



NATIONAL SCIENCE FOUNDATION
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NSF 16-010

Frequently Asked Questions (FAQs) for Program Solicitation NSF 15-598: Natural Hazards Engineering Research Infrastructure (NHERI) - Network Coordination Office, Computational Modeling and Simulation Center, and Post-Disaster, Rapid Response Research Facility

The following set of questions and answers refer to Frequently Asked Questions (FAQs) about the program solicitation [NSF 15-598: Natural Hazards Engineering Research Infrastructure \(NHERI\) - Network Coordination Office, Computational Modeling and Simulation Center, and Post-Disaster, Rapid Response Research Facility](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf15598) http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf15598. They are not intended to be a modification of this program solicitation.

Before preparing NSF 15-598 proposals, please read the [NSF 15-598](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg) solicitation and refer to the general information about NSF proposal submission including the *Grant Proposal Guide* (GPG), NSF 15-1, proposal submission guidelines available at http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg.

FAQs about FastLane, the NSF site for submitting proposals, can be found at https://www.fastlane.nsf.gov/NSFHelp/flashhelp/fastlane/FastLane_Help/fastlane_help.htm#fastlane_faqs_introduction.htm.

NSF 15-598, SECTION II, PROGRAM DESCRIPTION

1. Where can I find information about the NHERI Cyberinfrastructure (CI) and Experimental Facility (EF) awards made under the prior program solicitation NSF 14-605 NHERI?
2. The solicitation's Figure 1, Notional NHERI Construct, does not show interaction lines among all components, e.g., interactions among the Network Coordination Office (NCO), CI, Computational Modeling and Simulation Center (SimCenter), EF, and Post-Disaster, Rapid Response Research (RAPID) Awardees. Can proposed Governance interactions include additional interactions not shown in this Figure?
3. Will the solicitation support awards that can address coastal surge and wave processes related to windstorms?
4. Will my proposal be returned without review if, as the PI for the NCO, SimCenter or RAPID Facility component proposal, my qualifications do not meet all the PI qualification requirements listed in Sections II.C and Sections II.D, II.E, or II.F, respectively, of the solicitation?
5. Why does the NCO need a Software Development and Lifecycle Management Plan?
6. Section II.D lists the requirements and responsibilities for the NCO Awardee. Must all these activities be included in the proposal or can some activities be excluded from the proposal?
7. What is the role of the NCO in running the Research Experiences for Undergraduates (REU) site program and what is the role of the other NHERI awardees (CI, SimCenter, EF, and RAPID Facility)?
8. What is the NHERI Summer Institute and are there examples of Summer Institutes?
9. What is the difference between the software tools on the Software Service Delivery Platform to be provided by the CI Awardee vs. those to be provided by the SimCenter Awardee?
10. Can academic institutions submit proposals to NSF to conduct research and education activities that use SimCenter resources?
11. Can the SimCenter Awardee software tools be developed by subawardees that were not identified in the original proposal?
12. What is a requirements traceability matrix?
13. For the SimCenter, is it acceptable to develop open source software that can only run on a proprietary platform?
14. For the RAPID Facility, who is responsible for curating and archiving the collected field data?
15. For the RAPID Facility, there may be equipment or services that would be beneficial for the facility, but its acquisition, maintenance, and/or operations cost would exceed the award budget limits for the facility specified in Section III. However, such equipment or services may be available commercially for use on a pre-defined fee or rental basis to be deployed by the RAPID Facility for a specific post-disaster investigation event. Can the RAPID Facility proposal include such equipment or services and costs for the fee/rental in the NSF requested budget?
16. For the RAPID Facility, the Section II.F states: "All facility's resources and staff must be housed within the United

States at the lead institution in order to efficiently manage, staff, and maintain the facility." Can the project staff include individuals from other organizations or must all staff be from the lead academic institution?

17. Is the NCO or are the EF (including RAPID Facility) Awardees responsible for developing the NCO's Facility Scheduling Protocol? Are there examples of Facility Scheduling Protocols?
18. Why was the Network Coordination Office (NCO) activity to "lead and organize development of the Decadal Science Plan for Natural Hazards Engineering Research, Education, and Research Infrastructure for 2020 - 2029, to be completed by September 30, 2017" that was included in program solicitation NSF 14-605 now eliminated as an NCO activity in NSF 15-598?
19. Can the NCO, SimCenter, and RAPID Facility support activities related to explosions, fire, and other hazards that are not natural hazards?

NSF 15-598, SECTION IV, ELIGIBILITY INFORMATION

20. Can a PI or co-PI named on an award made under the NSF 14-605 NHERI solicitation serve as a PI or co-PI in a proposal submitted to NSF 15-598? How do I know if I am a PI or co-PI on a NHERI award made under NSF 14-605?
21. Can an individual serving as PI or co-PI in one proposal submitted to NSF 15-598 be named as Senior Personnel (Faculty and Other Senior Associates) in another proposal submitted to NSF 15-598?
22. If an academic institution is the lead on two proposals, is there a limit on the number of proposals that the academic institution can participate in as a non-lead institution?
23. Can an individual who is named as Senior Personnel in one proposal (not PI or co-PI) participate in other proposals as Senior Personnel (not PI or co-PI)?
24. Must all co-PIs be from academic institutions, and be U.S. citizens or permanent residents?
25. Must all co-PIs be from the same lead academic institution?
26. Can individuals from non-profit, non-academic organizations, such as professional societies, be supported on an award?
27. Can NSF help me identify potential proposal partners or identify proposers who will lead a proposal that may be seeking additional project partners?
28. Can proposals include project participants who are consultants? Is there a limit to the number of proposals that a consultant may participate in?
29. Can proposals include, as consultants, individuals who are faculty members at academic institutions?
30. Can federal government-supported national laboratory researchers participate as co-PIs and be named on the cover sheet?
31. Can federal government-supported national laboratory researchers serve as Senior Personnel in a proposal through a consulting agreement?
32. Must the PI be a full-time employee of the lead institution throughout the entire five-year award period?
33. Can the PI be a 50%-time employee of the lead institution during the entire five-year award period?
34. Can a Federally Funded Research and Development Center (FFRDC), managed by a non-profit organization, receive funding under a NHERI award?

