

# **BECKMAN YOUNG INVESTIGATOR PROGRAM PRESS KIT**

## **Contact:**

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**Anne Hultgren, PhD**

*Executive Director*

**Nicole Patras, PMP**

*Sr. Program Officer*





### **About the Beckman Young Investigator Program**

The Beckman Young Investigator (BYI) Program provides research support to the most promising young faculty members in the early stages\* of their academic careers in the chemical and life sciences, particularly to foster the invention of methods, instruments and materials that will open up new avenues of research in science.

Projects proposed for the BYI program should be truly innovative, high-risk, and show promise for contributing to significant advances in chemistry and the life sciences. They should represent a departure from current research directions rather than an extension or expansion of existing programs. Proposed research that cuts across traditional boundaries of scientific disciplines is encouraged. Proposals that open new avenues of research in chemistry and life sciences by fostering the invention of methods, instruments and materials will be given additional consideration.

- The BYI program funds promising young scientists early in their careers who have not yet received a major award from another organization. Proposals that already have substantial funding will not be considered for the BYI award (see eligibility for more information).
- Projects are normally funded for a period of four years. Grants are in the range of \$600,000 (\$150,000 annually) over the term of the project, contingent upon demonstrated progress after year two of the award.
- The Foundation does not provide for overhead or for indirect costs.

### **Program Timeline (subject to change)**

June - Letter of Intent Opens

August - Letter of Intent Due

November - Applicants Notified

January - Full Application Due

April - Applicants Notified, Interviews Conducted

May - Awardees Selected and Notified

*\*The BYI program is open to those within the first four years of a tenure-track position, or an equivalent independent research appointment, at a United States academic or non-profit institution that conducts research in chemical and life sciences. Additional guidelines regarding eligibility can be found on the program info webpage.*



### **Additional National Grant Programs at the Foundation**

- Arnold O. Beckman Postdoctoral Fellowship – Supports advanced research by postdoctoral scholars within the core areas of fundamental chemistry or the development and build of chemical instrumentation.
- Beckman Scholars Program – Provides 15-month mentored research experiences for exceptional undergraduate students in chemistry, biological sciences, or interdisciplinary combinations thereof.
- Beckman Speaker & Conference Support Fund – Provides funding that may be used for speaker travel support for members of the Beckman Family (current/past awardees, Institute Directors, Science Advisory Council, or Board Members), and other expenses related to hosting a seminar or conference. This program seeks to increase exposure to innovative science, promote leadership and communication skills, and enhance networking within Beckman awardee groups.

The Foundation also has a research technology initiative which evaluates the need for instrumentation grant programs and implements them as short-term opportunities on a periodic basis; most recently, Mass Spectrometry for Atmospheric Monitoring.



### **BYI Program Officer**

The Beckman Young Investigator Program is administered by Nicole Patras, PMP under the direction of the Executive Director, Deputy Director, and Board of Directors.



#### *Sr. Program Officer*

- Nicole Patras, PMP

Nicole joined the Arnold and Mabel Beckman Foundation in 2014 and serves as Sr. Program Officer of the Beckman Young Investigator Program. Nicole also leads the Foundation's JEDI (Justice, Equity, Diversity, and Inclusion) Committee and collaborates on Foundation event planning. She holds a BA from UC Santa Cruz and is a Nonprofit Leadership Alliance Certified Nonprofit Professional.

#### *Executive Director and CEO*

- Anne Hultgren, PhD

#### *Deputy Director*

- Catrina Bryant

#### *Board of Directors*

- Jane Buchan, PhD, Board Member
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IRVINE, Calif.

06/14/2023



# PRESS RELEASE

## Beckman Foundation Announces 2023 Beckman Young Investigator Awardees

***Eleven Researchers Selected to Receive \$6.6M in Total Science Funding for Cutting-edge Research***

The Arnold and Mabel Beckman Foundation announced today the selection of its 2023 class of Beckman Young Investigator Awardees from U.S. colleges and universities. The awardees exemplify the Foundation's mission of supporting the most promising young faculty members in the early stages of their academic careers in the chemical and life sciences, particularly to foster the invention of methods, instruments, and materials that will open new avenues of research in science. They were selected from a pool of nearly 200 applicants after a three-part review led by a panel of scientific experts.

