

UCB Diversity Ecosystem: STEM Relationships (sampling)

AISES stands for the American Indian Science & Engineering Society which promotes excellence, leadership and opportunities in education and professional development for American Indians and Alaska Natives. AISES (we) enrich the fields of science and engineering with Native traditions and strengthen communities with knowledge, resources and innovation. Our UC Berkeley Chapter Student President is Franklin Dollar. <http://www.aises.org/>

AGEP stand for Alliances for Graduate Education and the Professoriate program which is funded by NSF. It is intended to increase significantly the number of domestic students receiving doctoral degrees in the sciences, technology, engineering, and mathematics (STEM), with special emphasis on those population groups underrepresented in these fields (i.e., African Americans, Hispanics, American Indians, Alaska Natives, Native Hawaiians or other Pacific Islanders). In addition, AGEP is particularly interested in increasing the number of minorities who will enter the professoriate in these disciplines. Specific objectives of the AGEP program are (1) to develop and implement innovative models for recruiting, mentoring, and retaining minority students in STEM doctoral programs, and (2) to develop effective strategies for identifying and supporting underrepresented minorities who want to pursue academic careers. UC Berkeley's AGEP is run by Dr. Colette Patt. http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5474&org=NSF

BESSA stands for the Black Engineering and Science Students Association and is a student-run, non-profit organization whose mission is to provide academic and social support to its members and the community. BESSA organizes programs that promote academic excellence, personal and professional growth, and commitment to the minority community. <http://www.coe.berkeley.edu/bessa/>

BURC stands for Berkeley Undergraduate Research Consortium. The Berkeley Undergraduate Research Consortium (BURC), a campus wide working group of faculty and staff who work with undergraduate research programs, was first convened by the Office of Undergraduate Research in Spring 1998. The mission of this group was to share knowledge and work together to make research an important part of the undergraduate experience at Berkeley. BURC brings together diverse programs, some centered in departments, some at the college-wide or campus-wide level. UC Berkeley's BURC contact is Terry Strathman.

Bridge to the Doctorate is a NSF program that is tied into AMP programs. Individual campuses within an alliance can develop a proposal to for this grant money which focuses on helping diversity science graduate students on their particular campus. UC Berkeley does not have this program but it is an opportunity to consider in the future. http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5477

California Forum for Diversity in Graduate Education (aka Diversity Forum) is an all-day program designed to provide first-generation, low-income, and other students from underserved populations with a wealth of information about the career and academic opportunities associated with advanced study in a wide range of disciplines. The purpose of the Forum is to increase the flow of students from underserved groups into the advanced-level degree programs from which California's colleges and universities will draw their faculty of the future. Two events are scheduled each year (southern California in the spring and northern California in the fall). Each event hosts around 1,000 students. The planning committee is composed of over fifty CSU, UC, and Private university representatives. The Norcal Diversity Forum hosts include 2006-Mills College, 2007-UC Davis, 2008-UC Berkeley, 2009-UC Santa Cruz. The main contact is Kip Polakoff. <http://www.ucop.edu/acadadv/forum-for-diversity/information/campus-contact-info.htm>

The Coalition for Excellence and Diversity in Math, Science, and Engineering (aka the Coalition) is a partnership of colleges, departments, and programs that have joined together to engage and support historically underrepresented students in their science endeavors. Some of the programs involved include the Biology Scholars Program, Biology Fellows Program, Charles Tunstall Multicultural Engineering Program, UC LEADS, Pass the Torch, Professional Development Program, Chemistry Scholars, Program, College of Natural Resources, Student Learning Center, and the McNair Scholars Program to name a few. The Coalition meets weekly on Thursday mornings and is chaired by Dr. Caroline Kane.

COSMOS stands for the California State Summer School for Mathematics and Science program which is designed specifically for talented and motivated high school students. It is a 4-week summer residential program for high school scholars with demonstrated interest and achievement in math and science. This intensive experience is intended to encourage the brightest and most promising young minds to continue their interest in these fields. Located on four University of California campuses (Davis, Irvine, Santa Cruz, and San Diego), COSMOS provides students with an unparalleled opportunity to work side-by-side with outstanding researchers and university faculty, covering topics that extend beyond the typical high school curriculum. The UCOP COSMOS Contact is Dr. Dan Aldrich. <http://www.ucop.edu/cosmos/>

