



## 2017 HEALTH PRACTICE RESEARCH PILOT AWARDS

Irving Institute for Clinical and Translational Research  
and  
The Department of Biomedical Informatics (DBMI)

**Health Practice Research** is a form of translational research that applies operational interventions such as information technology, operations research, and simulation to improve the practice of health care, resulting in improved outcomes and efficiency. Columbia's Informatics Intervention Research Collaboration (I2RC) focuses on the use of innovative information interventions and will be a partner in this award.

## Irving Institute/DBMI 2017 Pilot Research Grant Application

**OVERVIEW.** The Irving Institute for Clinical and Translational Research (Columbia's CTSA), in partnership with the Department of Biomedical Informatics (DBMI), announces an individual, one-year health practice research pilot grant opportunity of \$25,000. The Irving Institute provides \$25,000 for salary and other research support of the project. For its part, DBMI makes an 'in-kind' contribution in the form of DBMI faculty expertise and guidance to support the Informatics and IT components of the pilot project. This award is intended primarily for *junior investigators*, and the focus of the application should be on research leading to independent, external funding. This award is not meant to supplement ongoing funded research.

**Award Duration** One (1) Year

**Monetary Award Amount** \$25,000

**Number of Awards** Up to two (2)

**Start Date** July 1, 2017

**QUALIFICATIONS.** At award time, qualified applicants must have an appointment as an Instructor, Assistant Professor (clinical or tenure track), or Associate Research Scientist at Columbia University Medical Center (CUMC). U.S. citizenship or permanent residency status is not required.

Research proposal should involve the following:

- Contact with human subjects, which may include clinicians, patients, groups of patients, or clinical outcomes;
- Innovative use of information management or information technology; and
- A rigorous evaluation of the results of the intervention.

### **About Columbia's Informatics Intervention Research Collaboration (I2RC)**

- I2RC is a collaborative structure sponsored by DBMI to carry out applied informatics research activities. Its mission is to "Empower clinicians. Engage patients. Improve care. Prove it."
- Participants of I2RC are DBMI faculty, fellows and students, as well as faculty, fellows and students from other CUMC departments, administrators from NewYork-Presbyterian, and collaborators from Weill-Cornell Medical College.
- I2RC's objectives are:
  - Leverage existing systems in practice by clinicians to improve care and, to the greatest extent possible, use existing informatics tools for care improvement.
  - For implementation of interventions and for evaluations, use rigorous study methods—e.g., RCT, well-designed quasi-experimental approaches—which would be suitable for publication in a major clinical journal.
- Activities in I2RC seek to (i) develop operational solutions to real problems in health care, (ii) study those solutions rigorously, and (iii) translate the knowledge into practice.
- I2RC has interactions with the Irving Institute, the NYPH Information Services Department, the NYPH Quality Department, ColumbiaDoctors Quality Group, NYP's bi-campus IT user groups, CUMC's Physician Advisory Group, NY-Presbyterian Hospital's Information Systems Clinical Advisory Group (IS-CAG), the Cornell Physicians Organization.

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**Specific Goals of this Pilot Award in Health Practice Research.** The main goals of this program are to offer clinical researchers the opportunity to do an informatics-based project in an operational clinical setting. The researcher should try to bring information technology-based tools to bear on a practical clinical problem. The goal of the project should be to (i) design, develop and implement an information technology-based intervention targeted at a practical clinical problem and (ii) evaluate to what extent the tool actually had an impact on care. Examples of interventions that might be implemented under this program are:

- An alert or reminder to increase the likelihood of compliance with best practices
- A workflow-based tool to increase the efficiency of care, quality of life or outcomes for providers, teams of practitioners, patients or society in general
- Tools to facilitate clinical research
- Population health management tools to measure, monitor and intervene in chronic disease
- Tools that support patient-centered care
- An analysis of current practices to inform future directions



### APPLICATION DIRECTIONS:

1. All applications must be submitted through the web-based system, <http://irvinginstitute.fluidreview.com/>, **by 5:00pm, FRIDAY, April 21, 2017.**
2. Applicants using FluidReview for the first time should create a new user account using their Columbia University email address. Returning FluidReview users should log into the system using their username and password. Each applicant will need to begin a new Health Practice Research/DBMI pilot application submission using the following format for the submission title, "LAST NAME, First Name - 2017 Health Practice Research/DBMI Pilot Application".
3. **Fill out all parts of the web-based Application Form** (contact information for all team members, the project title, abstract, current funding sources, submitted applications, human/animal research approvals, 12-month budget, and budget justification).