NSF 15-598, SECTION V, PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS: LETTERS OF INTENT (LOI)

35. The solicitation states for the LOI: "A Minimum of 0 and Maximum of 4 Other Senior Project Personnel are allowed." Does this mean that a full proposal can only include 1 PI, 4 co-PIs, and 4 Other Senior Personnel?
36. What can be included in the Other Comments section of the LOI?
37. What information should be included under "Other Comments?"
38. I am planning to serve as PI in a proposal. Can NSF tell me the names of the other PI from my academic institution who has submitted a Letter of Intent?
39. Can NSF provide feedback on the proposed plans described in my Letter of Intent submission?

NSF 15-598, SECTION V, PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS: FULL PROPOSALS

40. How can I check that my proposal is compliant and will not be returned without review?
41. If I resubmit a proposal previously submitted to NSF 14-605, does my proposal to NSF 15-598 have to address the prior review comments in a separate section within the proposal?
42. The solicitation states that the Project Description must not exceed 55 pages and must use the section headings listed, with page limits shown with each required section heading as a guide for that section. The solicitation states that proposals may deviate from the section page limits; however, the total number of pages in the Project Description for Sections 1-17 must not exceed the 55-page limit. Can the number of pages for a particular section exceed the number of pages listed as a guide for that section?
43. Is the number of co-PIs limited to four?

44. Per NSF 15-598, NHERI Awardees are to work/collaborate together. Do I need to list the NSF 14-605 NHERI Awardees in the Project Description, Section 1, Summary Tables, as collaborators?
45. A participating subaward organization in my proposal will request support starting in year two of the project. Should this organization be listed in the Project Description, Section 1, Summary Tables, Table 1, List of Participating Organizations, and if so, what information should be entered in the column entitled "year-one requested support?"
46. In the Project Description, Section 1, Summary Tables, Table 2, List of Project Personnel, should the number of months for the year-one level of effort shown for each individual match the number of months requested for year-one salary support for each individual on the NSF budget form?
47. Section V.A requires in the Project Description, Section 1, Summary Tables, Table 2, List of Project Personnel, that all identified leadership and management positions must have individuals named. What if a staff position with the word "manager" in its title will not be filled until after the NSF award is made?
48. For a RAPID Facility proposal, the actual level of support, if any, during years two through five of the project for several senior personnel, who will assist with equipment training and deployment, will not be known until after the facility/equipment planning workshops are held during year one. Should these senior personnel be listed in the Project Description in Section 1, Summary Tables, Table 2, List of Project Personnel?
49. Can a proposal include an Advisory Board, Advisory Committee, Practice Committee, or similar such entity in the proposal and list the member names and/or organizations?
50. NSF 15-598 does not allow unfunded collaborators. Can I list unfunded collaborators in the Facilities, Equipment, and Other Resources section and/or include a few letters of collaboration or unfunded collaborator biosketches in the Special Information and Supplementary Documentation section to help strength my proposal?
51. NSF 15-598 does not allow unfunded collaborators. However, my proposal will be interacting very closely with the other NHERI Awardees; some Awardees have been already funded under NSF 14-605 and some will be funded under NSF 15-598. Can I discuss my planned interactions with the NSF 14-605 Awardees and mention them by name, even if they will not request support in my proposal?
52. Is all staff listed in the proposal required to be hired and/or supported on the start date of the award?
53. What are a Work Breakdown Structure (WBS) and its dictionary?
54. For NCO proposals, in Section V.A of the solicitation under Project Description, what is the difference between Section 10, Governance Interactions, and Section 11, Component-Specific Implementation, as Section 11 requires information on Governance support?
55. Can an NCO proposal include a higher base budget for the required scope of work for the NCO?
56. RAPID Facility proposals are required to include a table that benchmarks the proposed experimental resources with comparable experimental facilities in the United States, and if applicable, globally. Should the benchmarking include both academic facilities and consulting/industry-based laboratories?
57. The Special Information and Supplementary Documentation section may include a Section C, Biographical Sketches of Additional Project Personnel. What constitutes "Additional Project Personnel?"
58. Per Section V.B, each individual requesting financial support must be supported for at least one month annually during each year of planned participation on the project. Will a proposal be returned without review if it includes individuals who are budgeted to receive less than one month annual support in any given year?
59. Can project staff be supported for less than 1.0 full-time equivalent (1.0 FTE) annually?
60. Can proposals include budgets for costs associated with computer hardware and commercial software?
61. If the RAPID Facility is used 100% annually to accommodate NSF-supported awards, will it be required to have institutionally-established user fees/recharge rates or can the requested annual budget totally fund the facility operations without having some costs assigned to NSF-supported users through institutionally-established user fees/recharge rates?
62. For a RAPID Facility, should user fees and recharge rates cover equipment maintenance and refresh?
63. Can the NSF budget request include graduate student tuition support/stipend for a student who is not a U.S. citizen, U.S. national, or permanent resident of the United States?
64. How should the REU site program be budgeted by the NCO and budgeted by the other NHERI awardees?
65. Are vendor quotes required for proposed purchases other than equipment?
66. Does support under a NHERI award prohibit project personnel from submitting proposals to other NSF programs?
67. I have additional information posted on my website I would like the reviewers to see. May I refer readers to my web site within the Project Description?
68. In the proposal Project Description, Section 3, Results from Prior NSF Support, what individuals listed in the proposal need to provide information on NSF awards in this section?
69. For a RAPID Facility proposal, in the section on Facilities, Equipment, and Other Resources, is a Facility Financial Resource Operating Plan required if the equipment is only conceptual at the time of proposal submission?
70. Can the NSF budget request include support for travel to conferences (domestic and international) and collaboration meetings?
71. The solicitation requires a Software Development and Lifecycle Management Plan be submitted with the proposal. If the proposed component will need to acquire commercial software, is this allowable, and does this software need to

- be procured following the Software Development and Lifecycle Management Plan?
72. What if my proposal is submitted after the full proposal deadline?
 73. Can I submit my proposal prior to the day of the full proposal deadline?
 74. I am having problems submitting my proposal and the full proposal deadline is almost here. Who should I contact?
 75. I just noticed a major problem with my full proposal. The full proposal deadline has not passed so can I fix the problem?

