THE DIFFERENCE
The College of Chemistry’s Guiding Outstanding Learners to Discover© (GOLD) programs are designed to empower students in high school and other undergraduate institutions to further their understanding of the chemical sciences and engineering. The programs provide structured curricula that incorporate seminars and lectures given by world-renown faculty and scientific leaders in their fields. In some cases, the programs include hands-on experiences in the laboratory and/or classroom. These offerings are integrated with other strategies such as group problem solving activities, presentations, and interactive discussions that build stronger communication, interpersonal, and analytical skills amongst participants.

The objective of the GOLD programs is to facilitate the development of each student’s intellectual and inquiry skills to help him/her achieve his/her fullest potential. Every GOLD program is sponsored and taught by UC Berkeley faculty, graduate students, and scholars, and is held onsite at the Berkeley campus.

OUR PROGRAM
The GOLD© Science Fair is a program that pairs a high school student with a graduate student mentor who remotely coaches him/her for eight months on a research project of the student’s choosing. The student completes the project at home or at school and receives guidance from their mentor on average two hours per month through email, videoconferencing, or other remote methods. The mentor guides the student on their topic concept, formulated hypothesis, suggested methodology, results observation, data analysis, and conclusion. The student then spends three weeks at UC Berkeley to shadow his/her mentor in the laboratory and to prepare the presentation of their science project to be displayed and judged by College of Chemistry faculty and students.

The GOLD© Science Fair teaches young scientists the theory and application of research methodology, to work independently, think critically, communicate more effectively, and present with poise and maturity.

REMOTE COACHING, June-January
ONSITE SCIENCE FAIR & LABORATORY SHADOWING, February
INNOVATIVE and UNIQUE

Brought to you by the #1 ranked chemistry program in the world. The GOLD Science Fair is administered and delivered by the College of Chemistry at UC Berkeley and is taught by its own globally ranked faculty and graduate students.

Gain scientific knowledge and understanding beyond theory. Students learn hands-on the scientific method and how to apply theoretical knowledge gained in the classroom when conducting their experiments.

Provides invaluable insight into the life of a scientist. The program introduces students to the commitment and dedication required to become a scientist. Students learn skills such as perseverance, adaptability, resourcefulness, and patience when conducting their experiments. Onsite, they are immersed in continuous learning through weekly seminars and laboratory shadowing.
OUR FACULTY

JOHN ARNOLD
Green Chemistry, Materials, Polymers, & Nanoscience, Inorganic and Organometallic Chemistry
Professor Arnold’s research is on synthetic inorganic chemistry with the primary goal of making, purifying, and studying molecules and materials that are interesting by virtue of their unusual structures and chemical reactivity.

STEPHEN LEONE
Physical Chemistry, Chemical Dynamics and Nanostructured Materials
Professor Leone’s research interests include ultrafast laser investigations and soft x-ray probing of valence and core levels, attosecond physics and chemistry, state-resolved collision processes and kinetics investigations, nanoparticle fluorescence intermittency, aerosol chemistry and dynamics, probing with near field optical microscopy, and neutrals imaging.

DAVID GRAVES
Plasma Processing, Electronic Materials
Professor Graves’s group focuses on the fundamentals and applications of weakly to partially ionized gases, or plasmas, to technological problems, primarily in the microelectronics industry.

DAN NOMURA
Chemical Biology, Analytical Chemistry
The Nomura Research Group is focused on developing and applying chemical proteomic and metabolomic platforms to identify and pharmacologically target metabolic drivers of human disease.

PEIDONG YANG
Professor Yang’s lab utilizes low-dimensional nanoscopic building blocks to assemble complex architectures with novel chemical and physical properties.

RON COHEN
Atmospheric Chemistry
Professor Cohen’s research focuses on developing and applying new experimental and modeling strategies for understanding the chemical composition of the Earth’s atmosphere now and in the past and for predicting future changes. Current research focuses on the role of nitrogen oxides and on the isotopes of water.
The GOLD® Science Fair is open to all high school students who have taken general chemistry, physics, or biology. Applicants must be available for a remote or in-person interview to be considered for the program.

There is a non-refundable application fee of $75. This fee will be applied towards the total tuition and fees of US $12,000 if accepted. Tuition includes room and board, course materials, UC Berkeley “swag”, pre-planned excursions, access to facilities, and an official completion certificate signed by the dean of the College.

ELIGIBILITY AND APPLICATION PROCESS

We will be accepting applications until May 31st. Click here to apply.
For questions about the GOLD Science Fair please contact:
Gold Programs
goldprograms@berkeley.edu
Suzanne Sutton
suttons@berkeley.edu