

**To:** Social, Behavioral and Population Science Faculty at Duke

**From:** Angela M. O’Rand, Director, Duke University Population Research Institute (DuPRI)  
Tom Nechyba, Director, Social Science Research Institute (SSRI)

**Subject:** SSRI Challenge, Round 3:  
Social, Behavioral, and Population Studies and Health Research

**Background:** This call is the third round of the **Social Science Challenge** (<https://medicaldata.ssri.duke.edu/?q=social-science-challenge>) that began in January 2015 with a general call for articulating themes to frame a specific call for proposals aimed at facilitating collaborations across the social sciences and related disciplines. The theme of connecting social science (broadly defined) with medical research emerged from faculty in the Duke Population Research Institute (DuPRI) and gave rise to Round 2, a pilot project involving researchers from both sides of campus around electronic medical records (EMRs). The additional infrastructure that has emerged from this pilot project has now led to Round 3 – a wider **call for seed funding proposals**.

- This seed program, supported by the Vice Provost for Research, the Information Initiative at Duke (iiD) and the Social Science Research Institute (SSRI), is intended to enhance the opportunities of social, behavioral and population scientists to collaborate with medical school and clinical researchers on projects involving medical data. The program parallels the call for Collaborative Quantitative Approaches to Problems in the Basic and Clinical Sciences (<http://research.duke.edu/funding/OVPR-RFPs>) by the Vice Provost for Research and seeks to culminate in the development of successful proposals for outside funding.

Although the call is open generally to social science collaborations around medical data, DuPRI researchers have identified two particular areas of strategic interest:

- *Developing and testing new approaches to assemble, organize and enhance health records data through integration with other data collection methods used by social, behavioral and population scientists:* Examples of these methods include personal interviews, data collected on smart phones and tablets, data from scraping the web, recording how people move about space and interact with others, and administrative records about, for example, health and finances. Such approaches have the potential to substantially enrich the data resources and open new, exciting vistas for high impact research.
- *Developing new perspectives to enrich analytical approaches that exploit these opportunities:* Life course models exploiting the temporal features of longitudinal data, stress process models identifying patterns of risk and resilience over time, and human development models that specify the roles of cognitive and non-cognitive factors in health over the life span are only a few of several well developed conceptual approaches. Similarly, empirical methods used in the population sciences that are well-suited to contribute to health research include methods for dealing with incomplete records, models estimated with self-selected samples, model and item validation, causal analytic designs and GWAS data analysis and gene-environment interactions, among others.

Please contact Angela O’Rand ([aorand@soc.duke.edu](mailto:aorand@soc.duke.edu)) if you have an idea for a project that does not fall in the two general areas above.

## Program details

The goal is to have selected projects that lead to collaborative proposals to external sponsors within twelve months of the end of the seed project. Collaborators should ordinarily include researchers from both the campus and the School of Medicine. Please contact Angela O’Rand ([aorand@soc.duke.edu](mailto:aorand@soc.duke.edu)) if you have any questions about or requests for referrals to appropriate medical center staff and faculty. Please contact Joe Lucas ([joe@stat.duke.edu](mailto:joe@stat.duke.edu)) with questions about available medical data, particularly electronic medical records.

## Application instructions

Complete applications will include the following:

- **Project Summary (one page):** Required sections: Collaborator information (names and contact information), Project rationale, Objectives/Aims, Expected outcomes, Budget amount requested, Name of potential external sponsor/target agency
- **Project Description (limited to three pages):** Required sections: Background, Research plan and methods, Timeline and responsibilities of collaborators, Scientific impact, Contribution to external sponsor/target agency mission and objectives.
- **PI Biosketches (limited to five pages each)**
- **Budget Justification (one page):** Provide a categorical description of the proposed project costs.
- All documents should have one-inch margins with font size of at least 11 points
- Applications should be submitted as a single PDF file

**Submit completed applications to Alexandra Cooper ([alexandra.cooper@duke.edu](mailto:alexandra.cooper@duke.edu)) by 5 pm on 15 February 2016**

## Award information and dates

Successful proposals will be awarded up to \$50,000 to undertake the proposed work over the twelve-month project period. Three to four proposals are expected to receive funding.

Important Program dates:

Proposal due date: 15 February 2016  
Notice of award: 15 March 2016  
Project start date: 1 May 2016  
Project end date: 31 May 2017

## Proposal reviews

A panel of SSRI and SoM faculty will review all applications and assign a score out of 100 points based on the quality and scientific impact of the application (75 points) and its chances for external funding, if successful (25 points). The review panel will make the recommendations for funding to the program sponsors (listed at the top), who will make the final decision based on those recommendations.