

Engineering PLUS Alliance An Eddie Bernice Johnson NSF INCLUDES Alliance Request for Proposals: Regional Hub Expansion Leadership

I. <u>Overview</u>

The Engineering PLUS Alliance (Eng+) is issuing a request for proposal (RFP) to engage a new partner that will provide leadership and oversight in the launching of a third Regional Hub. We envision that this partnership will assist in the expansion efforts of Eng+ as a part of our strategic plan to produce a professional network of professionals and institutions dedicated to the mission of changing the face of the national engineering landscape by increasing the undergraduate and graduate graduation rates of women and BIPOC (Black, Indegenous and other People of Color) in engineering disciplines. The host institution of each region is a sub-awardee on this prestigious grant and receives annual funding of up to \$180,000.

II. About the Engineering PLUS Alliance

The Engineering PLUS Alliance, funded at \$10 million over 5 years, is one of 17 NSF Eddie Bernice Johnson INCLUDES Alliances and the only Alliance focused on engineering. NSF INCLUDES is a nationwide initiative designed to build U.S. leadership in science, technology, engineering and mathematics (STEM) by increasing the participation of individuals from groups that have been historically underrepresented in STEM. The Alliance aims to recruit over 400 engineering institutions and community colleges into Regional Hubs, train more than 400 stEm PEER change agents, and engage 300 industry partners.

We envision the potential for solutions to be strongly informed by the widespread adoption of highimpact practices proven to increase diversity in engineering education. This systemic change, at scale, will result in the achievement of the Alliance's goal to dramatically increase the number of BIPOC and women engineering graduates annually to 100,000 B.S. and 30,000 M.S./Ph.Ds within five years, while simultaneously increasing the diversity of our nation's workforce.

The Engineering PLUS Alliance is broken down into six functional areas known as Key Performance Strategies (KPS): KPS1 Backbone, KPS2 Partnerships, KPS3 Regional Hubs, KPS4 stEm Partnerships, KPS5 Sustainability, and KPS6 CIDER (Continuous Improvement Data, Evaluation, and Research).

III. About KPS3 Regional Hubs

The Engineering PLUS Alliance seeks to establish a network of between three and -five Regional Hubs, expanding from the first two (<u>New England Regional Hub</u> and <u>Midwest Regional Hub</u>) by collaborating with the Urban Massachusetts LSAMP (UMLSAMP), the Northeast LSAMP (NELSAMP), the Louis Stokes





Midwest Regional Center of Excellence (LSMRCE) and other LSAMP alliances and non-LSAMP institutions.

The Engineering PLUS Network will work with NACME (National Action Council for Minorities in Engineering), the National GEM Consortium, and NAMEPA (National Association of Multicultural Engineering Program Advocates), to create regional foci of engineering affinity student society chapters.

We will also identify opportunities to integrate engineering undergraduate and engineering graduate students into local LSAMP Alliances and non-LSAMP institutions to coalesce into a Regional Hub. The combined LSAMP, non-LSAMP and integrated engineering-organizations efforts will form the Engineering PLUS Regional Hub Network.

Currently, there are nearly 60 total institutions within the Regional Hub Network with a goal of 400 partnering colleges and universities.

IV. Background

NSF INCLUDES (Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science): One of NSF's 10 Big Ideas

Why Have We Not Made Meaningful Progress?

As a community of educators and professional engineers, we are not addressing the problem systemically, i.e., we are not addressing the root causes that are 90% of the problem. Moreover, our current efforts to broaden participation in engineering fail to consistently leverage evidence-based, high impact practices and redress obstacles, all of which are necessary to catalyze institutional change at scale.

The Engineering PLUS Vision to Achieve Meaningful Progress

The Engineering PLUS Alliance, funded at \$10 million over 5 years, is one of 17 National Science Foundation (NSF) INCLUDES Alliances of higher education institutions and the only Alliance focused on engineering. NSF INCLUDES is a nationwide initiative designed to build U.S. leadership in science, technology, engineering and mathematics (STEM) by increasing the participation of individuals from groups that have been historically underrepresented in STEM. The Engineering PLUS Alliance posits that networked communities are needed to build an inclusive infrastructure that will **drive the transformative, systemic and sustainable change** needed to achieve 100K undergraduate and 30k graduate engineering degrees awarded annually to BIPOC and women students by 2026.

