COSTA RICA
Research Experience for Undergraduates (REU)

Are you curious about the natural world?

We are looking for undergraduate African Americans, Hispanic Americans, American Indians, Alaska Natives, Native Hawaiians, and Native Pacific Islanders who are curious about the natural world, and also:
- are adventurous
- are willing to invest their summer months doing original research in the tropical forests of Costa Rica
- are willing to integrate their research experience into their future careers by presenting their results
- are willing to make new friends and scientific contacts from across the globe
- are willing to work hard, and take full advantage of this stupendous opportunity that is truly a stepping stone towards a scientific career.

"Coming from native and pacific islander backgrounds, we all understood the impacts of being minority in the scientific field. Such an opportunity like this gave us confidence in reaching success in the field."

What is REU?
REU is a summer opportunity for undergraduate African Americans, Hispanic Americans, American Indians, Alaska Natives, Native Hawaiians, and Native Pacific Islanders students to complete ecological research. It takes place at the OTS La Selva Research Station and OTS Las Cruces Research Station, through support of the NSF Louis Stokes Alliances for Minority Participation Program (LSAMP). Summer funding allows student interns to complete an original research project while guided by experienced researchers.

For program dates, deadlines and detailed information, please visit: www.tropicalstudies.org/reu

REU Highlights
- Design and carry out original scientific research in a tropical rain forest.
- Introduction to tropical biodiversity and ecology.
- Ideal conditions for research on forest fragmentation, restoration ecology, water quality, tropical biodiversity, and climate change.
- Daily contact with experienced scientists from a variety of biological disciplines.
- Presentation of results in the internet-broadcast REU symposium.
Ten reasons why you should apply to REU if you are African American, Hispanic American, American Indian, Alaska Native, Native Hawaiian, or Native Pacific Islander

1. REU is an opportunity to immerse yourself in your own scientific research project.
2. Participating students come from similar, but diverse cultural backgrounds.
3. Each year REU students come from many educational backgrounds including isolated community colleges, tribal colleges, and other LSAMP institutions.
4. Summer activities include instruction in research methods, tropical ecology, statistical analysis and scientific writing.
5. One-on-one mentoring during your individual research project.
6. This paid 9 week summer internship covers all travel and basic living expenses in addition to giving you a stipend.
7. Make life-time contacts with scientists outside of your home institution.
8. Gain international experience.
9. The program is adaptable to your interests, skills, and abilities, as you can either develop a novel independent project from conception to presentation or you can collect and present data from an important piece of an ongoing research project.
10. Lack of experience does not limit participation and completion of REU.

Questions?
Please contact: kattia.mendez@tropicalstudies.org
www.tropicalstudies.org/reu

How to apply
Click on the Apply Now button on the program page and follow the online instructions to fill out the application on-line. At the end of the application you will be required to upload the following documents in pdf format:

- A letter of recommendation from your Home Mentor (download the mentor recommendation form)
- A letter of recommendation from a Science Professor (download the science recommendation form)
- Official transcripts

Photo Credits: Scott T. Walter and Adriana Buitodano
Introduction: The ChemEnergy REU aims to provide undergraduate students with a unique 10-week research experience tackling state-of-the-art research problems. REU students will live on campus and work alongside faculty and graduate students to gain a unique perspective on modern chemistry research. Students will also network with faculty and students in weekly social activities, participate in field trips to local companies and a weekend trip to Lake Tahoe, and receive training to improve scientific communication skills.

Eligibility: Students who are currently sophomore or junior chemistry (or related) majors. Must be a U.S. Citizen or permanent resident.

Financial: Stipend (up to $5,000); Housing provided; Travel costs included

Research Projects: see website, http://chemistry.ucdavis.edu/REU

Dates: June 19th – August 24th 2018.

