Simons Investigators in the Mathematical Modeling of Living Systems

Request for Nominations

The Simons Foundation invites nominations for Simons Investigators in the Mathematical Modeling of Living Systems (MMLS), a joint program of the Mathematics and Physical Sciences and Life Sciences divisions of the Simons Foundation. Investigators in MMLS are outstanding scientists, often with mathematics or theoretical physics backgrounds, now engaged in research based on mathematical modeling in the life sciences.

Rationale and scope: New approaches in mathematically based modeling are making increasingly important contributions to the life sciences. The MMLS program aims to support such approaches and foster a scientific culture of theory-experiment collaboration similar to that prevailing in the physical sciences. To encourage young researchers to pursue this endeavor, the MMLS program will provide a long-term, stable base of support, enabling a focus on model-based approaches to important issues in the life sciences.

A broad spectrum of research areas within the life sciences will be considered, ranging from cellular-level issues of organization, regulation, signaling, and morphogenic dynamics to the properties of organisms and ecology, as well as neuroscience and evolution; however, preference will be given to areas in which modeling approaches are less established and, for this reason, bioinformatics- and genomics-related proposals fall outside the scope of the program. In all cases, preference will be given to work that relates closely to experiment, developing mathematical models that can explain data, suggest new classes of experiments, and introduce important new concepts.

Basis for Awards: The intent of the program is to help launch the research careers of outstanding junior scientists. Nominees to the program will normally be in the first few years of their first faculty appointment. Nominations will be evaluated on the basis of nominees’ potential for scientific accomplishment.

Level and Duration of Funding: A Simons Investigator in MMLS is appointed for a period of five years. Appointments will begin August 1, 2016.

An Investigator will receive research support in an amount initially set at $100,000 per year. An additional $10,000 per year will be provided to the Investigator’s department. The award will be administered through the Investigator’s institution, which will receive an additional 20 percent per year in indirect costs.
An 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 years would occur only rarely.

**Allowable Expenses:** The funding provided to a Simons Investigator may be used at the Investigator’s discretion to support research expenses in the following categories:

- Up to one month of summer salary and related benefits.
- Salary support and related benefits, including tuition support, for postdoctoral, graduate, or undergraduate research assistants.
- Domestic or international travel for the Investigator.
- Short- or long-term visitors, including travel, meals, and lodging expenses
- Research equipment, supplies, and other expenses directly benefiting the research.

Expenditures in other expense categories may be possible but must be approved in advance by the foundation. Investigator funds may not be used for sabbatical salary support or teaching relief of any kind.

Funding provided for the Investigator’s department should be used at the discretion of the department chair to provide support for seminars, visitors, refreshments, and related expenditures that benefit the research activities of the department. The department is expected to provide appropriate administrative support to the Investigator.

**Unspent Funds:** The foundation’s intent is that the award be administered to allow the maximum flexibility in pursuit of scientific goals. To this end, unspent funds are automatically carried over from year to year during the period of appointment, allowing for a particularly large expenditure in one year. In exceptional circumstances, it may be appropriate to pre-spend a portion of the award.

Requests for accelerated disbursal will be considered by the foundation, subject to budget availability and joint approval by the directors of the Mathematics and Physical Sciences and Life Sciences divisions. Investigators may apply for a no-cost extension for funds unexpended at the conclusion of the appointment.

**Reporting:** Tentative five-year spending plans will be due from the Investigator by **December 1, 2016**.

A financial report and a brief activity report, summarizing research results achieved, people supported, talks given, and papers published, will be required from the Investigator annually, due by September 30 of each year.
At the conclusion of the appointment, a final report is required, due within 60 days of the appointment end date. This report should detail the research achieved, people supported, and publications produced, as well as provide a detailed itemization of how the funds were expended. It may reference the annual reports already submitted.

**Eligibility:** To be an Simons Investigator in MMLS, a scientist must be engaged in research related to the program, must not previously have been a Simons Investigator, and must have a primary appointment as a faculty member at an educational institution in the United States, Canada, or United Kingdom with a Ph.D. program. At the time of appointment, an Investigator should be in the early stages of an academic career (within five years of the start of his/her first faculty position) and, typically, be holding an assistant professorship or equivalent position.

The foundation reserves the right to determine eligibility, but, generally, 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, or United Kingdom, 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 takes up a primary long-term position at (i) a research institute, national laboratory, or other institution outside the United States, Canada, or United Kingdom, (iii) a for-profit organization, or (iii) accepts a major administrative responsibility that significantly reduces the time available for research.

Investigators are expected to attend annual meetings at the Simons Foundation (at the foundation’s expense) to discuss their activities.

