

A Commitment to Diversity: Foundation and Future

**Achieving a culture of inclusion in
UC San Diego's Division of Biological Sciences**

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Introduction

This document summarizes the programs and policies that the Division of Biological Sciences at UC San Diego currently has in place for underrepresented minority inclusion and presents a blueprint for the future. We seek outreach, introspection, and community discussion in order to create a culturally welcoming and professionally enriching environment. This is a mandate that cannot be relegated to just a few. All faculty, staff and students in the Division are responsible for developing and implementing programs as well as embodying principles that create and sustain a culture of inclusion.

The Division is committed to hiring faculty and staff and enrolling students—as well as training existing faculty, staff and students—who will advance these programs and embody principles of inclusion, equity, and fairness. Preferred candidates for positions in the Division will have strong leadership experience in diversity, equity, and inclusion in an academic setting. We want faculty who will bring underrepresented minority students to the Division and who will retain and develop those students into top-level, highly employable scientists.

To achieve this, we need to contribute to increasing the number of underrepresented students, postdoctoral fellows and faculty at every point of the educational and professional science pipeline. We therefore have developed a comprehensive outreach/recruitment/partnership framework.

For students at all levels, the Division will strategically expand its present programs and create new ones to (1) increase and broaden the pool of underrepresented undergraduates, graduates and postdoctoral fellows, (2) build relationships with those students to show them opportunities that are available in the Division, (3) persuade them to register at UC San Diego, (4) create programs that will make the transition into the Division a successful one, and (5) create a culture of inclusion that will lead students through graduation.

Students, faculty and staff must be made aware that it is beneficial to them, their careers, and for society and science in general that diversity and inclusion are essential parts of a scientific education. The rewards of a safe, open and diverse environment are a healthier and stronger scientific community and more culturally aware scientists who can lead teams of diverse individuals that will make the important scientific contributions of the twenty-first century.

Statistics

Where does the Division and UC San Diego stand in regard to underrepresented minority recruitment, enrollment, and faculty hiring? Here are a few current statistics:

Student Statistics

- Underrepresented minorities among California public high school graduates is increasing every year, from 35% in 1991 to a projected 51% in 2012.
- In Fall '09, UC San Diego had a total of 23,143 undergraduate students. Of those, 92 were American Indian, 368 were African American, 2,344 were Chicano/Chicana, and 667 were Latino/Latina.
<http://studentresearch.ucsd.edu/sriweb/enroll/ugethnic.pdf>
- UC San Diego six-year retention rate of students is 85%. However, the six-year retention rate for underrepresented students is significantly lower: African Americans 70%, Chicano 60%, and Latino 79%. The only exception is the graduation rate of American Indians, which is 86%.
<http://studentresearch.ucsd.edu/sriweb/retent/Retention0910.pdf>
- As of 2010, of the 5,274 undergraduate Biology majors: 88 are African American; 506 are of Latino; 8 are American Indian; 1,109 are Caucasian; 239 are East Indian/Pakistani; and 2,935 are of Asian, 1,241 of which are of Chinese or Chinese-American ancestry.

Faculty Statistics

- African American faculty members in the UC system were 2% in 1990 and 2% in 2010.
- Chicano/Latino faculty were 3.7% in 1990 and 5% in 2010.
- Asian faculty were 8.9% in 1993 and 14.5% in 2010.
- Women faculty were 17.1% in 1990 and 29% in 2010.
- UC San Diego, UC Davis and UC Berkeley have the lowest percentage of underrepresented minority faculty at 6.8%, while UC Merced (20%) and UC Santa Cruz (13%) have the highest.
- Since 2001–02, the Division has hired 45 new faculty members. Of those, four were from underrepresented minority groups and eighteen were women.

- In 2009, the Division had 78 faculty members: 58 men and 20 women, or 25.6% women, compared with 16.3% for Scripps Institution of Oceanography, 0.6% for Engineering, and 1.2% for Physical Sciences.

The Foundation

This section briefly describes the key administrative and programmatic pieces that compose the basis for current divisional diversity efforts.

Diversity Committee

As the focal point for all diversity matters concerning the Division, the Diversity Committee bears key responsibility in developing a shared and inclusive understanding of diversity, and creating an environment characterized by equal access and respected participation of all groups and individuals regardless of cultural, ethnic, racial, gender, age, language, religious, differences, disabilities, socioeconomic, and sexual orientation.