Time-line: Application deadline is February 5th and offers will be made in late February or early March. http://chemistry.ucdavis.edu/REU

Program Directors: Dr. Annaliese Franz and Dr. Jesus Velazquez

E-mail: chem-reu@ucdavis.edu
Chemistry and Biochemistry at the University of Oregon

Summer Research Opportunities

REU - The University of Oregon and the National Science Foundation sponsor a 10 week summer undergraduate research program for Physics and Chemistry majors to participate in a wide variety of exciting research projects. It's not all work, however. Having local and regional adventures are a vital component of the program. The Oregon REU program offers a variety of research projects for students interested in chemistry, physics, environmental chemistry, optics and materials science.

The REU program provides a cutting edge interdisciplinary research experience supplant-ed with career building and mentoring activities that provide training and practice in the transferable skills that are so essential for success in the next stage of education, and/or employment. For more information about the Oregon REU program contact Jeanne Basom, jbasome@uoregon.edu, 541-346-4307

SPUR - The University of Oregon (UO) Summer Program for Undergraduate Research (SPUR) provides fellowship opportunities for undergraduate students from other Universities and Colleges to participate in ongoing research in life sciences laboratories at UO during the Summer months. Each project is a rigorous and rich immersion in a mentored, high profile science research project with a lab mentor under the direction of a research professor. We stress active, experiential learning, because a true understanding of scientific ideas requires immersion into the processes of discovery, and it is reflected in the ability to communicate these ideas. In addition, professional and social interactions with active researchers at all levels helps interns boost personal confidence. For more information about the Oregon SPUR program, email spur@uoregon.edu.

Graduate Program

Graduate research at the University of Oregon is designed to keep student researchers at the forefront of chemical science. Our programs in the traditional areas of biochemistry, inorganic, organic, and physical chemistry lay the foundation for new discoveries in materials science, molecular biology, optics, and theoretical chemistry. Though our department is medium in size, we are a leading innovator in chemistry.

A unique strength of our program is its interdisciplinary approach to research and teaching. Chemical scientists may be interested in the Institute of Molecular Biology, the Institute of Theoretical Science, the Materials Science Institute, the Oregon Center for Optics, and the programs in cell biology and in molecular synthesis, structure, and dynamics.

Oregon's science complex includes state-of-the-art buildings and facilities that continually evolve and expand to provide a stimulating environment for scientific discovery. Students have direct access to a diverse array of modern research instrumentation. Highly skilled full-time instrumentation specialists are available to assist with training and in the optimization of experiments. We have an excellent science library, nationally recognized computer resources, and professionally staffed technical support shops. Close proximity of research laboratories and facilities encourages spontaneous day to day interactions among students and faculty members, providing a rich chemical education.

The quality of our educational program has been recognized by training grants from the National Science Foundation, the National Institutes of Health, and the Department of Education. These grants recognize and support our efforts to provide a comprehensive educational program that can be tailored to the varied career goals of our students.

For more information contact Christi Mabinuori, Graduate Program Manager, Chemistry and Biochemistry christim@uoregon.edu, 541-346-4789
Research Faculty

Chemistry

Shannon Boettcher - The capture and storage of solar energy in a collaborative interdisciplinary environment, utilizing inorganic, synthetic, nano and microscale, surface chemistry, simulation, physical measurement, and device fabrication to design, build, and study new materials and structures. sshub@uoregon.edu

Bruce P. Branchaud - Tools and applications, synthetic organic chemistry, fluorescent dyes and sensors, biotechnology. branchaud@uoregon.edu

Jeff Cina - Theory and simulation of time-resolved optical spectroscopy. cina@uoregon.edu

Victoria DeRosa - Biochemistry, chemical biology, biomolecular, and chemical approaches towards understanding RNA and protein structure and function. Emphasis on chemical activity, RNA drug interactions, and nucleic acid chemistry. derosa@uoregon.edu

Ken Duose - Inorganic chemistry, designed synthesis of water-stable phosphorus-containing carbohydrate and metallophosphorus materials. Development of environmentally benign methods for the synthesis of solid state materials. duose@uoregon.edu

Marina Gomza - Theory and simulations of soft condensed matter, complex fluids, and biophysical systems. Development of novel, molecular-scale, statistical-mechanical theories of structure and dynamics of complex materials. gomza@uoregon.edu

