

## **INTRODUCTION**

The following survey is designed to gather information on the Science, Engineering, and Education for Sustainability (SEES) portfolio of programs. You have been selected to respond to this survey because of your current or previous work with a project funded under the SEES initiative, or because of your current or previous work with a project funded from an NSF program similar to the SEES portfolio of programs. The information you provide in this survey will be used to inform the evaluation of SEES.

## **CONFIDENTIALITY**

Your responses to the survey will be kept confidential. Data will be reported in aggregate, and individuals will not be identified. Results from the survey will only be used for the purposes of this evaluation.

## **FREEDOM TO WITHDRAW**

Your participation in this evaluation study is completely voluntary. You may skip any question that is asked and you may withdraw from the survey at any time by clicking the 'Exit this survey' button at the top of each page. Please note: your answers will not be saved if you exit the survey.

## **BENEFITS**

The results will help NSF assess the success of SEES in terms of developing new knowledge and concepts that advance the over-arching goals of developing a sustainable human future, facilitating new and productive connections between researchers in a range of disciplines, and developing a workforce capable of meeting sustainability challenges. In particular, this survey will help the evaluation team better understand how SEES and comparable non-SEES projects compare in terms of their project-level characteristics, team compositions, public outreach, research outputs, and contributions to the development of a science and engineering workforce.

The survey is being conducted by Manhattan Strategy Group (MSG), an independent research firm under contract to NSF.

## **PRIVACY CONSIDERATIONS**

We will treat the information that you supply in a manner that carefully protects your privacy, in accordance with the Privacy Act of 1974, 5 U.S.C. § 552a, and other applicable statutes. We will NOT present results in any way that would permit them to be identified with you or any other specific individual. No personally identifiable information--such as name, project title, collaborator names, collaborator information, or employment history--will be disclosed to anyone outside the evaluation team.

## **MORE INFORMATION**

If you have any questions about the survey, please feel free to email the Project Manager, Ying

**Zhang, Ph.D., at [yzhang@manhattanstrategy.com](mailto:yzhang@manhattanstrategy.com) or on 301-828-1326.**

In this survey, we ask questions about your 'NSF-funded project' or 'project.' **By 'NSF-funded project' or 'project' we mean the NSF project named in your survey invitation email.** It might be helpful to keep this invitation email handy as you complete the survey, especially if you have, or have had, multiple NSF-funded projects in the past.

NSF Project Background

***In this section, we are interested in knowing more about the federal funding you rely on to conduct your research. By federal funding, we mean funding from any federal department or agency, including funding from Federally Funded Research and Development Centers (FFRDCs).***

1. About what percent of your overall research funding has come from NSF?

- 0-20%
- 20-40%
- 40-60%
- 60-80%
- 80-100%

2. About what percent of your overall research funding has come from other federal funding sources outside of NSF?

- 0-20%
- 20-40%
- 40-60%
- 60-80%
- 80-100%

3. Thinking about your current NSF-funded project (i.e., the project referred to in your survey invitation email), about what percent of this project is funded by NSF?

- 0-20%
- 20-40%
- 40-60%
- 60-80%
- 80-100%

4. Would you have been able to carry out your project as planned if you were not awarded NSF funding?

- Yes**, there were other programs or Directorates within NSF that could have funded my project as planned.
- Yes**, there were other agencies or funding bodies outside NSF that could have funded my project as planned.
- Maybe**, other programs or Directorates within NSF could have funded my project, but parts of the project plan would have changed.
- Maybe**, other agencies or funding bodies outside NSF could have funded my project, but parts of the project plan would have changed.
- No**, there were no other programs or Directorates within NSF, nor were there any other agencies or funding bodies outside NSF, that could have funded my project as planned.
- No**, there were no other programs or Directorates within NSF, nor were there any other agencies or funding bodies outside NSF, that could have funded my project as planned—even if parts of the project plan were changed.

NSF Project Impact

***In this section, we are interested in learning more about how your NSF-funded project has helped to advance sustainability issues in the science, engineering, and/or education fields. Remember: by 'NSF-funded project' or 'project' we mean the NSF project named in your survey invitation email.***

5. Please indicate the number of times your project details or project findings were...

Submitted for publication in a peer-reviewed academic journal	<input type="text"/>
Published in a peer-reviewed academic journal	<input type="text"/>
Submitted for presentation at an academic conference	<input type="text"/>
Presented at an academic conference	<input type="text"/>
Discussed by organizations or professional groups affiliated with your research field (e.g. national associations).	<input type="text"/>

6. Please indicate the number of times your project details or project findings were...

Featured in print or electronic media (e.g. news website, blog, tweet, print journal)	<input type="text"/>
Presented at a non-academic conference or public event (e.g. as an invited speaker or panelist, at an industry conference).	<input type="text"/>
Featured in a non peer-reviewed journal, book, or report	<input type="text"/>
Used in an undergraduate course that you teach	<input type="text"/>
Used in an undergraduate course that others teach	<input type="text"/>
Used in a graduate-level course that you teach	<input type="text"/>
Used in a graduate-level course that others teach	<input type="text"/>

NSF SEES Project Impact

7. Have you received any special recognition as a result of your NSF-funded project?

Yes

No

If Yes, please explain

8. Have your project findings contributed to sustainability research, education, and/or practice?

Yes

No

If Yes, please explain

9. Have your project findings informed public policy addressing sustainability issues?

Yes

No

If Yes, please explain

10. Have your project findings led to environmentally sustainable practices?

Yes

No

If Yes, please explain



Interdisciplinarity

***In this section, we are interested in knowing more about the importance of interdisciplinary research in your own work as well as in your workplace. Please indicate the extent to which you agree or disagree with each of the following statements:***

11. My institution places a high value on interdisciplinary research.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly Disagree

12. I utilize professionals from other disciplines for their particular expertise when conducting my own research.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly Disagree

13. I consistently give feedback to professionals from other disciplines on their research.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly Disagree

Interdisciplinarity

14. My colleagues from other disciplines believe that they could not do their jobs as well without the assistance of individuals from my discipline.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly Disagree

15. Incorporating the views held by my colleagues from other disciplines improves my ability to carry out research in my own discipline.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly Disagree

16. Formal procedures/mechanisms exist within my institution for facilitating interdisciplinary research.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly Disagree

Interdisciplinarity

17. Working with colleagues from other disciplines leads to outcomes or findings that we could not achieve alone.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly Disagree

18. My colleagues and I talk about ways to involve individuals from other disciplines in our research.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly Disagree

Current Employment

***In this section, we are interested in knowing more about your current and former employment, as well as your future career plans and goals. Answer the following questions for your current primary employer—that is, the employer you currently work the most hours for each week—and then work backwards through your previous primary employers over the past 10 years, if applicable.***

19. What is your current job title? If you have more than one job, report the one for which you work the most hours each week.