The committee is responsible for crafting the Strategic Plan for Fostering Diversity in the Division and monitoring its implementation, promoting the campus Framework for Fostering Diversity, recommending policies and programs, and actively participating in and contributing to initiatives addressing diversity and inclusion within the Division. It is co-chaired by a Faculty member and the Associate Dean for Education. Committee members include at least one faculty representative from each Section, the appointed Division's Faculty Equity Advisor and staff members (the managers of Graduate Student Instructional Services (SIS) and Undergraduate SIS, the manager of Human Resources, and the Division Business Officer.

Faculty Equity Advisor

Initiated in 2009, Shelly Halpain became the divisional Faculty Equity Advisor charged with providing advice and information about practices that advance faculty diversity and excellence and contribute to the campus cultural climate.

The divisional faculty equity advisor is a close partner of the Senior Vice Chancellor for Academic Affairs, who is charged with changing the practices and culture that are barriers to faculty equity at UC San Diego.

Current Blueprints

Our efforts to increase diversity among student, faculty and staff are guided by strategic frameworks whose conceptual foundations are found in *best practices* articulated by various higher education organizations. The purpose of these blueprints is to build synergies with and contribute to UC San Diego's diversity initiatives and to lead to the development of a comprehensive divisional strategic plan that will benchmark, track and identify our progress toward achieving our broad vision.

• Faculty Diversity Blueprint

Recruiting and retaining a diverse faculty is one of the Division's top priorities. Because the size of the applicant pool is small, only extraordinary, consistent and comprehensive efforts will have a chance of being effective. The Division's strategic plan is aligned with campus-wide efforts and proposals, and it draws on best-practices principles presented by the Office of UC San Diego's Associate Vice Chancellor for Equity, the American Association for the Advancement of Sciences (AAAS), and the Association of American Universities (AAU).

Develop a diverse applicant pool.

Develop search plan

Faculty Search Committees will follow a best practices plan as laid out by the Associate VC for Equity:

http://facultyequity.ucsd.edu/pdf/Best_Practices-9-8-08.pdf and rely on resources such as Diversity Web for up-to-the-minute research: http://www.diversityweb.org/diversity_innovations/faculty_staff_development/recruitment_tenure_promotion/index.cfm.

Involve Faculty Equity Advisor

The divisional Faculty Equity Advisor will advise all faculty search committees and support and guide the creation and implementation of a faculty search plan.

Train Search Committee Members

All members of the search committee will be expected to utilize the resources, *Achieving a Culture of Inclusion: A Self Assessment Tool* to be found at <http://www.universityofcalifornia.edu/facultydiversity/self-assessment-tool.pdf> and participate in special training programs offered by the Associate VC for Equity.

Create online tool in support of collect applicant demographic data

Such an online tool will allow search committees to monitor applicant pools efficiently so that committees can make additional recruitment efforts leading to a more diverse pool while the search is still in progress.

Increase pool of applicants

We will proactively work to expand applicant pools with a focus on recruiting minority candidates by *using targeted advertising and aggressive outreach* aimed at traditional candidates as well as those from groups that are not well represented.

Identifying post-docs before they enter the job market.

Each one of our faculty will use personal contacts to identify post-docs who have not yet entered the job market by calling colleagues and asking them to identify candidates for junior faculty positions. This

will not only identify possible candidates, but, by having candidates referred through their mentors, we will build relationships that can help in subsequent recruitments.

Build a divisional culture of inclusion

Research has shown that addressing the following *cultural climate* issues effectively will improve a departments' ability to recruit and promote underrepresented minority faculty. We will:

Develop transparent policies, procedures, and practices.

We will clearly communicate how hiring and promotion are approached and what a tenure clock extension means for tenure. With the guidance and support of the divisional Equity Advisor we will review existing divisional and sectional policies and procedures and develop, modify and improve a Faculty Handbook (accessible via the divisional Faculty Portal).

Communicate that we value the importance of work–life balance.

We will communicate during the search process that the campus has in place *family friendly policies* and that we fully support those. This includes opportunities to support dual career families, including dual career hiring.

Implement career development opportunities

Promote individual career success.

Under the guidance of the divisional Faculty Equity Advisor and by applying best practices (<http://www.engr.washington.edu/advance/resources/Retention/>) we will improve our existing faculty mentoring program. Our current program provides a departmental mentor whose role is to help newly arrived faculty adjust. We have identified shortcomings, which we will address with the guidance of the Faculty Equity Advisor by developing a mentor training program. Because it is difficult for a single mentor to provide all the support that a faculty member needs as his or her career develops, we will assign two senior faculty members who will provide feedback, especially in the areas of grant preparation and teaching.