Michael Haley - Synthesis of analogs of tetrahydrofuran scaffolding for materials and supramolecular chemistry; organic semiconducting materials. haley@uoregon.edu

Mike Harms - Protein evolution. Phylodynamics, molecular biophysics. harms@uoregon.edu

Diane Havel - RNA polymerase, regulation of gene expression, protein-DNA interactions. dnhavel@uoregon.edu

Chris Henderson - MOFs, amorphous materials, surface structures. chend@uoregon.edu

James Hutchison - Ion and electron transport in biological systems and synthetic materials. Nanoelectronics, chemically-modified surfaces, green materials chemistry. hutch@uoregon.edu

Ramesh Jasti - Organic synthesis of structurally unique carbon nanomaterials with novel properties. rjasti@uoregon.edu

Darren Johnson - Organic, inorganic, supramolecular, and materials chemistry with primary applications in the areas of environmental remediation, molecular probes design, and the development of inorganic clusters as precursors (inks) for metal oxide thin films. djohnson@uoregon.edu

David Johnson - Novel approaches to solid-state synthesis of new nanocrystalline materials with designed structure. Correlating physical properties, structure, composition, and nanostructure helps guide applications of these materials in nanoelectronic devices, magnetic data storage, and solar applications. davej@uoregon.edu

Michael Kellman - Theoretical chemistry and physical chemistry. kellman@uoregon.edu

Mark Lonergan - Study of polymer blends, composites, and copolymers in which at least one component is optically or electrically active, such as a conducting polymer or inorganic superconductor. lonergan@uoregon.edu

Andrew Marcus - Wavepacket dynamics in molecules. Molecular dynamics in complex systems. Nonlinear spectroscopy of biomolecular systems. marcus@uoregon.edu

George Narin - The connection between the chemical structure and properties of nanoparticle materials and devices. In particular, real space experimental approaches that provide spectroscopic information on the atomic and molecular scales. gianrin@uoregon.edu

Head Nolen - Molecular regulation of the cytoskeleton. hnnolen@uoregon.edu

Catherine Page - Novel synthetic routes to functional materials, including self-assembly of multilayer thin film systems and sol gel synthesis of complex oxides. cp@uoregon.edu

Michael Pluth - Organic, supramolecular, and inorganic chemistry; chemical biology. pluth@uoregon.edu

Ken Prehoada - Signal transduction, protein interaction networks, x-ray crystallography. prehoda@uoregon.edu

James Preil - Mass spectrometry of macromolecular complexes and nanoscale soft matter. Bioanalytical and physical chemistry. jpreil@uoregon.edu

Geraldine L. Richmon - Optical studies of interfacial structure and dynamics. richmond@uoregon.edu

Tom Stevens - Membrane biogenesis, protein sorting, organelle assembly. tstevens@uoregon.edu

Davide Tyler - Inorganic materials, polymer chemistry, photochemistry. dtyler@uoregon.edu

Peter II. von Hippel - Physical biochemistry of proteins and nucleic acids; gene expression. Emeritus professor, research active. petevh@uoregon.edu

Cathy Wong - Nonlinear spectroscopy of materials systems. Materials formation and degradation. Non-equilibrium systems. cwong@uoregon.edu

Biology

Alice Barkan - Post-transcription control of gene expression in the chloroplast, RNA-protein interaction. abarkan@uoregon.edu

Bruce A. Bowser - Molecular genetic analysis of the microtubule and microtubule cytoskeleton in early C elegans embryos. bbowser@uoregon.edu

Bill Cress - Developmental genetics of evolving traits, gene and genome duplication, evolutionary genetics, speciation. wcress@uoregon.edu

Chris Doe - Neural stem cell, cell polarity and CNS development in Drosophila. cdoe@uoregon.edu

Karen Guillen - Bacterial-host interactions in development; Helicobacter pylori mechanisms of pathogenesis. kguillon@uoregon.edu

Tory Herman - Neural target selection and synapse formation in Drosophila. herman@uoregon.edu

Eric Johnson - Hypoxia, genomics, gene regulation. ejohnson@uoregon.edu

Diana Libuda - DNA repair, recombination, and chromosome dynamics during meiosis genetic mechanisms of sperm and egg development. dlibuda@uoregon.edu