**Number of Awards:** In 2016, the foundation expects to appoint four Simons Investigators in MMLS.

**Nomination Procedure:** The foundation asks each university to submit a maximum of two nominations to the MMLS Investigator program. Nominees for 2016 will be submitted through an online process via proposalCENTRAL (pC) (https://proposalcentral.altum.com/default.asp). The deadline to submit nomination applications is **October 28, 2015, at midnight 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 “Simons Investigators Nomination Instructions for MMLS 2016”** for further information on and requirements for submitting the nominee’s nomination material.
Required Nomination Materials Include:

- Nomination letter (two-page limit) written and signed by the nominator (someone other than the nominee), explaining the distinctive scientific contributions of the nominee and including discussion of a few important papers.

- Letters of support from two senior scientists (two-page limit for each). The letter writers could be the nominee’s Ph.D. and postdoc advisors or could be other scientists familiar with the nominee’s recent work and research goals. The letters should be signed and indicate the nominee’s most significant research accomplishments and provide insight into the nominee’s research program and likely future scientific trajectory.

- The nominee’s curriculum vitae, including email address, 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 postdoctoral fellows and Ph.D. students supervised by or currently under the supervision of the nominee.

- A research statement prepared by the nominee that outlines the nominee’s research vision and plans. (Two-page limit; references do not need to be included in the page limit but should not exceed an additional page.)

- 501(c)(3) equivalency determination letter from the IRS for international institutions.

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

The foundation expects to notify nominees of the decision by May 31, 2016.

Important Dates:

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<tr>
<th>Nomination Deadline</th>
<th>Notification</th>
<th>Award Start Date</th>
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<tr>
<td>October 28, 2015</td>
<td>May 15, 2016</td>
<td>August 1, 2016</td>
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Contact Information:
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Simons Investigators in the Mathematical Modeling of Living Systems

Instructions For Nomination Submission

**Deadline:** October 28, 2015, at midnight EST

**Important Note:**
Nomination applications should be started and submitted on proposalCENTRAL under the account of the institutional representative submitting the nomination. This representative is encouraged to submit in advance of the deadline to ensure he/she has time to make any corrections that might be necessary for successful submission.

Additionally, institutional representatives must work with institutional officials to register the institution with proposalCENTRAL or ensure the institution’s existing proposalCENTRAL account is up-to-date. New institutions are strongly encouraged to start the registration process at least four weeks prior to the nomination deadline.

Please note that all deadlines are in Eastern Standard Time. If the deadline has expired, the institutional representative submitting the nomination will not be able to see the SUBMIT button and will, therefore, not be able to submit the nomination proposal.

The institutional representative can be, among others, the nominator (if at the same institution as the nominee), the nominee’s department chair, or an official in the institution’s sponsored projects office (or equivalent). **A nominee cannot submit his/her own nomination.**

**For NEW proposalCENTRAL users:**
**Step 1:** Register as a proposalCENTRAL user:
- Go to [https://proposalcentral.altum.com/default.asp](https://proposalcentral.altum.com/default.asp).
- Select CREATE ONE NOW (Please see the proposalCENTRAL instructions for “Registering and Completing Your Professional Profile” at: [https://proposalcentral.altum.com/RegUser.pdf](https://proposalcentral.altum.com/RegUser.pdf)).
- Once you have completed the required information and clicked to agree to the Terms of Service and the Acceptable Use Policy, click on SAVE. An email will be sent to your email address containing a confirmation number. Note: This email will also contain both your username and password.
- Log in ([https://proposalcentral.altum.com/default.asp](https://proposalcentral.altum.com/default.asp)) using APPLICATION LOGIN, enter your confirmation number in the box provided on the next screen, and click on SUBMIT CONFIRMATION NUMBER.
- You will then be directed to your PROFESSIONAL PROFILE, where you will need to select a primary institution.
- If your institution is already registered on proposalCENTRAL, you will see it listed in the search results.
If you do not see your institution in the list, please ask your grants and contracts office (or equivalent) to create a profile for your institution on the system. (Please see proposalCENTRAL instructions on “Registering Your Institution” at: https://proposalcentral.altum.com/RegInst.pdf).

It is not a requirement for you to complete the other sections of your PROFESSIONAL PROFILE at this time. It is recommended that you do enter your degrees and personal data for applications (sections 2 and 4). Please be sure to save after completing each section.

Within the application, a red asterisk will indicate the required PROFESSIONAL PROFILE and INSTITUTIONAL PROFILE fields (see “Applicant” and “Organization/Institution” sections below).

**Step 2:** Navigate to the GRANT OPPORTUNITIES tab.
- Select SIMONS FOUNDATION from the drop-down list and click on the FILTER LIST BY GRANT MAKER.
- You will then see the list of current Simons Foundation grant opportunities.
- Click on APPLY NOW to access the appropriate MATHEMATICS AND PHYSICAL SCIENCES—SIMONS INVESTIGATORS IN THE MATHEMATICAL MODELING OF LIVING SYSTEMS application.
- Enter a title in the TITLE PAGE section and click the SAVE button. This creates your application and stores it under the MANAGE PROPOSALS tab, and allows you to navigate to the other sections of the application. **The APPLICATION TITLE should be the nominee’s name.**
- Please be sure to save after completing each section.
- You can navigate to each section by clicking on the NEXT button or by clicking on the section hyperlink in the left-hand navigation.
- For further information, please see the proposalCENTRAL's instructions on how to “Prepare and Submit a Proposal” at: https://proposalcentral.altum.com/CreateApp.pdf.