NSF 15-598, SECTION VII, AWARD ADMINISTRATION INFORMATION

76. Section VII.B, Award Conditions, of the solicitation states that NSF oversight will include the following award-specific programmatic terms and conditions, for all awardees: "review and approval of requests to support graduate students who are U.S. citizens, U.S. nationals, or permanent residents of the United States to participate in awardee activities other than the NHERI-wide REU site activity and SimCenter Graduate Research Traineeships." Is there a list of additional NSF-approved awardee activities that can support graduate students who are U.S citizens, U.S. nationals, or permanent residents of the United States?
77. What is the earliest deadline for proposal submission?
78. What is the maximum number of Senior Personnel allowed in a proposal in addition to the PI and four co-PIs?
79. If I resubmit a proposal previously submitted to NSF 14-605, and I would like to address reviewer comments, where should I place this response in my proposal?
80. NSF 14-605 required a Conflict-of-Interest list for all project personnel requesting financial support in year one be submitted as a Single Copy Document. However, this does not appear to be required for NSF 15-598 proposals. Can you please clarify if this list should also be submitted as a Single Copy Document for a proposal submitted to NSF 15-598?
81. Should the NCO requested budget include travel budget for each NHERI Awardee to attend in-person Governance, including Council, meetings annually or is this travel to be supported by the budget for each individual NHERI award?
82. NSF 15-598, Section V.B, states: "Include separate budgets for subawards/subcontracts that are \$50,000 or greater annually. For subawards/subcontracts less than \$50,000 annually, include the costs aggregated on the subaward line of the annual budget."
83. Can you clarify the budgetary limitations for post-doctoral and student support?

NSF 15-598, SECTION II, PROGRAM DESCRIPTION

1. **Where can I find information about the NHERI Cyberinfrastructure (CI) and Experimental Facility (EF) awards made under the prior program solicitation NSF 14-605 NHERI?**

The CI and EF abstracts for awards made under NSF 14-605 may be accessed at the following web site:

<http://www.nsf.gov/awardsearch/advancedSearchResult?ProgOrganization=070300000&ProgEleCode=013Y,7470&BooleanElement=ANY&BooleanRef=ANY&ActiveAwards=true&#results>

The NHERI CI Awardee, which interfaces with all NHERI Awardees, has established the following web site: <http://www.designsafe-ci.org>. A description of the cyberinfrastructure is available at <https://www.designsafe-ci.org/nheri-community/cyberinfrastructure/>.

2. **The solicitation's Figure 1, Notional NHERI Construct, does not show interaction lines among all components, e.g., interactions among the Network Coordination Office (NCO), CI, Computational Modeling and Simulation Center (SimCenter), EF, and Post-Disaster, Rapid Response Research (RAPID) Awardees. Can proposed Governance interactions include additional interactions not shown in this Figure?**

Yes. To simplify this diagram, all potential interactions among Awardees are not shown. Proposers should include cross-Awardee interactions, whether or not shown on this diagram, needed to make implementation of their project successful.

3. **Will the solicitation support awards that can address coastal surge and wave processes related to windstorms?**

Yes, as long as the coastal surge and wave processes are related to windstorm natural hazards.

4. **Will my proposal be returned without review if, as the PI for the NCO, SimCenter or RAPID Facility component proposal, my qualifications do not meet all the PI qualification requirements listed in Sections II.C and Sections II.D, II.E, or II.F, respectively, of the solicitation?**

The proposal will not be returned without review. However, proposers are reminded that in accordance with the Additional Solicitation Specific Review Criteria listed in Section VI.A of the solicitation, the PI's qualifications will be evaluated as part of the merit review criteria. Reviewers will be asked to address the strengths and weaknesses of the PI's qualifications when evaluating the quality of the proposal in responding to the requirements and responsibilities in Section II.C, All Awardees (NCO, CI, SimCenter, and EF) - Common Awardee Requirements and Responsibilities, and the requirements and responsibilities in Sections II.D, II.E, and II.F for the NCO, SimCenter, and RAPID Facility, respectively.

5. Why does the NCO need a Software Development and Lifecycle Management Plan?

The solicitation, Section II.C, requires that all Awardees must have a Software Development and Lifecycle Management Plan, in anticipation that all awardees, including the NCO, may have activities specific to their proposed component during the award period that will involve software development. All software development must be done in accordance with the Awardee's Software Development and Lifecycle Management Plan.

6. Section II.D lists the requirements and responsibilities for the NCO Awardee. Must all these activities be included in the proposal or can some activities be excluded from the proposal?

NHERI is considered by NSF to be a large facility. All the requirements and responsibilities listed in NSF 15-598 for the NCO are considered by NSF to be essential to make NHERI function successfully as an integrated large facility. While proposals that exclude some of these requirements and responsibilities will not be returned without review, proposers should note that one of the merit review criterion in Section VI.A is "Quality of the proposed project in responding to the requirements and responsibilities in Section II.D, Network Coordination Office (NCO) Component - Additional Awardee Requirements, Responsibilities, and Key Year-One Milestones."

7. What is the role of the NCO in running the Research Experiences for Undergraduates (REU) site program and what is the role of the other NHERI awardees (CI, SimCenter, EF, and RAPID Facility)?

The NCO is responsible for leading and running the NHERI-wide REU site program in accordance with a scope and budget allowable per the NSF REU solicitation in effect during that REU site period. The NCO will be responsible for all activities and costs associated with the REU site program, including posting REU program information on the NHERI web site; REU student recruitment, selection, and placement across the various NHERI Awardee project locations; REU participant support costs; any centralized REU student activities and training; and program evaluation. Each NHERI Awardee under NSF 14-605 and NSF 15-598 must annually host and provide REU experiences for at least two REU students participating in the NCO's REU site program.

