



Summer Undergraduate Research Fellowships

Passion + Curiosity





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Experiential Learning



Since the College of Creative Studies was founded in 1967, it has aimed to provide a unique educational experience within the UC system. CCS has an immersive engagement approach to learning, with knowledge production as its grounding. CCS students are still encouraged to branch out beyond their disciplines, but the creation of new knowledge within a field is the guiding force. The experience is not for everyone, but for those with passion and indefatigable curiosity; our faculty and staff are committed to providing an incomparable educational experience.

Central to the CCS experience is hands-on experiential engagement in their fields, guided by faculty advising and mentorship. Whether in art studios, STEM labs, music studios, libraries or archives, our students create in order to dive into the processes of knowledge production. Many have found their first such experiences through our Summer Undergraduate Research Fellowship (SURF) program.

Emanating from the inspiration of UCSB Professor Emeritus of Chemistry Donald H. Aue, SURF is rooted in the age-old framework of apprenticeship. Students learn by doing, guided by experts in their fields. That is the core of SURF, and what has over the years expanded to provide summer fellowships open to students in all eight majors: Art, Biology, Chemistry & Biochemistry, Computing, Mathematics, Music Composition, Physics and Writing & Literature. Professor Aue's unwavering zeal for the program has led to generations of student scholars who make waves as scientists, artists and leaders in their fields and communities. Faculty grants, institutional funding, and philanthropic support all come together to maintain the flame that Professor Aue kindled.

I hope you enjoy reading through the testimonials from our fellows, and that you take pride in the fact that your support played an instrumental role in providing transformational experiences for our students.

Sincerely,

Dean Gerardo Aldana
College of Creative Studies

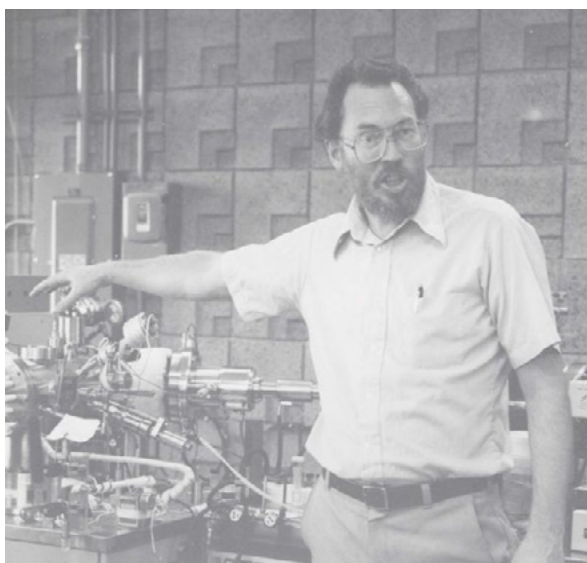
Passion + Curiosity

In 1985, the College of Creative Studies launched the Summer Undergraduate Research Fellowship (SURF) program as part of its experiential learning. The program provides CCS students the opportunity to conduct original research, produce creative work, or innovate entrepreneurial-focused projects under the guidance of world-class UC Santa Barbara faculty.

This program, originally open to science and math majors, was launched by Don Aue—now UCSB Professor Emeritus of Chemistry and Biochemistry—who was inspired by his own research experiences as a student. Under Professor Aue’s leadership, with an initial cohort of seven students, the program quickly expanded and became integral to immersive learning at CCS. Today, his belief remains in the power of hands-on learning to engage a student’s understanding of coursework, and in the value of student scholars working side-by-side with faculty. Over the years, this program has succeeded through the dedication of UC Santa Barbara faculty who opened up their labs to students and generously made funding available from their research grants in addition to CCS institutional funds. As student interest skyrocketed, philanthropic investment from CCS alumni, parents, and friends became a critical means to support a growing number of summer fellowships.

During the College’s 50th anniversary in the 2017-2018 academic year, CCS expanded summer fellowships for students in all eight majors. CCS launched The Create Fund, solely dedicated to supporting summer fellowships for all its students, and the annual Research and Creative Activities Conference (RACA-CON) to showcase the results of student projects and promote cross-discipline collaboration. The conference takes place each fall and provides CCS student scholars the opportunity to present their work in an academic setting. Whether it be an original piece of art, musical score, literary work, or a scientific research project, each RACA-CON presentation or poster is the culmination of many hours of hard work by the students with the aid of their faculty mentors.