• Graduate Student Diversity Blueprint

The blueprint includes specific objectives and methodology for increasing the numbers of qualified minority student applicants, thus increasing the number of offers of admission to this pool of applicants. The implementation of the plan involves coordination of outreach efforts to students at prestigious institutions nationwide, as well as more intense targeting of two undergraduate student pools: other Southern California schools and our own undergraduate students who have

tended to enroll elsewhere. Our primary goal is to become a strong and viable competitor in recruiting students from these talent pools. To achieve this, we have developed the following outreach/recruitment/partnership framework:

Form a strategic partnerships with:

The Office of Graduate Studies' (OGS) Diversity Outreach Collaboration (DOC).

The Diversity Outreach Collaboration (DOC) is a campus infrastructure that supports identification of qualified underrepresented potential students and faculty in key colleges and universities. In addition to recruitment programs, OGS administers the San Diego Fellowship and the Eugene Cota-Robles Fellowship to provide financial support for underrepresented minority graduate students at UC San Diego. These fellowship programs help increase the total population of underrepresented graduate students on campus and in our program, beyond the limited number of Training Grant positions available.

Graduate Recruitment, Admissions and Yield Committee (GRAY)

GRAY is co-chaired by April Bjornsen (Assistant Dean in the Office of Graduate Studies) and Sandra Daley, Associate Chancellor and Diversity Officer. Under the auspices of the UC San Diego Diversity Council, GRAY focuses on graduate recruitment and yield efforts, obtains information about admissions policies and procedures, expresses concerns and identifies barriers in the admissions process and directs findings to the Diversity Council for consideration. GRAY meets regularly to share information, coordinate activities, and collect and review data on the effectiveness of activities. It makes recommendations to the Diversity Council based on best practices and identifies and implements strategies that result in increasing the diversity of undergraduate students enrolled at UC San Diego.

Grow and nurture a pipeline for recruitment.

The Division will develop personal relationships with relevant program directors to create a pipeline of direct recruitment and possible referral of unsuccessful PhD applicants or undergraduates with potential. We will send faculty to give research presentations and target California State universities that have special programs, especially Cal State Los Angeles, San Francisco State University. Divisional faculty, staff and students will attend undergraduate research conferences such as SACNAS and ABRCMS, where they will participate in panel discussions and/or judge student presentations and poster sessions. Faculty will follow up with students they met at those events to encourage them to apply to the Division's graduate program.

Include faculty members from the divisional Diversity Committee on the divisional Admissions Committee.

These faculty members will be dedicated to underrepresented minority student applicants. They will be advocates for applicants by identifying readiness, checking

if they have participated in programs such as MARC, MIRT and, if so, conferring with MARC or MIRT program directors and calling students' references.

Retain students.

Beyond recruitment, it is critical that students who join our program succeed in their graduate training. We will continue to improve the environment for minority students doing graduate work here and ensure that students feel a sense of secure and supportive community so they can be academically successful.

• **Undergraduate Student Diversity Blueprint**

The goal of the Division is to create synergy with campus-wide efforts to increase the number of applicants and to increase the acceptance yield of qualified underrepresented undergraduate students who join UC San Diego either as freshmen or as transfer students. Furthermore, the Division will create specific programs to support underrepresented biology majors educational success. To achieve this, we have developed (as in the graduate blueprint) an outreach/recruitment/partnership strategy.

Form strategic partnerships with:

Undergraduate Recruitment, Admissions and Yield Committee (URAY).

URAY is chaired by Sandra Daley (Associate Chancellor for Diversity). URAY is a committee of the Diversity Council. It focuses on recruitment and yield efforts. They meet regularly to share information, coordinate activities, collect and review data on the effectiveness of activities, make recommendations to the Diversity Council based on best practices, and identify and implement strategies that result in increasing the diversity of undergraduate students enrolled at UC San Diego.

Admissions and Relations with Schools Office.

Under the oversight of the Assistant Vice Chancellor for Admissions and Relationships to Schools this office coordinates outreach to high schools and on-campus recruitment activities.

Black Student Union

A close partnership with the BSA provides opportunities to receive feedback for our initiatives, to recruit students willing to help us implement those initiatives, and to participate in the creation of new programs.

Form partnerships with Biology alumni

Reaching out and partnering with Biology underrepresented minority alumni provides opportunities to recruit underrepresented students to UCSD and the Division.

