Key Participants:			
	Primary Participant			
	Name (First Name, Middle Name, Last Name)			
	Institution		37	
	Participant/Contributor 2		X	
	Name (First Name, Middle Name, Last Name) Institution			
	Participant/Contributor 3			
	Description of How CREST Contributed to This Presentation			X
	Description of flow Giveor Contributed to find freedmanon			11
	6. Publications			

nts	Common Collection	ject It Hine	tion	outs
New Elements	Categories	Staff and Project Participant	Project Implementation Characteristics	Project Outputs
New	Questions	Staff Pa	Impl Cha	Proje
	Title			X
	Thrust Area (Select one)			
	• Thrust Area 1		X	
	• Thrust Area 2			
	Publication Name			X
				Λ
	Publication Type: (Select one)  • Article in Refereed Journal			
	Book Chapter or Textbook			X
	Article in Public Proceedings			
	Status of Publication: (Select one)			
	Accepted, Awaiting Publication			
	Published (Volume, Year)      Charitad Hada Parisas			X
	<ul><li>Submitted, Under Review</li><li>Other (please specify)</li></ul>			
	Citation:			
	Page #			
	URL			X
	Other Citation			
	Key Participants:			
	Primary Participant			
	Name (First Name, Middle Name, Last Name)			
	Institution			
	Participant/Contributor 2	X		
	Name (First Name, Middle Name, Last Name)	1		
	Institution			
	Participant/Contributor 3			
	Description of How CREST Contributed to This Publication			X
	_ = ==================================			
	7. Collaborative Projects			
	Collaborative Project Title			X
	Thrust Area (Select one)			
	Thrust Area 1		X	
	• Thrust Area 2		23	
	· · · · · · · · · · · · · · · · · · ·			

New Elements	Common Collection Categories Questions	Staff and Project Participant	Project Implementation Characteristics	Project Outputs
	Key Participants:			
	Primary Participant			
	Name (First Name, Middle Name, Last Name)			
	Institution			
	Participant/Contributor 2	X		
	Name (First Name, Middle Name, Last Name)			
	Institution			
	Participant/Contributor 3			
	•••			
	Description of How CREST Contributed to This Collaborative Project			X

New Elements	Colle	Common Collection Categories Questions			
	Collaborative Partner(s): Institution 1 (Name, Type, City, State/Region) Funding Source: (Mark all that ap	mer:	X		
X	Did the collaboration provide research for  • Yes • No	r Undergraduates?			X
X	Research for Graduates?  • Yes • No				X

New Elements	Common Collection Categories Questions	Staff and Project Participant	Project Implementation Characteristics	Project Outputs
X	Research for Postdocs?  • Yes • No			X
X	Is this collaboration International?  • Yes • No		X	
	If yes, was this collaboration planned as a part of your proposal or developed later during the award period? (select one)  • Proposal  • Award			
	6. Patents			
	Patent Title			X
	Thrust Area: (Select one)  Thrust Area 1 Thrust Area 2		X	
	Year Submitted			X
	Application Number			X
	Allowed: (Select one)  • Yes  • No			X
	Patent Number			X
	Key Participants: Primary Participant Name (First Name, Middle Name, Last Name) Institution Participant/Contributor 2 Name (First Name, Middle Name, Last Name) Institution Participant/Contributor 3	X		
	Description of How CREST Contributed to This Collaborative Project			X
	7. Activities			
	Activity Title			X
	Thrust Area: (Select one)  Thrust Area 1 Thrust Area 2		X	

ents	Common Collection	oject nt	tion	puts
New Elements	<b>Categories Questions</b>	Staff and Project Participant	Project Implementation Characteristics	Project Outputs
	Activity Type: (Select one)			
	Research Activities/Findings			
	Education and HR Activities/Accomplishments			
	<ul><li>Attracting/Attaining/Retaining Students</li><li>Integrating Education and Research</li></ul>			X
	Working With K—12 Students			
	Facilitating the Transfer of Knowledge			
	Developing or Purchasing Equipment/Facilities			37
	Activity Start Date			X
	Activity End Date			X
	Institutions: Institution 1			
	(Name, Type, City, State/Region)	X		
	Institution 2	11		
	Key Participants:			
	Primary Participant			
	Name (First Name, Middle Name, Last Name)			
	Institution	***		
	Participant/Contributor 2	X		
	Name (First Name, Middle Name, Last Name)			
	Institution Participant/Contributor 2			
	Participant/Contributor 3			
	Highlights of outstanding accomplishments:			
	(If this is a continuation of an activity from last year, please explain the			X
	changes in the direction or level of activity from the previous year.)			11
	Impact of Activity on Faculty, Students and/or Scientific Community			X
	Description of How CREST Contributed to This Activity			X
	8. Conferences Organized			X
X	Conference Title			X
X	Conference Topic			X
	Thrust Area: (Select one)			
X	• Thrust Area 2		X	
	• Thrust Area 2			
X	Conference Start Date			X
X	Conference End Date			X

New Elements	Common Collection Categories	Staff and Project Participant	Project Implementation Characteristics	Project Outputs
Nev	Questions	Staf	Iml	Pro
	Conference Location:			
	Institution (Name, Type, City, State/Region)			
X	OR		X	
	Conference name and location:			
	Conference Name			
	City			
	State			
X	Invited Speakers	X		
X	Undergraduate Participant Count			X
X	Graduate Participant Count			X
X	Postdoc Participant Count			X
X	Faculty Participant Count			X
X	Other Sponsoring Organization(s)	X		
X	Conference URL			X
	Key Participants:			
	Primary Participant			
	Name (First Name, Middle Name, Last Name)			
	Institution			
X	Participant/Contributor 2	X		
	Name (First Name, Middle Name, Last Name)			
	Institution			
	Participant/Contributor 3			
X	Description of How CREST Contributed to This Conference			X
Λ	Description of flow CREST Continuated to This Conference			Λ
	9. Functional Budget			

New Elements	Common Collection Categories Questions											Staff and Project Participant	Project Implementation Characteristics	Project Outputs
	Budget data per budget source (including thrusts and general CREST Sources):													
						Source	е							
	Funds Allocated	NSF CREST	Other NSF	Other	State	Local	Industry	University	Other	Total				
	Thrust 1												X	
	Thrust 2													
	Crest Administration Education Coordinator													
	Outreach and Knowledge Transfer Coordinator													
	Total													

<sup>&</sup>lt;sup>i</sup> 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.

<sup>&</sup>lt;sup>ii</sup> Elements of these characteristics include: Sources and amount of funds, fellowships, scholarships, traineeships, partnerships, training, and research methods.

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