During the past 35 years, over 650 students have participated in the summer fellowship program. These fellows have gone on to shape society and become scientists, thinkers, and creators in their fields and communities. CCS is committed to remaining at the forefront of hands-on learning for generations to come.



“The value of this kind of a program is going to continue... The interest from undergraduates is stronger and stronger every year.”

— Don Aue
UCSB Professor Emeritus of Chemistry

[Listen to Professor Don Aue tell his story about summer fellowships by clicking this link.](#)

From 1985 to Today

1985

Launch of Summer Fellowship Program

Began with seven students in Science and Mathematics

2011

Francesc Roig Summer Undergraduate Research Fund

Established in honor of UCSB Senior Lecturer Emeritus Francesc Roig in the Department of Physics to fund Roig Fellow(s) in Physics

2017

Proctor Summer Undergraduate Research Fellowship Endowed Fund

Established by Dr. Christopher and Julie Proctor to fund Proctor Fellow(s) in Biology

2017-18

CCS Research and Creative Activities Conference (RACA-CON) established during CCS 50th Anniversary

Launched to showcase the results of student research and creative projects

2006

Science/Mathematics Summer Undergraduate Research Fellowship Fund

Established to support up to two Dean's Fellows selected annually to pursue projects related to Science and Mathematics

2016

The Bruce H. and Robin G. Tiffney Summer Undergraduate Research Fund

Established in honor of Bruce Tiffney, UCSB Professor Emeritus in the Department of Earth Science and past CCS dean, and his spouse Robin Gowen Tiffney to fund Tiffney Fellow(s) in Biology

2017-18

Summer Fellowship Program Expands with Launch of The Create Fund during CCS 50th Anniversary

Summer fellowships open to students in all eight majors

2021

Donald H. Aue Summer Undergraduate Research Fellowship Fund

Established in honor of UCSB Professor Emeritus of Chemistry Donald H. Aue to fund Aue Fellow(s) in Mathematics and Science

Recipient Stories

Jarrold Smith '92

CCS Chemistry and Biochemistry
1989 Dean's Fellow

After completing his chemistry degree at UCSB, Jarrold earned his PhD at The Scripps Research Institute where he applied nuclear magnetic resonance (NMR) and computational methods to the determination of atomic-detail structures of proteins, nucleic acids, and their complexes. He then moved to Vanderbilt University in Nashville, TN with one of his co- PhD advisors, to join the research faculty in the department of biochemistry and helped found the Vanderbilt Center for Structural Biology.



“ Dr. Aue, CCS, and the SURF program enabled me to learn things about myself as an undergraduate that many are not able to find out until later in their professional trajectory. The SURF program convinced me early on that I wanted to attend graduate school and helped me get accepted into some top programs. And once I got there, I already knew the area I wanted to focus on (Structural Biology). ”

Angela Belcher '91,'97

CCS Creative Studies, PhD UCSB Chemistry
1990 Dean's Fellow

Angela attended UCSB for her undergraduate and graduate degrees, obtaining a PhD in Chemistry after completing her bachelor's degree at CCS. In 2001, Angela joined the faculty at MIT and is now the James Mason Crafts Professor of Biological Engineering and Materials Science and Engineering as well as Head of the Department of Biological Engineering. At MIT, Angela combines her interdisciplinary interests to study how to utilize natural processes to create technologically important materials and devices for energy, the environment, and medicine.



“ CCS was the most important decision in my career... providing the freedom and ability to string different ideas and disciplines together. ”

David Twining '03

CCS Physics

2001 Vos Fellow

David studied physics and completed his summer undergraduate research fellowship under the mentorship of Professor Roger Freedman. After UCSB, David studied at UC Berkeley's Space Sciences Laboratory (SSL) before joining industry to develop spacecraft payloads and subsystems for civil and defense applications. In 2014, David founded Planck Aerosystems, developing artificial intelligence (AI) and autonomy solutions for unmanned systems.