Contribute to UC San Diego's efforts to increase diversity:

- a. Activities to increase freshmen applicant pool:
 - i. Build Relationship to Los Angeles High Schools (Bravo, King Drew, Dominguez Hill Charter School); visit schools (Bio Faculty together with members of UC San Diego's Admissions Office and Black Student Association) between October and November.
 - ii. Build Relationships to San Diego High Schools. Co-Host and Co-organize visits of Los Angeles area underrepresented minority students to the UC San Diego campus. These are Saturday events where students come to the UC San Diego campus, meet faculty and students, and tour the campus. The Division organizes lab tours.
 - iii. Preuss School specific programs:
 1. Tutoring program/volunteering program organized by BSSA
 2. *Saltman Quarterly*: Preuss science students may submit feature article to this student-run journal.
- b. Activities to increase freshmen yield:
 - i. Visit Los Angeles and San Diego high schools after students received admissions letter, i.e., between March and April 31st (students must submit intent to register by May 1st);
 - ii. Encourage underrepresented minority students who have been admitted to UC San Diego to accept the offer by sending personalized email from Dean and follow-up phone calls from Biological Sciences administrators, students and faculty.
 - iii. Participate in Admit Day
- c. Activities to increase transfer student applicant pool:
 - i. Participate in Transfer Admit Day.
 - ii. Increase transfer student yield by creating a special academic support program.

Retain students.

Beyond recruitment, it is critical that students once they have joined UCSD as Biology majors will be supported academically and socially. We will continue to improve the environment for minority students by building a culture of inclusion.

Implemented Initiatives

The following are brief and specific descriptions of the current initiatives within the Division for increasing the numbers of underrepresented minority faculty, postdoctoral fellows, graduate students, and undergraduates.

• Faculty Initiatives

Increasing the size and diversity of faculty job applicant pools.

We will post jobs to and specifically recruit directly from the following groups:

SACNAS: <http://www.sacnas.org/postdocs.cfm>

A Society of Scientists Dedicated to Increasing Hispanic/Chicano and Native American Participation and Leadership in Science: part of our outreach activities for increasing the pool of graduate students includes attending SACNAS meetings and getting actively involved in meeting activities. We will broaden and outreach and expand our efforts to the recruitment of post-docs.

UC President's Postdoctoral Fellowship Program

<http://www.ucop.edu/acadadv/ppfp/>. The University of California President's Postdoctoral Fellowship Program was established in 1984 to encourage outstanding women and minority PhD recipients to pursue academic careers at the University of California. The current program offers postdoctoral research fellowships, faculty mentoring, and eligibility for a hiring incentive to qualified scholars in all fields whose research, teaching, and service contributes to diversity and equal opportunity at the University of California. We will reach out to fellows and encourage them to apply.

National Institute of General Medical Sciences (NIGMS):

NIGMS has a special program, the Institutional Research and Academic Career Development Awards (IRACDA), that combines traditional mentored research experience with an opportunity to develop teaching skills through mentored assignments at minority serving institutions. Generally a high percentage of the individuals in the program are underrepresented minority students and their research productivity is excellent. UC San Diego has an IRACDA program, Dr. Larry Brunton. We will reach out to him and the fellows currently supported by the program. Furthermore, the national IRACDA web site

(<http://www.nigms.nih.gov/Training/CareerDev/MOREInstRes.htm>) lists the institutions and directors and contains a list of all currently funded fellows. We will target those fellows directly, by reaching out to them and encouraging them to apply.

Identifying post-docs before they enter the job market.

We will focus particularly on the broad array of outstanding biomedical research institutions in the San Diego area, including the Salk Institute, the Burnham Institute, the Scripps Research Institute, and the Neurosciences Institute to identify promising post-docs who are already in the local area and therefore familiar with the San Diego community.

• Graduate Initiatives

Strategic partnerships:

The Office of Graduate Studies' DOC

The Division and OGS members jointly attend key meetings such as SACNAS and participates in other OGS initiated recruitment programs. OGS administers the San Diego Fellowship and the Eugene Cota-Robles Fellowship which provide financial support for underrepresented minority graduate students. These fellowships provide additional resources (beyond the limited number of Training Grant positions available) thus supporting the Division's efforts to increase its total population of underrepresented graduate students.

Graduate Recruitment, Admissions and Yield Committee (GRAY)

The Division actively participates in this committee and is represented by the Dean for Education and the Director of the Graduate Student and Instructional Services.

Initiatives to increase the size and diversity of graduate student applicant pool:

Participating in national and local conferences.

Student Instructional Services staff, Division faculty, postdoctoral fellows and graduate students attend all meetings of ABRCMS, SACNAS, and other UC Diversity Conferences. The Office of Graduate Studies makes travel funds available for graduate students to attend SACNAS and ABRCMS. Faculty give poster sessions and Divisional representatives provide information about the graduate program while collecting names of interested students for follow up. The Division is developing an extensive list of faculty, postdoctoral fellows and graduate students interested in attending these conferences.