20. Which one of the following best describes your principal employer? Are you...

- Self-Employed or a business owner in a non-incorporated business, professional practice, or farm
- Self-employed or a business owner in an incorporated business, professional practice, or farm
- Employee in a for-profit company or organization
- Employee in a non-profit organization, including tax-exempt or charitable organization
- Employee in a private for-profit college/university
- Employee in a private non-profit college/university
- Employee in a local government (e.g., city, county, school district)
- Employee in a state government (including public state colleges/ universities)
- Employee in the U.S. military service, active duty or Commissioned Corps (e.g., USPHS, NOAA)
- Employee in the U.S. government (e.g., civilian employee)
- Other (please specify)

Current Employment

21. Is the educational institution where you work a...

- Two-year college, community college, or technical institute
- Four-year college or university, other than a medical school
- Medical school (including university-affiliated hospital or medical center)
- University-affiliated research institute
- Other

Current Employment

22. What type of academic position(s) do you currently hold at this institution? Select all that apply

- President, Provost, or Chancellor (any level)
- Dean (any level), department head, or department chair
- Research faculty, scientist, associate, or fellow
- Teaching faculty
- Adjunct faculty
- Postdoc (e.g., postdoctoral fellow or associate)
- Research assistant
- Teaching assistant
- Other

23. What is your faculty rank?

- Not applicable: no ranks designated at this institution
- Not applicable: no ranks designated for my position
- Professor
- Associate Professor
- Assistant Professor
- Instructor
- Lecturer
- Other (please specify)

24. What is your tenure status?

















- Not applicable: no tenure system at this institution
- Not applicable: no tenure system for my position
- Tenured
- On tenure track but not tenured
- Not on tenure track





## Current Employment

26. During a typical week, what kind of work are you doing at this job? Please rank the following activities, with "1" being the activity you spend the most hours working on during a typical week.

		Accounting, finance, contracts	<input type="checkbox"/> N/A
		Basic research – study directed toward gaining scientific knowledge primarily for its own sake	<input type="checkbox"/> N/A
		Applied research – study directed toward gaining scientific knowledge to meet a recognized need	<input type="checkbox"/> N/A
		Development – using knowledge gained from research for the production of materials, devices	<input type="checkbox"/> N/A
		Design of equipment, processes, structures, models	<input type="checkbox"/> N/A
		Human resources – including recruiting, personnel development, training	<input type="checkbox"/> N/A
		Managing or supervising people or projects	<input type="checkbox"/> N/A
		Other	<input type="checkbox"/> N/A

Current Employment

27. Have you changed primary employers in the past 10 years? If you have changed positions with the same employer (e.g., you received a promotion), answer 'yes' and enter the details of this previous position. If you have taken temporary positions or taken temporary leave but remained with your current primary employer answer 'no' below.

Yes

No

Current Employment

28. Were you a full-time student before you started working with this employer?

Yes

No

Current Employment

29. What degree were you studying for?

- Doctorate (Ph.D.)
- Masters (M.A. or M.Sc.)
- Bachelors (B.A. or B.Sc)
- Associate or other 2-year degree
- Other (please specify)

30. What year did you complete this degree?

Previous Employment 1

31. What was your former job title?

32. Which one of the following best describes your previous principal employer? Were you...

- Self-Employed or a business owner in a non-incorporated business, professional practice, or farm
- Self-employed or a business owner in an incorporated business, professional practice, or farm
- Employee in a for-profit company or organization
- Employee in a non-profit organization, including tax-exempt or charitable organization
- Employee in a private for-profit college/university
- Employee in a private non-profit college/university
- Employee in a local government (e.g., city, county, school district)
- Employee in a state government (including public state colleges/ universities)
- Employee in the U.S. military service, active duty or Commissioned Corps (e.g., USPHS, NOAA)
- Employee in the U.S. government (e.g., civilian employee)
- Other (please specify)

Previous Employment 1

33. Was the educational institution where you worked a...

- Two-year college, community college, or technical institute
- Four-year college or university, other than a medical school
- Medical school (including university-affiliated hospital or medical center)
- University-affiliated research institute
- Other

Previous Employment 1

34. What type of academic position(s) did you hold at this institution? Select all that apply

- President, Provost, or Chancellor (any level)
- Dean (any level), department head, or department chair
- Research faculty, scientist, associate, or fellow
- Teaching faculty
- Adjunct faculty
- Postdoc (e.g., postdoctoral fellow or associate)
- Research assistant
- Teaching assistant
- Other

35. What was your faculty rank?

- Not applicable: no ranks designated at this institution
- Not applicable: no ranks designated for my position
- Professor
- Associate Professor
- Assistant Professor
- Instructor
- Lecturer
- Other (please specify)



















36. What was your tenure status?

- Not applicable: no tenure system at this institution
- Not applicable: no tenure system for my position
- Tenured
- On tenure track but not tenured
- Not on tenure track



















## Previous Employment 1

37. During a typical week, what kind of work were you doing at this job? Please rank the following activities, with "1" being the activity you spent the most hours working on during a typical week.

		Undergraduate teaching	<input type="checkbox"/> N/A
		Graduate teaching	<input type="checkbox"/> N/A
		Doctoral advising	<input type="checkbox"/> N/A
		Postdoctoral advising	<input type="checkbox"/> N/A
		Basic research – study directed toward gaining scientific knowledge primarily for its own sake	<input type="checkbox"/> N/A
		Applied research – study directed toward gaining scientific knowledge to meet a recognized need	<input type="checkbox"/> N/A
		Departmental administration	<input type="checkbox"/> N/A
		University administration	<input type="checkbox"/> N/A
		Other	<input type="checkbox"/> N/A

## Previous Employment 1

38. During a typical week, what kind of work were you doing at this job? Please rank the following activities, with "1" being the activity you spent the most hours working on during a typical week.

		Accounting, finance, contracts	<input type="checkbox"/> N/A
		Basic research – study directed toward gaining scientific knowledge primarily for its own sake	<input type="checkbox"/> N/A
		Applied research – study directed toward gaining scientific knowledge to meet a recognized need	<input type="checkbox"/> N/A
		Development – using knowledge gained from research for the production of materials, devices	<input type="checkbox"/> N/A
		Design of equipment, processes, structures, models	<input type="checkbox"/> N/A
		Human resources – including recruiting, personnel development, training	<input type="checkbox"/> N/A
		Managing or supervising people or projects	<input type="checkbox"/> N/A
		Other	<input type="checkbox"/> N/A

Previous Employment 1

39. What year did you leave this employer?

40. Have you held any other full-time positions in the past 10 years? If you have held a different full-time position with the same employer (e.g., you received a promotion), answer 'yes' and enter the details of this previous position.

Yes

No

Previous Employment 1

41. Were you a full-time student before you started working with this previous employer?

Yes

No

Previous Employment 1

42. What degree were you studying for?

- Doctorate (Ph.D.)
- Masters (M.A. or M.Sc.)
- Bachelors (B.A. or B.Sc)
- Associate or other 2-year degree
- Other (please specify)

43. What year did you complete this degree?

Previous Employment 2

44. What was your former job title?

45. Which one of the following best describes your previous principal employer? Were you...

- Self-Employed or a business owner in a non-incorporated business, professional practice, or farm
- Self-employed or a business owner in an incorporated business, professional practice, or farm
- Employee in a for-profit company or organization
- Employee in a non-profit organization, including tax-exempt or charitable organization
- Employee in a private for-profit college/university
- Employee in a private non-profit college/university
- Employee in a local government (e.g., city, county, school district)
- Employee in a state government (including public state colleges/ universities)
- Employee in the U.S. military service, active duty or Commissioned Corps (e.g., USPHS, NOAA)
- Employee in the U.S. government (e.g., civilian employee)
- Other (please specify)

Previous Employment 2

46. Was the educational institution where you worked a...

- Two-year college, community college, or technical institute
- Four-year college or university, other than a medical school
- Medical school (including university-affiliated hospital or medical center)
- University-affiliated research institute
- Other

Previous Employment 2

47. What type of academic position(s) did you hold at this institution? Select all that apply

- President, Provost, or Chancellor (any level)
- Dean (any level), department head, or department chair
- Research faculty, scientist, associate, or fellow
- Teaching faculty
- Adjunct faculty
- Postdoc (e.g., postdoctoral fellow or associate)
- Research assistant
- Teaching assistant
- Other

48. What was your faculty rank?

- Not applicable: no ranks designated at this institution
- Not applicable: no ranks designated for my position
- Professor
- Associate Professor
- Assistant Professor
- Instructor
- Lecturer
- Other (please specify)












49. What was your tenure status?

- Not applicable: no tenure system at this institution
- Not applicable: no tenure system for my position
- Tenured
- On tenure track but not tenured
- Not on tenure track

















## Previous Employment 2

50. During a typical week, what kind of work were you doing at this job? Please rank the following activities, with "1" being the activity you spent the most hours working on during a typical week.