CCS and SURF really influenced how I thought about science, and had a huge influence on my career path. It struck a perfect balance between independent thought and scientific structure at an impactful point in my life.

Amber Kaplan '06

CCS Biology

2003, 2004, and 2005 Dean's Fellow

Dr. Kaplan is an immunologist with a focus on autoimmunity and cancer. She considers herself "on sabbatical" from academia now that she's practicing her science out in the biotech industry. Currently, Dr. Kaplan is Chief Scientific Officer at Karma Biotechnologies.



My three summers as a CCS Summer Undergraduate Research Fellow were truly formative. I learned so much about the ebb and flow of research, and how to keep moving towards your questions no matter where on the wave you happened to be.

Megan Maguire '10

CCS Mathematics

2008 Carter Fellow

After graduating from CCS in 2010, Megan remained at UC Santa Barbara to complete masters in mathematics. Afterwards, she obtained a PhD from the University of Wisconsin at Madison where she studied the cohomology of configuration spaces of manifolds. She went on to complete a postdoctoral research fellowship at UC Irvine, before deciding to move back to Wisconsin where she is now working at an Electronic Health Records company.



“The CCS Summer Undergraduate Research Fellowship was my first experience with math research. It was exciting to engage with Math in a new way. It was also my first time using a computer algebra system to compute examples that helped me look for patterns that I could prove, a technique I continued to use throughout my career in Mathematics. I was challenged by my first year of coursework at CCS, and the joy I experienced doing research enabled by the summer fellowship was motivating.

Paul Konopelski '11

CCS Chemistry and Biochemistry

2009 Menon-Watson Fellow

After completing his degree at UCSB, Paul went to the UC Davis Master Brewers Program, and started working in 2012 at Bohemian Brewery in Salt Lake City, UT. He worked in every position in the brewery from packaging to brewing and got the opportunity to create and run the QA/QC (quality assurance/quality control) lab. In 2021, Paul started at Uinta Brewing in Salt Lake City as a QA Technician where he now tests the beer for alcohol content, amount of bitterness, color, and microbiological stability.



“The Summer Undergraduate Research Fellowship was a fantastic opportunity that allowed me to stay at UCSB during the summer, teaching me independence as an individual, student, and scientist.

Alyssa Flores '13

CCS Chemistry and Biochemistry

2011 Stansbury Fellow

Interested in working as a physician-scientist, Alyssa went on to the Geisel School of Medicine at Dartmouth after graduating from CCS. While obtaining her medical degree, she was a Howard Hughes Medical Institute (HHMI) Research Fellow. Recently, she started a residency at the Massachusetts General Hospital, one of the premier research hospitals in the United States.



Being a part of CCS and participating in SURF helped instill intellectual curiosity during my formative undergraduate studies. I got to develop key critical thinking and analytical skills. Research has continued to be an exciting and meaningful part of my work through medical school and I will be pursuing a career as a surgeon-scientist.

Gualtiero Victor Spiro Jaeger '13

CCS Physics

2012 Roig Fellow

Gualtiero is fascinated by the ocean and its influence on society, and is motivated to make our dependence on natural resources sustainable. Before working in management consulting, he was a policy fellow at the National Oceanic and Atmospheric Administration (NOAA) in DC, and completed a PhD at MIT studying the ocean and climate system in the Indian Ocean.

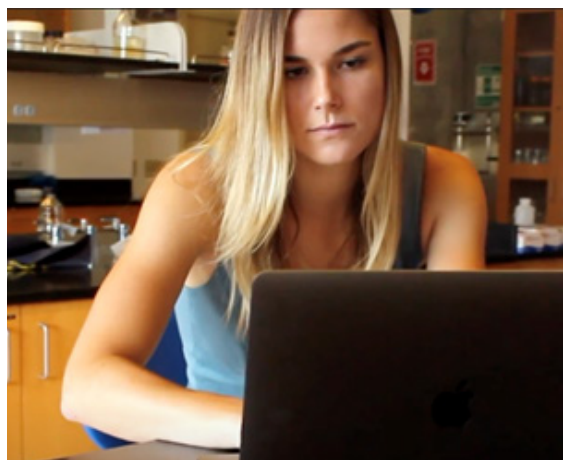


Veronica Russell '18

CCS Biology

2018 Norman F. Sprague III Fellow

[Watch Veronica's video about her research and fellowship experience](#)



My research [focused] on Kaposi sarcoma associated herpesvirus (KSHV), looking at whether the blood endothelial or lymphatic endothelial cells give rise to malignancy in tumors. The fellowship was a great opportunity to dive deep into this area.

