University of Michigan and Shanghai Jiao Tong University

Call for Proposals

Topic: Data Science

CALL FOR PROPOSALS: *Submission deadline: 5:00 PM (EST), May 8, 2017*

Funding from the University of Michigan (U-M) and Shanghai Jiao Tong University (SJTU) will be available for collaborative research projects between co-investigators from SJTU and from U-M. The objective of the Seed Phase is to identify topics for joint research projects in the fields of data science, providing a basis for joint proposals seeking external support. Successful Seed Project proposals, therefore, must have a strong potential for significant follow-on external funding. This announcement represents the third call for proposals during the second phase of our research collaboration.

Collaborative Research Program:

Since 2009, the University of Michigan and Shanghai Jiao Tong University have made significant commitments to address challenges and opportunities in energy, biomedicine, nanotechnology and data science. On **March 28 & 29, 2017** a symposium was held at SJTU in Shanghai, China to help identify potential topics and collaborations related to this year's theme of Data Science. This call for proposals follows this activity and invites faculty from both institutions to work together to pursue collaborative research in this area.

Seed projects will develop innovative methodological approaches for data collection, data analysis, and data interpretation. Topics may focus on, but are not restricted to the following areas:

I. Data science for applied chemistry and physics of the universe (e.g. catalysis, various topics in astrophysics).
II. Data science for finance and economics.

Methodological approaches might include developing or applying concepts from machine learning, computer vision, knowledge discovery, active sensing, optimal experimental design, spatio-temporal signal analysis, advanced data visualization or automated anomaly detection.

The proposal process

Successful collaborative teams will seek resources made available from both the US and Chinese industry and governments to form lasting international collaborations of researchers specializing in specific applications of data science in solving challenging societal problems in the selected theme for this year.

Budgets:

UM and SJTU intend to award up to five grants with up to US$50,000/year from each University **per grant**. Awards may be made for one year or two years, with a quality gate review at half point of the project duration for projects lasting longer than one year. U-M tenure track faculty are NOT permitted salary support on this program.

Preconditions:

Proposals must include researchers from both U-M and SJTU. A website is available for faculty from each university to post project interests and find potential collaborators. See links to U-M and SJTU researchers above.

Each faculty interested in submitting for this Call should complete a faculty profile form if you have not already done so. Questions regarding this Call should be sent to Ann Leffler at aleffler@umich.edu and LI Yinyue at liyinyue@sjtu.edu.cn).

The proposers should clearly indicate how the successful conduct of the Seed Project would enhance the prospects for securing third party funding or initiating commercialization prior to completion of the project. Proposers who can identify specific external research programs with current or pending Requests for Proposals (RFPs) will be favored.

Cost sharing derived from sources either inside or outside U-M and SJTU demonstrates the interest of third parties in the field and is recommended, but not required. The source, amount and nature of such cost sharing shall be identified in writing at the onset in the Proposal of each collaborative project.

Project durations cannot exceed 24 months. Milestones and/or deliverables after half of the project duration are required for projects lasting longer than one year (quality gate review).

A successful proposal must be consistent with regulations governing the participating institutions. Principal Investigators (PIs) can only submit one proposal. PIs currently participating in an ongoing SJTU-U-M Collaborative program are ineligible for receiving funding under this announcement. PIs previously funded by this program may apply again if a different research topic is pursued.

Guidelines for proposal preparation, evaluation and progress