Meeting with students who participate in UC San Diego special summer programs.

Representatives from the Division meet with participants in the Summer Training Academy for Research in the Sciences (STARS); UCLEADS, a UC Office of the President program whose goal is to educate California's future leaders by preparing promising students for advanced education in science, technology, mathematics and engineering; and the AMGEN Scholars Program. The Division hosts a special dinner for students in these programs as part of a partnership with OGS and Academic Enrichment. This gives Divisional faculty and

students a chance to talk about research in the Division and for faculty and students to participate in a seminar series. The Division follows up with especially promising students throughout the year.

Targeting non-traditional sources.

Through partnership with OGS, the Division has connected with two key post-Baccalaureate Programs at SFSU and Cal State Los Angeles. These NIH PREP programs, which include intensive research for 1–2 years before applying to PhD programs, have a track record for preparing talented but not yet competitive students to become successful applicants for highly competitive doctoral programs. Divisional faculty visit these programs and give research talks, while building relationships and identifying students who would be successful applicants.

Targeting key California State Universities.

The UCOP Web site shows that 157 faculty at Cal State Universities in Biological Sciences received UC doctorates. The Division is identifying those CSU faculty as part of a concerted effort to create partnerships and a pipeline from a department/lab to UC San Diego.

Building special relationships with selected Cal State Universities in Southern California.

The Division has worked with current graduate students to develop partnerships with Southern California colleges and universities that have a high population of excellent underrepresented students. We have already initiated partnerships with Cal State San Marcos's and UC Irvine's MARC programs. Outreach to SDSU, Cal State Long Beach, UC Riverside and UCLA are planned.

Publicizing special opportunities

Incoming students are made aware of the opportunities described in AGEP, as well as priority housing and the Socrates Fellows Program

Initiatives to retaining students – building a supportive environment

Peer Mentoring Program

Graduate students with support from the administration have developed a Peer Mentoring Program (<http://132.239.58.91/grad/phd/program-info/peermentor.html>). This ensures that entering minority students are folded into the PhD program, and feel completely a part of it, with senior student partners to provide advice and encouragement.

Professional Pathways Graduate Seminar Course.

This one-unit graduate seminar course has been created as a professional development tool for graduate students. The course is designed to connect UC San Diego graduate students interested in career planning and professional development with experienced science professionals, from a wide variety of backgrounds. The focus is on the biosciences, particularly biotechnology, biomedical and pharmaceutical industries. Professional Pathways enables students to

learn about career options in academia, science industry and other allied roles and then create and develop their own personal career action plan. Students also gain insight into their personal career motivations and interests and begin development of much-needed communication and professional networking skills. Our goal is to create additional workshops for the participants.

- **Undergraduate Initiatives**

Strategic partnerships with:

Undergraduate Recruitment, Admissions and Yield Committee (URAY),
URAY is chaired by Sandra Daley (Associate Chancellor for Diversity). Under the auspices of the UC San Diego Diversity Council, URAY focuses on undergraduate recruitment and yield efforts, obtains information about admissions policies and procedures, expresses concerns and identifies barriers in the admissions process and directs findings to the Diversity Council for consideration. URAY meets regularly to share information, coordinate activities, and collect and review data on the effectiveness of activities. It makes recommendations to the Diversity Council based on best practices and identifies and implements strategies that result in increasing the diversity of undergraduate students enrolled at UC San Diego.

UC San Diego's Office of Admissions and Relations with Schools

Recruitment policies and procedures is the responsibility of this campus office. Division representatives meet regularly with them to maintain participation in activities organized by UC San Diego Admissions Office (e.g., Admit Day).

Black Student Union

Division representatives maintain a partnership with this organization that is active in the recruitment and retention of African American students.

Biology Alumni

A Division alumnus, Tony Jackson, M.D., in partnership with the Division and the Office of Admissions and Relations with Schools, works on recruiting African American high school students in Los Angeles and throughout the state

Initiatives to increase the size and diversity of undergraduate student applicant pool:

Relationships with Southern California high schools.

This outreach includes three Los Angeles high schools (Bravo, King Drew, and Dominguez Hill Charter School) and three San Diego high schools (Otay, Helix, Preuss). In October and November, faculty—along with members of the Admissions Office and Black Student Union—visit these schools and meet with prospective students to create personal relationships that can influence a student's decision to pursue a degree in Biology at UC San Diego. In March and April,

Division faculty and students again visit Los Angeles and San Diego high schools, after students receive admission letters, to encourage and answer questions high school students might have before submitting an intent to register by May 1st.