	<input type="text" value="1"/>	Undergraduate teaching	<input type="checkbox"/> N/A
	<input type="text" value="2"/>	Graduate teaching	<input type="checkbox"/> N/A
	<input type="text" value="3"/>	Doctoral advising	<input type="checkbox"/> N/A
	<input type="text" value="4"/>	Postdoctoral advising	<input type="checkbox"/> N/A
	<input type="text" value="5"/>	Basic research – study directed toward gaining scientific knowledge primarily for its own sake	<input type="checkbox"/> N/A
	<input type="text" value="6"/>	Applied research – study directed toward gaining scientific knowledge to meet a recognized need	<input type="checkbox"/> N/A
	<input type="text" value="7"/>	Departmental administration	<input type="checkbox"/> N/A
	<input type="text" value="8"/>	University administration	<input type="checkbox"/> N/A
	<input type="text" value="9"/>	Other	<input type="checkbox"/> N/A

## Previous Employment 2

51. During a typical week, what kind of work were you doing at this job? Please rank the following activities, with "1" being the activity you spent the most hours working on during a typical week.

		Accounting, finance, contracts	<input type="checkbox"/> N/A
		Basic research – study directed toward gaining scientific knowledge primarily for its own sake	<input type="checkbox"/> N/A
		Applied research – study directed toward gaining scientific knowledge to meet a recognized need	<input type="checkbox"/> N/A
		Development – using knowledge gained from research for the production of materials, devices	<input type="checkbox"/> N/A
		Design of equipment, processes, structures, models	<input type="checkbox"/> N/A
		Human resources – including recruiting, personnel development, training	<input type="checkbox"/> N/A
		Managing or supervising people or projects	<input type="checkbox"/> N/A
		Other	<input type="checkbox"/> N/A

Previous Employment 2

52. What year did you leave this employer?

53. Have you held any other full-time positions in the past 10 years? If you have held a different full-time position with the same employer (e.g., you received a promotion), answer 'yes' and enter the details of this previous position.

Yes

No

Previous Employment 2

54. Were you a full-time student before you started working with this previous employer?

Yes

No

Previous Employment 2

55. What degree were you studying for?

- Doctorate (Ph.D.)
- Masters (M.A. or M.Sc.)
- Bachelors (B.A. or B.Sc)
- Associate or other 2-year degree
- Other (please specify)

56. What year did you complete this degree?

Previous Employment 3

57. What was your former job title?

58. Which one of the following best describes your previous principal employer? Were you...

- Self-Employed or a business owner in a non-incorporated business, professional practice, or farm
- Self-employed or a business owner in an incorporated business, professional practice, or farm
- Employee in a for-profit company or organization
- Employee in a non-profit organization, including tax-exempt or charitable organization
- Employee in a private for-profit college/university
- Employee in a private non-profit college/university
- Employee in a local government (e.g., city, county, school district)
- Employee in a state government (including public state colleges/ universities)
- Employee in the U.S. military service, active duty or Commissioned Corps (e.g., USPHS, NOAA)
- Employee in the U.S. government (e.g., civilian employee)
- Other (please specify)

Previous Employment 3

59. Was the educational institution where you worked a...

- Two-year college, community college, or technical institute
- Four-year college or university, other than a medical school
- Medical school (including university-affiliated hospital or medical center)
- University-affiliated research institute
- Other



Previous Employment 3

60. What type of academic position(s) did you hold at this institution? Select all that apply

- President, Provost, or Chancellor (any level)
- Dean (any level), department head, or department chair
- Research faculty, scientist, associate, or fellow
- Teaching faculty
- Adjunct faculty
- Postdoc (e.g., postdoctoral fellow or associate)
- Research assistant
- Teaching assistant
- Other

61. What was your faculty rank?










- Not applicable: no ranks designated at this institution
- Not applicable: no ranks designated for my position
- Professor
- Associate Professor
- Assistant Professor
- Instructor
- Lecturer
- Other (please specify)

62. What was your tenure status?

- Not applicable: no tenure system at this institution
- Not applicable: no tenure system for my position
- Tenured
- On tenure track but not tenured
- Not on tenure track

















## Previous Employment 3

63. During a typical week, what kind of work were you doing at this job? Please rank the following activities, with "1" being the activity you spent the most hours working on during a typical week.

	<input type="text" value="1"/>	Undergraduate teaching	<input type="checkbox"/> N/A
	<input type="text" value="2"/>	Graduate teaching	<input type="checkbox"/> N/A
	<input type="text" value="3"/>	Doctoral advising	<input type="checkbox"/> N/A
	<input type="text" value="4"/>	Postdoctoral advising	<input type="checkbox"/> N/A
	<input type="text" value="5"/>	Basic research – study directed toward gaining scientific knowledge primarily for its own sake	<input type="checkbox"/> N/A
	<input type="text" value="6"/>	Applied research – study directed toward gaining scientific knowledge to meet a recognized need	<input type="checkbox"/> N/A
	<input type="text" value="7"/>	Departmental administration	<input type="checkbox"/> N/A
	<input type="text" value="8"/>	University administration	<input type="checkbox"/> N/A
	<input type="text" value="9"/>	Other	<input type="checkbox"/> N/A

## Previous Employment 3

64. During a typical week, what kind of work were you doing at this job? Please rank the following activities, with "1" being the activity you spent the most hours working on during a typical week.

		Accounting, finance, contracts	<input type="checkbox"/> N/A
		Basic research – study directed toward gaining scientific knowledge primarily for its own sake	<input type="checkbox"/> N/A
		Applied research – study directed toward gaining scientific knowledge to meet a recognized need	<input type="checkbox"/> N/A
		Development – using knowledge gained from research for the production of materials, devices	<input type="checkbox"/> N/A
		Design of equipment, processes, structures, models	<input type="checkbox"/> N/A
		Human resources – including recruiting, personnel development, training	<input type="checkbox"/> N/A
		Managing or supervising people or projects	<input type="checkbox"/> N/A
		Other	<input type="checkbox"/> N/A

Previous Employment 3

65. What year did you leave this employer?

66. Have you held any other full-time positions in the past 10 years? If you have held a different full-time position with the same employer (e.g., you received a promotion), answer 'yes' and enter the details of this previous position.