CUR The mission of the Council on Undergraduate Research is to support and promote high-quality undergraduate student-faculty collaborative research and scholarship. The Council on Undergraduate Research (CUR) and its affiliated colleges, universities, and individuals share a focus on providing undergraduate research opportunities for faculty and students at predominantly undergraduate institutions. CUR achieves its vision through efforts of its membership as organized in a divisional structure that includes biology, chemistry, geosciences, mathematics and computer science, physics and astronomy, psychology, social sciences, an at-large division that serves administrators and other disciplines, and a division for directors of undergraduate research programs. NCUR, SSCUR, and CUR are related to each other <http://www.cur.org/index.html>

HES stands for the Hispanic Engineers and Scientists. This student club seeks to increase the number of civically responsible Latino engineers and scientists who succeed academically, lead professionally, and passionately contribute to society. The goals of the group were two-fold: to increase Latino enrollment in engineering and the technical sciences, and to build as well as social support among its members. In 1980, the organization changed its name to Hispanic Engineers and Scientists (HES) and joined the Society of Hispanic Professional Engineers (SHPE) as a student chapter. Our UC Berkeley Chapter Student President is Noe Lozano. <http://hes.berkeley.edu/>

MESA stands for Math, Engineering, and Science Achievement program. MESA works with thousands of educationally disadvantaged students so they excel in math and science and graduate with math-based degrees. MESA works closely with industry partners and the University of California, California State University, the California Community Colleges, the Association of Independent Colleges and Universities and the State Department of Education. MESA is nationally recognized for its innovative academic development program. To the extent possible by California law, MESA emphasizes participation by students from groups with low eligibility rates for four-year institutions. MESA is administered by the University of California. The intersegmental program is funded by the state legislature, corporate contributions and grants. MESA is composed of MESA School Programs (K-12 efforts), MESA CCP (community college efforts), and MESA Engineering programs (MEP-undergraduate efforts). MESA's Interim Chief Operating Officer at UCOP is Oscar Porter. <http://www.ucop.edu/mesa/home.html>

NCUR stands for the National Conference for Undergraduate Research. Specifically, the purposes of NCUR are to 1) encourage awareness of undergraduate research, scholarship, and creative opportunities as they exist in various disciplines and types of institutions; 2) promote appreciation of the valuable role these components play in complementing the other aspects of undergraduate education and in encouraging the pursuit of advanced study and academic careers; 3) communicate and celebrate the

results of such student-mentor collaborations; and 4) foster a multidisciplinary and multicultural community of researchers, scholars, and artists linked by a common enthusiasm for learning. NCUR, SSCUR, and CUR are related to each other <http://www.ncur.org/>

SCCUR stands for the Southern California Conference on Undergraduate Research. SCCUR promotes awareness of faculty-mentored undergraduate research, scholarly, and creative activities as they exist in various disciplines and types of institutions. The conference fosters appreciation of the valuable role these collaborations play in enhancing undergraduate education. SCCUR aims to develop a multidisciplinary and multicultural community of researchers, scholars and artists linked by a common enthusiasm for learning and discovery. It is basically a mini-NCUR. NCUR, SSCUR, and CUR are related to each other. <http://sccur.ucr.edu/about.html>

Other 36 AMP programs exist around the nation supporting the mission of AMP. AMP is a NSF program led by Dr. A. James Hicks out of Washington D.C. The California State University system also has an AMP, the lead campus is Sacramento State University (Dr. Juanita Barrena). A nation-wide AMP publication called "NSF Louis Stokes Alliance for Minority Participation Celebrating Achievement Through Increasing Opportunities (2006)" provides a snapshot of each alliance and highlights their accomplishments, projects, and best practices (plus photos). http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf03520

Pass the Torch is a program focused on transfer students (especially in the physical sciences and English). It was the brain child of Dr. Jean Thomas of Foothill community college and is a partnership with UC Berkeley, UC Davis, and San Francisco Community College. This grant has just recently expired though at UC Berkeley PDP we are trying to keep it alive. UC Berkeley's Pass the Torch focuses on Math, Chemistry, and Physics students and is run by Diana Lizarraga (Executive Director Dr. Steven Chin). <http://www.foothill.edu/services/torch.html>

SACNAS stands for the Society for Advancement of Chicanos and Native Americans in Science. It has a mission of encouraging Chicano/Latino and Native American students to pursue graduate education and obtain the advanced degrees necessary for science research, leadership, and teaching careers at all levels. For over 30 years, SACNAS has provided strong national leadership in improving and expanding opportunities for minorities in the scientific workforce and academia; mentoring college students within science, mathematics and engineering; as well as, supporting quality pre-college science education. SACNAS' annual National Conference (each October) and K-12 Teacher Workshops, student chapters, e-Mentoring Program, and online internship/job placement resources are tools that help a diverse community of undergraduate and graduate students, professors, administrators, and K-12 educators achieve expertise within their disciplines. www.sacnas.org