This year's award offers \$600,000 in funding over four years to each of the following researchers:

Mikael Backlund, Ph.D., University of Illinois, Urbana-Champaign  
Steven Banik, Ph.D., Stanford University  
Zachary Calamari, Ph.D., Baruch College, City of New York (CUNY)  
David Hershey, Ph.D., University of Wisconsin-Madison  
Timothy Johnstone, Ph.D., University of California, Santa Cruz  
Laure Kayser, Ph.D., University of Delaware  
Christina Kim, Ph.D., University of California, Davis  
Yayuan Liu, Ph.D., Johns Hopkins University  
Andrew Modzelewski, Ph.D., University of Pennsylvania  
Abdoulaye Ndao, Ph.D., Boston University  
Thao Tran, Ph.D., Clemson University

"We are excited to welcome this new group of young researchers, and to support their outstanding work, amazing creativity, and future potential. Throughout the next four years, our 2023 class of Beckman Young Investigators

- more -

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will be tackling a broad range of problems, from exploring the use of Earth-abundant main group elements to sustainably mediate the chemical reactions that currently rely on precious metals, to developing a new molecular toolkit for identifying and quantifying protein expression in the brain, to fabricating small devices that can produce touch sensation in assistive robots and displays. We are eager to be part of these incredible projects and to see our researchers' results," shared Dr. Anne Hultgren, Executive Director of the Arnold and Mabel Beckman Foundation.

### **About the Arnold and Mabel Beckman Foundation**

Located in Irvine, California, the Arnold and Mabel Beckman Foundation supports researchers and nonprofit research institutions in making the next generation of breakthroughs in chemistry and the life sciences. Founded in 1977 by 20th century scientific instrumentation pioneer Dr. Arnold O. Beckman and Mrs. Mabel Beckman, the Foundation supports United States institutions and young scientists whose creative, high-risk, and interdisciplinary research will lead to innovations and new tools and methods for scientific discovery. For more information, visit [beckman-foundation.org](http://beckman-foundation.org).

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**Notable Awardee: 1996 BYI Jennifer A. Doudna, PhD**

Born: 19 February 1964, Washington, D.C., USA

Affiliation at the time of the award: UC Berkeley, CA, USA

Prize motivation: "for the development of a method for genome editing"

Prize share: 1/2

The life processes of organisms are controlled by genes made up of sections of DNA. In 2012, Jennifer Doudna and Emmanuelle Charpentier developed a method for high-precision genome editing. They used the immune system of a bacterium, which disables viruses by cutting their DNA up with a type of genetic scissors. By extracting and simplifying the genetic scissors' molecular components, they made it generally applicable. The CRISPR/Cas9 genetic scissors can lead to new scientific discoveries, better crops and new weapons in the fight against cancer and genetic diseases.

*Jennifer A. Doudna – Facts – 2020. NobelPrize.org. Nobel Prize Outreach AB 2023. Sat. 18 Nov 2023. <https://www.nobelprize.org/prizes/chemistry/2020/doudna/facts/>*

Read more Beckman Young Investigator highlights:  
[www.beckman-foundation.org/latest-news](http://www.beckman-foundation.org/latest-news)



Jennifer A. Doudna, PhD, was awarded the Nobel Prize in Chemistry in 2020.

Photo Credit:  
Christopher Michel



**Notable Awardee: 1998 BYI Carolyn R. Bertozzi, PhD**

Born: 10 October 1966, Boston, MA, USA

Affiliation at the time of the award: Stanford University, Stanford, CA, USA; Howard Hughes Medical Institute, USA

Prize motivation: "for the development of click chemistry and bioorthogonal chemistry"

Prize share: 1/3

Chemists strive to build increasingly complicated molecules. For a long time, this has been very time consuming and expensive. Click chemistry means that molecular building blocks snap together quickly and efficiently. Around 2000, Carolyn Bertozzi started utilising click chemistry in living organisms. She developed bioorthogonal reactions which take place inside living organisms without disrupting the normal chemistry of the cell. These reactions are now used to explore cells, track biological processes, and improve the targeting of cancer pharmaceuticals.

*Carolyn Bertozzi – Facts – 2022. NobelPrize.org. Nobel Prize Outreach AB 2023. Sat. 18 Nov 2023. <https://www.nobelprize.org/prizes/chemistry/2022/bertozzi/facts/>*

Read more Beckman Young Investigator highlights:  
[www.beckman-foundation.org/latest-news](http://www.beckman-foundation.org/latest-news)



Carolyn R. Bertozzi, PhD, was awarded the Nobel Prize in Chemistry in 2022.

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Stefan Bladh