The Simons Foundation invites nominations for Simons Investigators in the Mathematical Modeling of Living Systems (MMLS). These Investigators are outstanding scientists, often with mathematics or theoretical physics backgrounds, who are now engaged in mathematical-model-based research in the life sciences and to whom the Simons Foundation is dedicated to providing long-term support for their work.

**Rationale and scope:** Mathematical model based approaches are making increasingly important contributions to the life sciences. MMLS aims to support such approaches and to foster a scientific culture of theory-experiment collaboration similar to that prevailing in the physical sciences. To encourage young researchers to pursue this endeavor, MMLS 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 dynamics through morphogenesis to the properties of large organisms, as well as neuroscience and evolution; however, preference will be given to areas in which modeling approaches are less well established, and for that reason bioinformatics and genomics will fall outside the scope of the program. In all cases preference will be given to work that relates closely to experiment, developing models that can explain data, suggest new classes of experiments and introduce important new concepts.

**Level and Duration of Funding:** A Simons Investigator in MMLS is appointed for a period of five years. Appointments will begin August 1, 2015.

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 is administered through the institution at which the Investigator is appointed, and this institution will receive 20 percent in indirect costs.

**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 the nominee’s potential for scientific accomplishment.

**ELIGIBILITY**

- To be an Investigator in MMLS, a scientist must be engaged in research related to the program, must have a primary appointment as a faculty member and not previously have been a Simons Investigator.
At the time of appointment an Investigator should be in the early stages of an academic career (within 5 years of the start of the first faculty position) and will typically hold an assistant professor or equivalent position.

The foundation reserves the right to determine eligibility but, typically, a ‘primary appointment’ is defined as one where an Investigator is a full time employee of an academic institution and with a teaching load that is comparable to that of other faculty members in the same department.

LIMIT ON NUMBER OF PROPOSALS PER ORGANIZATION

- Nomination Procedure: The foundation asks each university to submit up to one nomination to the MMLS Investigator program.
- Number of Awards: In 2015, the Simons Foundation anticipates appointing up to four Investigators in the Mathematical Modeling of Living Systems.

KEY DATES

- Internal Letter of Intent due: July 17, 2014 (by midnight)
- Internal proposal due: July 31, 2014 (by midnight)
- Notification: August 21, 2014
- Sponsor Proposal due: October 28, 2014

SUBMITTING A MANDATORY LETTER OF INTENT

Faculty members interested in applying are required to submit a letter of intent (LOI). An LOI is required but not binding.

1. Click here to access the LOI form.
2. Name the LOI as follows: “LastName-FirstInitial-LOI-Simons-MMLS-2015”, replacing “LastName” with your last name and “First Initial” with your first initial.
3. Submit the complete LOI form by clicking on the Depot link: https://depot.northwestern.edu/xythoswfs/webui/_xy-e6644290_1-t_oVEeqsz0

SUBMITTING AN INTERNAL PROPOSAL

If interest exceeds the number of submissions the university is allowed, invitations to submit internal proposals will be sent to all faculty who submitted an LOI. Proposals should be prepared with 0.5-inch margins, 10-point font size and are required to contain the following components:

1. Introduction (ONLY for applicants who previously submitted an internal proposal to this program) that includes the following components (one page, max):
   a. Summarize how your research proposal differs from your previous submission(s).
   b. Summarize how your application as a whole differs from your previous submission(s) (i.e., publications, honors, awards, accomplishments, etc.).

2. A research statement, of less than two pages in length, outlining your research vision and plans.
3. Chair’s Nomination letter: up to two pages in length, explaining the distinctive scientific contributions of the nominee and including discussion of a few important papers. The letter is a critical component of the nomination process.

4. Names of two senior scientists other than your Department Chair who can provide letters of support. These individuals can be your Ph.D. and postdoc advisors or other scientists. They should be familiar with your recent work and research goals, be able to indicate your most significant research accomplishments, and provide insight into your research program and likely future scientific trajectory. For each reference, indicate his/her title, affiliation, and most notable awards/honors.

5. Curriculum vitae, including Ph.D. year, institution, advisor, postdoctoral institutions and advisors, and positions held subsequent to award of doctorate.

6. Up-to-date publication list.

7. A list of postdoctoral fellows and Ph.D. students supervised by you or currently under your supervision.


Prepare your proposal as a SINGLE PDF FILE. It should be named, “LastName-FirstInitial-Simons-MMLS-2015,” replacing "LastName" with your last name and "FirstInitial" with your first initial.

**UPLOADING THE INTERNAL PROPOSAL TO DEPOT**

1. Click on the Depot ticket provided in the email inviting you to submit the internal proposal.
2. Click the Upload button.
3. Click the Browse button and navigate to your file on your hard drive or network.
4. Click the OK button in Depot. Note: You will get a tiny confirmation message upon upload. If you do not see it, you may contact Karen Cielo k-cielo@northwestern.edu for a confirmation.

Depot access will expire after the deadline; as such late submission is not possible. Also, the Depot system does not allow you to overwrite an upload. If you need to upload a revised proposal BEFORE the deadline, contact Karen Cielo k-cielo@northwestern.edu.

**COLLABORATION OPPORTUNITIES**

The Office of Research Development offers assistance in identifying and facilitating collaborations, putting together interdisciplinary teams, programmatic and administrative development of large, cross-school proposals, and leveraging institutional resources for outreach and education. Contact Fruma Yehiely (yehiely@northwestern.edu), Director of ORD, for more information.
CONTACT AND ADDITIONAL INFORMATION
Fruma Yehiely, Director of ORD, 847-491-1074, yehiely@northwestern.edu
Limited Submissions web site: http://www.research.northwestern.edu/ord/funding/limited-submissions/