Yes

No

Previous Employment 3

67. Were you a full-time student before you started working with this previous employer?

Yes

No

Previous Employment 3

68. What degree were you studying for?

- Doctorate (Ph.D.)
- Masters (M.A. or M.Sc.)
- Bachelors (B.A. or B.Sc)
- Associate or other 2-year degree
- Other (please specify)

69. What year did you complete this degree?

Previous Employment 4

70. What was your former job title?

71. Which one of the following best describes your previous principal employer? Were you...

- Self-Employed or a business owner in a non-incorporated business, professional practice, or farm
- Self-employed or a business owner in an incorporated business, professional practice, or farm
- Employee in a for-profit company or organization
- Employee in a non-profit organization, including tax-exempt or charitable organization
- Employee in a private for-profit college/university
- Employee in a private non-profit college/university
- Employee in a local government (e.g., city, county, school district)
- Employee in a state government (including public state colleges/ universities)
- Employee in the U.S. military service, active duty or Commissioned Corps (e.g., USPHS, NOAA)
- Employee in the U.S. government (e.g., civilian employee)
- Other (please specify)



Previous Employment 4

72. Was the educational institution where you work a...

- Two-year college, community college, or technical institute
- Four-year college or university, other than a medical school
- Medical school (including university-affiliated hospital or medical center)
- University-affiliated research institute
- Other

Previous Employment 4

73. What type of academic position(s) did you hold at this institution? Select all that apply

- President, Provost, or Chancellor (any level)
- Dean (any level), department head, or department chair
- Research faculty, scientist, associate, or fellow
- Teaching faculty
- Adjunct faculty
- Postdoc (e.g., postdoctoral fellow or associate)
- Research assistant
- Teaching assistant
- Other

74. What was your faculty rank?










- Not applicable: no ranks designated at this institution
- Not applicable: no ranks designated for my position
- Professor
- Associate Professor
- Assistant Professor
- Instructor
- Lecturer
- Other (please specify)

75. What was your tenure status?

- Not applicable: no tenure system at this institution
- Not applicable: no tenure system for my position
- Tenured
- On tenure track but not tenured
- Not on tenure track

















## Previous Employment 4

76. During a typical week, what kind of work were you doing at this job? Please rank the following activities, with "1" being the activity you spent the most hours working on during a typical week.

	<input type="text" value="1"/>	Undergraduate teaching	<input type="checkbox"/> N/A
	<input type="text" value="2"/>	Graduate teaching	<input type="checkbox"/> N/A
	<input type="text" value="3"/>	Doctoral advising	<input type="checkbox"/> N/A
	<input type="text" value="4"/>	Postdoctoral advising	<input type="checkbox"/> N/A
	<input type="text" value="5"/>	Basic research – study directed toward gaining scientific knowledge primarily for its own sake	<input type="checkbox"/> N/A
	<input type="text" value="6"/>	Applied research – study directed toward gaining scientific knowledge to meet a recognized need	<input type="checkbox"/> N/A
	<input type="text" value="7"/>	Departmental administration	<input type="checkbox"/> N/A
	<input type="text" value="8"/>	University administration	<input type="checkbox"/> N/A
	<input type="text" value="9"/>	Other	<input type="checkbox"/> N/A

## Previous Employment 4

77. During a typical week, what kind of work were you doing at this job? Please rank the following activities, with "1" being the activity you spent the most hours working on during a typical week.

		Accounting, finance, contracts	<input type="checkbox"/> N/A
		Basic research – study directed toward gaining scientific knowledge primarily for its own sake	<input type="checkbox"/> N/A
		Applied research – study directed toward gaining scientific knowledge to meet a recognized need	<input type="checkbox"/> N/A
		Development – using knowledge gained from research for the production of materials, devices	<input type="checkbox"/> N/A
		Design of equipment, processes, structures, models	<input type="checkbox"/> N/A
		Human resources – including recruiting, personnel development, training	<input type="checkbox"/> N/A
		Managing or supervising people or projects	<input type="checkbox"/> N/A
		Other	<input type="checkbox"/> N/A

Previous Employment 4

78. What year did you leave this employer?

Future Career Goals

***In this section, we would like to know more about your future career goals. We would also like to know how your current NSF-funded project might help you reach these goals.***

79. What is your future career plan or goal? In 10 years, would you like...

- A tenure-track position at a university
- Another research-related position at a university
- A position in university/departmental administration (e.g. Dean, Provost, or President)
- Another teaching position (e.g. secondary or primary education)
- Consultancy work in the private sector
- Consultancy work in the public sector
- A research position at a for-profit business or organization
- A research position at a non-profit
- Employment in public-sector/government
- Employment in a non-governmental organization (NGO)
- Retirement
- Other (please specify)

80. Has your NSF-funded project helped you meet this plan or goal?

- Yes
- No

If Yes, please explain

Future Career Goals

81. In what research field or discipline do you conduct research related to environmental sustainability? If you conduct research in more than one field or discipline, please list the field or discipline you conduct the most environmentally-related research.

82. How likely are you to remain in this environmentally-related research field or discipline in the next 10 years?

- Very likely
- Likely
- Neither likely nor unlikely
- Unlikely
- Very unlikely
- Not sure



Future Career Goals

83. Why are you unlikely to remain in this field or discipline in the next 10 years?

Future Career Goals

84. In the next 10 years, how likely are you to continue in your other research discipline or disciplines that are not related to environmental sustainability?

- Very likely
- Likely
- Neither likely nor unlikely
- Unlikely
- Very unlikely
- Not sure
- Not applicable

Future Career Goals

85. Why are you unlikely to continue in this research discipline or disciplines in the next 10 years?

Future Career Goals

***Remember: by 'NSF-funded project' or 'project' we mean the NSF project named in your survey invitation email.***

86. In what ways, if at all, has your NSF-funded project work affected your plans for future research?

87. In what ways, if at all, has your NSF-funded project work affected your plans for future education or training?

The Future of Environmental Sustainability Research

***In this section, we would like to know more about your thoughts on the future of environmental research and environmental sustainability research. In particular, we would like to know how your NSF-funded project might have contributed to the development of a scientific workforce capable of addressing future needs in the environmental sustainability field. Remember: by 'NSF-funded project' or 'project' we mean the NSF project named in your survey invitation email.***

88. What knowledge or skills do you think researchers will need in order to address environmental issues in the future?

89. Has your NSF-funded project helped to develop such knowledge or skills among your project staff?

Yes

No

The Future of Environmental Sustainability Research

90. Has your project helped to engage researchers from other fields to address environmental issues?

Yes

No

If Yes, please explain

91. Has your project helped to attract young researchers or students to your research field to study environmental issues?

Yes

No

If Yes, please explain

Network Analysis

***In the following sections, we are interested in knowing more about the network(s) of individuals that you regularly collaborate with on a professional basis.***

92. Did your NSF-funded project allow you to collaborate with people from different disciplines in ways that you had not done before being funded by NSF?

Yes

No

93. What were the disciplinary background(s) of the individuals you typically collaborated with before you were awarded your NSF-funded project? Select all that apply.

- Business Management/Administration
- Communication
- Computer & Information Sciences
- Education
- Engineering
- Humanities
- Agricultural Sciences/Natural Resources
- Biological/Biomedical Sciences
- Health Sciences
- Mathematics
- Astronomy
- Atmospheric Science & Meteorology
- Chemistry
- Geological & Earth Sciences
- Ocean/Marine Sciences
- Physics
- Psychology
- Social Sciences
- Other (please specify)

94. Did you add any new collaborators as part of your NSF-funded project?

- Yes
- No



Network Analysis

95. What are the disciplinary background(s) of these new collaborators? Select all that apply.

- Business Management/Administration
- Communication
- Computer & Information Sciences
- Education
- Engineering
- Humanities
- Agricultural Sciences/Natural Resources
- Biological/Biomedical Sciences
- Health Sciences
- Mathematics
- Astronomy
- Atmospheric Science & Meteorology
- Chemistry
- Geological & Earth Sciences
- Ocean/Marine Sciences
- Physics
- Psychology
- Social Sciences
- Other (please specify)

Network Analysis

96. Did your connections with senior personnel on your NSF-funded project, i.e., (co) principal investigator(s) and/or faculty associate (faculty member), allow you to make connections with new collaborators?