Organizing and co-hosting weekend visits of Los Angeles-area students.

Underrepresented minority students are invited to the UC San Diego campus where they tour the campus and Division facilities. Graduate students, undergraduates and faculty lead hands-on lab tours, which give high school students insights on how undergraduates contribute to ongoing research.

Conducting special Preuss School programs

A low-income student high school on the UC San Diego campus, the Preuss School has a volunteer tutor program organized by the Biology Student Association. Also, students from the Preuss school may submit feature articles to the *Saltman Quarterly*, a student-run scientific journal.

E-mailing welcome messages from the Dean.

Personalized email messages are sent to all underrepresented minority students who have been admitted to UC San Diego.

Participating in UC San Diego's Phonathon.

Conducted after freshman decisions are released, Division students, faculty and administrators call admitted underrepresented minority freshmen to congratulate them on being admitted, to answer any academic or student life questions they may have, and to invite them to Admit Day.

Participating in Admit Day.

The Division sets up a table on library walk with at least two USIS staff members and students from BSSA and the *Saltman Quarterly* who give two general presentations and one about undergraduate research opportunities. The Division organizes lab tours and students can meet with faculty.

Reaching out to Transfer students

Transfer Opportunities for Success (TOPS) Program

The Division has several initiatives to increase the applicant pool of transfer students including a Transfer Admit Day and a special program for transfer students called Transfer Opportunities for Success (TOPS). This program includes special Summer Information Sessions, a Fall Quarter seminar called Strategies for Success, and peer-to-peer mentoring program organized by the Biology Student Association.

Opportunities for Research in Behavioral Science.

Dr. James Nieh directs ORBS. It is a program for undergraduates attending two-year colleges. Schools currently participating are San Diego City College and Southwestern College. This program encourages students attending community colleges to transition to four-year institutions and to pursue careers in the behavioral

sciences. In particular, the Division assists students who are interested in transferring to UC San Diego by familiarizing them with the campus, the faculty, and the educational and research opportunities available.

• **Postdoctoral Fellow: Leadership Development Initiatives**

Across the Nation, faculty Searches at Institutions of Higher Learning explicitly state that successful applicants will have the skills or the potential to contribute to diversity and the climate of inclusion. For Example, the current Division faculty search advertisement states: *“The preferred candidates will have experience in the arena of equity and diversity such as leadership in teaching, mentoring, research or service towards building an equitable and diverse scholarly environment.”*

We believe it is our responsibility to provide opportunities for postdoctoral fellows to develop and hone leadership skills in the area of diversity and to demonstrate their commitment to diversity and ability to contribute as a scholar to campus diversity and cultural climate.

Therefore, the Division of Biological Sciences will pilot two programs that we envision could serve as models for postdoctoral career development. Specifically, postdoctoral fellows will have an opportunity to contribute to inclusion, dialogue and outreach in the Division in the areas of TA training and an Intergroup Dialogue Course. As teachers in the former, and facilitators in the latter, the postdoctoral fellows will assume important lead roles, thus demonstrating the above described skills colleges and universities expects to see in applications for faculty positions. Both projects are described in details below, in the *Building a Culture of Inclusion* part.

• **Building a Culture of Inclusion**

Creating a supportive and inclusive environment requires internal dialogue about how we communicate and interact with each other. Attitudes and beliefs about persons may present barriers to the cultural change we try to achieve at UCSD. We have therefore created two pilot initiatives aimed at enriching the classroom culture.

TA Training Workshops (Fall, Winter and Spring Quarters)

A postdoctoral fellow will develop and—starting in the Fall Quarter training session—conduct a workshop entitled “Teaching All Students: Improving the Classroom Climate” to train graduate student TAs and undergraduate tutors specifically in the areas of cultural inclusion, openness and equity.

Research has shown that instructors who care about diversity have historically attempted to teach in ways that are culturally neutral, thinking

that this approach would be least offensive to most students. This neutrality can be potentially alienating to students.

The overall goal of the workshop is to create awareness of the importance of cultural competency for student learning. Cultural competency here is defined as the effectiveness of an instructor for students who do not share the same personal characteristics or the same cultural background as the instructor. Participants will learn actions they can implement in classrooms. It will also be made clear that cultural competency cannot be achieved from one-hour workshop, but rather is something one must develop and cultivate over the course of one's career.

Intergroup Dialogue Course (Winter Quarter 2011)

We will offer an Intergroup Dialogue course to provide undergraduates with opportunities to learn and practice essential skills for living and working in a diverse community, and to develop and practice skills needed to be a productive and culturally competent citizen in a diverse society.