**For EXISTING proposalCENTRAL Users:**

**Step 1:** Log in using APPLICATION LOGIN at https://proposalcentral.altum.com/default.asp.

**Step 2:** Navigate to the GRANT OPPORTUNITIES tab.
- Select SIMONS FOUNDATION from the drop-down list and click on the FILTER LIST BY GRANT MAKER.
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- For further information, please see the proposalCENTRAL’s instructions on how to “Prepare and Submit a Proposal” at: https://proposalcentral.altum.com/CreateApp.pdf.
Format of the Application: Proposal attachments should be single-spaced and in typeface no smaller than 10-point font. Margins, in all directions, must be at least ½ inch. Nominations that do not adhere to these requirements may not be considered.

Applications contain the following elements:

1. **Title Page:** The APPLICATION TITLE should be the nominee’s name.

2. **Enable Other Users to Access this Proposal:** This screen allows the user to give other users access to the application, if necessary.

3. **Applicant:** This information is pre-loaded from the applicant’s PROFESSIONAL PROFILE. The applicant’s name should reflect the name of the institutional official submitting the nomination.

4. **Organization/Institution:** This information is pre-loaded from the INSTITUTIONAL PROFILE. Institutional approval is indicated by the signing official and financial/fiscal officer selected within this section. Select the appropriate officials from the drop-down list or enter the email address of a new official and click on **ADD.** Click on the **SAVE** or **CLOSE WINDOW** link — the official will now be listed as the assigned signing official or financial/fiscal officer.

5. **Key Personnel:** Enter information for the nominee and nominator; required fields include role, name, email, position/title, institution, and department.

6. **Budget Summary:** Enter budget period start and end dates and all requested budget items as indicated for a five-year period. The program provides $100,000 per year for research support, plus $10,000 per year to the Simons Investigator’s department, and $22,000 per year in indirect costs to the Investigator’s institution. The budget period will run from August 1 through July 31 of each year.

7. **Proposal Attachments** (Please be sure that the following attachments are uploaded as unlocked PDFs):
   - **Nomination Letter:** Written and signed by the nominator (someone other than the nominee) explaining the distinctive scientific contributions of the nominee, focusing on scientific accomplishments of the past five years and including discussion of a few important papers. (Two-page limit.)
   - **Letter of Support:** Letters from two senior scientists who could be the nominee’s Ph.D. and postdoc advisors or other scientists familiar with the nominee’s recent work and research goals. The letters should be signed and indicate the nominee’s most significant research accomplishments and provide insight into the nominee’s research program and likely future scientific trajectory. The ATTACHMENT DESCRIPTION for each letter should contain the letter writer’s name. (Two-page limit for each.)
• **Nominee Curriculum Vitae:** 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.

• **Postdoc and Student List:** A list of postdoctoral fellows and Ph.D. students supervised by or currently under supervision by the nominee.

• **Research Statement:** Prepared by the nominee that outlines the nominee’s research vision and plans. *(Two-page limit; references do not need to be included in the page limit but should not exceed an additional page.)*

• **501(c)(3) Equivalency Determination Letter from the IRS (if applicable):** For international institutions, upload a copy of the institution’s 501(c)(3) equivalency determination letter. The Simons Foundation requires an equivalency determination letter from the U.S. Internal Revenue Service (IRS) stating exemption under 501(c)(3) and furthermore, either a 509(a)(1), (2), or (3) classification. If an international institution is selected for funding and does not have the aforementioned documentation, the foundation will require that the institution complete an equivalency determination with NGOsource (see [MPS policies](#)).

• **Signed Signature Page:** downloaded in the SIGNATURE PAGE(S) section of the application, signed by the designated signing official and financial officer from the institution’s sponsored research office (or equivalent), and then re-uploaded as a proposal attachment. If the signing official also acts in the capacity of the financial officer, only one institutional signature is required. Please note that not all fields on the generated signature page will be populated. Only the signed first page of the signature page PDF file needs to be uploaded for this requirement.

8. **Validate:** Click the VALIDATE button to check for any missing required information or files. All missing required information will be listed on the screen. Please correct any missing information before submitting your application.

9. **Signature Page(s):** Once all sections are completed, the signed signature page is to be downloaded in this section of the application, signed by the designated signing official and financial officer from the institution’s sponsored research office (or equivalent), and then re-uploaded as a proposal attachment. Only the signed first page of the signature page PDF file needs to be uploaded for this requirement.

10. **Submit:** This section will only appear if the deadline has not passed.

**Simons Foundation Mathematics and Physical Sciences (MPS) Contact Information:**
mps@simonsfoundation.org, 212-524-6966

**proposalCENTRAL Contact:**
pcsupport@altum.com, 800-875-2562