National Science Foundation
4201 Wilson Boulevard
Arlington, Virginia 22230

NSF 14-019

Dear Colleague Letter: Stimulating Integrative Research in Computational Cognition

December 16, 2013

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 finding across disciplines. Proposals submitted to programs in SBE should include a rigorous computational context, and proposals submitted to programs in 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, cyber-human or co-robotics designs should leverage and integrate our understanding of human cognition, perception, action control, linguistics, or developmental science.

This is not a special competition or new program. Proposals in response to this Dear Colleague Letter must meet the requirements and deadlines of the program to which they are 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 which will occur sometime during the spring.

Participating programs in SBE include:

Cognitive Neuroscience
http://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

Participating programs in CISE include:

Cyber-Human Systems
http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504958

National Robotics Initiative (NRI)
http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503641

Robust Intelligence
http://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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Assistant Director   Assistant Director
Directorate for Social, Behavioral and Economic   Directorate for Computer & Information Science
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