October 19, 2020

Dear Colleague:

The National Science Foundation is beginning a national search for the Assistant Director for Engineering (ENG) and we seek your help in identifying visionary candidates. The new Assistant Director (AD) will succeed Dr. Dawn Tilbury, who has served with distinction since June 2017.

The Assistant Director, ENG, leads a Directorate of five divisions — Chemical, Engineering, Environmental, and Transport Systems (CBET); Civil, Mechanical, and Manufacturing Innovation (CMMI); Electrical, Communications, and Cyber Systems (ECCS); Engineering Education and Centers (EEC); and Industrial Innovation and Partnerships (IIP) — and the Office of Emerging Frontiers and Multidisciplinary Activities (EFMA). The Directorate’s portfolio encompasses a broad range of engineering disciplines and translational research initiatives, with a total budget of over $1 billion. The enclosed information sheet summarizes the Directorate's activities, the responsibilities of the position, and the criteria for the search.

We are pleased that Dr. Gilda Barabino, President of the Olin College of Engineering, will chair the Search Advisory Committee. We seek your help in identifying candidates who are outstanding leaders, have a deep sense of scholarship, and understand the issues facing the engineering community, particularly in education, innovation, and fundamental research. Candidates must also have the skills and temperament to serve effectively as a key member of the NSF senior management team, working with the NSF Director and other Assistant Directors on interdisciplinary activities. The Engineering AD also interacts with the executive and legislative branches of government and must be able to communicate effectively with leaders in business, industry, and philanthropy.

Employment in the position may be on a temporary or permanent basis in the Federal Service or by temporary assignment under provisions of the Intergovernmental Personnel Act. We welcome recommendations of individuals from any sector, including academia, industry, and government. The National Science Foundation is an equal opportunity employer committed to engaging a highly qualified staff that reflects the diversity of our nation.

Please send your recommendations, including any supporting information that you might be able to provide, to the AD/ENG Search Advisory Committee via e-mail to engsrch@nsf.gov. In light of COVID-19, we cannot receive recommendations by conventional mail. Please submit your recommendations by Friday, February 12, 2021.

I very much appreciate you help with this important task.

Sethuraman Panchanathan
Director

Enclosures
Search Advisory Committee Review Criteria
for the Assistant Director for Engineering (AD/ENG), NSF

We are seeking demonstrated evidence of:

Strategic Vision

- Working knowledge of the major current intellectual challenges and opportunities in engineering, including the stewardship and development of engineering centers and partnerships.
- Ability to think strategically and formulate integrated plans for research and education activities in engineering, especially at the interfaces of, and boundaries with, other disciplines.
- Ability to bring about strategic change, within and outside the organization, to meet organizational goals. Includes the ability to establish an organizational vision and to implement it in a continuously changing environment.

Leadership, Direction, Representation

- Ability to lead people toward meeting the organization's vision, mission, and goals. Includes the ability to provide an inclusive workplace that fosters the development of others, facilitates cooperation and teamwork, and supports constructive resolution of conflicts. Ability to provide innovative and transformative leadership of people, reflective of NSF's organizational values.
- Ability to serve effectively as a member of NSF’s senior management team, helping to develop consensus both within the ENG directorate and across the agency on policy and plans.
- Ability to plan, prioritize, and coordinate interagency and international research, education, and infrastructure programs and to forge government-industry-university partnerships.
- Ability to manage an organization consisting of approximately 155 scientific and administrative professionals; ability to manage human, financial, and information resources strategically.
- Ability to communicate NSF policy and strategic plans to the external community, including the public, Congress, industry, and colleagues in other disciplines.
- Ability to meet organizational goals and customer expectations. Includes the ability to make decisions that produce high-quality results by applying technical knowledge, analyzing problems, and calculating risks.

Commitment

- Commitment to the goals of the NSF Strategic plan - Transforming the Frontiers, Innovating for Society, and Performing as a Model Organization - and to the strategies for achieving these goals through developing intellectual capital, integrating research and education, and promoting partnerships. Demonstrated ability to conceptualize the role of engineering in achieving those goals.
- Commitment to the appointment and development of a highly qualified staff that reflect the diversity of our nation and to the equitable representation of underrepresented groups and institutions on advisory committees, in workshops, and proposal review panels.
- Commitment to equitable representation of underrepresented groups in the national enterprise.

Credibility within Research and Education Community

- Substantial research contributions and experience in academic, government and/or private national research and education endeavors as evidenced in publications, innovative leadership in research administration and/or professional leadership awards.
- Ability to build coalitions internally and with other Federal agencies, State and local governments, nonprofit and private sector organizations, foreign governments, or international organizations to achieve common goals.
- Demonstrated commitment to scholarship and significant scientific contributions to engineering.
- Broad understanding of universities and other institutions where research and education in engineering are conducted.
- Familiarity with the existing U.S. and international infrastructure that supports research and education.
The National Science Foundation
Directorate for Engineering (ENG)

The National Science Foundation (NSF) is an independent agency of the United States Government. Its vision is to enable the nation's future through its strategic goals of transforming the frontiers, innovating for society, and performing as a model organization. The Foundation seeks to realize these goals using five core values: vision, dedication to excellence, learning and growing, broad inclusiveness, and accountability to the research community and the taxpayer. NSF invests in supporting research that advances the frontiers of knowledge and establishes the nation as a leader in transformational science, in developing a world-class, broadly inclusive science and engineering workforce and scientifically literate citizenry, in building the nation's research capacity with critical investments in advanced instruments, tools and facilities, and in cultivating a capable and responsive organization that promotes excellence in science and engineering research and education.

The Directorate for Engineering (ENG) is one of seven NSF directorates. ENG aims to help the U.S. harness the collective efforts of engineering communities to address the most compelling scientific questions, educate the future advanced high-tech workforce, and promote discoveries to meet the needs of the Nation. Research in ENG-supported disciplines has led to advances in a host of world-wide applications, such as earthquake-resistant buildings, novel medical sensors, sustainable biofuels, and secure quantum computing. Together, these achievements strengthen our national capacity to perform and innovate, which, in turn, contributes to national prosperity, security, and welfare. The Directorate's goals and strategies for all scales of research mirror those of the Foundation. The Directorate for Engineering contains the Division of Chemical, Bioengineering, Environmental, and Transport Systems (CBET); the Division of Civil, Mechanical, and Manufacturing Innovation (CMMI); the Division of Electrical, Communications, and Cyber Systems (ECCS); the Division of Engineering Education and Centers (EEC); the Division of Industrial Innovation and Partnerships (IIP); and the Office of Emerging Frontiers and Multidisciplinary Activities (EFMA). A staff of approximately 155 administers a budget of about $1 billion annually.

The Assistant Director for Engineering (AD/ENG) serves as a key member of NSF's senior management and policy team and provides leadership and direction to the Directorate's programs and initiatives. The incumbent is responsible for planning and implementing programs, priorities, and policy within the framework of statutory and National Science Board authority. NSF seeks a candidate with outstanding leadership abilities, a deep sense of scholarship, a grasp of the issues facing engineering community in the areas of education and research, and a commitment to the goals and strategies of the National Science Foundation.