



2018-2019 Academic Year

Guide to Summer Research and Internships

This document is a guide to Stanford-specific summer research and internship opportunities that may be of interest to Earth Systems undergraduate students. If interested in any of the following opportunities and programs, students are encouraged to visit the associated website and/or contact the program's coordinator. Please contact Sadie Cwikiel (scwikiel@stanford.edu) with questions about this pamphlet, or to be connected with former participants in these programs. Note that the following programs will generally fulfill the Earth Systems internship requirement upon approval; contact internship coordinator Suki Hoagland (shh@stanford.edu) to learn more.

Summer Research Opportunities

Stanford Earth Summer Undergraduate Research Program (SESUR)

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| <ul style="list-style-type: none">• Up to \$7,500 total budget• Deadline February 22, 2019• 10 weeks, full-time | <ul style="list-style-type: none">• Freshman/sophomore preference• Choose from proposed projects or develop new project with a mentor |
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The School of Earth, Energy & Environmental Sciences (SE3) will fund approximately 20 Stanford students to conduct research over the summer of 2019. Funding priority goes to current and prospective students within SE3 who have not yet received departmental funding. Preference goes to freshmen and sophomores, though juniors and seniors in their first research experience will be considered. Applicants develop a project with a faculty member/graduate student who will then serve as their advisor(s). Projects on and off campus.

Visit <https://pangea.stanford.edu/stanford-earth-summer-undergraduate-research-program> to learn more or apply.

Mentoring Undergraduates in Interdisciplinary Research (MUIR)

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| <ul style="list-style-type: none">• \$7,000 stipend• Deadline February 1, 2019• 10 weeks, full-time | <ul style="list-style-type: none">• Open to all undergraduates• Faculty members apply on behalf of undergraduates |
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The Stanford Woods Institute for the Environment's MUIR program funds interdisciplinary environmental research for undergraduates. Faculty apply with specific students in mind for a given project; students wishing to initiate a project must approach a faculty member to apply on their behalf and to serve as their mentor.

See <https://woods.stanford.edu/educating-leaders/mentoring-undergraduates-interdisciplinary-research-program-muir>.

Research Experiences Especially for Freshmen (REEF) at Hopkins Marine Station

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| <ul style="list-style-type: none">• Up to \$5,000 total budget• Deadline March 1, 2019• 10 weeks, full-time• Current freshmen only | REEF grants allow students to conduct marine science research at Hopkins Marine Station in Pacific Grove, CA, directly after their freshman years. These summer research internships are available to current Stanford freshmen only. See https://hopkinsmarinestation.stanford.edu/REEF for a list of projects. |
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Visit <https://hopkinsmarinestation.stanford.edu/webforms/research-experiences-especially-freshmen-reef> to apply.

Biology Summer Undergraduate

- \$7,000 research stipend
- Deadline January 31, 2019
- Mostly 10 weeks, full-time
- Freshman/sophomore preference
- Apply with three top project choices; faculty select applicants.



The Department of Biology, using funds from the office of the Vice Provost for Undergraduate Education (VPUE), offers paid research internships to current Stanford undergraduates who want to spend the summer participating in ongoing faculty research projects to learn biological research methods. Extensive experience is not required; the basic design of the research projects is provided by faculty who will guide you. Most of these projects take place on the Stanford main campus and Hopkins Marine Station in Pacific Grove, CA. Some projects take Stanford students out of the area or even out of the country to experience environmental, ecological and animal behavior research through already-established projects. Often, data is collected in the field and analyzed on campus.

Visit <https://biology.stanford.edu/academics/undergraduate-program/undergraduate-research/vpue-summer-program> to apply or learn more about the program and the 2018 project listings.

Earth Systems Volpert Scholars Award

The Volpert Scholars Award provides financial support for work on research projects and internships undertaken by Earth Systems majors. Award recipients may receive up to \$7500 to pursue research or internship activities that will foster students' growth as interdisciplinary environmental scholars and problem-solvers. The Volpert Scholarship emphasizes work on interdisciplinary environmental leadership and scholarship, and may support both research projects and internships.

- Up to \$7,500 total budget
- Deadline TBA
- 10 weeks, full-time
- For upper-level Earth Systems majors
- Student applies under faculty mentorship

See <https://pangea.stanford.edu/esys/volpert-scholars-award> to learn more or apply.