Yes

No

Network Analysis

97. What are the disciplinary background(s) of these new collaborators? Select all that apply.

- Business Management/Administration
- Communication
- Computer & Information Sciences
- Education
- Engineering
- Humanities
- Agricultural Sciences/Natural Resources
- Biological/Biomedical Sciences
- Health Sciences
- Mathematics
- Astronomy
- Atmospheric Science & Meteorology
- Chemistry
- Geological & Earth Sciences
- Ocean/Marine Sciences
- Physics
- Psychology
- Social Sciences
- Other (please specify)

Most Important Collaborators

*In this section, we would like to know some background details about your most important research collaborators since the year 2000. Researchers often have fellow collaborators--both inside and outside the academy--that they turn to when doing their research. For example, they might write grants, conduct research projects, co-author publications, share expertise or conduct analysis with fellow colleagues. You may comment on up to five (5) collaborators. It might be helpful to write down the names of your collaborators before you begin this section.*

98. Since the year 2000, how many of your research collaborators would you consider to be your most important research collaborators?

- 1
- 2
- 3
- 4
- 5

Most Important Collaborator (One collaborator)

99. Who is your most important collaborator? You may use your collaborator's first and last name, or create an alias.

Most important  
collaborator

Most Important Collaborator (One collaborator)

100. What is the gender of your most important collaborator?

- Female
- Male

101. What is the approximate age of your most important collaborator?

- 20-35
- 35-50
- 50-65
- 65-80
- 80 and older

102. In what country does your most important collaborator reside?

103. What PhD does your most important collaborator hold?

104. Does your most important collaborator work in a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No
- If Yes, please provide the name of the university and the department or subdivision that your collaborator is affiliated with (e.g., "University of Kentucky, Department of Engineering")

105. Does your most important collaborator work in an institution or organization other than a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the institution or organization and the subdivision that your collaborator is affiliated with (e.g., "National Science Foundation, Directorate for Geosciences")

106. What year did you first begin collaborating with your most important collaborator?

107. What research activities do you engage in with your most important collaborator? Select all that apply.

- Collaborate on research project design
- Write grants
- Collect data
- Analyze data
- Write publications
- Share expertise
- Other (please specify)

108. Which agencies, foundations, or other funding bodies have you and your most important collaborator been awarded research funding? Select all that apply.

- National Science Foundation
- United States Department of Energy national laboratories
- National Institute of Standards and Technology
- National Institutes of Health
- University-National Oceanographic Laboratory System
- Center for the Advancement of Science in Space
- Other Federally Funded Research and Development Centers (FFRDCs)
- Other (please specify)



Collaborator Relationships (One collaborator)

***In this section, we are interested in understanding how you interact with your most important collaborators.***

109. On average, how often do you have any kind of contact with your most important collaborator (e.g. in person, by phone, over email)?

	Daily	Several times a week	Once a week	Once a month	Several times a year	Less than once a year
Most important collaborator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Most Important Collaborator (Two collaborators)

110. Who are your two (2) most important collaborators? You may use your collaborator's first and last names, or create an alias. It might be helpful to write down the names of your collaborators.

Most important  
collaborator

Second most important  
collaborator

Most Important Collaborator (Two collaborators)

111. What is the gender of your most important collaborator?

- Female
- Male

112. What is the approximate age of your most important collaborator?

- 20-35
- 35-50
- 50-65
- 65-80
- 80 and older

113. In what country does your most important collaborator reside?

114. What PhD does your most important collaborator hold?

115. Does your most important collaborator work in a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the university and the department or subdivision that your collaborator is affiliated with (e.g., "University of Kentucky, Department of Engineering")

116. Does your most important collaborator work in an institution or organization other than a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the institution or organization and the subdivision that your collaborator is affiliated with (e.g., "National Science Foundation, Directorate for Geosciences")

117. What year did you first begin collaborating with your most important collaborator?

118. What research activities do you engage in with your most important collaborator? Select all that apply.

- Collaborate on research project design
- Write grants
- Collect data
- Analyze data
- Write publications
- Share expertise
- Other (please specify)

119. Which agencies, foundations, or other funding bodies have you and your most important collaborator been awarded research funding? Select all that apply.

- National Science Foundation
- United States Department of Energy national laboratories
- National Institute of Standards and Technology
- National Institutes of Health
- University-National Oceanographic Laboratory System
- Center for the Advancement of Science in Space
- Other Federally Funded Research and Development Centers (FFRDCs)
- Other (please specify)

Second Most Important Collaborator (Two collaborators)

120. What is the gender of your second most important collaborator?

121. What is the approximate age of your second most important collaborator?

- 20-35
- 35-50
- 50-65
- 65-80
- 80 and older

122. In what country does your second most important collaborator reside?

123. What PhD does your second most important collaborator hold?

124. Does your second most important collaborator work in a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the university and the department or subdivision that your collaborator is affiliated with (e.g., "University of Kentucky, Department of Engineering")

125. Does your second most important collaborator work in an institution or organization other than a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the institution or organization and the subdivision that your collaborator is affiliated with (e.g., "National Science Foundation, Directorate for Geosciences")

126. What year did you first begin collaborating with your second most important collaborator?

127. What research activities do you engage in with your second most important collaborator? Select all that apply.

- Collaborate on research project design
- Write grants
- Collect data
- Analyze data
- Write publications
- Share expertise
- Other (please specify)

128. Which agencies, foundations, or other funding bodies have you and your second most important collaborator been awarded research funding? Select all that apply.

- National Science Foundation
- United States Department of Energy national laboratories
- National Institute of Standards and Technology
- National Institutes of Health
- University-National Oceanographic Laboratory System
- Center for the Advancement of Science in Space
- Other Federally Funded Research and Development Centers (FFRDCs)
- Other (please specify)



Collaborator Relationships (Two collaborators)

*In this section, we are interested in understanding how you interact with your most important collaborators and how, in turn, your most important collaborators interact with each other.*

129. On average, how often do you have any kind of contact with your most important collaborators (e.g. in person, by phone, over email)?

	Daily	Several times a week	Once a week	Once a month	Several times a year	Less than once a year
Most important collaborator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Second most important collaborator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Collaborator Relationships (Two collaborators)

130. Based on your own impressions, does your most important collaborator have any kind of contact with your other most important collaborators (e.g., in person, by phone, over email)? Select 'Not applicable' if you listed less than five collaborators (e.g., you did not list a third most important collaborator).

Second most important collaborator

**Yes**, my most important collaborator has contact with my...

**No**, my most important collaborator does not have contact with my...

Most Important Collaborator (Three collaborators)

131. Who are your three (3) most important collaborators? You may use your collaborator's first and last names, or create an alias. It might be helpful to write down the names of your collaborators.

Most important  
collaborator

Second most important  
collaborator

Third most important  
collaborator

Most Important Collaborator (Three collaborators)

132. What is the gender of your most important collaborator?

- Female
- Male

133. What is the approximate age of your most important collaborator?

- 20-35
- 35-50
- 50-65
- 65-80
- 80 and older

134. In what country does your most important collaborator reside?

135. What PhD does your most important collaborator hold?

136. Does your most important collaborator work in a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the university and the department or subdivision that your collaborator is affiliated with (e.g., "University of Kentucky, Department of Engineering")

137. Does your most important collaborator work in an institution or organization other than a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the institution or organization and the subdivision that your collaborator is affiliated with (e.g., "National Science Foundation, Directorate for Geosciences")

138. What year did you first begin collaborating with your most important collaborator?

139. What research activities do you engage in with your most important collaborator? Select all that apply.

- Collaborate on research project design
- Write grants
- Collect data
- Analyze data
- Write publications
- Share expertise
- Other (please specify)

140. Which agencies, foundations, or other funding bodies have you and your most important collaborator been awarded research funding? Select all that apply.