Shawn Lockery - Parallel and distributed processing in simple biological networks. shawn@uoregon.edu

John Postlethwait - Genome evolution, evolution of development, sex determination, skeletal development. postlethwait@uoregon.edu

Annie Powell - Intestinal stem cell biology in development, adult homeostasis and disease states. anniep@uoregon.edu

Eric Selker - Epigenetics, DNA methylation, genome dynamics, gene silencing, position effects. selker@uoregon.edu

George Sprague - Genetic regulatory mechanisms in yeast. gts@uoregon.edu

Kryn Stankunas - Chromatin and regulators as dynamic sources of epigenetic information during heart development. kryn@uoregon.edu

Philip Washbourne - Molecular mechanisms of synaptic formation between neurons during development and repair. pwash@uoregon.edu

Monte Westerfield - Developmental genetics of neurons and muscle. mwesterfield@uoregon.edu

Physics

Raghuvir Parthasarathy - Materials properties of biological membranes, mechanisms of protein organization, advanced microscopy techniques. rpartha@uoregon.edu

For additional faculty research and contact information, visit chemistry.uoregon.edu
SUMMER UNDERGRADUATE RESEARCH OPPORTUNITIES IN CHEMISTRY

The University of Georgia

The Department of Chemistry at the University of Georgia is soliciting applications from outstanding undergraduates majoring in chemistry and related disciplines for our SURO 2018 Summer Undergraduate Research Opportunities program. Undergraduate researchers will join active research groups and participate in projects directed by faculty members. Participants are introduced to new and innovative areas of research in a variety of chemistry sub-disciplines through interaction with faculty members and joint seminars with other participants in the summer research program.

Undergraduate students who are completing their sophomore or junior years in the spring of 2018 are encouraged to apply. Applications are available on-line at http://www.chem.uga.edu/suro. Applicants must complete an application form and arrange for two letters of recommendation to be sent in their behalf from faculty members who are familiar with their recent academic progress. In addition, applicants should send a current transcript of their undergraduate academic record. Applications are reviewed frequently until the available openings are filled. Those received by March 15, 2018 are assured of full consideration. International students currently enrolled in US institutions are eligible for SURO 2018.

SURO 2018 is a 9 week program commencing Tuesday May 29, 2018 and continuing through Friday July 27, 2018. Participants receive a $5000 stipend.

The University of Georgia is located in Athens and is situated in northern Georgia at the southern tip of the Appalachian Mountains approximately 65 miles northeast of Atlanta. Athens and its beautiful surroundings offer a variety of amenities including backpacking, river-running, visits to nearby national parks, and nationally popular summer arts events.

Research interests of UGA chemistry faculty can be found at http://www.chem.uga.edu/research. Those desiring more detailed information about specific research projects of participating faculty or have questions regarding the Summer Undergraduate Research Opportunities in Chemistry program should direct correspondence to:

Professor Gary E. Douberly
University of Georgia
Department of Chemistry
Athens, Georgia 30602-2586
Phone: (706)-542-3857 email: douberly@uga.edu
Summer 2018 NSF-REU Program
Undergraduate Research Opportunities at the Interface of Computational and Experimental Chemistry

Students looking for an exciting interdisciplinary research experience encompassing many aspects of computational and experimental chemistry are invited to apply for the Summer 2018 NSF-REU program at the University of North Texas. The ten-week program will tentatively begin in late May or early June, and participants will be given a $5,000 stipend, plus housing. Funds are available to help defray travel costs to and from the REU site, which is located at the northern outskirts of the Dallas-Ft. Worth area.

Possible Research Areas Include:

Application forms and additional information on this program are available by visiting http://chemistry.unt.edu/nsf-rcu-program.

Applications for the program are due by February 15, 2018 and should be submitted online.

For Questions and Comments, Contact Shawn Adams:
Phone: 940-565-4372 chem-reu@unt.edu
FAX: 940-565-4318 http://chemistry.unt.edu/nsf-reu-program