The Beagle II Award

- Up to \$7,500 (individual award)
- Up to \$12,000 (shared award)
- Deadline January 22, 2019
- Open to Stanford undergraduates of all years and majors



Sponsored by the Stanford Department of Anthropology, the Beagle II Award funds “voyages of scientific discovery.” Rather than a typical undergraduate research grant, it is an award to encourage learning through travel, much in the manner of Darwin and other explorers. Project schedule and structure is flexible. There is an application workshop on Thursday, November 15, 2018 from 12-1 PM for those interested in applying.

Visit <https://web.stanford.edu/group/beagle2/index.html> to learn more; apply at <https://undergrad.stanford.edu/opportunities-research/fellowships/fellowships-listing/beagle-ii>.

UAR Major and Small Grants

Student grants from Undergraduate Advising and Research (UAR) support independent student projects from all disciplines. Small Grants can support smaller projects during any quarter, while Major Grants typically support full-time summer commitments. UAR Chappell Lougee Scholarships available for sophomores pursuing full-time immersive summer projects in the humanities, creative arts, and qualitative social sciences.

- Up to \$7,000 Major Grant stipends for 10 weeks of full-time summer work
- Up to \$1,500 Small Grant stipends
- \$7,500 10-week stipend for Chappell Lougee
- Major Grant deadline March 11, 2019
- Monthly Small Grant deadlines
- Chappell Lougee deadline December 3, 2018

See <https://undergrad.stanford.edu/opportunities/research/get-funded/explore-uar-student-grants> to learn more.

Civil & Environmental Engineering – Summer Undergraduate Research Program

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| <ul style="list-style-type: none">• Up to \$7,500 total budget• Deadline February 20, 2019• 10 weeks, full-time | <ul style="list-style-type: none">• All undergraduates eligible• Contact CEE faculty member to discuss project before applying to program; see listed projects or propose a new project |
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The Department of Civil & Environmental Engineering (CEE), through Stanford's Vice Provost for Undergraduate Education (VPUE), will support full-time summer research appointments for undergraduates in 2018. The theme of this research program is "Engineering for Sustainability," and selected undergraduates will work closely with CEE faculty on one of several designated projects (or design their own) in the realms of the natural environment and the built environment. Applicants may apply to multiple projects, provided they list preferences. Prior to submitting an application, students should identify and contact a CEE faculty member who is agreeable to supervise and collaborate a summer research project.

Visit https://web.stanford.edu/~aboehm/VPUE_2018.htm to apply or learn more about the 2018 project listings.

Materials Science & Engineering VPUE Summer Research Program

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| <ul style="list-style-type: none">• Up to \$7,000 stipend• Application closes early March• 10 weeks, full-time | <ul style="list-style-type: none">• All undergraduates eligible• Rank project preferences; faculty choose final placements |
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Materials Science and Engineering has received a grant from the Vice Provost for Undergraduate Education and the School of Engineering to fund summer research projects for Stanford undergraduates. Each student will have a faculty mentor who will guide them through the summer research projects. This program is highly recommended for any student interested in getting hands-on experience with the cutting edge of Materials Science and Engineering research, including topics such as energy storage, nanomaterials, photovoltaics, and biomechanics.

Visit <https://mse.stanford.edu/student-resources/research-experience-undergraduates> to learn more or apply.

Department of Anthropology Summer Research Grants

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| <ul style="list-style-type: none">• \$2,000-\$5,000 grants• Deadline TBA (Feb. 2019)• 10 weeks, full-time | <ul style="list-style-type: none">• All undergraduates eligible; preference to honors candidates majoring in Anthropology• Work with Department of Anthropology faculty advisor |
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Through the Franz Boas Summer Scholars and Michelle Z. Rosaldo grant programs, students may apply for funding of any anthropological research, including research in the subfields of linguistics, archaeology, ethnology, and biological anthropology.

See <https://anthropology.stanford.edu/undergraduate-program/research/summer-research-opportunities-funding>.

Center for Spatial and Textual Analysis (CESTA) – Summer Research Assistant Positions

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| <ul style="list-style-type: none">• Stipend-supported• Application opens mid-Winter Quarter• All undergraduates eligible |
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The Center for Spatial and Textual Analysis hires undergraduate Research Assistants to work on interdisciplinary research projects. CESTA is a collaborative research center, home to the Spatial History Project, the Literary Lab, Humanities + Design, and the Chinese Railroad Workers in North America Project, among other initiatives.

See <https://cesta.stanford.edu/programs/undergraduate-research-assistant-program/job-announcement-and-application-portal>.