Intergroup dialogue programs are based on the premise that sustained and meaningful intergroup contact, dialogue, and education are necessary to address issues of conflict and to promote the creation of just, multicultural campus communities. Intergroup dialogues engage students in an educational process, which encourages sustained conversation, exploration of both conflict and common ground, and action to improve cross-group relations and address social injustices.

Intergroup dialogues typically include twelve to sixteen participants (with roughly equal numbers from each social identity group) and two trained student facilitators of diverse backgrounds representing the social identity groups in dialogue. Typically, groups meet weekly for at least two hours for six to twelve weeks. Academic credit-bearing intergroup dialogues courses are organized around:

- Specific theme
- Multidisciplinary readings (both theoretical and personal narratives)
- Experiential learning activities
- A small group project
- Weekly writing and summative reflections

Students analyze and learn about issues facing groups on campus and in broader society. They write weekly journal entries, read and react to weekly assigned readings, and write self-reflection papers.

This approach was initially developed at the University of Michigan and has subsequently been implemented at Arizona State University, the University of Illinois, Urbana-Champaign, the University of Massachusetts, Amherst, and the University of Washington, Seattle and UC San Diego.

In Winter Qtr 2011, the Division will offer a Professional Development one-unit course that will focus on race and ethnicity. This course will be co-taught by a postdoctoral fellow and the Associate Dean for Education. The postdoctoral fellow is currently undergoing facilitator training.

The Future

Biology Web Site Diversity Section

The Division currently has a section of its Web site devoted to diversity issues, programs and policies, but we need to develop this area, make it more visible, and keep it current.

Proposed Faculty Initiatives

• Enhance the talent pool at the post-doc level.

We will apply lessons learned from our student outreach programs by actively enhancing the post-doctoral pool. Specifically, we will

Formally track individuals with promise.

The Division will track individuals throughout their career by maintaining a list of talented minorities and women in the field. This includes post-doctoral fellows currently working in our faculty labs or in other UC San Diego, Salk and adjacent research institutions. It will be an explicit expectation that *all* our faculty members contribute to this.

Invite promising post-docs to present at divisional and sectional seminar series.

The seminar series would function as an informal interview series, allowing us to get to know potential candidates for faculty positions and would allow them to get to know the Division and the campus community. In other words, it would create opportunities to develop, build and nurture broad relationships that involve potential candidates, their mentors, the Division and other on- and off-campus community members.

Develop a campus visit program.

This would involve working with other STEM departments to develop opportunities for post-docs who are within one or two years of “going on the market” to be invited to visit the campus for a 2–3 day event. The program’s agenda would include a chance to sit in on classes, deliver a research talk, and meet with deans, professors, and students to learn more about the institution and its current and future job openings. Ideally, the visitors will also rub shoulders with community leaders at a dinner held at the chancellor’s house and take a bus tour of the city to help them feel at home in San Diego. This program will have to be developed as resources allow, but this approach has been shown to be very effective in increasing diversity at other institutions.

• Enhance the Pool at the Faculty Level

Sabbatical Program.

We will reach out to underrepresented minority men and women faculty and encourage them to spend a sabbatical in our Division.

Seminar Series

As described above for post-docs, we will invite underrepresented minorities and senior female faculty to present at divisional or sectional seminars. This would allow us to develop relationships that would increase diversity at the more senior faculty level.

Proposed Graduate Initiatives

• Increase the Pool

Increase Visibility and Impact at National Conferences

Develop a special information session and round-table discussion program.

This would be presented at national and local recruiting conferences that Division faculty and graduate students attend.

Build relationships with conference organizers

This would improve the possibility of Division faculty to be asked to be keynote speakers and participants in panel discussions at recruiting conferences.

Improve the follow-up process.

We would increase faculty involvement in traveling to nearby universities and reaching out to undergraduate underrepresented minority students.

Increase the Academic and Professional Support

Broaden peer-advising support.

Expand the Professional Pathways course and build workshops around it.

Proposed Undergraduate Initiatives

• Access to Success in Biological Sciences Program.

The Division wishes to implement the *Access to Success in Biological Sciences Program*. The program's goals are (1) to help new freshmen students to successfully transition to UC San Diego and to biological sciences studies and (2) to ensure that students remain on a positive academic trajectory while enrolled at UC San Diego as Biology Majors.

We would present this program to high school students when visiting schools or when high school students visit the Division. This program would serve as a tool for recruitment, enrollment yield, and underrepresented minority science student pipeline building.

