Information Session

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Info Session Overview

- Student testimonials & past projects
- Eligibility overview
- Program commitments
- Conference overview
- Application process
- Q&A
I was able to visit archival libraries all over the world - The British Library, the National Art Library in London, the New York Public Library for the Performing Arts, the New York Historical Society Archives, and the Smithsonian and Library of Congress in DC.

I spent the summer becoming an expert in mid-nineteenth century theater history, and that breadth allowed me to find connections that no other scholars have talked about in regards to my topic, the Astor Place Riot.

-Eli
Mieko Anders  
English & Sociology  
Summer 18  
Gothic Tropes and Racialized Labor in the Postwar Novel

Mason Cummings  
Philosophy  
Summer 18  
Inner Vision: Mondrian and Entoptics
The SURF award permitted me to travel to Cap-Haitian, Haiti so that I could conduct ethnographic research first-hand for my senior honors thesis project.

Without the SURF stipend none of my on-the-ground research would have been possible. This included almost twenty in-depth interviews and a two-month participant observation position with an organization. The SURF award allowed for me to live and travel safely while in Haiti conducting research, and for that I could not be more grateful.

-Julia
Past Social Science Fellows

Pablo Paderes
Ethnic Studies
Summer 18
An Integrated Look at Black and Brown Persecution by the State

Elizabeth McCullough
Development Studies
Summer 18
Cash Transfers: Theory and Practice in Neoliberal Aid
Not only did I get a completely new perspective on what it means to be a full-time researcher, but I also got a taste of what to expect if I go to grad school. I had been on the fence about grad school for a while, but because I got the chance to focus on this entirely, I found out how much I really love the whole experimental design process. Previously, I would come into lab and really only have time to set up experiments that grad students had already prepared. But over the summer, it was all me, and it made the work that I was doing that much more meaningful!

Also, in our college culture today, it's common for people to double or even triple major - rather than dive into the research and learn hands-on because there's a lack of support like this for students. I'm incredibly grateful that this program acknowledges the importance that experience harbors.

-Peter
Recent STEM Fellows

Diana Leslie Cornejo
Molecular & Cell Biology
Summer 19
Neuroendocrine Mechanisms Underlying the Impact of Stress on Pregnancy

Connor Tou
Bioengineering
Summer 19
CRISPR-Mediated Genetic Diversification in Yeast
Recent STEM Fellows

Namrata Ramesh
Physics
Summer 19
*Exploring Self Assembly and Optical Properties of Novel Nanocrystal Superlattices*

Nikhil Sahoo
Mathematics
Summer 19
*Schubert Calculus Through Toric Geometry*
...this experience has been the first time I have been given the opportunity to do research here at Berkeley. As a transfer student sometimes I feel like I'm behind in experiences like these but now I can confidently apply to other opportunities and continue to expand my educational experience. The research [my mentor and I] did this summer will add to the growing field of wearable electronics and will hopefully continue to be developed into a better device that can improve the health of those in communities with limited resources.

-Yuniba
Recent SURF-SMART Fellows

Alexandra Langer
History
Summer 19
The Hydrological Legacy of Sugar Planting in St. Croix, U.S. Virgin Islands

Nikolay Velkov
Civil Engineering
Summer 19
Direct Observation of Stick-Slip Fault Behavior
I am so grateful to be a SURF fellow. In fact, this is the first fellowship I have received. I want to pursue a Ph.D., and this fellowship makes me a more competitive candidate. But most importantly, I learned so much thanks to this program. I learned to write a proposal, to prepare human subjects protocol, to work with mentors, to analyze data, to present at the conference, and what it means to be a full-time researcher. I’ve come to see that research is actually really fun, and I am more confident in my decision in spending five years in grad school.

-Hai
The financial support made it possible to do my research full time, but the less tangible benefit was the research community that the program as a whole offered me. To work with such talented and committed scholars was an honor and helped to foster my scholarly abilities.

