



**National Science Foundation
4201 Wilson Boulevard
Arlington, Virginia 22230**

NSF 16-122

Dear Colleague Letter: Stimulating Integrative Research in Computational Cognition (CompCog)

August 3, 2016

Dear Colleague,

This Dear Colleague Letter is intended to enhance the scientific and societal impact of the field by encouraging active dialogue across the cognitive and computational communities, facilitating bidirectional cross-fertilization of ideas, and nurturing emerging areas of transdisciplinary research.

The National Science Foundation (NSF) is interested in receiving proposals to existing programs, listed below, that explore computational models of human cognition, perception and communication and that integrate considerations and findings across disciplines. Proposals submitted to programs in the Directorate for Social, Behavioral and Economic Sciences (SBE) should include a rigorous computational context, and proposals submitted to programs in the Directorate for Computer and Information Science and Engineering (CISE) should include a rigorous cognitive context. For example, proposals that explore human cognition, perception, action, communication or learning should integrate and exploit what has been learned in the fields of artificial intelligence, natural language processing, computational neuroscience, computer vision, robotics, machine learning, or other related areas. Similarly, proposals that explore artificial systems or cyber-human or co-robotics designs should leverage and integrate understanding of human cognition, perception, action control, linguistics, or developmental science. **These computational cognition (CompCog) proposals should be synergistic with the participating program approaches to which the proposals are submitted and must contain clear research components as described by that program's solicitation; if they do not, they may be returned without review.**

This is not a special competition or new program. A proposal in response to this Dear Colleague Letter must meet the requirements and deadlines of the program to which it is submitted, but should start the proposal title with "CompCog:". Primary and secondary units of consideration on the cover sheet should indicate which participating SBE and CISE programs are most relevant. These proposals may, at the discretion of the cognizant program director, be reviewed in a special cross-directorate Computational Cognition panel that will occur sometime during the spring.

Participating programs in SBE include:

Cognitive Neuroscience

https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5316

Decision, Risk and Management Sciences

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5423

Developmental and Learning Sciences

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=8671

Linguistics

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5408

Perception, Action, and Cognition

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5686

Social Psychology

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5712

Participating programs in CISE include:

National Robotics Initiative (NRI)

https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503641

Robust Intelligence

https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503305

Questions concerning this Dear Colleague Letter should be directed to the e-mail alias

CompCog@nsf.gov.

Sincerely,

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