Summer Undergraduate Program on Energy Research (SUPER)

The Precourt Institute for Energy's Summer Undergraduate Program on Energy Research (SUPER) internships provide undergraduates with opportunities to work on faculty-mentored, individualized energy research during the summer. Undergraduates delve deeply into one energy topic, while also learning about energy research across Stanford University.

See <https://energy.stanford.edu/super/super-overview> to learn more.

- \$7,000 stipend
- Deadline February 10, 2019
- 10 weeks, full-time
- Open to all undergraduates
- Apply with or without a designated faculty advisor

Summer Internship and Fellowship Opportunities

Earth Systems Public Service Summer Fellowship

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| <ul style="list-style-type: none">• \$5,000 base stipend• Application opens Nov. 12, 2018• 9 weeks, 35 hrs/week | <ul style="list-style-type: none">• All undergraduates welcome• Applicants propose and organize their own organization placements |
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Through the Earth Systems Public Service Summer Fellowship, students apply what they have learned through interdisciplinary environmental studies to a summer internship at a nonprofit organization or government agency. The fellows spend a summer working full time with a supervisor/mentor in an organization of their choice, and the focus of the fellow's work should foster growth as an interdisciplinary environmental scholar and problem-solver within the public service arena. This fellowship, co-operated by the Haas Center, is a Cardinal Quarter opportunity.

See <https://haas.stanford.edu/students/cardinal-quarter/fellowships/earth-systems-public-service-summer-fellowship>.

Stanford Energy Internships in California and the West (SEICW) – Precourt Institute for Energy

The Precourt Institute for Energy will fund twelve students in 2018 through Stanford Energy Internships in California and the West (SEICW). Internship positions are listed at <https://west.stanford.edu/students/stanford-undergraduates/summer-internships>. Application is through Stanford in Government's fellowship portal. SEIC is a Cardinal Quarter opportunity.

See <https://energy.stanford.edu/seicw/seicw-overview>.

- \$5,000-\$7,500 stipend
- Deadline February 4, 2019
- Nine+ weeks, full-time
- Apply via Stanford in Government application
- Choose from listed internship positions

Environmental and Policy Internships in California (EPIC) – Woods Institute for the Environment

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| <ul style="list-style-type: none">• \$5,000-\$7,500 stipend• Deadline TBA• 9-10 weeks, 35-40 hrs/week | <ul style="list-style-type: none">• Undergraduate students eligible• List of internship placements found on website• Application through SIG system |
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The Woods Institute for the Environment, in collaboration with the Haas Center for Public Service and Stanford in Government, offers undergraduates paid summer internships that provide a hands-on introduction to environmental policy work. Students who are selected will receive mentoring from environmental professionals and directly contribute to solving important sustainability challenges that are facing the public. A list of internship positions may be found on the website below, and application is through SIG's portal. EPIC is a Cardinal Quarter opportunity.

See <https://woods.stanford.edu/educating-leaders/education-leadership-programs/stanford-environmental-internships-california>.

Schneider Fellowship

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| <ul style="list-style-type: none">• \$8,500 base stipend• Deadline January 21, 2019• 12 weeks, full-time | <ul style="list-style-type: none">• Undergraduate and graduate students eligible• List of internship placements found on website• Application through SIG system |
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Through the Haas Center's Schneider Fellows program, Stanford students work at leading U.S. nongovernmental organizations (NGOs) in the sustainable energy field. Fellows spend a quarter tackling the world's economic, environmental, social, and technical challenges associated with harnessing energy resources to deliver energy services. 12-week and year-long fellowships available at any of several partner NGOs; students may apply to as many of these fellowships as they like. Locations include Washington, D.C., New York City, and the SF Bay Area.

See <https://haas.stanford.edu/students/cardinal-quarter/fellowships/schneider-fellows> for NGO partner list and more info.

Stanford in Government (SIG) Fellowships and Stipends

SIG's Fellowship Program allows motivated students to gain exposure to the public policy arena through funded internships with NGOs and government agencies. SIG offers dozens of arranged fellowships across the United States and internationally. Students may also apply for stipends to support work with an organization of their choosing. SIG-supported internships are Cardinal Quarter opportunities.

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| <ul style="list-style-type: none">• Nine+ weeks, full-time• \$5,000-\$7,500 stipend• Deadline February 6, 2019• Listed internship positions, or apply for open stipend |
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See <https://haas.stanford.edu/students/cardinal-quarter/fellowships/stanford-government-sig-fellowships-and-stipends>.