Through the process I was able to develop my academic voice. After my SURF paper was published, I used it as a writing sample for my graduate school applications. I am happy to say that I was accepted to the school of my choice and will work with a professor who is top in my field.

I used my SURF paper to engage with organizations in my field who advocate for people with learning disabilities. As a result, I have been asked to present my research on the topic by various organizations as an educational tool.

- Sonia
Why SURF?

- Explore your passion for in-depth research in a specialized area of interest
- Work closely with faculty and graduate student mentors
- Prepare for graduate school
- Contribute to a body of knowledge
- Build community with other motivated students, professionals, and others
- Challenge yourself
- Gain confidence in your abilities
- Create a capstone project for potential publication in undergraduate journals- on-campus, national, international
On August 20 & 21, SURF fellows will present their research at our academic conference held in LeConte Hall.

On their assigned day, each student will present either a ten-minute oral presentation with PowerPoint slides, or a professionally styled poster, depending on their cohort.

SURF fellows are encouraged to invite family, friends, mentors, and colleagues to watch them present.

We offer light refreshments in the morning and serve lunch on both conference days.

Conference attire is business casual.
Eligibility:

SURF L&S

- Currently enrolled student who is on track to receive a Bachelor’s degree from UCB (visiting or UCB Extension *not* eligible to apply)
- Studying within the College of Letters & Science; all majors welcome
- Have a minimum 3.0 GPA at UC Berkeley
- All citizenship statuses welcome, including international & AB540
- Open to students graduating Fall 2020 or Spring 2021
- Research project is individually driven by your own unique research question
- Research project will lead to a senior thesis to be evaluated in a graded course taken in the 2019-20 academic year. This can include an independent study with your faculty mentor
Eligibility:

SURF Math Team

- Currently enrolled student who is on track to receive a Bachelor’s degree from UCB (visiting or UCB Extension not eligible to apply)
- All citizenship statuses welcome, including international & AB540
- 4-member team of students create one research proposal/project
- At least 2 of the team members must be declared math majors
- Team members can be from any year
- Team members have one faculty mentor, who also receives a stipend ($2,500)
- Team members may not apply for any other SURF cohort- either as a team, or individually
Eligibility:

- Must be in good academic standing at the time of application
- All citizenship statuses welcome, including international & AB540
- All majors across campus are welcome, including undeclared students
- Students who will graduate in December 2019 or in May 2020 are not eligible to apply
- If you applied in the past and were not selected to be a SMART mentee, you are welcome to apply again. Former SMART mentees are not eligible to apply again
- You may not apply to any other SURF cohort
- Your work is driven by the graduate student Mentor whose research project you apply to work on
Eligibility:

Rose Hills

- Currently enrolled student who is on track to receive a Bachelor’s degree from UCB (visiting or UCB Extension not eligible to apply)
- Have a minimum 3.0 GPA at UC Berkeley
- Only open to U.S. citizens
- Past SURF Rose Hills scholars can reapply
- Select majors in science, mathematics, or engineering (see future slide)
- Permanent address is in an eligible Southern Californian County (see future slide)
- **For Rose Hills Experience**: open to sophomores and juniors
- **For Rose Hills Independent**: open to sophomores, juniors, and seniors graduating Spring 20
Eligibility Continued:

- For Rose Hills Experience: project should reflect your individual contribution to your faculty mentor/lab’s research
- For SURF Rose Hills Independent: project is individually driven by your own unique research question
- For SURF Rose Hills Independent: For juniors, research will lead to a senior thesis to be evaluated in a graded course; for seniors, research will lead to a draft publication or conference presentation
Eligible Majors:

- **Life Sciences**: Integrative Bio, Microbial Bio, Molecular & Cell Bio, Genetics and Plant Bio, Molecular & Environmental Bio, Earth & Planetary, Nutritional Science (Toxicology, Dietetics, Physiology & Metabolism), Conservation & Resource, Environmental Science, Marine Science, Planetary Science

- **Physical Sciences**: Astrophysics, Mathematics, Applied Mathematics, Physics, Statistics, Chemical Bio, Chemistry, Geology, Geophysics,