Budget: This one-time award is in the sum of \$25,000. Your detailed budget should directly support your protocol. Each item must be justified in the budget justification section of the application. Expenses may include salary, equipment, computer costs, etc., but the justification must be clearly stated. Also provide the percent effort for the DBMI collaborator(s), which represents the DBMI in-kind contribution; a detailed budget for in-kind contribution is not required, but the contributed percent effort will require approval of the collaborator(s) and of the DBMI business office (Luz-Raquel Perez [rp302@cumc.columbia.edu](mailto:rp302@cumc.columbia.edu)).

4. **Upload the body of the application (i.e., Goals, Rationale, Methods, and Future Plans) as a single PDF** that does not exceed five (5) single-spaced, typed pages (11 or 12 point font required; Arial typeface preferred), excluding references. It should include:
  - A) Goals: What are you planning to do?
  - B) Rationale: Why is this project worth doing? What prior work and analyses will the proposed research build upon? How is the proposed work interdisciplinary?

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C) Methods: Describe how the project will be conducted.

- We strongly encourage applicants to seek consultation with relevant DBMI faculty prior to submission of this proposal to review feasibility, to leverage existing informatics resources, and to develop the in-kind DBMI budget. Input from DBMI faculty should be sought at least 4 weeks before the proposal deadline.
- The project must include a rigorous evaluation. In general, at least 20% of the time and effort on the project should be devoted to evaluation activities.
  - I. Where relevant, a description of the planned statistical analysis, e.g., number of subjects, power, controls, analysis of data, etc., should be included.

D) Subsequent Planned Research Activity: The applicant should describe planned next steps for research activities after receiving pilot funding.

- What specific grant application(s) do you plan to submit and when? Provide a detailed plan and timeline for grant applications to the NIH, private foundations, or other external funding sources. This response will be *heavily weighted*.

5. **Upload NIH-style biosketches** for each investigator including collaborators and/or consultants, including eRA Commons usernames: Maximum of 5 pages per investigator (including Other Support).
6. **Upload the Signatures of Approval page**, which must contain signatures from the Principal Investigator and the Department Chair in support of proposal. The Signatures of Approval template page is available for download in the **Resources** section, located in the upper-right hand section of the web-based application system
7. **Upload the Letter of Recommendation** from the home Department Chair agreeing to the use of the necessary space, personnel, and facilities needed in support of this proposal.
8. **Submit the application** by selecting the “Submit Your Application” button in the web-based application system, <http://irvinginstitute.fluidreview.com/>.

NOTE: IRB approval is not required at the time of application. However, if a candidate is awarded a grant, an IRB approval number must be forwarded prior to receipt of funding. Therefore, candidates are encouraged to apply and obtain IRB approval in advance in order to avoid any delays if funding is awarded.

Reviewers will use a scoring system based on a 5-point scale and judge each application on the basis of scientific merit, multidisciplinary, potential impact of the pilot findings, alignment with goals and directions of DBMI and potential of the junior investigator for independent research career.

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**For any questions about the application content, please contact:**

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**For any questions about the application process, please contact:**

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**FAILURE TO FOLLOW THESE DIRECTIONS WILL RESULT IN THE PROPOSAL BEING RETURNED TO YOU, WITHOUT REVIEW.**

**DO NOT INCLUDE APPENDICES.**

**PILOT AWARD WINNERS WILL BE ANNOUNCED IN JUNE 2017.**

**FUNDING WILL BE AVAILABLE IN JULY 2017.**

**REMINDERS**

**PLEASE REVIEW APPLICATION WITH DEPARTMENT CHAIR AND OBTAIN LETTER OF APPROVAL.**

To learn more about the Irving Institute, please visit: <http://irvinginstitute.columbia.edu>

To learn more about the Department of Biomedical Informatics, visit: <http://dbmi.columbia.edu/>

To access the Irving Institute's web based application system, please visit:  
<http://irvinginstitute.fluidreview.com/>