

Biotechnology Education and Training Sequence Investment (BETSI) Phase II

Engaging the Community through Nurturing Biotechnology Interests and Pursuits

Southwestern College (SWC), a Hispanic-serving community college, is transitioning into the second phase of the *Biotechnology Education and Training Sequence Investment (BETSI) Project*. Phase II of this project is aimed at *engaging the community* of the southern San Diego county in serving its needs for biotechnology education and training, paving the way to highly specialized careers and postsecondary education. SWC, as the only higher education institution in southern San Diego County, plays a pivotal role in addressing the needs of the community. The pilot phase of the *BETSI Project* was designed as a stepwise project to educate students from three feeder high schools, in the Sweetwater Union High School District (SUHSD), in biotechnology, to recruit them into the SWC Biotechnology Program, and to create more internship opportunities for SWC biotechnology students. At SWC, biotechnology students have the choice of four tracks certificate, associate degree, transfer track and parallel track. All four tracks lead to possible employment with the biotechnology industry or post-graduate study. Evaluations of the pilot project outcomes demonstrated that this education and training pipeline successfully sparked high school students' interest in biotechnology, benefited their academic training and informed them of the local career opportunities and educational pathways in biotechnology. The *BETSI Project* was also successful in establishing new relationships with internship hosts in industry and four-year academic institutions.

The focus of *Phase II* of the *BETSI Project* is in part aimed at improving parental awareness of the biotechnology education and training available at SWC, and to focus recruiting efforts on students that responded enthusiastically to the classroom outreach. SWC will offer Parent Workshops that will expose parents of SUHSD students to the scope of educational and career opportunities in biotechnology, and give them a taste of the enhanced biotechnology lab curriculum the SWC *BETSI Project* brings to their children's classrooms. These workshops will also serve the need for adult education for a population with a rudimentary understanding of this important industry in San Diego County. Weekend workshops for high school and community college students will be designed to captivate students' interest in biotechnology careers and offer the opportunity for students to experience laboratory technologies that reach beyond the scope of curriculum and standards covered in the classroom outreach. Although these workshops will be open to all, the *BETSI* evaluation database developed during phase I will be utilized to focus our workshop recruitment on those students expressing a strong interest in biotechnology.

BETSI Phase II will continue all components of the successful *BETSI Project* which include SWC Biotechnology Program student internships, summer high school faculty/student



training workshops and high school classroom outreach supported by the BETSI Outreach Director, SWC biotechnology student mentors/teaching assistants, and the *BETSI Project Mobile Lab*. This approach ensures successful implementation of the project curriculum and continued use of biotechnology equipment at the high schools. The presence of expert technical support and student role models in the classrooms has been evaluated as one of the most valuable components of the *BETSI High School Outreach*. SWC has committed to the *BETSI Project* outreach by institutionalizing the Outreach Director position. *BETSI Phase II* will continue serving the three district high schools to fully develop recruitment strategies and to continue implementing our sustainability plan which will allow replication of this successful program throughout Sweetwater, the largest high school district in the state of California.

Benefits of *BETSI Project Phase II* include:

- increased community awareness of and interest in biotechnology education and career options
- implementation of successful high school outreach and SWC Biotech program practices
- expanded career options for community college students
- increased opportunities for pursuing baccalaureate and post-graduate education
- enhanced prospects for economic development for individuals and industry

