#### APPLICATION CHECKLIST AND NARRATIVE OUTLINE

Planning Grants for Engineering Research Centers (NSF 18-549) Submission Deadline: June 6, 2018

Planning grant proposals must contain the items listed below and adhere strictly to the specified page limitations. No additional information may be provided as an appendix or by links to webpages. Figures and tables must be included within the applicable page limit (described below). Planning grant proposals that are not compliant with the guidelines will be returned without review. The initial team configuration at the planning grant proposal stage is recommended to include the PI and up to four co-PIs who may come from any or all of the potential domestic partner universities for a future Engineering Research Center (ERC) proposal. No separately submitted collaborative proposals will be accepted.

## **Title of Proposed Project**

The title should begin with "Planning Grant: Engineering Research Center for" followed by the rest of the title and the center acronym.

## **Project Summary** (1 page)

The Project Summary must be prepared in accordance with the guidance in NSF's Proposal & Award Policies & Procedures Guide (PAPPG), with the following supplemental guidance: The Overview Section should begin with a heading titled "Proposed Vision."

## **Project Description** (maximum 6 pages total)

In addition to separate sections labeled "Intellectual Merit" and "Broader Impacts" as required by the PAPPG, the Project Description must contain the following sections:

- 1. *Currently Planned Proposing Team:* The description must start with a table that has four columns: 1) Name of the PI/co-PIs, 2) Institution, 3) Department(s), and 4) Most Relevant Field(s) of Expertise. There will be up to five rows, one for the PI and one each for up to four co-PIs.
- 2. *Targeted Societal Impact:* Describe the specific societal impact(s) that the intended ERC will potentially target.
- 3. *Rationale:* Make the case for why an ERC is appropriate and why a convergent research approach is needed for the targeted societal impact. Identify some key, enabling ideas that will be built upon. Describe the intellectual approach and qualifications for carrying out the proposed strategies.
- 4. **Expected Benefits:** What would the planning grant enable that isn't currently in place?
- 5. **Stakeholder Community:** Describe the proposed strategies that will be used to better understand and engage the stakeholder community most appropriate for your ERC. The stakeholder community should be identified with consideration of all key components of the ERC.
- 6. **Team Formation:** Describe the proposed strategies that will be used to identify and bring together the best team, including effective leadership/management, to address engineering challenges for the targeted societal impact.
- 7. **Planning Procedures:** Describe in detail how you will use this planning grant. Include possible dates, locations, participants, objectives, and outcomes of proposed planning meeting(s) and any other relevant information.

8. *Anticipated Impacts:* What aspects of the proposed approach would be most likely to change as a result of the activities described in this planning grant? Where do you see the planning grant having the most impact? What are the anticipated impacts of the activities listed in the previous section?

## **Budget**

The budget justification should explain how the budget allocation supports the overall goal of the planning grant. Reviewers will closely examine all allowable expenses such as Salary/Wages, Materials and Supplies, Travel, Participant Support Costs for Planned Workshops, and Other (specify). The proposal budget should include travel funds to support one PI or co-PI to attend two NSF-sponsored cohort meetings. The planning grant is for one year and the proposed budget for each planning grant should not exceed \$100,000.

### **References Cited** (maximum 3 pages)

See PAPPG for format guidelines. The submitting team may be asked to submit a BIBTEX file of the references at a later date.

# **Biographical Sketches** (2-page limit for each)

Biographical sketches should be included for the PI and up to four co-PIs responsible for managing the planning grant. See PAPPG and/or Office of Proposal Development template for guidelines.

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Unless required by the PAPPG, no other items, appendices, supplementary documents are permitted. If any supplementary documents and appendices are submitted, the planning grant proposal will be returned without review. Items required by the PAPPG:

# **Current and Pending Support** (no page limit)

Provide information for the PI/co-PIs on all current and pending support for ongoing projects and proposals and any subsequent funding in the case of continuing grants.

- Information should be provided for the proposed project in pending support.
- All current project support from whatever source (e.g., Federal, State, local or foreign government agencies, public or private foundations, industrial or other commercial organizations, or internal funds allocated toward specific projects) must be listed.
- Projects or activities requiring a portion of time of the senior personnel must be included, even if no salary support is received.
- The total award amount for the entire award period covered (including indirect costs) must be shown
- The number of person-months per year to be devoted to the project must be shown.
- Information must be provided for all proposals already submitted or submitted concurrently to other possible sponsors, including NSF.
- If the project now being submitted has been funded previously by a source other than NSF, information must be furnished for the last period of funding.

#### Facilities, Equipment and Other Resources (no page limit)

This section of the proposal is used to assess the adequacy of the resources available to perform the effort proposed to satisfy both Intellectual Merit and Broader Impacts review criteria. Proposers should include an aggregated description of the internal and external resources (both physical and personnel) that the organization and its collaborators will provide to the project should it be funded.

- The description should be narrative in nature and must not include any quantifiable financial information.
- Describe only those resources that are directly applicable.
- Any substantial collaboration with individuals not included in the Budget should be described in this section (and documented in a letter of collaboration from each collaborator).

### Data Management Plan (2-page limit)

Describe plans for data management and sharing of the products of research. This supplement should describe how the proposal will conform to NSF policy on the dissemination and sharing of research results (see AAG Chapter VI.D.4) and may include: 1) the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project; 2) the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies); 3) policies for access and sharing, including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements; 4) policies and provisions for re-use, re-distribution, and the production of derivatives; and 5) plans for archiving data, samples, and other research products and for preservation of access to them.

# **Collaborators and Other Affiliations Information** (no page limit)

Provide collaborator and other affiliations information using the NSF-approved Excel spreadsheet available at <a href="http://research.unl.edu/proposaldevelopment/proposal-guidelines-templates-and-outlines-boilerplate-language/">http://research.unl.edu/proposaldevelopment/proposal-guidelines-templates-and-outlines-boilerplate-language/</a> for each PI/co-PI.