Info Session Overview

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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
Past Humanities Fellows

**Skylar Clark**  
English & Comparative Lit  
Summer 20  
*European and American Literary Realism: The Fictional Construction of Nation and Self*

**Anthony Principe-Contreras**  
English  
Summer 20  
*Found Identity: A Study of Ocean Vuong’s “On Earth We’re Briefly Gorgeous”*
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

Samba Kane
Linguistics
Summer 20
*Fula Poetry in the Valley of the Senegal River*

Karla Saracay
Anthropology
Summer 20
*Pre-Inca Household Archaeology in the Mantaro Valley*
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

**Allison Zau**
Geology
Summer 20
Detecting Aquifer Characteristics of Groundwater-Dependent Meadow Ecosystems in the Northeastern Sierra Nevada

**Miles Mellott**
Molecular & Cell Biology
Summer 20
Assaying Protein-Protein Interaction of HCMV and the Human Immune Complement System
Recent STEM Fellows

Ricardo Silva
Cell & Developmental Biology
Summer 20
Investigating the role of how S1PR3 promotes the release of CGRP

Rahul Jain
Applied Math & Computer Science
Summer 20
Holder-Brascamp-Lieb, Red-Blue Pebbling, and Communication-optimal algorithms
...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

Emma Bellman
Undeclared
Summer 20
Puzzling Proofs: Navigating Proof Construction and Communication in Middle School

Takao Kakegawa
Applied Math & Data Science
Summer 20
The Role of Hybridization in Generating Weird Fish Faces in Caribbean Pupfish
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
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 2021 or Spring 2022
- 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 2021-22 academic year. This can include an independent study with your faculty mentor
- Past L&S fellows are not eligible to reapply
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
- Past Math Team fellows *are not* eligible to reapply
- Past SURF fellows from other cohorts *may apply*, if they meet other eligibility requirements
Eligibility:

SURF-SMART

- 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
- All citizenship statuses welcome, including international & AB540
- All majors across campus are welcome, including undeclared students
- Students who will graduate in December 2020 or in May 2021 are not eligible to apply
- Past SURF-SMART fellows are not eligible to reapply
- You may not apply to any other SURF 2021 cohort
- If successful, you are eligible to apply to other SURF cohorts in future summers
- Your work is driven by the graduate student Mentor whose research project you apply to work on
Eligibility:

SURF 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 are eligible to 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 21
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
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 programming has been affected by the impact of COVID-19. After having successfully adapted the program to accommodate changes brought on by the pandemic, we assume that the SURF 2021 experience will happen under those same conditions.

One of the most salient of these changes is that all SURF events-including the Conference, orientation, workshops, and small group meetings-will be held remotely via Zoom.
SURF & The Impact of COVID-19

- We recommend that students design their research projects based on the assumption that current COVID conditions and restrictions will remain in place through the summer of 2021.

- For students who intend to do lab work: SURF supports what you and your PI/mentor agree upon and receive approval for—to note that lab proposals are subject to approval by the university, and SURF is not involved in that process.

- Regarding travel and access to special sites or interview subjects: SURF supports what you and your mentor agree upon and receive approval for from the university and other relevant parties; SURF is not involved in that process.
SURF Commitments:

Spring & Summer 2021

- Receive $5,000 stipend
- Attend orientation in May during RRR week
- Regularly submit short research updates to SURF graduate student advisor
- Attend at least 4 summer workshops
- Attend biweekly small group meetings with your SURF staff advisor throughout the summer
- 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- Address changes due to COVID)
- Be available the week of August 9th 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 19 & 20
- Projects with human subjects: submit human subjects protocol to CPHS by mid-March (vulnerable human subjects or not high-risk). Your faculty sponsor must also take the CITI course or be “grandfathered” in.
SURF Commitments:

Fall 21 & Spring 22

- 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 2021-2022 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
On August 19 & 20, SURF fellows will present their research at our academic conference held remotely via Zoom.

- On their assigned day, each student will present a ten-minute oral presentation with PowerPoint slides.
- SURF fellows are encouraged to invite family, friends, mentors, and colleagues to watch them present.
- Conference attire is business casual.
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 will be available on the SURF website
Application Materials:

SURF-SMART

- **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 be asked to an interview with the grad student mentor leading your prospective project (at grad student mentor’s discretion)
- Projects are available to view on the SURF website 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 (starting in January) to review your application. You can find their office hour sign-ups on the “Advisor” page of the SURF website.

- Attend application support workshops remotely- for schedule of workshops available, see the Office of Undergraduate Research & Scholarships website or research.berkeley.edu
Faculty Mentor Support

- 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 2021 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 18th 2021

Got Questions? Contact us at surf@Berkeley.edu