8. What is the NHERI Summer Institute and are there examples of Summer Institutes?

The goal, scope, and organization of the NHERI Summer Institute are open-ended in the solicitation to enable the NCO to provide community leadership for this activity as part of its Education and Community Outreach program. Examples of NSF-supported Summer Institutes can be found by searching NSF awards at <http://www.nsf.gov/awards/about.jsp>.

9. What is the difference between the software tools on the Software Service Delivery Platform to be provided by the CI Awardee vs. those to be provided by the SimCenter Awardee?

The CI Awardee's Software Service Delivery Platform will provide software tools made available by the CI Awardee and new computational modeling and simulation tools developed by the SimCenter Awardee. The CI Awardee's scope is to provide the following on the platform: tools and educational materials formerly available on the NEEShub (<http://www.nees.org>), existing tools identified by users as critical for natural hazards engineering research and education, new research and educational tools developed by external users, and experimental testing tools of broad user interest. The SimCenter Awardee scope is to develop new computational modeling and simulation software tools to be delivered to the platform.

10. Can academic institutions submit proposals to NSF to conduct research and education activities that use SimCenter resources?

Yes.

11. Can the SimCenter Awardee software tools be developed by subawardees that were not identified in the original proposal?

Yes, provided the new subawards to be issued by the SimCenter Awardee follow the NSF cooperative agreement terms and conditions and the Awardee's institutional policies and procedures for procurement.

12. What is a requirements traceability matrix?

A requirements traceability matrix is a commonly used project management tool for software development. The requirements traceability matrix maps user requirements to the elements of software tool design and features.

13. For the SimCenter, is it acceptable to develop open source software that can only run on a proprietary platform?

Yes, but all SimCenter software must be able to be broadly executed by the natural hazards engineering research and education community.

14. For the RAPID Facility, who is responsible for curating and archiving the collected field data?

The collected field data must be curated and archived in the CI Awardee's NHERI data repository. The collected field data must be prepared by either the RAPID Facility or its users, as specified in the RAPID Facility's Data Management Plan, in the metadata and data formats required by the RAPID Facility's Data Management Plan developed with the CI Awardee and the community.

15. For the RAPID Facility, there may be equipment or services that would be beneficial for the facility, but its acquisition, maintenance, and/or operations cost would exceed the award budget limits for the facility specified in Section III. However, such equipment or services may be available commercially for use on a pre-defined fee or rental basis to be deployed by the RAPID Facility for a specific post-disaster investigation event. Can the RAPID Facility proposal include such equipment or services and costs for the fee/rental in the NSF requested budget?

All RAPID Facility resources and staff should be housed at the lead institution in order to efficiently manage, staff, and maintain the facility. The RAPID Facility must not be a distributed resource facility that requires support within the requested budget for ongoing maintenance and operations of equipment and instrumentation located at academic institutions other than the lead academic institution. However, the proposal may include commercially available equipment or services that may be deployed on a fee/rental basis that could enhance the capabilities of the RAPID Facility for users, and this may be included in the preliminary equipment concepts and requested budget in the proposal.

16. For the RAPID Facility, the Section II.F states: "All facility's resources and staff must be housed within the United States at the lead institution in order to efficiently manage, staff, and maintain the facility." Can the project staff include individuals from other organizations or must all staff be from the lead academic institution?

The proposal may include project staff from other organizations; however, the management team and technical staff supporting maintenance, operations, information technology, and cybersecurity should be employees of the lead institution.

17. Is the NCO or are the EF (including RAPID Facility) Awardees responsible for developing the NCO's Facility Scheduling Protocol? Are there examples of Facility Scheduling Protocols?

The NCO is the Awardee responsible for developing and implementing the Facility Scheduling Protocol to be used for scheduling users at each EF. Many NSF-supported large facilities have scheduling policies and procedures that are available online.

18. Why was the Network Coordination Office (NCO) activity to "lead and organize development of the Decadal Science Plan for Natural Hazards Engineering Research, Education, and Research Infrastructure for 2020 - 2029, to be completed by September 30, 2017" that was included in program solicitation NSF 14-605 now eliminated as an NCO activity in NSF 15-598?

This activity, if supported, will be better supported through another NSF program.

19. Can the NCO, SimCenter, and RAPID Facility support activities related to explosions, fire, and other hazards that are not natural hazards?

No. The vision for NHERI is to enable frontier research and education that can contribute knowledge and innovation

for civil infrastructure, over its lifespan, to be multi-hazard resilient and sustainable, where the hazards to be addressed are natural hazards, with an emphasis on earthquakes and windstorms.

NSF 15-598, SECTION IV, ELIGIBILITY INFORMATION

- 20. Can a PI or co-PI named on an award made under the NSF 14-605 NHERI solicitation serve as a PI or co-PI in a proposal submitted to NSF 15-598? How do I know if I am a PI or co-PI on a NHERI award made under NSF 14-605?**

A PI or co-PI named on an award made under NSF 14-605 cannot serve as a PI or co-PI in a proposal submitted to NSF 15-598. The names of the PI and co-PIs of each NHERI award made under NSF 14-605 are listed in the cooperative agreement, as well as on the NSF award abstract page. There is no limit to the number of proposals submitted to NSF 15-598 that a PI or co-PI named on an award under NSF 14-605 may participate as Senior Personnel, Faculty and Other Senior Associates.

- 21. Can an individual serving as PI or co-PI in one proposal submitted to NSF 15-598 be named as Senior Personnel (Faculty and Other Senior Associates) in another proposal submitted to NSF 15-598?**

Yes, provided that the PI or co-PI, his/her organizational affiliation, and type of requested support meet all solicitation eligibility requirements. There is no limit to the number of proposals that an individual may participate as Senior Personnel, Faculty and Other Senior Associates.

- 22. If an academic institution is the lead on two proposals, is there a limit on the number of proposals that the academic institution can participate in as a non-lead institution?**

There is no limit, provided that the institution's employees named on all submitted proposals meet all solicitation eligibility requirements.

