Math+X Investigators

Request for Nominations

The Simons Foundation’s Mathematics and Physical Sciences division invites nominations for the Math+X Investigators program.

Rationale: This program is designed to encourage novel collaborations between mathematics and other fields in science or engineering by providing funds to professors at universities in the United States, Canada, the United Kingdom, or Ireland to establish programs at the interface between mathematics and other fields of science or engineering.

Level and Duration of Funding: A Math+X Investigator is appointed for a period of five years and will receive support in the amount of $300,000 per year, which includes up to 20 percent in indirect costs to the Investigator’s institution. Renewal for an additional five years is contingent upon the evaluation of the scientific impact of the Investigator. Renewal beyond the ten-year period will not be considered. Appointments will begin July 1, 2018.

A Math+X Investigator position may be interrupted and resumed for reasons that would normally justify a leave from a university, such as illness, the need to care for family members or time off for national service. Periods of sabbatical or research leave do not count as interrupting the Investigator position. Support may be withdrawn at any time at the discretion of the foundation, but it is expected that termination of the award at times other than five or ten years would occur only rarely.

Allowable Expenses: The funding provided to a Math+X Investigator may be used at the Investigator’s discretion to support activities that develop connections between mathematics and the X partner department discipline in the following categories:

- Up to one month of summer salary and related benefits for the Investigator only.
- Salary support and related benefits, including tuition support for postdoctoral fellows and research associates, graduate students or undergraduate research assistants in the mathematics department and in the X partner departments.
- Domestic or international travel for the Investigator and postdoctoral fellows and research associates, graduate students or undergraduate research assistants supported by the grant.
- Short- or long-term visitors and collaborators, including travel, meals and lodging expenses.
- Research equipment, supplies and other expenses directly benefiting the
research, including computers, computer support, publication expenses and professional membership dues.

- Special lectures or lecture series and workshops that will attract participation from both departments and from corresponding departments from other universities.

Award funds may not be used for the salary support of current faculty, except for the Investigator.

**Spending Rules:** With the exception of summer salary and fringe benefits for the Investigator, unspent funds are automatically carried over from year to year during the period of appointment.

In addition, Investigators may apply for a no-cost extension for funds unexpended at the conclusion of the appointment. Unspent funds at the end of the award must be returned to the foundation.

**Reporting:** A financial report and progress report summarizing the collaborative activities supported by the award will be required from the institution and Investigator annually, within 60 days after the end of each appointment year.

The foundation will conduct a review of the Math+X Investigator award prior to the end of year five, to determine if the Math+X Investigator will be appointed for an additional five years. The Math+X Investigator will be evaluated using the year-four progress report and cumulative progress reports, as well as the promise of continued activity during the renewal term.

**Eligibility:**

**Mathematics and X Partner Departments:** The X partner should be a department or institute of science or engineering at the Investigator’s university that will engage in significant collaboration with the mathematics department in an area where such collaboration is not the norm. Both departments must have doctoral programs. The foundation will accept proposals for Applied Math+X but not Statistics+X.

X partners in finance and business will not be considered. Proposals involving connections to areas where there are already well-established links with mathematics, such as economics, string theory or computational complexity, will also not be considered unless the proposal involves particularly unique collaborations.

**Math+X Investigators:** To be eligible to be nominated for a Math+X Investigator award, a scientist must be a current tenured faculty member with a primary appointment in the mathematics department at an institution in the United States, Canada, the United Kingdom, or Ireland, on a campus within these countries, and currently employed at the institution submitting the nomination. A person with a
primary appointment in the statistics department is not eligible. The Investigator will be expected to teach both in the mathematics and the X partner departments and be appointed in both departments by the award's start date (courtesy appointments will be allowed). There are no citizenship requirements.

The foundation reserves the right to determine eligibility, but, typically, a ‘primary appointment’ is defined as one where the Investigator is a full-time employee of an academic institution with a teaching load that is comparable to that of other faculty members in the same department. Investigators may transfer their awards to new educational institutions within the United States, Canada, the United Kingdom, or Ireland, subject to approval from the foundation and the old and new institutions. The award will be interrupted or terminated, at the foundation's discretion, if an Investigator (i) takes up a primary long-term position at a research institute, national laboratory or other institution outside the United States, Canada, the United Kingdom, or Ireland or another campus of their current institution, which falls outside the United States, Canada, the United Kingdom, or Ireland; (ii) at a for-profit organization; or (iii) accepts a major administrative responsibility that significantly reduces the time available for research.

Investigators are not eligible to hold a Simons Fellowship or another Simons Investigator award for the duration of the Math+X Investigator award.

Investigators are expected to attend annual meetings, held at the Simons Foundation each fall, to discuss their activities. Costs associated with attending these meetings will be covered by the foundation.

**Number of Awards:** The foundation expects to award up to two Math+X Investigator awards per year.

**Nomination Procedure:** The foundation asks that universities submit not more than one nomination to the Math+X Investigator program. Nominations must be submitted via proposalCENTRAL (pC) ([https://proposalcentral.altum.com/default.asp](https://proposalcentral.altum.com/default.asp)). The deadline to submit nomination applications is **October 31, 2017, at 11:59:59 p.m. EST**.

Nomination applications must be submitted by an institutional representative via his/her pC account in coordination with the appropriate institutional officials and policies. Please refer to the attached “Math+X Investigators Nomination Instructions 2018” for further information on and requirements for submitting the nominee’s nomination material.
Required Nomination Materials Include:

- Three nomination letters (two-page limit for each) from the nominee’s dean, the chair of the mathematics department and the chair of the X partner department, explaining the distinctive scientific contributions of the nominee, focusing on scientific accomplishments of the past five years and including a discussion of a few important papers. Each letter must be signed by the nominator.

- A statement from the nominee (five-page limit, plus one additional page for references and figures) that addresses the following:
  o the nominee’s vision of the novel collaborations and possibilities the award will produce — the involvement of both departments should be clearly described; and
  o the nominee’s vision of how the research funding will be used to establish new links between the two departments and, more generally, between the disciplines involved.

- The nominee’s curriculum vitae, including Ph.D. year, institution, advisor, postdoctoral institutions and advisors, positions held subsequent to award of doctorate and the nominee’s up-to-date publication list.

- A list of past and current postdoctoral fellows and Ph.D. students supervised by the nominee within the last five years and a list of those who may be supported by the award.

- The nominee’s current and pending external and internal research support (award number, award title, role, start and end dates, sponsor, total award amount).

- 501(c)(3) equivalency determination letter from the IRS for international institutions, if available. Please see the “Math+X Investigators Nomination Instructions 2018” for further information on this requirement.

Please note: nominations submitted via email will not be considered.

The foundation expects to notify nominees of the decision by May 31, 2018.

Important Dates:

<table>
<thead>
<tr>
<th>Nomination Deadline</th>
<th>Notification</th>
<th>Award Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 31, 2017</td>
<td>May 31, 2018</td>
<td>July 1, 2018</td>
</tr>
</tbody>
</table>
Contact Information:
mps@simonsfoundation.org

Elizabeth Roy
Senior Program Manager
Mathematics and the Physical Sciences
212-524-6966
eroy@simonsfoundation.org