



NATIONAL SCIENCE FOUNDATION
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CMMI 15-006

Dear Colleague Letter: Division of Civil, Mechanical and Manufacturing Innovation (CMMI) Systems Science (SYS) and Engineering and Systems Design (ESD) - Employment Opportunity for Program Director Position (Open Until Filled)

August 28, 2015

Dear Colleague:

The Division of Civil, Mechanical, and Manufacturing Innovation, within the Directorate for Engineering at the National Science Foundation (NSF), announces a nationwide search to fill the Program Director position for two related programs: the Systems Science (SYS) and Engineering and Systems Design (ESD) Programs.

Formal consideration of interested applications will begin September 15, 2015 and will continue until a selection is made.

Program Directors have an unparalleled opportunity and responsibility to ensure NSF-funded research is at the forefront of advancing fundamental knowledge. In support of that, Program Directors are responsible for extensive interaction with academic research communities and industry, as well as interaction with other Federal agencies that may lead to development of interagency collaborations. Within this context, Program Directors solicit, receive and review research and education proposals, make funding recommendations, administer awards, and undertake interaction with research communities in these fields. They are also responsible for service to Foundation-wide activities and initiatives that together accomplish NSF's strategic goals to: 1) Transform the Frontiers of Science and Engineering, 2) Stimulate Innovation and Address Societal Needs through Research and Education, and 3) Excel as a Federal Science Agency. The position requires a commitment to high standards of intellectualism and ethical conduct, a considerable breadth of interest, receptivity to new ideas, a strong sense of fairness, good judgment, and a high degree of personal integrity.

The SYS program supports fundamental research leading to a theoretical foundation for design and systems engineering. In particular, SYS supports intellectual advances in which underlying theories (such as probability theory, decision theory, game theory, organizational sociology, behavioral economics or cognitive psychology) are integrated and abstracted to develop explanatory models for design and systems engineering in a general, domain-independent fashion. Ideally, the explanatory models, derived from the underlying theoretical foundations will lead to testable hypotheses. Based on collected evidence supporting or falsifying the hypotheses, new insights are gained allowing the explanatory models to be refined or updated.

Closely related to SYS, the ESD program supports fundamental research leading to new engineering and systems design methods and practices for specific global contexts. In particular, ESD seeks intellectual advances in which the theoretical foundations underlying design and systems engineering are operationalized into rigorous and pragmatic methods for a specific context. In addition, the program

funds the rigorous theoretical and empirical characterization of new or existing methods for design and systems engineering, identifying in which global contexts and under which assumptions these methods are effective and efficient. Such a global context includes both a domain (such as energy systems, consumer products, cyber-physical systems) and an economic, socio-political, environmental and technological context.

Persons wishing to apply for this position are referred to the SYS program web page at https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504788 and the ESD program web page at https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13340 for descriptions of the programs. These persons are also encouraged to contact the current Program Director, who is identified on the program web pages, for more information.

Requirements of the position include a PhD. degree in an appropriate field plus, after award of the PhD, six years or more of successful, funded research, research administration, and/or managerial experience pertinent to the position. The position requires highly effective oral and written communication skills. Familiarity with NSF programs and activities is a plus. The incumbent is expected to function effectively both as an individual managing the SYS and ESD programs, and as a member of crosscutting and interactive teams. The incumbent must also demonstrate a capability to work across government agencies to promote NSF activities and to leverage program funds through interagency collaborations, in addition to a commitment to outreach to the SYS and ESD research communities.

The Program Director position recruited under this announcement may be filled under one of the following appointment options:

Intergovernmental Personnel Act (IPA) Appointment: Individuals eligible for an IPA assignment with a Federal agency include employees of state and local government agencies or institutions of higher education, Indian tribal governments, and other eligible organizations in instances where such assignments would be of mutual benefit to the organizations involved. Initial assignments under IPA provisions may be made for a period up to two years, with a possible extension for up to an additional two-year period. The individual remains an employee of the home institution and NSF provides the negotiated funding toward the assignee's salary and benefits. Initial IPA assignments are made for a one- year period and may be extended by mutual agreement. IPA appointments are not convertible to permanent appointments. For additional information regarding IPA positions, please visit the NSF website at: http://www.nsf.gov/about/career_opps/rotators/ipa.jsp.

Visiting Scientist, Engineer or Educator (VSEE) Appointment: Visiting Scientist Appointment: Appointment to this position will be made under the Excepted Authority of the NSF Act. Visiting Scientists are on non-paid leave status from their home institutions and placed on the NSF payroll. NSF withholds Social Security taxes and pays the home institution's contributions to maintain retirement and fringe benefits (i.e., health benefits and life insurance), either directly to the home institutions or to the carrier. Appointments are usually made for a one-year period and may be extended for an additional year by mutual agreement. Visiting Scientist appointments may be convertible to permanent appointments. See <http://www.nsf.gov/careers/rotator/vsee.jsp> for additional information.

Temporary Excepted Service Appointment: Appointment to this position will be made under the Excepted Authority of the NSF Act. Candidates who do not have civil service or reinstatement eligibility will not obtain civil service status if selected. Candidates currently in the competitive service will be required to waive competitive civil service rights if selected. Usual civil service benefits (retirement, health benefits, and life insurance) are applicable for appointments of more than one year. Temporary appointments may not exceed three years.

Temporary Excepted Service appointments may be convertible to permanent appointments.

For additional information on NSF's rotational programs, please see "Programs for Scientists, Engineers, and Educators" on the NSF website at http://www.nsf.gov/about/career_opps/rotators/ and <http://www.nsf.gov/careers/rotator/microsite/>.

Applications will be accepted from US Citizens. Recent changes in Federal Appropriations Law require Non-Citizens to meet certain eligibility criteria to be considered. Therefore, Non-Citizens must certify eligibility by signing and attaching this [Citizenship Affidavit](#) to their application. Non-citizens who do not provide the affidavit at the time of application will be considered for IPA only. We also ask that you complete and submit the Applicant Survey Form. This will help NSF to ensure that our recruiting efforts are attracting a diverse candidate pool; it will be used for statistical purposes only.

Applicants should indicate in their cover letter that they are applying to the SYS and ESD program. Should you or your colleagues be interested in this position, please email a current CV accompanied by your cover letter highlighting the background that specifically relates to the program objectives to:

CMMI Program Director Search Committee
Dr. George A. Hazelrigg
Division of Civil, Mechanical and Manufacturing Innovation
Directorate for Engineering
National Science Foundation
Arlington, VA 22230
Email: ghazelri@nsf.gov

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