- 23. Can an individual who is named as Senior Personnel in one proposal (not PI or co-PI) participate in other proposals as Senior Personnel (not PI or co-PI)?**

Yes, provided that the individual, his/her organizational affiliation, and type of requested support meet all the solicitation eligibility requirements. There is no limit to the number of proposals that an individual may participate in as Senior Personnel.

- 24. Must all co-PIs be from academic institutions, and be U.S. citizens or permanent residents?**

An individual may be co-PI in only one proposal, and does not need to be from an academic institution; however, the co-PI, his/her organizational affiliation, and type of requested support must meet all the solicitation eligibility requirements.

- 25. Must all co-PIs be from the same lead academic institution?**

No, proposals may include co-PIs from organizations other than the lead academic institution, provided that the co-PI, his/her organizational affiliation, and type of requested support meet all the solicitation eligibility requirements.

- 26. Can individuals from non-profit, non-academic organizations, such as professional societies, be supported on an award?**

Yes, provided that the individuals and their organizational affiliations meet all the solicitation's eligibility requirements.

- 27. Can NSF help me identify potential proposal partners or identify proposers who will lead a proposal that may be seeking additional project partners?**

No, as it is the responsibility of proposers to form their own proposal teams.

- 28. Can proposals include project participants who are consultants? Is there a limit to the number of proposals that a consultant may participate in?**

Proposals may include consultants, provided that consultant's organizational affiliation meets all the solicitation eligibility requirements. There is no limit to the number of proposals that a consultant may participate in.

- 29. Can proposals include, as consultants, individuals who are faculty members at academic institutions?**

Faculty members participating in a proposal are responsible for complying with all their institutional requirements for employee participation in federally sponsored programs.

30. Can federal government-supported national laboratory researchers participate as co-PIs and be named on the cover sheet?

The federal government-supported national laboratory researcher should not be listed as a co-PI on the cover sheet or in the proposal. As stated in the solicitation, national laboratories can participate using their own funds. However, unfunded collaborators should not be listed anywhere in the proposal. Unfunded collaborators may be selected after an award is made. If the national laboratory researcher is a federal government employee, then that researcher cannot be supported as a co-PI or Senior Personnel on the award.

31. Can federal government-supported national laboratory researchers serve as Senior Personnel in a proposal through a consulting agreement?

The solicitation does allow for national laboratories to receive subcontracts for services, including consulting, from a proposed lead organization. However, consultants provide services to a project but are not considered Senior Personnel, as they are not participants in a project. Any consulting agreement with a Federal government-supported national laboratory must comply with applicable Federal laws and regulations. Further, consultants should not be named as Senior Personnel in the budget request, and associated costs should be included in the consultants line of the NSF budget form.

32. Must the PI be a full-time employee of the lead institution throughout the entire five-year award period?

As stated in the solicitation, the PI must be a full-time employee of the lead institution by the start date of the award. Any change to the PI's full-time employee status during the award performance period would require notification to and approval by NSF.

33. Can the PI be a 50%-time employee of the lead institution during the entire five-year award period?

As stated in the solicitation, the PI must be a full-time employee of the lead institution by the start date of the award. From Exhibit II-7 of the Grant Proposal Guide, "NSF does not infer any distinction in scientific stature among multiple PIs, whether referred to as PI or co-PI. If more than one, the first one listed will serve as the contact PI, with whom all communications between NSF program officials and the project relating to the scientific, technical, and budgetary aspects of the project should take place." A full-time employee of the institution is necessary to provide the necessary technical direction and serve as the contact PI as defined in the Grant Proposal Guide at the start of the award period.

34. Can a Federally Funded Research and Development Center (FFRDC), managed by a non-profit organization, receive funding under a NHERI award?

The solicitation does not prohibit purchases, services, or sales contracts/agreements with an FFRDC. An FFRDC may be proposed as a subcontractor in this capacity. The requested budget should be in compliance with the terms and conditions of the federal agency's award instrument to the FFRDC's administering organization.

NSF 15-598, SECTION V, PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS: LETTERS OF INTENT (LOI)

35. The solicitation states for the LOI: "A Minimum of 0 and Maximum of 4 Other Senior Project Personnel are allowed." Does this mean that a full proposal can only include 1 PI, 4 co-PIs, and 4 Other Senior Personnel?

No. The Senior Personnel may include one PI, up to 4 co-PIs, and as many additional Faculty and Other Senior Associates as needed for the project.

36. What can be included in the Other Comments section of the LOI?

The LOI must include the following information: (a) name of lead institution, (b) names of participating organizations, and (c) names and organizational affiliations of the PI, co-PIs, Other Senior Project Personnel, Leadership and Management Team, and Additional Project Personnel. Also include the information requested for the NCO, SimCenter, or RAPID Facility, as appropriate for the proposal. Information that cannot be entered within the prescribed boxes, e.g., Additional Information and Participating Organizations, may be included under Synopsis or Other Comments.

37. What information should be included under "Other Comments?"

There is no prescribed information for "Other Comments." An institution may use that section to provide further description of their planned proposal.

38. I am planning to serve as PI in a proposal. Can NSF tell me the names of the other PI from my academic institution who has submitted a Letter of Intent?

No. Feedback will not be provided to submitters on their Letter of Intent. It is the responsibility of the submitting academic institution to coordinate all NSF 15-598 Letters of Intent and full proposal submissions and meet the eligibility requirements.

39. Can NSF provide feedback on the proposed plans described in my Letter of Intent submission?

No. Feedback will not be provided to submitters on the contents of the Letter of Intent.

NSF 15-598, SECTION V, PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS: FULL PROPOSALS

40. How can I check that my proposal is compliant and will not be returned without review?

Section X, Appendix, provides a full proposal compliance checklist. Proposals must be compliant with both the NSF Grant Proposal Guide and the NSF 15-598 solicitation.

41. If I resubmit a proposal previously submitted to NSF 14-605, does my proposal to NSF 15-598 have to address the prior review comments in a separate section within the proposal?