Nick Mazuk '19

CCS Music Composition

2018 Patterson Fellow

Nick is a composer and trombonist who believes in the power of music to change the world. He has won numerous awards for his music, including being a 4-time Corwin Award recipient and winning the Christopher Bill Composition Competition in 2018. Nick composed and performed *Farewell Fanfare* to open the 2019 CCS Commencement ceremony. After graduating from CCS, he has helped other composers to create and share their music. He runs Finale Superuser, a site dedicated to helping teach composers how to use the software Finale, and he created Parts and Scores, a site that allows composers to upload and sell their music.



I believe people with a passion for music can change the world for the better.

Sophie Arango Nebeker '20

CCS Art and CCS Biology

2018 Axline Fellow

During the summer of 2018, Sophie Arango Nebeker combined her two passions of Art and Biology during her summer fellowship. She studied the effects of the Thomas Fire that occurred in December 2017/January 2018—one of the largest fires in California history—on the ecosystem in Ecology, Evolution, and Marine Biology (EEMB) Professor Hillary Young's lab. She subsequently created art pieces based on her scientific research, under the guidance of CCS Art Faculty Emily Baker. Sophie continues to work as an interdisciplinary artist who is inspired by natural forms, and is currently an intern at the Toucan Ridge Ecology and Education Society in Belize.



[Watch Sophie's video about her art and fellowship experience](#)



I was grateful for the means to experiment with costly materials I may not have been able to afford without funding from the summer fellowship. I produced work that I am proud of to this day, and will continue to create beautiful works. A memorable moment from that summer was firing up the foundry for a bronze pour in the Art Department. This opportunity reminded me that funds are available for creative projects and to continually seek them out. Of course, none of this would have been possible without mentorship from Jane Mulfinger, Emily Baker, and Ken Yokota, and of course, the Axline family for their generous donation to make my fellowship possible.

Youssef Sibih '20

CCS Biology

2018 Proctor Fellow

[Watch Youssef's video about his research and fellowship experience](#)



It has been an amazing experience. It definitely pushed me to my limits and out of my comfort zone and taught me a lot. I cannot thank the donors enough, specifically the family that supported me and my research.

Kristen Klitgaard '21

CCS Biology
2018 Tiffney Fellow

[Watch Kristen's video about her research and fellowship experience](#)



“Getting more involved in the lab and being able to do field work has allowed me to see what day-to-day research actually looks like, and has made me more eager to pursue research.”

Celine Pun, Class of '22

CCS Writing & Literature and
Letters & Science Environmental Studies
2020 Dean's Fellow