V. Scope of Work

Regional Hub Leadership is responsible for:

- Administrating the third regional hub of the Engineering PLUS Alliance
- Hosting meetings with members, professional development, and convenings
- Assisting with documentation of third hub work towards project goals



- Working with Eng+'s research team, CIDER.
- Assisting with NSF Reports not limited to quarterly and annual

- Attending limited national events or meetings
- Collaborating with other Hubs
- Recruiting institutional members for regional hubs
- Recruiting stEm PEERs from the third regional hub to attend the stEm PEER Academy

The Regional Hubs are responsible for:

- Expanding the number of Engineering PLUS regional member institutions
- The establishment and strengthening of the working relationships between institutions and Engineering PLUS Alliance, with a focus in broadening the participation of women and BIPOC in engineering;
- Providing opportunities to mid-career education professional engaged or driven to improving the preparation, participation, and contributions of women and BIPOC through the stEm (E for our Engineering focus) PEER (Practitioners Enhancing Engineering Regionally) Academy
- Supporting members implement best practices at their institution and in their region
- Cementing faculty/leadership buy-in at regional institutions for scaling up best practices
- The members will, in turn, serve as institutional Ambassadors to lead and leverage activities that align with the overarching goal of Engineering PLUS by significantly increasing the number of women and BIPOC students graduating with BS and MS/Ph.D degrees in engineering by 100K and 30K, respectively, by 2026 across the Alliance.

Example Three-Year Plan and overview of work

VI. Selection Process and Timeline

- A. Request for Proposal (RFP) Circulated: Friday, November 3, 2023
- B. Information and Q & A Webinar Series

Tuesday, November 14 from 12:00-1:00PM ET

Wednesday November 15 from 12:00-1:00PM ET.

C. Deadline for Submissions: Monday, January 15, 2024; 11:59PM PT UPDATED

- D. Finalists Notified: Friday, February 9, 2024
- E. Finalists Interviews: Week of February 19th
- F. Selection Notification: Friday, March 1, 2024
- G. Third Regional Hub Launch: Monday, April 1, 2024

VII. Third Hub Launch Timeline



Subaward NSF Budget Submission to Northeastern University Kickoff Meeting with Eng+ Leadership Team Establish relationship and reporting cadence to: Richard Harris, Co-PI KPS 3 Regional Hubs CIDER Representative PI-Team Annual Report Backbone Staff for Quarterly Effort Reporting Begin recruitment and expansion effort with fellow geographic constituents Establish quarterly recruitment goals Establish meeting cadence with Hub 3 members Identify stEm PEER applicants Establish a quarterly retreat or convening for Hubs 3 Attend National Convening

VIII. RFP Evaluation Criteria

The minimum general proposal requirements include:

- Qualifications and experience of anticipated team
- Demonstrated understanding of the scope of work
- Demonstrated understanding of efforts serving and supporting marginalized or underrepresented populations
- Institutional support of application
- LSAMP Membership
- Institutional profile
- Capacity and ability to perform work
- Understanding of the Engineering PLUS Alliance
- Demonstrated position within a geographic community of higher education institutions

IX. Detailed Submission of Proposal Requirements

The following should be included as headings outlined in the proposal. Applications should be no longer than 15 pages before appendixes. Please see our FAQ page for document breakdown by section.

- A. Summary Letter: Submission of the Scope of Work
- B. Organization Identification: 1) Organization Name, 2) Business Registration and Federal Identification Number (FIN), 3) Name, telephone number, and email of the organization contact person for this proposal, 4) Brief biographies of proposed PI/co-PI(s) and senior personnel working on the project, 5) Brief description of the institution, 6) Website address
- C. Written rationale for involvement in the Engineering PLUS Alliance as a subawardee, and why your team should be selected to lead our third regional hub.
- D. Letters of collaboration from other institutions in your geographical area demonstrating connection and community with likeminded institutions that are willing to join the regional hub. This may contain statements of commitment, an esprit de corps focused on



relationship building and partnerships, and indication of belief in the applicants success with this project.

- E. Documentation of LSAMP Affiliation
- F. Proof of Engineering program, or of bridge programs connecting to four-year engineering degree.
- G. A list of all other programs or grants applicants have led (as PI/Co-PI, or other project lead designation)
- H. Letter from Dean of Engineering, or equivalent in support of application
- I. Examples of previous work or initiatives supporting marginalized or underrepresented communities
- J. Schedule and Budget: 1) Respondents should clearly demonstrate how they intend to perform the work on schedule and within budget. Describe the intended method of task planning and budget control, including a table showing each task, the proposed schedule, and the anticipated level of effort for each task
- K. Required signature: A wet signed proposal must be included with your submission

X. Submission Process

Please submit proposal to KF Flynn via email: no later than Monday January 15, 2024, 11:59PM PT.

KF Flynn Director, Engineering PLUS Alliance Office of Diversity, Equity, and Inclusion Northeastern University 271 Huntington Avenue Boston, MA 02115