Please note that there have been changes to the requirements and responsibilities for the NCO, SimCenter, and RAPID Facility from NSF 14-605 to NSF 15-598. The proposal resubmission to NSF 15-598 must address the requirements and responsibilities in the NSF 15-598 solicitation. A separate section that addresses the response to the review comments from the NSF 14-605 proposal is not required within the proposal submitted to NSF 15-598. However, the new proposal should be responsive to prior review comments that are applicable to the requirements and responsibilities in the NSF 15-598 solicitation.

42. The solicitation states that the Project Description must not exceed 55 pages and must use the section headings listed, with page limits shown with each required section heading as a guide for that section. The solicitation states that proposals may deviate from the section page limits; however, the total number of pages in the Project Description for Sections 1-17 must not exceed the 55-page limit. Can the number of pages for a particular section exceed the number of pages listed as a guide for that section?

Yes, provided that the total number of pages in the Project Description for Sections 1-17 does not exceed the 55-page limit.

43. Is the number of co-PIs limited to four?

Yes. For full proposals submitted using FastLane, FastLane will only permit up to four co-PIs on the Cover Sheet. For full proposals submitted using Grants.gov, full proposals may identify a maximum of four co-PIs, and the names of the co-PIs must be the first four names entered on the Research and Related Senior/Key Person Profile form.

44. Per NSF 15-598, NHERI Awardees are to work/collaborate together. Do I need to list the NSF 14-605 NHERI Awardees in the Project Description, Section 1, Summary Tables, as collaborators?

No, the NSF 14-605 NHERI Awardees must not be listed in the Summary Tables as collaborators, unless the Awardee(s) named will be supported in the proposal, with at least one month annual support for each year of participation, and meets the eligibility requirements.

45. A participating subaward organization in my proposal will request support starting in year two of the project. Should this organization be listed in the Project Description, Section 1, Summary Tables, Table 1, List of Participating Organizations, and if so, what information should be entered in the column entitled "year-one requested support?"

Because the subaward organization will be requesting support during the five-year project period, list and include information about this organization in Table 1. For this organization, enter "none" in Table 1 under the column "year-one requested support." Personnel from this organization who will request support in the NSF budget during the

project period should also be listed in Table 2, List of Project Personnel.

46. **In the Project Description, Section 1, Summary Tables, Table 2, List of Project Personnel, should the number of months for the year-one level of effort shown for each individual match the number of months requested for year-one salary support for each individual on the NSF budget form?**

Yes. The year-one level of effort (number of months) for an individual listed in Table 2 should match the number of months of year-one support requested for that individual on the NSF budget form. If that individual will make available an additional level of effort (additional months above that requested on the NSF budget form) to the project through support provided by charging NSF users institutionally-established user fees/recharge rates, then in the proposal section on Facilities, Equipment, and Other Resources, in the table for the Facility Financial Resource Operating Plan, for that individual's listing, under the column "Sources of Support" enter both "NHERI Award and Institutionally-Established User Fees/Recharge Rates."

47. **Section V.A requires in the Project Description, Section 1, Summary Tables, Table 2, List of Project Personnel, that all identified leadership and management positions must have individuals named. What if a staff position with the word "manager" in its title will not be filled until after the NSF award is made?**

If the staff position with the word "manager" in its title is identified in Table 2 as a leadership or management position, then the name of the individual who will fill that position must be included in Table 2. Proposals that do not identify the names for all leadership and management positions in Table 2 will be returned without review and will not receive further consideration.

48. **For a RAPID Facility proposal, the actual level of support, if any, during years two through five of the project for several senior personnel, who will assist with equipment training and deployment, will not be known until after the facility/equipment planning workshops are held during year one. Should these senior personnel be listed in the Project Description in Section 1, Summary Tables, Table 2, List of Project Personnel?**

Yes, include information about each of these senior personnel in Table 2, List of Project Personnel. If no year-one support is requested for these senior personnel, then enter "none" in the column for the "year-one level of effort."

49. **Can a proposal include an Advisory Board, Advisory Committee, Practice Committee, or similar such entity in the proposal and list the member names and/or organizations?**

No. Only the Governance groups listed in the solicitation will be supported under NHERI, with the exception of the RAPID Facility External Steering Committee. Proposals must not include the names of any committee members or committee chairs, as all committees, including the Network Independent Advisory Committee (NIAC), User Forum, and RAPID Facility External Steering Committee, are to be populated after awards are made by NSF. Proposals that include names of committee members, chairs, and organizational affiliations will be returned without review and will not receive further consideration.

50. **NSF 15-598 does not allow unfunded collaborators. Can I list unfunded collaborators in the Facilities, Equipment, and Other Resources section and/or include a few letters of collaboration or unfunded collaborator biosketches in the Special Information and Supplementary Documentation section to help strength my proposal?**

NSF 15-598 does not allow unfunded collaborators; proposals that include the names of unfunded collaborators, letters of collaboration from unfunded collaborators, and/or biosketches of unfunded collaborators will be returned without review and not receive further consideration. Proposers should note while such information was allowed in proposals submitted to NSF 14-605, they are not allowed in proposals submitted to NSF 15-598.

51. **NSF 15-598 does not allow unfunded collaborators. However, my proposal will be interacting very closely with the other NHERI Awardees; some Awardees have been already funded under NSF 14-605 and some will be funded under NSF 15-598. Can I discuss my planned interactions with the NSF 14-605 Awardees and mention them by name, even if they will not request support in my proposal?**

Yes.

52. **Is all staff listed in the proposal required to be hired and/or supported on the start date of the award?**

Proposers need to provide justification in their proposal for the role and responsibility of each staff member proposed; if a project participant's role does not commence at the start of the project, then that participant does not need to be supported until their role commences.

53. What are a Work Breakdown Structure (WBS) and its dictionary?

A WBS is a commonly used project management tool, as described in http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf15089.

54. For NCO proposals, in Section V.A of the solicitation under Project Description, what is the difference between Section 10, Governance Interactions, and Section 11, Component-Specific Implementation, as Section 11 requires information on Governance support?

Section 10 must describe how the NCO will interact with the Governance structure and describe up to three NHERI-wide policies and procedures, up to three committees, and up to three cross-Awardee activities that would be beneficial to the operations of the proposed NCO component. Section 11 should describe how the NCO will support the Governance structure, as well as describe how the NCO will be implemented to meet other requirements and responsibilities listed in the solicitation's Section II.D.

