



NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230

NSF 16-115

Dear Colleague Letter: Data Resources for the BRAIN Initiative

August 5, 2016

Dear Colleague:

NSF supports fundamental research across the broad spectrum of disciplines associated with Understanding the Brain (see <https://www.nsf.gov/brain>), and is a partner in the federal "Brain Research through Advancing Innovative Neurotechnologies" (BRAIN) Initiative. This broad interagency effort is supporting projects that are using different combinations of technologies and model organisms, generating multi-modal data sets aimed at understanding specific circuit contributions to brain function. These data sets include systematic collections of molecular profiles, anatomic information, functional properties of brain cells, as well as neuronal activity data, connectivity maps and high-resolution data on complex behaviors. Current Brain Initiative projects, thematic areas and programs supported by NIH or NSF can be found at the following websites:

NIH Link: <http://www.braininitiative.nih.gov/funding/fundedAwards.htm>

NSF Link: https://www.nsf.gov/news/special_reports/brain/initiative/

The large and complex datasets generated by these projects are representative of trends in the field, and NSF recognizes the need for novel approaches to manage, integrate and analyze these diverse data types. With this Dear Colleague Letter, NSF calls attention to core programs at NSF that support informatics, software and cyberinfrastructure projects in a broad range of disciplines, including neuroscience. More specifically, NSF is encouraging researchers with expertise in data science to partner with BRAIN Initiative projects to enhance the dissemination and utilization of these data sets. This DCL is part of NSF's phased approach to develop a national research infrastructure for neuroscience as outlined in the Dear Colleague Letter NSF 16-047.

The standing core programs or solicitations at NSF that are most relevant to this effort include:

Advances in Biological Informatics (ABI):

https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5444

Software Infrastructure for Sustained Innovation (SI2): http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503489&org=NSF

Data Infrastructure Building Blocks (DIBBs):

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504776&org=ACI&from=home

In order to take advantage of this Dear Colleague Letter, please contact a relevant Program Officer listed on the Program websites above.

Sincerely,

James L. Olds
Assistant Director for Biological Sciences