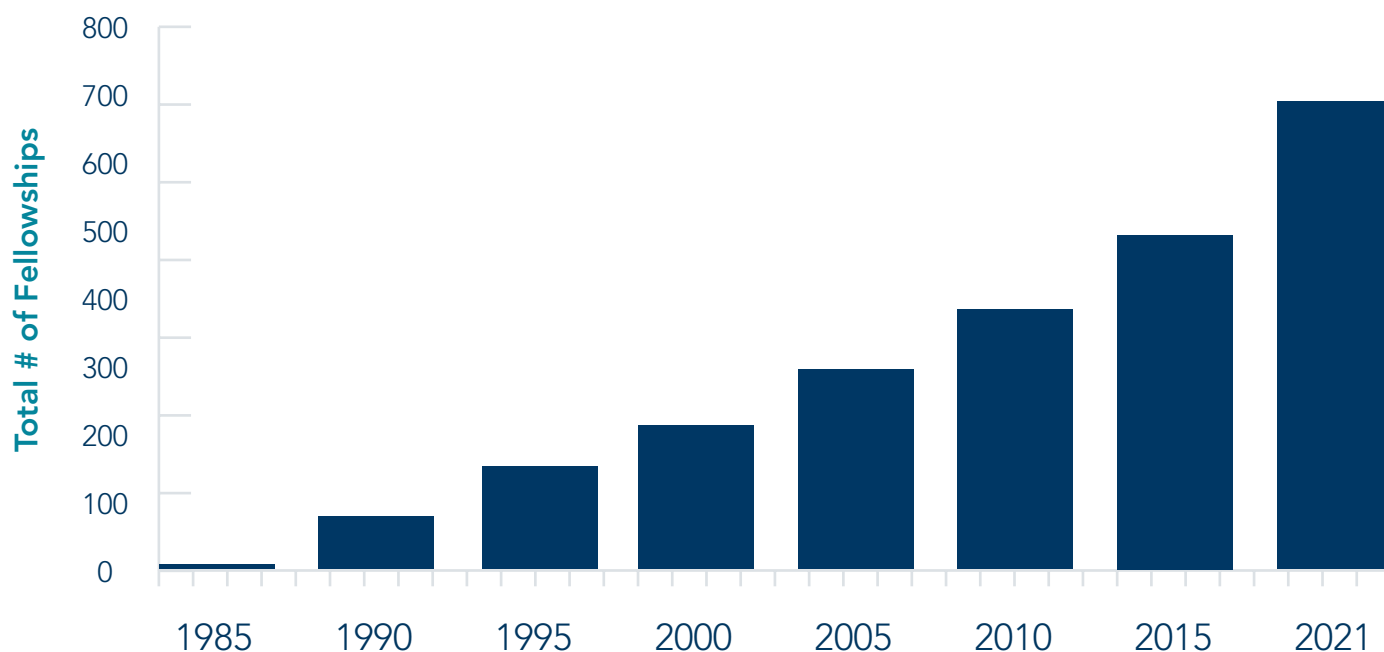
Celine, who describes herself as a Chinese-Vietnamese American plant-based writer, wanted to explore how Asian American and plant-based identities affected writing, because she recalled learning about the power of identity in one of her creative writing classes. For seven weeks, under the mentorship of UCSB Professor Dipali Murti, she researched other food writers, wrote her own recipes, and created a food blog to share her experiences. Celine is using her summer work as part of her CCS capstone project, a manuscript and book proposal about food, identity, and what it means to be Asian American and plant-based.



[Watch Celine's video from her RACA-CON presentation](#)

“The summer fellowship provided me with the opportunity to explore what Asian American and plant-based means through food writing. I learned how to marry my interests in writing and the environment, and my goal is to produce a book about this experience.”

Over 35 Years of Impact



In Recognition

We are grateful for the generosity of our donors who have supported named fellowships since 2001.