- National Science Foundation
- United States Department of Energy national laboratories
- National Institute of Standards and Technology
- National Institutes of Health
- University-National Oceanographic Laboratory System
- Center for the Advancement of Science in Space
- Other Federally Funded Research and Development Centers (FFRDCs)
- Other (please specify)

Second Most Important Collaborator (Three collaborators)

141. What is the gender of your second most important collaborator?

142. What is the approximate age of your second most important collaborator?

- 20-35
- 35-50
- 50-65
- 65-80
- 80 and older

143. In what country does your second most important collaborator reside?

144. What PhD does your second most important collaborator hold?

145. Does your second most important collaborator work in a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the university and the department or subdivision that your collaborator is affiliated with (e.g., "University of Kentucky, Department of Engineering")

146. Does your second most important collaborator work in an institution or organization other than a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the institution or organization and the subdivision that your collaborator is affiliated with (e.g., "National Science Foundation, Directorate for Geosciences")

147. What year did you first begin collaborating with your second most important collaborator?

148. What research activities do you engage in with your second most important collaborator? Select all that apply.

- Collaborate on research project design
- Write grants
- Collect data
- Analyze data
- Write publications
- Share expertise
- Other (please specify)



149. Which agencies, foundations, or other funding bodies have you and your second most important collaborator been awarded research funding? Select all that apply.

- National Science Foundation
- United States Department of Energy national laboratories
- National Institute of Standards and Technology
- National Institutes of Health
- University-National Oceanographic Laboratory System
- Center for the Advancement of Science in Space
- Other Federally Funded Research and Development Centers (FFRDCs)
- Other (please specify)

Third Most Important Collaborator (Three collaborators)

150. What is the gender of your third most important collaborator?

151. What is the approximate age of your third most important collaborator?

- 20-35
- 35-50
- 50-65
- 65-80
- 80 and older

152. In what country does your third most important collaborator reside?

153. What PhD does your third most important collaborator hold?

154. Does your third most important collaborator work in a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the university and the department or subdivision that your collaborator is affiliated with (e.g., "University of Kentucky, Department of Engineering")

155. Does your third most important collaborator work in an institution or organization other than a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the institution or organization and the subdivision that your collaborator is affiliated with (e.g., "National Science Foundation, Directorate for Geosciences")

156. What year did you first begin collaborating with your third most important collaborator?

157. What research activities do you engage in with your third most important collaborator? Select all that apply.

- Collaborate on research project design
- Write grants
- Collect data
- Analyze data
- Write publications
- Share expertise
- Other (please specify)

158. Which agencies, foundations, or other funding bodies have you and your third most important collaborator been awarded research funding? Select all that apply.

- National Science Foundation
- United States Department of Energy national laboratories
- National Institute of Standards and Technology
- National Institutes of Health
- University-National Oceanographic Laboratory System
- Center for the Advancement of Science in Space
- Other Federally Funded Research and Development Centers (FFRDCs)
- Other (please specify)

Collaborator Relationships (Three collaborators)

***In this section, we are interested in understanding how you interact with your most important collaborators and how, in turn, your most important collaborators interact with each other.***

159. On average, how often do you have any kind of contact with your most important collaborators (e.g. in person, by phone, over email)?

	Daily	Several times a week	Once a week	Once a month	Several times a year	Less than once a year
Most important collaborator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Second most important collaborator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Third most important collaborator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Collaborator Relationships (Three collaborators)

160. Based on your own impressions, does your most important collaborator have any kind of contact with your other most important collaborators (e.g., in person, by phone, over email)? Select 'Not applicable' if you listed less than five collaborators (e.g., you did not list a third most important collaborator).

	Second most important collaborator	Third most important collaborator
<b>Yes</b> , my most important collaborator has contact with my...	<input type="radio"/>	<input type="radio"/>
<b>No</b> , my most important collaborator does not have contact with my...	<input type="radio"/>	<input type="radio"/>

161. Based on your own impressions, does your second most important collaborator have any kind of contact with your other most important collaborators (e.g., in person, by phone, over email)? Select 'Not applicable' if you listed less than five collaborators (e.g., you did not list a third most important collaborator).

	Most important collaborator	Third most important collaborator
<b>Yes</b> , my second most important collaborator has contact with my...	<input type="radio"/>	<input type="radio"/>
<b>No</b> , my second most important collaborator does not have contact with my...	<input type="radio"/>	<input type="radio"/>

Collaborator Relationships (Three collaborators)

162. Based on your own impressions, does your third most important collaborator have any kind of contact with your other most important collaborators (e.g., in person, by phone, over email)? Select 'Not applicable' if you listed less than five collaborators (e.g., you did not list a fourth most important collaborator).

	Most important collaborator	Second most important collaborator
<b>Yes</b> , my third most important collaborator has contact with my...	<input type="radio"/>	<input type="radio"/>
<b>No</b> , my third most important collaborator does not have contact with my...	<input type="radio"/>	<input type="radio"/>

Most Important Collaborator (Four collaborators)

163. Who are your four (4) most important collaborators? You may use your collaborator's first and last names, or create an alias. It might be helpful to write down the names of your collaborators.

Most important  
collaborator

Second most important  
collaborator

Third most important  
collaborator

Fourth most important  
collaborator



Most Important Collaborator (Four collaborators)

164. What is the gender of your most important collaborator?

- Female
- Male

165. What is the approximate age of your most important collaborator?

- 20-35
- 35-50
- 50-65
- 65-80
- 80 and older

166. In what country does your most important collaborator reside?

167. What PhD does your most important collaborator hold?

168. Does your most important collaborator work in a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the university and the department or subdivision that your collaborator is affiliated with (e.g., "University of Kentucky, Department of Engineering")

169. Does your most important collaborator work in an institution or organization other than a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the institution or organization and the subdivision that your collaborator is affiliated with (e.g., "National Science Foundation, Directorate for Geosciences")

170. What year did you first begin collaborating with your most important collaborator?

171. What research activities do you engage in with your most important collaborator? Select all that apply.

- Collaborate on research project design
- Write grants
- Collect data
- Analyze data
- Write publications
- Share expertise
- Other (please specify)

172. Which agencies, foundations, or other funding bodies have you and your most important collaborator been awarded research funding? Select all that apply.

- National Science Foundation
- United States Department of Energy national laboratories
- National Institute of Standards and Technology
- National Institutes of Health
- University-National Oceanographic Laboratory System
- Center for the Advancement of Science in Space
- Other Federally Funded Research and Development Centers (FFRDCs)
- Other (please specify)

Second Most Important Collaborator (Four collaborators)

173. What is the gender of your second most important collaborator?

174. What is the approximate age of your second most important collaborator?

- 20-35
- 35-50
- 50-65
- 65-80
- 80 and older

175. In what country does your second most important collaborator reside?

176. What PhD does your second most important collaborator hold?

177. Does your second most important collaborator work in a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the university and the department or subdivision that your collaborator is affiliated with (e.g., "University of Kentucky, Department of Engineering")

178. Does your second most important collaborator work in an institution or organization other than a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the institution or organization and the subdivision that your collaborator is affiliated with (e.g., "National Science Foundation, Directorate for Geosciences")

179. What year did you first begin collaborating with your second most important collaborator?

180. What research activities do you engage in with your second most important collaborator? Select all that apply.

- Collaborate on research project design
- Write grants
- Collect data
- Analyze data
- Write publications
- Share expertise
- Other (please specify)

181. Which agencies, foundations, or other funding bodies have you and your second most important collaborator been awarded research funding? Select all that apply.