Urban Studies Summer Fellowship

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| <ul style="list-style-type: none">• \$6,000 stipend• Deadline TBA• 8 weeks, full-time | <ul style="list-style-type: none">• Preference to Urban Studies majors• Applicants propose and organize their own organization placements |
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The Urban Studies Summer Fellowship provides undergraduates with the opportunity to complement their academic studies with a full-time, paid internship experience during the summer at an organization of their choice. Preference will be given to Urban Studies majors, but all Stanford undergraduates are eligible to apply. The fellowship placement should be with government agencies or non-profit organizations committed to public service, public policy, community development or research on urban issues. This is a Cardinal Quarter opportunity.

Visit <https://web.stanford.edu/dept/URBS/cgi-bin/wordpress/> to learn more and apply.

Bill Lane Center for the American West - Summer Internships

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| <ul style="list-style-type: none">• \$5,000-\$7,200 stipend• Deadline TBA (Feb. 2019)• 10 weeks, full-time | <ul style="list-style-type: none">• Open to all undergraduates• Can apply to up to two of the fourteen posted positions |
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Every summer, the Bill Lane Center for the American West offers many opportunities for Stanford undergraduates (including graduating seniors) to work with organizations throughout the West. Through these internships, students can explore careers in natural history, conservation, land use, museum curation, resource management, and related fields.

See <https://west.stanford.edu/students/stanford-undergraduates/summerinternships>.

TomKat Center for Sustainable Energy – Energy Impact Summer Fellowship

In conjunction with the Haas Center, the TomKat Center will place undergraduate students on a multifaceted project that will provide a blueprint for the generation of renewable energy. Fellows will be based at Stanford under the direction of TomKat Center personnel but will interact with a broad range of mentors, professionals, and experts on the technology, policy, and business aspects of the project. The summer 2018 Energy Impact Project will explore the technical, economic and regulatory barriers to wider adoption of renewable natural gas (RNG) in California with particular focus on the pathway(s) to facilitate pipeline injection. Fellowships are Cardinal-Quarter-eligible.

See <https://tomkat.stanford.edu/education/energy-impact-summer-fellowships>.

- \$6,400 stipend
- App available Jan. 2019
- 8 weeks, full-time
- All undergraduates eligible
- Fellows work in a team on a single TomKat project



TomKat Ranch Sustainable Agriculture Internship

Through the TomKat Ranch Sustainable Agriculture Fellowship, Stanford students can work full-time for 10 weeks at the TomKat Ranch in Pescadero, CA. TomKat Ranch is a 1,800-acre cattle ranch producing grass-fed, grass-finished, pasture-raised beef. It seeks lasting solutions to the challenges of producing safe, wholesome food in a sustainable manner. The fellowship is an opportunity to serve with the TomKat Ranch Educational Foundation, a learning laboratory for animal agriculture focused on climate stability, healthy food, biodiversity, and vibrant community. Cardinal Quarter opportunity.

See <https://haas.stanford.edu/students/cardinal-quarter/fellowships/tomkat-ranch-sustainable-agriculture-internship>.

- \$5,000 base stipend
- Deadline TBA (Feb. 2019)
- 10 weeks, 35+ hrs/week
- Housing on ranch included
- Open to all undergraduates



Other Opportunities and Resources

For a complete list of summer Cardinal Quarter opportunities, see the Haas Center for Public Service's webpage at <https://haas.stanford.edu/students/cardinal-quarter/fellowships>. Many Haas fellowship opportunities not listed in this pamphlet will likely be of interest to Earth Systems students wishing to engage with public service, policymaking, NGOs, etc.

During Winter and Spring quarters, some internship and research position offerings will be sent to SE3 and Earth Systems students via email blasts. These will include Stanford-based opportunities as well as external opportunities, so undergraduates interested in this type of summer work should keep an eye on their inboxes. Select external research opportunities can be browsed via the National Science Foundation's Research Experiences for Undergraduates (REU) page: https://www.nsf.gov/crssprgm/reu/reu_search.jsp. This pamphlet is restricted to Stanford's own undergraduate opportunities, and is non-exhaustive even then, so students should look beyond the opportunities outlined above.

Earth Systems students, alumni, staff, and faculty are excellent resources for discovering summer opportunities that may be otherwise difficult to come across. Deana Fabbro-Johnston (deana@stanford.edu), Anahid Babekian (anahids@stanford.edu), Richard Nevle (rnevle@stanford.edu), and the Earth Systems Student Advisors can all help provide guidance for students wondering about summer opportunities. And remember: sometimes the most meaningful summer experiences come from outside the traditional realm of internship positions. Keeping an open mind throughout the process is the key to finding a truly rewarding summer experience.