2001

Vos Family Foundation

4 Vos Fellows

2002

Vos Family Foundation

5 Vos Fellows

2003

Dr. Arent '61 and Jean H'13 Schuyler

3 Schuyler Fellows

Vos Family Foundation

4 Vos Fellows

2004

The Carter Foundation

2 Carter Fellows

Dr. Arent '61 and Jean H'13 Schuyler

5 Schuyler Fellows

2005

The Carter Foundation

3 Carter Fellows

Dr. Arent '61 and Jean H'13 Schuyler

6 Schuyler Fellows

2006

The Carter Foundation

13 Carter Fellows

Dr. Arent '61 and Jean H'13 Schuyler

5 Schuyler Fellows

2007

Anonymous

1 Dean's Fellow

The Carter Foundation

11 Carter Fellows

Christine M. Doyle '79

2 Doyle Fellows

Dr. Arent '61 and Jean H'13 Schuyler

8 Schuyler Fellows

2008

The Carter Foundation

9 Carter Fellows

Dr. Arent '61 and Jean H'13 Schuyler

4 Schuyler Fellows

2009

Dr. Laura Pham '97

1 Pham Fellow

Dr. Arent '61 and Jean H'13 Schuyler

5 Schuyler Fellows

David Watson '99 and

Vinitha Menon-Watson '99

8 Menon-Watson Fellows

2010

Anonymous

2 Dean's Fellows

Jay Freeman '03

4 Freeman Fellows

Dr. Arent '61 and Jean H'13 Schuyler

5 Schuyler Fellows

David Watson '99 and

Vinitha Menon-Watson '99

4 Menon-Watson Fellows

2011

Jay Freeman '03

4 Freeman Fellows

Cynthia and Tayloe Stansbury

4 Stansbury Fellows

David Watson '99 and

Vinitha Menon-Watson '99

3 Menon-Watson Fellows

2012

Anonymous

7 Dean's Fellows

Jay Freeman '03

6 Freeman Fellows

Gregory and Linda Marks

1 Marks Fellow

**Francesc Roig Summer Undergraduate
Research Fund**

1 Roig Fellow

Cynthia and Tayloe Stansbury

7 Stansbury Fellows

2013

Anonymous

7 Dean's Fellows

Jay Freeman '03

4 Freeman Fellows

**Francesc Roig Summer Undergraduate
Research Fund**

1 Roig Fellow

Cynthia and Tayloe Stansbury

5 Stansbury Fellows

2014

Anonymous

7 Dean's Fellows

Jay Freeman '03

5 Freeman Fellows

Anita and James Hopper

5 Hopper Fellows

**Francesc Roig Summer Undergraduate
Research Fund**

1 Roig Fellow

Cynthia and Tayloe Stansbury

10 Stansbury Fellows

2015

Anonymous

5 Dean's Fellows

Julie and Jeff Brody

4 Brody Fellows

Jay Freeman '03

5 Freeman Fellows

Anita and James Hopper

2 Hopper Fellows

Francesc Roig Summer Undergraduate Research Fund

1 Roig Fellow

Cynthia and Tayloe Stansbury

12 Stansbury Fellows

2016

Anonymous

8 Dean's Fellows

Susan and John Axline

4 Axline Fellows

Dr. Monica '89 and Shawn Dahlem

1 Dahlem Fellow

Jay Freeman '03

8 Freeman Fellows

Anita and James Hopper

2 Hopper Fellows

Manson Jones and Susan Fitzgerald

1 Jones-Fitzgerald Fellow

Seeley W. Mudd Foundation

1 Norman F. Sprague III Fellow

Francesc Roig Summer Undergraduate Research Fund

1 Roig Fellow

Cynthia and Tayloe Stansbury

9 Stansbury Fellows

2017

Anonymous