The fundamental premise of the program is to create a sense of belonging and to connect students to faculty and lab groups by allowing freshmen to affiliate with a research lab and by engaging students for four years in increasingly more sophisticated research. A social and academic support structure would ensure community building and academic support.

This would allow us to graduate students well poised to be successful applicants for graduate and professional schools.

The program has three distinct parts:

Research Fundamentals Program for freshmen.

Freshmen would join the laboratory of a faculty in the Biological Sciences. Students would gain valuable experience in the world of working scientists, as well as hands-on experience of the scientific process. Freshmen are expected to commit 6–8 hours per week. They would participate in a one-unit First-Year Orientation Seminar. This course addresses issues that are critical in the first year of biological sciences at UC San Diego. It is designed to assist new students in making a smooth and informed transition from high school to the university and their chosen biological sciences major. The lectures focus on study skills, academic planning, and using campus and community resources to help achieve academic, personal and professional goals.

Freshmen would also participate in a number of enrichment activities, such as freshmen explorations: lab tours and visits to research centers such as CalIT2, Supercomputer, etc., and workshops on how to take lecture notes, how to manage time, etc.

Research Apprenticeship Program for sophomores.

Students continue their research experience in a more structured way into their sophomore year. They can earn BISP 99 credit.

Research Scholars Program and Summer Research Program for juniors and seniors.

Students can continue their research and work full-time in a faculty member's lab over the summer and part-time during the academic year and receive funding via NIH or NSF supplement grants. Students may attend undergraduate research conferences and professional meetings.

Create a summer program for underrepresented minority high school students from targeted high schools.

This program would serve as a recruitment tool to increase the number of underrepresented minority students who apply to the Division. For local high school students, it could be set up as a non-residential program. Entering senior high school students could be offered a summer research position in the lab of a biology faculty. Students would receive stipends via an REU grant, or NIH supplement grant. For high school students from farther away, such as Los Angeles, the program would be a residential program. A possible partner in creating such a program is the UC San Diego Extension Academic Connection Program.

Create a summer program for transfer students who have accepted UC San Diego's offer.

This program would serve as a recruitment and retention tool for underrepresented minority transfer students. Presenting this program to transfer students would

increase the number of applicants, increase yield and, if students would continue their involvement in research, would increase the number of well prepared applicants to graduate and professional schools. As outlined above for high school students, this could be either a residential or non-residential program. Funds could come from an REU NSF grant, NIH supplement grants or other grant opportunities. As an example, Dr. James Nieh has applied for such a grant for his ORBS program.

Support for the proposed programs could come from:

NIH

NIH specifically offers Diversity Supplements towards those with disabilities, minorities or from disadvantaged backgrounds. It is a competitive supplement, which any PI (with an R01, etc.) can apply for as long as the supplement is within the scope of the overall research. Students (high school, undergraduate and graduate), post-docs and faculty are eligible, but each parent grant can only have one supplement at a time.

Students are not required to be from UC San Diego to be eligible. There are no specific deadlines for these supplements (although program officers will sometimes advise PIs to submit by a certain date to increase their chances) and awards are generally made within six months. NIP supplements:
<http://grants.nih.gov/grants/guide/pa-files/PA-08-190.html>.

NSF

NSF offers REU supplements that are specifically for undergraduates for PIs with new or existing NSF grants. The REU supplements are competitive and must also be within the overall scope of the parent grant. REU requests do not have a specific deadline for submission and NSF generally makes awards within six months. It does not appear that NSF limits these awards to only proposals with underrepresented populations but PIs are strongly encouraged to recruit from those groups. There are no specific guidelines in the supplements that require students to be from UC San Diego and PIs often recruit from outside.

A request for an REU Supplement may be included within a proposal for a new or renewal NSF grant or cooperative agreement or as a supplement to an ongoing NSF-funded project. An REU Supplement request is handled by the NSF program officer for the underlying research grant. NSF:
http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5517&from=fund

Conclusion

While programs and policies currently exist in the Division of Biological Sciences for underrepresented minority student and faculty recruitment and retention, all of us in the Division must re-think, re-imagine, and re-dedicate ourselves to the task of increasing the numbers of minorities and in improving the climate of inclusion that will sustain a vibrant, diverse, and scientifically outstanding community.

Through outreach—by increasing and broadening applicant pools, building partnerships and relationships within and outside the UC system, and actively recruiting new faculty and students—we can increase the numbers of minority applicants. Through community dialogue—in workshops, courses, training, and discussion—we can strengthen and expand a culturally healthy environment. And through introspection, we can come to embody principles of fairness, equity, and diversity, and breathe life into these programs and policies.

We can achieve this only if we all commit ourselves to these tasks.