55. Can an NCO proposal include a higher base budget for the required scope of work for the NCO?

No, as Section V.B states: "Requested annual and total budgets must not exceed the budget amounts listed in Section III, 'Award Information.'" Section X states that proposals that exceed the budget amounts listed in Section III will be returned without review and not receive further consideration.

56. RAPID Facility proposals are required to include a table that benchmarks the proposed experimental resources with comparable experimental facilities in the United States, and if applicable, globally. Should the benchmarking include both academic facilities and consulting/industry-based laboratories?

The solicitation has no requirements for the types of facilities to include in the benchmarking table.

57. The Special Information and Supplementary Documentation section may include a Section C, Biographical Sketches of Additional Project Personnel. What constitutes "Additional Project Personnel?"

In accordance with the NSF Grant Proposal Guide, a biosketch is required for each individual identified as Senior Personnel (PI, co-PI, Faculty and Other Senior Associates) on the NSF Budget Form. Proposals may include up to 10 additional biosketches for additional project personnel who are not Senior Personnel, as appropriate, e.g., individuals listed under Other Personnel or Consultant Services on the NSF budget form. Proposals that include more than 10 biosketches in Section C will be returned without review and not receive further consideration.

58. Per Section V.B, each individual requesting financial support must be supported for at least one month annually during each year of planned participation on the project. Will a proposal be returned without review if it includes individuals who are budgeted to receive less than one month annual support in any given year?

Yes, proposals with any individual budgeted for less than one month of support in any given year of participation will be returned without review and not receive further consideration.

59. Can project staff be supported for less than 1.0 full-time equivalent (1.0 FTE) annually?

Yes, if this requested NSF support is commensurate with the staff member's role and responsibilities. Not all project staff need to be supported for 1.0 FTE (12 months annual support).

60. Can proposals include budgets for costs associated with computer hardware and commercial software?

Yes, but the proposal must provide justification for all requested computer hardware and commercial software, and NSF will review the budget and budget justification prior to making an award.

61. If the RAPID Facility is used 100% annually to accommodate NSF-supported awards, will it be required to have institutionally-established user fees/recharge rates or can the requested annual budget totally fund the facility operations without having some costs assigned to NSF-supported users through institutionally-established user fees/recharge rates?

The facility total operations budget is to be a combination of support provided through the NSF NHERI award, support provided through institutionally-established user fees/recharge rates charged to NSF-supported users for costs not covered by the NSF NHERI award, and support provided by non-NSF supported users who pay full recovery costs to utilize the facility through institutionally-established user fees/recharge rates. By the end of year two of the award,

institutionally-established user fees/recharge rates for the RAPID Facility must be established the Awardee and posted on the NHERI web site.

62. For a RAPID Facility, should user fees and recharge rates cover equipment maintenance and refresh?

The RAPID Facility Awardee's institution is responsible for establishing user fees and recharge rates, and what these fees/rates will cover, in accordance with its institutional policies.

63. Can the NSF budget request include graduate student tuition support/stipend for a student who is not a U.S. citizen, U.S. national, or permanent resident of the United States?

No, as this will not be an allowable cost on any NHERI award.

64. How should the REU site program be budgeted by the NCO and budgeted by the other NHERI awardees?

All costs for execution of the REU site program, including REU student stipends, must be part of the NCO's requested budget, with the following exception: separately, all NHERI Awardees must budget up to \$10,000 annually for the Awardee's local staff time (e.g., faculty member or graduate student) to work with the REU students at the Awardee's project location.

65. Are vendor quotes required for proposed purchases other than equipment?

Vendor quotes should be provided, as appropriate, to present a complete budget justification.

66. Does support under a NHERI award prohibit project personnel from submitting proposals to other NSF programs?

NSF provides many funding opportunities. Some have specific eligibility criteria. Prior to submitting a proposal to any NSF funding opportunity, proposers should check the eligibility criteria.

67. I have additional information posted on my website I would like the reviewers to see. May I refer readers to my web site within the Project Description?

Proposers are advised that per the NSF Grant Proposal Guide, the Project Description must be self-contained and are cautioned that a website that provides information related to the proposal should not be used because: 1) the information could circumvent page limitations; 2) the reviewers are under no obligation to view such a site; and 3) the site could be altered or abolished between the time of submission and the time of review.

68. In the proposal Project Description, Section 3, Results from Prior NSF Support, what individuals listed in the proposal need to provide information on NSF awards in this section?

The Project Description, Section 3, Results from Prior NSF Support, must comply with the proposal preparation requirements listed in NSF 15-1, Grant Proposal Guide (GPG), Section II.C.2.d.iii, "Results from Prior NSF Support." Information must be listed for the PI and each co-PI named in the proposal (cover sheet) who has received NSF funding (including any current funding) in the past five years. Proposers are reminded to thoroughly review this section of the GPG to ensure that the submitted proposal is fully compliant with this GPG requirement.

69. For a RAPID Facility proposal, in the section on Facilities, Equipment, and Other Resources, is a Facility Financial Resource Operating Plan required if the equipment is only conceptual at the time of proposal submission?

Yes, the Financial Resource Operating Plan is required, even if the equipment is only conceptual at the time of proposal submission. While this plan will likely be updated after equipment needs are finalized at the end of year one, it will help during the proposal preparation stage to formulate the NSF budget request.

70. Can the NSF budget request include support for travel to conferences (domestic and international) and collaboration meetings?

Yes, provided that the conferences and collaboration meetings are necessary to accomplish the objectives of the proposed work or to disseminate its findings, and are specified and itemized by destination and cost in the budget justification.

71. The solicitation requires a Software Development and Lifecycle Management Plan be submitted with the

proposal. If the proposed component will need to acquire commercial software, is this allowable, and does this software need to be procured following the Software Development and Lifecycle Management Plan?

Acquisition of commercial software is allowed, provided its procurement is fully justified for the project. Proposers do not need to follow their Software Development and Lifecycle Management Plan for this procurement.