- National Science Foundation
- United States Department of Energy national laboratories
- National Institute of Standards and Technology
- National Institutes of Health
- University-National Oceanographic Laboratory System
- Center for the Advancement of Science in Space
- Other Federally Funded Research and Development Centers (FFRDCs)
- Other (please specify)

Third Most Important Collaborator (Four collaborators)

182. What is the gender of your third most important collaborator?

183. What is the approximate age of your third most important collaborator?

- 20-35
- 35-50
- 50-65
- 65-80
- 80 and older

184. In what country does your third most important collaborator reside?

185. What PhD does your third most important collaborator hold?

186. Does your third most important collaborator work in a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the university and the department or subdivision that your collaborator is affiliated with (e.g., "University of Kentucky, Department of Engineering")

187. Does your third most important collaborator work in an institution or organization other than a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the institution or organization and the subdivision that your collaborator is affiliated with (e.g., "National Science Foundation, Directorate for Geosciences")

188. What year did you first begin collaborating with your third most important collaborator?

189. What research activities do you engage in with your third most important collaborator? Select all that apply.

- Collaborate on research project design
- Write grants
- Collect data
- Analyze data
- Write publications
- Share expertise
- Other (please specify)



190. Which agencies, foundations, or other funding bodies have you and your third most important collaborator been awarded research funding? Select all that apply.

- National Science Foundation
- United States Department of Energy national laboratories
- National Institute of Standards and Technology
- National Institutes of Health
- University-National Oceanographic Laboratory System
- Center for the Advancement of Science in Space
- Other Federally Funded Research and Development Centers (FFRDCs)
- Other (please specify)

Fourth Most Important Collaborator (Four collaborators)

191. What is the gender of your fourth most important collaborator?

192. What is the approximate age of your fourth most important collaborator?

- 20-35
- 35-50
- 50-65
- 65-80
- 80 and older

193. In what country does your fourth most important collaborator reside?

194. What PhD does your fourth most important collaborator hold?

195. Does your fourth most important collaborator work in a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the university and the department or subdivision that your collaborator is affiliated with (e.g., "University of Kentucky, Department of Engineering")

196. Does your fourth most important collaborator work in an institution or organization other than a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the institution or organization and the subdivision that your collaborator is affiliated with (e.g., "National Science Foundation, Directorate for Geosciences")

197. What year did you first begin collaborating with your fourth most important collaborator?

198. What research activities do you engage in with your fourth most important collaborator? Select all that apply.

- Collaborate on research project design
- Write grants
- Collect data
- Analyze data
- Write publications
- Share expertise
- Other (please specify)

199. Which agencies, foundations, or other funding bodies have you and your fourth most important collaborator been awarded research funding? Select all that apply.

- National Science Foundation
- United States Department of Energy national laboratories
- National Institute of Standards and Technology
- National Institutes of Health
- University-National Oceanographic Laboratory System
- Center for the Advancement of Science in Space
- Other Federally Funded Research and Development Centers (FFRDCs)
- Other (please specify)

Collaborator Relationships (Four collaborators)

***In this section, we are interested in understanding how you interact with your most important collaborators and how, in turn, your most important collaborators interact with each other.***

200. On average, how often do you have any kind of contact with your most important collaborators (e.g. in person, by phone, over email)?

	Daily	Several times a week	Once a week	Once a month	Several times a year	Less than once a year
Most important collaborator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Second most important collaborator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Third most important collaborator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fourth most important collaborator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Collaborator Relationships (Four collaborators)

201. Based on your own impressions, does your most important collaborator have any kind of contact with your other most important collaborators (e.g., in person, by phone, over email)? Select 'Not applicable' if you listed less than five collaborators (e.g., you did not list a third most important collaborator).

	Second most important collaborator	Third most important collaborator	Fourth most important collaborator
<b>Yes</b> , my most important collaborator has contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>No</b> , my most important collaborator does not have contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

202. Based on your own impressions, does your second most important collaborator have any kind of contact with your other most important collaborators (e.g., in person, by phone, over email)? Select 'Not applicable' if you listed less than five collaborators (e.g., you did not list a third most important collaborator).

	Most important collaborator	Third most important collaborator	Fourth most important collaborator
<b>Yes</b> , my second most important collaborator has contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>No</b> , my second most important collaborator does not have contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Collaborator Relationships (Four collaborators)

203. Based on your own impressions, does your third most important collaborator have any kind of contact with your other most important collaborators (e.g., in person, by phone, over email)? Select 'Not applicable' if you listed less than five collaborators (e.g., you did not list a fourth most important collaborator).

	Most important collaborator	Second most important collaborator	Fourth most important collaborator
<b>Yes</b> , my third most important collaborator has contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>No</b> , my third most important collaborator does not have contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

204. Based on your own impressions, does your fourth most important collaborator have any kind of contact with your other most important collaborators (e.g., in person, by phone, over email)? Select 'Not applicable' if you listed less than five collaborators (e.g., you did not list a third most important collaborator).

	Most important collaborator	Second most important collaborator	Third most important collaborator
<b>Yes</b> , my fourth most important collaborator has contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>No</b> , my fourth most important collaborator does not have contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Most Important Collaborator (Five collaborators)

205. Who are your five (5) most important collaborators? You may use your collaborator's first and last names, or create an alias. It might be helpful to write down the names of your collaborators.

Most important  
collaborator

Second most important  
collaborator

Third most important  
collaborator

Fourth most important  
collaborator

Fifth most important  
collaborator



Most Important Collaborator (Five collaborators)

206. What is the gender of your most important collaborator?

- Female
- Male

207. What is the approximate age of your most important collaborator?

- 20-35
- 35-50
- 50-65
- 65-80
- 80 and older

208. In what country does your most important collaborator reside?

209. What PhD does your most important collaborator hold?

210. Does your most important collaborator work in a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the university and the department or subdivision that your collaborator is affiliated with (e.g., "University of Kentucky, Department of Engineering")

211. Does your most important collaborator work in an institution or organization other than a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the institution or organization and the subdivision that your collaborator is affiliated with (e.g., "National Science Foundation, Directorate for Geosciences")

212. What year did you first begin collaborating with your most important collaborator?

213. What research activities do you engage in with your most important collaborator? Select all that apply.

- Collaborate on research project design
- Write grants
- Collect data
- Analyze data
- Write publications
- Share expertise
- Other (please specify)

214. Which agencies, foundations, or other funding bodies have you and your most important collaborator been awarded research funding? Select all that apply.

- National Science Foundation
- United States Department of Energy national laboratories
- National Institute of Standards and Technology
- National Institutes of Health
- University-National Oceanographic Laboratory System
- Center for the Advancement of Science in Space
- Other Federally Funded Research and Development Centers (FFRDCs)
- Other (please specify)

Second Most Important Collaborator (Five collaborators)

215. What is the gender of your second most important collaborator?

216. What is the approximate age of your second most important collaborator?

- 20-35
- 35-50
- 50-65
- 65-80
- 80 and older

217. In what country does your second most important collaborator reside?

218. What PhD does your second most important collaborator hold?

219. Does your second most important collaborator work in a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the university and the department or subdivision that your collaborator is affiliated with (e.g., "University of Kentucky, Department of Engineering")

220. Does your second most important collaborator work in an institution or organization other than a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the institution or organization and the subdivision that your collaborator is affiliated with (e.g., "National Science Foundation, Directorate for Geosciences")

221. What year did you first begin collaborating with your second most important collaborator?

222. What research activities do you engage in with your second most important collaborator? Select all that apply.

- Collaborate on research project design
- Write grants
- Collect data
- Analyze data
- Write publications
- Share expertise
- Other (please specify)

223. Which agencies, foundations, or other funding bodies have you and your second most important collaborator been awarded research funding? Select all that apply.

