CALL FOR PROPOSALS
Collaboratory Fellows Fund
Preparing Tomorrow’s Leaders for a Data-Rich World

Proposals Due: April 20, 2018
Award Notification: June 1, 2018

The increasing availability of data in society is impacting our world in profound ways. As our ability to generate, store, and analyze data grows, so do the opportunities for using those data to improve our economy, our security, the environment, and human health. Scores of professional and research areas are increasingly becoming data-driven enterprises. To prepare for a data-rich world, students and future leaders need to integrate data science into their traditional areas of study, and data-focused students need to be provided with the skills and tools required to address the business, ethical, cultural, and policy issues related to their work.

Jointly founded by Columbia University’s Data Science Institute and Columbia Entrepreneurship, Innovation, and Design, the Collaboratory@Columbia is a university-wide program dedicated to supporting collaborative curricula innovations designed to ensure that all Columbia University students receive the education and training that they need to succeed in today’s data-rich world. More information can be found at: entrepreneurship.columbia.edu/collaboratory/.

Call for Proposals for the Collaboratory Fellows Program:
The goal of the Collaboratory Fellows Fund is to support innovative curriculum development that meets the data and computational literacy needs of a given discipline, set of disciplines and/or cohort of students at Columbia University. Likewise, the Fund also supports curriculum in which business, ethical, cultural, and policy tools and skills are embedded into data and computational curricula.

The program will award grants to pairs of instructors, one with disciplinary/area expertise and one with data-science/computational expertise, to collaborate on the development and teaching of new material that embeds data or computational science into a more traditional domain or the reverse, embeds business, policy, cultural and ethical topics into the context of a data or computer science curriculum. The new content should use pedagogy, instruction, and delivery methods that are fitting for the specific student cohort. Example curricula offerings might include classes, workshops, studios, out-of-semester offerings and “boot-camps.” Student cohorts can be undergraduate students, PhD students or graduate students undergoing professional training. The goal is to create diverse course offerings that are accessible to student at all levels, including those who have no previous data science exposure.

In addition to the subject areas suggested above, this year we are encouraging proposals that:

- Create curricula aimed at undergraduates
- Integrates Genomics and data science
- Tailors entrepreneurship and/or business literacy curricula for STEM students

Proposals are welcome from all Schools at Columbia University. Because the goal of the Fellows Fund is to support data literacy and the contextual used of data as an important element of a Columbia
University education, it is intended that all developed material be integrated into Columbia’s instructional offerings.

**Eligibility:**

Applications must be submitted by a pair of instructors (or more if justification is provided), each of whom must have the authority to assume scholarly, administrative, and financial responsibility for their individual award. Those eligible to apply are: full-time officers of instruction, professors of practice, lecturers within discipline and/or adjunct professors of Columbia University. At least one member of the instructional team must be appointed full-time. All full-time members on the team must hold primary appointments at Columbia University. Information about prior successful selectees for the Fellows Fund can be found [here].

**Funding:**

All awards will be made on a competitive basis to a pair of instructors. Each pair of instructors will receive an award of up to $150,000 to support the co-development and teaching of the new material. Example uses of award funding might be to buy-out of teaching in order to free up time for the co-development activities, summer salary support, support for student assistants and/or on-line curricula components, the cost of materials, supplies and other items, etc.

As part of the application process, applicants must provide written support from their dean and department chair indicating a commitment to offer the course at least once per academic year for at least three years. In some cases, this may require a financial commitment from schools beyond the initial Collaboratory grant. Applicants must also provide a budget and budget justification as part of their application to the program. Proposals from more than two-instructors are welcome if a justification is provided, although the maximum funding per offering will remain at $150,000.

**Proposal Guidance:**

We will offer two info sessions where you can discuss your ideas and ask questions, see below.

Your proposal should clearly identify project goals and approaches to be piloted, targeted student populations, and the justification for inclusion. Help the grant administrators understand why your project is particularly innovative and how it will add value to Columbia’s existing degree programs.