Sigma Xi is the international honor society of science and engineering. Each year in November Sigma Xi holds an undergraduate poster competition and annual meeting (locations vary each time). UC Berkeley has a chapter (about 500 members) and has been sending students to present their research at this event. Dr. Ellen Simms is the current UC Berkeley President. www.sigmaxi.org

TAP stands for the Transfer Alliance Project which works with certain California Community Colleges to help students understand the process of transferring to Cal. Currently they work with 19 Northern California Community Colleges but will be expanding thanks to a new grant they received earlier this year. TAP is designed to increase the academic preparation and opportunity for high-achieving, low-income and otherwise disadvantaged prospective transfer students. The program provides intensive academic preparation and advising to help participants become competitive in Berkeley's highly selective transfer admissions process. UC Berkeley's TAP program is coordinated by Merryll Owen.

TRIO Programs Include Upward Bound, Student Support Services, Talent Search, and McNair Scholars Program. These programs are federally funded through the Department of Education. I think that UC Berkeley has three of the four programs on campus. <http://www.trioprograms.org/abouttrio.html>

Talent Search This program serves young people in grades six through 12. In addition to counseling, participants receive information about college admissions requirements, scholarships and various student financial aid programs. This early intervention program helps people from families with incomes under \$24,000 (where neither parent graduated from college) to better understand their educational opportunities and options. Over 386,000 students are enrolled in 471 Talent Search TRIO programs. It is my understanding that UC Berkeley doesn't have a Talent Search program. <http://www.ed.gov/programs/triotalent/index.html>

Upward Bound This program helps young students to prepare for higher education. Participants receive instruction in literature, composition, mathematics, and science on college campuses after school, on Saturdays and during the summer. Currently, 774 programs are in operation throughout the United States. This program at UC Berkeley is run by Keith Hori. <http://students.berkeley.edu/apa/APA%20Home/ubms/default.htm>

TRIO Student Support Services Student Support Services helps low-income students to stay in college until they earn their baccalaureate degrees. Participants, who include disabled college students, receive tutoring, counseling and remedial instruction. Students are now being served at 930 colleges and universities nationwide. <http://dsptrio.berkeley.edu/>

McNair Scholars Program This program prepares participants for doctoral studies through involvement in research and other scholarly activities. Participants are from disadvantaged backgrounds and have demonstrated strong academic potential. Institutions work closely with participants as they complete their undergraduate requirements. Institutions encourage participants to enroll in graduate programs and then track their progress through to the successful completion of advanced degrees. The goal is to increase the attainment of Ph.D. degrees by students from underrepresented segments of society. There are 179 McNair Scholars program nation-wide. This program at UC Berkeley is run by Dr. Harold Campbell. <http://www-mcnair.berkeley.edu/default2.html>

UC CAMP is the Louis Stokes UC Alliance for Minority Participation in the sciences. It is one of 37 alliances nation wide that is sponsored by the National Science Foundation. UC CAMP has just receive a fifth cycle of funding (each grant is a five-year grant) which involves 50K to each UC campus plus \$20K of UCOP Diversity Research Initiative funds (so each campus receives \$70K per year). Each year in February an annual undergraduate research symposium and is held to bring together students, staff, and faculty from each CAMP program. The mission of CAMP is to help Science majors who are African-American, Native-American, and Hispanics students graduate with their B.S. degrees and ideally go onto STEM graduate programs. The lead campus in our alliance is UC Irvine. UC Berkeley's AMP has just recently changed leadership and is now being run by Diana Lizarraga (Faculty PI Dr. George Johnson of Engineering). <http://www.camp.uci.edu/>

UC LEADS stands for the University of California's Leadership Excellence through Advanced Degrees which focuses on educating California's future leaders by preparing promising students for advanced education in science, mathematics and engineering. The program is designed to identify upper-division undergraduate students with the potential to succeed in these disciplines, but who have experienced situations or conditions that have adversely impacted their advancement in their field of study. Once chosen as a UC LEADS scholar, the students embark upon a two-year program of scientific research and graduate school preparation guided by individual Faculty Mentors. Scholars are provided with an excellent opportunity to explore their discipline, experience a research environment, and improve their opportunities for future study in their chosen field. This is a UC System-wide alliance and UC Berkeley's LEADS program is run by Diana Lizarraga (Faculty Advisor Dr. Caroline Kane). <http://www.ucop.edu/ucleads/>