- National Science Foundation
- United States Department of Energy national laboratories
- National Institute of Standards and Technology
- National Institutes of Health
- University-National Oceanographic Laboratory System
- Center for the Advancement of Science in Space
- Other Federally Funded Research and Development Centers (FFRDCs)
- Other (please specify)

Third Most Important Collaborator (Five collaborators)

224. What is the gender of your third most important collaborator?

225. What is the approximate age of your third most important collaborator?

- 20-35
- 35-50
- 50-65
- 65-80
- 80 and older

226. In what country does your third most important collaborator reside?

227. What PhD does your third most important collaborator hold?

228. Does your third most important collaborator work in a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the university and the department or subdivision that your collaborator is affiliated with (e.g., "University of Kentucky, Department of Engineering")

229. Does your third most important collaborator work in an institution or organization other than a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the institution or organization and the subdivision that your collaborator is affiliated with (e.g., "National Science Foundation, Directorate for Geosciences")

230. What year did you first begin collaborating with your third most important collaborator?

231. What research activities do you engage in with your third most important collaborator? Select all that apply.

- Collaborate on research project design
- Write grants
- Collect data
- Analyze data
- Write publications
- Share expertise
- Other (please specify)



232. Which agencies, foundations, or other funding bodies have you and your third most important collaborator been awarded research funding? Select all that apply.

- National Science Foundation
- United States Department of Energy national laboratories
- National Institute of Standards and Technology
- National Institutes of Health
- University-National Oceanographic Laboratory System
- Center for the Advancement of Science in Space
- Other Federally Funded Research and Development Centers (FFRDCs)
- Other (please specify)

Fourth Most Important Collaborator (Five collaborators)

233. What is the gender of your fourth most important collaborator?

234. What is the approximate age of your fourth most important collaborator?

- 20-35
- 35-50
- 50-65
- 65-80
- 80 and older

235. In what country does your fourth most important collaborator reside?

236. What PhD does your fourth most important collaborator hold?

237. Does your fourth most important collaborator work in a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the university and the department or subdivision that your collaborator is affiliated with (e.g., "University of Kentucky, Department of Engineering")

238. Does your fourth most important collaborator work in an institution or organization other than a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the institution or organization and the subdivision that your collaborator is affiliated with (e.g., "National Science Foundation, Directorate for Geosciences")

239. What year did you first begin collaborating with your fourth most important collaborator?

240. What research activities do you engage in with your fourth most important collaborator? Select all that apply.

- Collaborate on research project design
- Write grants
- Collect data
- Analyze data
- Write publications
- Share expertise
- Other (please specify)

241. Which agencies, foundations, or other funding bodies have you and your fourth most important collaborator been awarded research funding? Select all that apply.

- National Science Foundation
- United States Department of Energy national laboratories
- National Institute of Standards and Technology
- National Institutes of Health
- University-National Oceanographic Laboratory System
- Center for the Advancement of Science in Space
- Other Federally Funded Research and Development Centers (FFRDCs)
- Other (please specify)

Fifth Most Important Collaborator (Five collaborators)

242. What is the gender of your fifth most important collaborator?

243. What is the approximate age of your fifth most important collaborator?

- 20-35
- 35-50
- 50-65
- 65-80
- 80 and older

244. In what country does your fifth most important collaborator reside?

245. What PhD does your fifth most important collaborator hold?

246. Does your fifth most important collaborator work in a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the university and the department or subdivision that your collaborator is affiliated with (e.g., "University of Kentucky, Department of Engineering")

247. Does your fifth most important collaborator work in an institution or organization other than a university?

- Yes, and this is their primary place of employment
- Yes, but this is not their primary place of employment
- No

If Yes, please provide the name of the institution or organization and the subdivision that your collaborator is affiliated with (e.g., "National Science Foundation, Directorate for Geosciences")

248. What year did you first begin collaborating with your fifth most important collaborator?

249. What research activities do you engage in with your fifth most important collaborator? Select all that apply.

- Collaborate on research project design
- Write grants
- Collect data
- Analyze data
- Write publications
- Share expertise
- Other (please specify)

250. Which agencies, foundations, or other funding bodies have you and your fifth most important collaborator been awarded research funding? Select all that apply.

- National Science Foundation
- United States Department of Energy national laboratories
- National Institute of Standards and Technology
- National Institutes of Health
- University-National Oceanographic Laboratory System
- Center for the Advancement of Science in Space
- Other Federally Funded Research and Development Centers (FFRDCs)
- Other (please specify)

Collaborator Relationships (Five collaborators)

***In this section, we are interested in understanding how you interact with your most important collaborators and how, in turn, your most important collaborators interact with each other.***

251. On average, how often do you have any kind of contact with your most important collaborators (e.g. in person, by phone, over email)?

	Daily	Several times a week	Once a week	Once a month	Several times a year	Less than once a year
Most important collaborator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Second most important collaborator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Third most important collaborator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fourth most important collaborator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fifth most important collaborator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Collaborator Relationships (Five collaborators)

252. Based on your own impressions, does your most important collaborator have any kind of contact with your other most important collaborators (e.g., in person, by phone, over email)? Select 'Not applicable' if you listed less than five collaborators (e.g., you did not list a third most important collaborator).

	Second most important collaborator	Third most important collaborator	Fourth most important collaborator	Fifth most important collaborator
<b>Yes</b> , my most important collaborator has contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>No</b> , my most important collaborator does not have contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

253. Based on your own impressions, does your second most important collaborator have any kind of contact with your other most important collaborators (e.g., in person, by phone, over email)? Select 'Not applicable' if you listed less than five collaborators (e.g., you did not list a third most important collaborator).

	Most important collaborator	Third most important collaborator	Fourth most important collaborator	Fifth most important collaborator
<b>Yes</b> , my second most important collaborator has contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>No</b> , my second most important collaborator does not have contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Collaborator Relationships (Five collaborators)

254. Based on your own impressions, does your third most important collaborator have any kind of contact with your other most important collaborators (e.g., in person, by phone, over email)? Select 'Not applicable' if you listed less than five collaborators (e.g., you did not list a fourth most important collaborator).

	Most important collaborator	Second most important collaborator	Fourth most important collaborator	Fifth most important collaborator
<b>Yes</b> , my third most important collaborator has contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>No</b> , my third most important collaborator does not have contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

255. Based on your own impressions, does your fourth most important collaborator have any kind of contact with your other most important collaborators (e.g., in person, by phone, over email)? Select 'Not applicable' if you listed less than five collaborators (e.g., you did not list a third most important collaborator).

	Most important collaborator	Second most important collaborator	Third most important collaborator	Fifth most important collaborator
<b>Yes</b> , my fourth most important collaborator has contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>No</b> , my fourth most important collaborator does not have contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

256. Based on your own impressions, does your fifth most important collaborator have any kind of contact with your other most important collaborators (e.g., in person, by phone, over email)? Select 'Not applicable' if you listed less than five collaborators (e.g., you did not list a third most important collaborator).

	Most important collaborator	Second most important collaborator	Third most important collaborator	Fourth most important collaborator
<b>Yes</b> , my fifth most important collaborator has contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>No</b> , my fifth most important collaborator does not have contact with my...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