Assessment of the proposed course is an important part of the proposed evaluation so please include a section on “Assessment” that outlines how the instructors will measure the success of the proposed course. These metrics should be aligned with the proposed learning goals and outcomes. Please indicate how the course will lead to transformative improvements in the student population it will serve.

The goal of the Collaboratory project is to create curriculum offering that will eventually become part of Columbia’s education. Future plans for integrating the proposed course(s) into existing programs should be part of the proposal or mentioned in the supporting letters.
Information Sessions:
We will host two information sessions on Thursday, March 1\textsuperscript{st} on the CUMC campus, please RSVP [HERE] and Tuesday, March 8\textsuperscript{th} near the Morningside campus, please RSVP [HERE].

Seeking a Collaborator?
If you are seeking a collaborator, please reach out to Linda Pifer lp2777@columbia.edu, to schedule a 10-minute call.

To Apply:
Application and additional instructions can be downloaded [HERE]. Submit the materials requested in the application instructions via email as a pdf to collaboratory@columbia.edu by the deadline. Proposals will be judged by a multi-disciplinary panel drawn from across the university.

Deadline:
April 20\textsuperscript{th}, 2018, 4:00 PM (Neither incomplete nor late applications will be accepted)
Anticipated Award notifications:
June 1st, 2018

Questions?
Please contact collaboratory@columbia.edu | Webpage: http://collaboratory.columbia.edu/

Tian Zheng
Professor, Department of Statistics
Associate Director, Columbia University Data Science Institute

Patricia J. Culligan
Professor, School of Engineering & Applied Science
Co-Founder of the Collaboratory
Collaboratory Fellows Fund

Application Cover Page

<table>
<thead>
<tr>
<th>Project</th>
<th>Course Title:</th>
</tr>
</thead>
</table>

**Contact Information (Principal Investigators/Instructors)**

<table>
<thead>
<tr>
<th>Full Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title:</td>
</tr>
<tr>
<td>School(s):</td>
</tr>
<tr>
<td>Dept./Division/Center/Instit</td>
</tr>
<tr>
<td>Email:</td>
</tr>
<tr>
<td>Phone:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Full Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title:</td>
</tr>
<tr>
<td>School(s):</td>
</tr>
<tr>
<td>Dept./Division/Center/Instit</td>
</tr>
<tr>
<td>Email:</td>
</tr>
<tr>
<td>Phone:</td>
</tr>
</tbody>
</table>

(If additional contacts are needed, please check here,_______, and provide supplemental listing before CV’s.)

**Executive Summary | 300 words or less**

Funding Amount Requested: | Maximum Request: $150,000.00
Proposal Check-List

- Application Cover Page
- Executive Summary
- Budget, Narrative & Justification
- Proposal
- Letters of Support
  - Deans (required)
  - Department Chari(s) (as appropriate)
- Bio sketch for each instructor

*NOTE: You're welcome to use your own template in excel, however, please ensure to include relevant budget categories.

Please email the required documents in this order, in a single file, to collaboratory@columbia.edu by the stated deadline.

Budget Request

<table>
<thead>
<tr>
<th>Project</th>
<th>Course Title:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>BUDGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please provide a summary budget of the proposed project. Add lines or categories as necessary.</td>
</tr>
<tr>
<td>Personnel, including salary and fringe</td>
</tr>
<tr>
<td>Supplies &amp; Materials</td>
</tr>
<tr>
<td>Meetings &amp; Travel (airfare, hotel, etc.)</td>
</tr>
<tr>
<td>Other costs (please specify)</td>
</tr>
<tr>
<td>$</td>
</tr>
</tbody>
</table>

*NOTE: You're welcome to use your own template in excel, however, please ensure to include relevant budget categories.

Budget Narrative & Justification:

Please provide a short description and justification of how funds received from the Collaboratory Fellows Program will be used. All funds must be expended within a 3-year period. Proposed instructional offers must be introduced into the Columbia university curriculum within 2 years of funding.