72. What if my proposal is submitted after the full proposal deadline?

The proposal will be returned without review and not receive further consideration. Proposals must be submitted in FastLane or Grants.gov by November 4, 2015, 5 p.m. proposer's local time, with a FastLane stamped submittal time no later than 4:59 pm to ensure that the 5 p.m. deadline is met.

73. Can I submit my proposal prior to the day of the full proposal deadline?

Yes, submitting the proposal well before the deadline is strongly encouraged as it provides the institution and PI an opportunity to review the proposal prior to the deadline for compliance, and if the proposal is compliant, ensures a proposal submission stamped time prior to the full proposal deadline.

74. I am having problems submitting my proposal and the full proposal deadline is almost here. Who should I contact?

Institutions are strongly encouraged to submit their proposal well in advance of the deadline to allow time to correct any problems that may occur in the submission process. Issues and questions related to the NSF FastLane system should be directed to the FastLane User Support desk at (800) 673-6188. You can also send an e-mail message to fastlane@nsf.gov. For information on the availability of the NSF FastLane system, phone (800) 437-7408 for a recorded message. For Grants.gov user support, contact the Grants.gov Contact Center by phone at (800) 518-4726 or by email at support@grants.gov.

75. I just noticed a major problem with my full proposal. The full proposal deadline has not passed so can I fix the problem?

Yes, if you see a problem **before the deadline**, you may use the FastLane Proposal File Update Module to replace files or revise other Proposal Attributes of a submitted proposal. PIs and their institutions should thoroughly review the proposal before it is submitted, including identifying any PDF conversion or printing problems. PIs and their institutions are strongly encouraged to download the final submitted version of the proposal from FastLane well before the full proposal deadline to ascertain that that version contains all the proposal parts and that it is compliant.

76. What is the earliest deadline for proposal submission?

Proposals may be submitted after the Letter of Intent has been submitted by the lead institution. Letters of Intent must be submitted by the Letter of Intent deadline of October 16, 2015, 5 p.m. proposer's local time.

77. What is the maximum number of Senior Personnel allowed in a proposal in addition to the PI and four co-PIs?

There is no restriction on the maximum number of Senior Personnel in addition to the PI and co-PIs. However, it is noted that Section 7, Organizational Structure, Staffing and Diversity, of the proposal's Project Description must "describe why [the proposed] structure and the project team's qualifications will be effective for leading, managing, and implementing the project."

78. If I resubmit a proposal previously submitted to NSF 14-605, and I would like to address reviewer comments, where should I place this response in my proposal?

Please note that there have been changes to the requirements and responsibilities for the NCO, SimCenter, and RAPID Facility from NSF 14-605 to NSF 15-598. The proposal resubmission to NSF 15-598 must address the requirements and responsibilities in the NSF 15-598 solicitation. A separate section that addresses the response to the review comments from the NSF 14-605 proposal is not required within the proposal submitted to NSF 15-598. However, the new proposal should be responsive to prior review comments that are applicable to the requirements and responsibilities in the NSF 15-598 solicitation. Response to reviewer comments can be included in the Project Description, Section 17 (optional).

79. NSF 14-605 required a Conflict-of-Interest list for all project personnel requesting financial support in year one be submitted as a Single Copy Document. However, this does not appear to be required for NSF 15-598

proposals. Can you please clarify if this list should also be submitted as a Single Copy Document for a proposal submitted to NSF 15-598?

A conflict-of-interest list is not a proposal preparation requirement in NSF 15-598 and should not be submitted for proposals submitted to NSF 15-598.

80. **Should the NCO requested budget include travel budget for each NHERI Awardee to attend in-person Governance, including Council, meetings annually or is this travel to be supported by the budget for each individual NHERI award?**

Per Section V.B, each proposal should include in its annual budgets travel for its own staff to participate in Governance, including Council, meetings; REU site program; Summer Institute; one NSF-supported Large Facility Workshop; and one NSF-supported Cybersecurity Summit. It is not the responsibility of the NCO to provide travel funds to other NHERI awardees for these activities.

81. **NSF 15-598, Section V.B, states: "Include separate budgets for subawards/subcontracts that are \$50,000 or greater annually. For subawards/subcontracts less than \$50,000 annually, include the costs aggregated on the subaward line of the annual budget."**

If a requested subaward budget is \$50,000 or greater in any year, then for all years of participation of the subaward, include a separate annual NSF budget form, as well as the cumulative NSF budget form, for the subaward, even if in any of the other years the subaward budget is less than \$50,000.

82. **Can you clarify the budgetary limitations for post-doctoral and student support?**

NSF 15-598, Section V.B, states the following restrictions on post-doctoral and graduate student support:

- Postdoctoral researchers may be supported only on the SimCenter award and must be U.S. citizens, U.S. nationals, or permanent residents of the United States.
- Graduate students who are U.S. citizens, U.S. nationals, or permanent residents of the United States may be supported in three ways: (a) to assist with local campus implementation of the REU site program, (b) as participants in the SimCenter Research Traineeship program, or (c) to support other Awardee activities, if approved in the annual work plan by the cognizant NSF Program Officer. Other graduate students may not be supported.

NSF 15-598, SECTION VII, AWARD ADMINISTRATION INFORMATION

83. **Section VII.B, Award Conditions, of the solicitation states that NSF oversight will include the following award-specific programmatic terms and conditions, for all awardees: "review and approval of requests to support graduate students who are U.S. citizens, U.S. nationals, or permanent residents of the United States to participate in awardee activities other than the NHERI-wide REU site activity and SimCenter Graduate Research Traineeships." Is there a list of additional NSF-approved awardee activities that can support graduate students who are U.S citizens, U.S. nationals, or permanent residents of the United States?**

No. Because NSF 15-598 does not support research, there should be minimal involvement of graduate students in activities other than the NHERI-wide REU site activity and SimCenter Graduate Research Traineeships. NSF will consider, on a case-by-case basis, requests for support of graduate students who are U.S. citizens, U.S. nationals, or permanent residents of the United States to participate in awardee activities other than the NHERI-wide REU site activity and SimCenter Graduate Research Traineeships.