- **Data Science**

Eligible counties:

- San Diego, Imperial, Orange, Riverside, Santa Barbara, Ventura, Los Angeles, San Bernardino
SURF Commitments:

Spring & Summer 2020

- Receive $5,000 stipend
- Attend orientation in May during RRR week
- Regularly submit short research updates to SURF staff member
- Attend at least 4 summer workshops
- Devote 8 weeks full-time to your SURF research (no summer school classes longer than 6 weeks, no internships or full-time employment during that time)
- Be present in Berkeley the week of August 10th to attend a practice session, where you will run through your presentation and provide feedback to others
- Present your research at the 2-day conference August 20 & 21
- Projects with human subjects: submit human subjects protocol to CPHS by March 16 (vulnerable human subjects or not high-risk). Your faculty sponsor must also take the CITI course or be “grandfathered” in.
SURF Commitments:

Fall 20 & Spring 21

- Write a thank you note to the donors and complete a program evaluation after the conference

- For SURF L&S and SURF Rose Hills Independent Juniors:
  - meet with your faculty member to confirm thesis plans in the first weeks of fall term
  - enroll in a course/courses during the 2020-2021 academic year that offer graded credit for your SURF project/senior thesis.
  - Submit your thesis upon completion.

- Rose Hills Independent Seniors, Rose Hills Experience, SURF-SMART, and Math Team fellows are not required to enroll in a course or submit a thesis following SURF

- For SURF Rose Hills Independent Graduating Seniors: Submit conference presentation draft or publication draft by May 2021, at the latest.
Application Materials
(not applicable to SURF -SMART)

- 3-5 page research proposal that is well-written and well-planned
- A budget is not required but including a brief spending plan in your proposal may be helpful in cases of large expenses
- Strong backing from a faculty member, including written commitment to guiding your research via a letter of recommendation (if your primary support comes from a graduate student you will need a faculty member to co-sign their letter)
- Scanned transcripts for PDF upload
- Application goes live in November - available on SURF website
Applicant Materials:
- **Current resume or curriculum vitae (CV)** that ideally highlights skill sets and experience suited to the project
- **Application essay** that indicates which project you are applying for, and addresses how your interests, skill sets, and experience suit the project
- You will not need a letter of recommendation for SURF-SMART
- You may only apply to *one* research project
- Projects are available to review February 1
Writing a Strong Research Proposal

- Statement of purpose: what do you intend to accomplish?
  - What question/line of inquiry will you pursue?
  - Why is this question important to explore in a research project?

- Background and justification: what knowledge is already established in the field that you will contribute to?

- Project plan: What methods, theories, source material, experiments, etc. will you employ to do the project?
  - Timeline, preparation, personal experience and qualifications

- Work closely with your faculty mentor, and/or SURF staff

- See SURF website (resources page) and research.berkeley.edu for research proposal workshops, proposal guidance documents, and office hour sign-ups with SURF staff members
Support With Your Application

• Schedule time with our Program Coordinator or one of the Graduate Student Advisors to review your application January through February

• Attend application support workshops in Durant 9- for schedule of workshops available, see the Office of Undergraduate Research & Scholarships website or research.berkeley.edu
Approach a faculty member or graduate student who is very familiar with your coursework and SURF project ideas—ideally someone with whom you've already met with many times during office hours.

The letter should specifically address your ability to complete the project proposed—not just a “sign-off”.

Send link (available on SURF website) to your faculty mentor at least one month in advance of the application deadline—they will use this link to submit your letter of recommendation.

Senate faculty or lecturers appointed through Fall 2020 are eligible.

Graduate students are also eligible, as long as they co-sign the letter with a senate faculty member or lecturer.

Your mentor should maintain regular contact with you over the summer to discuss your progress and answer questions.

We welcome mentors to attend the conference, but they are not required to.
Application deadline: February 20th 2020

Got Questions? Contact us at surf@Berkeley.edu