11 Dean's Fellows

Susan and John Axline

4 Axline Fellows

Jay Freeman '03

1 Freeman Fellow

Mildred E. & Harvey S. Mudd Foundation

1 Norman F. Sprague III Fellow

Francesc Roig Summer Undergraduate Research Fund

1 Roig Fellow

Cynthia and Tayloe Stansbury

3 Stansbury Fellows

2018

Anonymous

9 Dean's Fellows

Susan and John Axline

6 Axline Fellows

Dr. Angela Belcher '91,'97 and

Dr. David Bebinger

1 Belcher Fellow

Mildred E. & Harvey S. Mudd Foundation

1 Norman F. Sprague III Fellow

Dr. Anna Patterson

6 Patterson Fellows

Dr. Christopher and Julie Proctor

1 Proctor Fellow

Dr. Robert and Laura Rodriguez

8 Rodriguez Fellows

Francesc Roig Summer Undergraduate Research Fund

1 Roig Fellow

The Bruce H. and Robin G. Tiffney Summer Undergraduate Research Fund

1 Tiffney Fellow

2019

Anonymous

5 Dean's Fellows

Susan and John Axline

3 Axline Fellows

John '86 and Mary Kelly

2 Kelly Fellows

Susan and Jim Lewis

1 Lewis Fellow

The Mildred E. & Harvey S. Mudd Foundation and the Seeley W. Mudd Foundation

3 Norman F. Sprague III Fellows

Francesc Roig Summer Undergraduate Research Fund

1 Roig Fellow

The Bruce H. and Robin G. Tiffney Summer Undergraduate Research Fund

1 Tiffney Fellow

Dr. Marlene Zuk '77 and Dr. John T. Rotenberry

3 Zuk Fellows

2020

Anonymous

12 Dean's Fellows

Susan and John Axline

4 Axline Fellows

The College of Creative Studies Computer Science Endowment

2 Dean's Fellows

Carol and Paul George

1 George Fellow

John '86 and Mary Kelly

3 Kelly Fellows

Dr. Milan '00 and Henry Minsky

1 Rajendra Singh Fellow

Mildred E. & Harvey S. Mudd Foundation

1 Norman F. Sprague III Fellow

Manish Pathak

1 Sharman Fellow

Proctor Summer Undergraduate Research Fellowship Endowed Fund

1 Proctor Fellow

Francesc Roig Summer Undergraduate Research Fund

1 Roig Fellow

The Bruce H. and Robin G. Tiffney Summer Undergraduate Research Fund

1 Tiffney Fellow

2021

Anonymous

3 Dean's Fellows

Francesc Roig Summer Undergraduate Research Fund

1 Roig Fellow

The Bruce H. and Robin G. Tiffney Summer Undergraduate Research Fund

1 Tiffney Fellow

Mildred E. & Harvey S. Mudd Foundation

2 Norman F. Sprague III Fellows

Susan and John Axline

4 Axline Fellows

Alexander Lacson and Sophie '22 Lacson

1 Dr. Maria Ferrer-Lacson Fellow

John '86 and Mary Kelly

3 Kelly Fellows

Dr. Emerson Fang '86

1 Fang Fellow

Proctor Summer Undergraduate Research Fellowship Endowed Fund

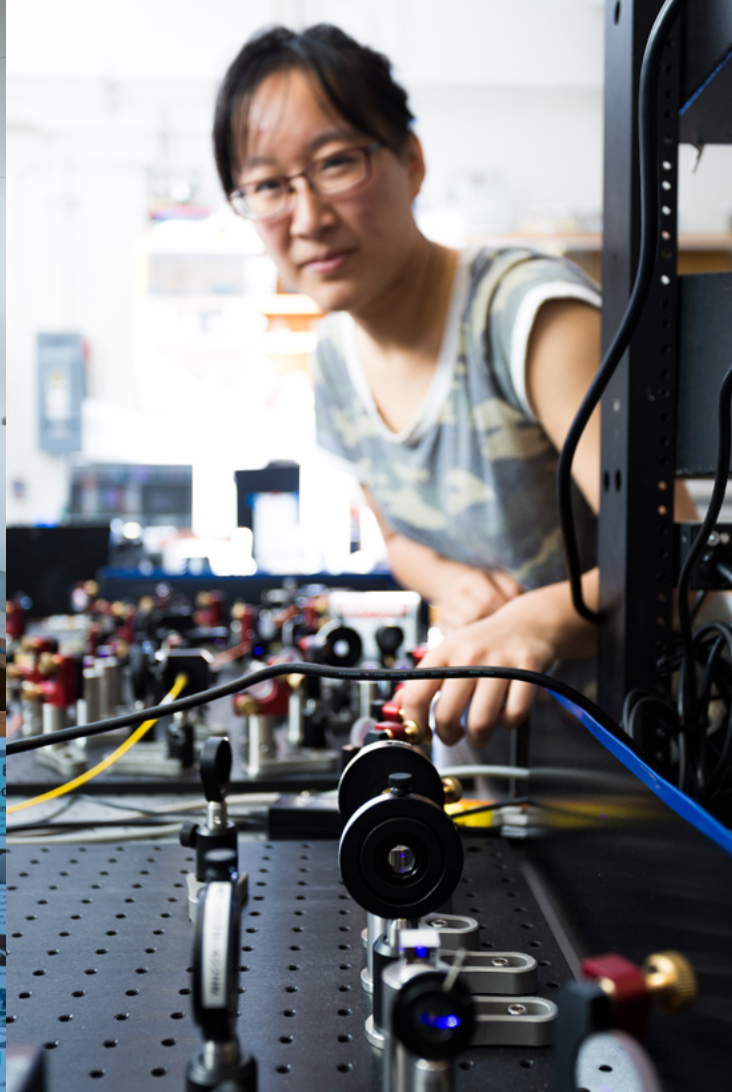
1 Proctor Fellow

Dr. Milan '00 and Henry Minsky

1 Dr. Rajendra Singh Fellow

Dr. Ilan Ben-Yaacov '99, '02, '04

1 Ben-Yaacov Fellow



For more information or questions, please contact:

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