

Skyline College Biotechnology Program Advisory Committee

MEETING MINUTES 03/19/2024

Attendance

Name	Position/Title	Affiliation
Alex Fuentes	Interim Project Director for Dual Enrollment	Skyline College
Andrew Mulato	Senior Research Scientist	Gilead Sciences
Angela Consani	Executive Director	BCSI - Microbadging
Arlyne Bautista	Skyline Alumni, Master's Graduate	Exact Sciences
Bryony Ruegg	Director, Board Member	Director of Bio-Rad Explorer Program & BABEC Board member
Chang Dou	Bioprocess Analytical Chemist	ABPDU
Christopher Kan	Director of Business Development	Sampling Human
Emily Quach	Biotech Faculty	Laney College
Erin Deis	Interim Director	SFUSD College & Career Readiness
Golnar Afshar	CCSF/Skyline Biotech faculty	CCSF & Skyline College
Jim DeKloe		Solano College
Jing Folsom	Interim Dean of STEM, Biotech Faculty	Skyline College
Joana Feit		
Karen Leung	Biotech Faculty	CCSF
Kevin Recinos	Middle College Student & Guardian Health Biorepository Handler	Skyline College Biotech
Linda Chen	Student Enrichment Opportunities Office	SFSU
Manjari Wijenaik	External Evaluator	NSF ATE Grant
Michael Fuller	Program Lead, Biotech Faculty	Program Lead at BABEC, Faculty at Skyline College
Mona Shah	Project Manager of Summer and GMP Program	Stanford Laboratory for Cell & Gene Medicine
Nick Kapp	Biotech Faculty	Skyline College
Patrick Beatty	Investor & President	Investor in Deep tech (including synthetic

		biology), President of Board of Ignited Education
Paul Escalante	Sr. Business Dev Manager	Kelly Science & Clinical
Priscilla Sanchez	Research Data Analyst & Alumni	UCSF
Raimundo Romero	MSAT Scientist	Lonza Biologics
Rocky Ng	Biotech Faculty	South San Francisco & Skyline College
Sandra Mikolaski	External Evaluator	NSF ATE Grant
Shin Kiyohara	Consultant	Bay Area American Society of Quality
Sylwia Palczewska	Program Manager for Workforce and Talent	Biocom Institute
Ying-Tsu Loh	Executive Director	BABEC

PAC Meeting Goals

Goal 1: Identify professional and technical skills needed for entry level internships or positions across the Biotech Industry.

Goal 2: Identify strategies for developing and sustaining relationships with local industry partners.

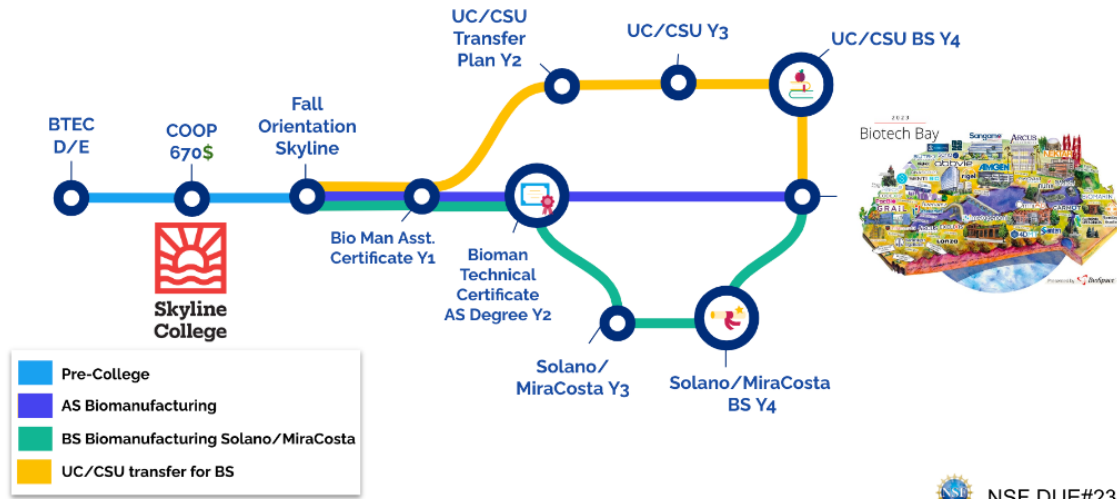
Grant Overview

National Science Foundation (NSF) Advanced Technical Education (ATE) Grants

- Main goal of the ATE Program: Improve technical skills and general STEM preparation of students and educators in order to produce more qualified technicians that meet workforce demands
- We want to address the workforce shortage and lack of diversity by strengthening the pipeline of underrepresented students from high school to community college to employment. Two examples of how we can do this:
 - o Work Co-op (Paid summer internship for high school students from underrepresented communities)
 - o Collaborating with stakeholders to increase awareness of our program and recruit students to the program/career

Current engagement strategies for High School students

Skyline College Biotech Pathways Review



NSF DUE#2327682

Dual Enrollment: High school students participating in college-level courses

- Current High schools that offer Dual Enrollment with Skyline are: Gateway HS, El Camino HS, South San Francisco HS, SMHS, Carlmont HS, and Aragon HS
- We have focused our recruitment to the 3 schools closes in proximity, Title I and/or URM population (Gateway HS, El Camino HS, and SSFHS)

COOP 670A: 1-unit course of college and high school credit

- This is a 2-week paid opportunity for students to use their lab skills and make Biotech materials on the Skyline College campus. This course is offered during the summer, with the goal of students joining the Skyline Biotech program in the fall semester.
- Applications for this course increased from 6 to 74 compared to the previous year, with 71% self-identifying as an underrepresented minority student.

Current Hurdles:

- The majority of Dual enrollment Biotech students go directly to a 4-yr school after graduating high school. Those students that come to Skyline are typically focused on transferring to a UC or CSU 4-year university.
- Currently, only BTEC 170/171 transfers to UCs. The rest of the Biotech courses only transfer to CSUs, limiting our students' options.

Breakout Room Focus Questions and Responses:

1. What technical and professional skills are needed for a broad range of future internships or entry-level jobs in the biosciences?

- Technical Skills: Aseptic technique, Understanding PCR, Standard Operating Procedures, Small volume metrology, Basic mask skills
 - Angela Consani created Microbadging, which is a series of practical skills tests that evaluate a student's proficiency and understanding of the particular skill. If demonstrated successfully, students will earn a Microcredential, which will help them prove their qualified skills to an employer.
 - Those individuals with a microbadge stand out in the candidate pool because the industry recognizes this training.
- Professional Skills: Adaptability, Flexibility, Communication, Understanding the company and where you fit in, Writing professional emails, Proper documentation and lab skills, Time management, Following Directions
 - While we can't have microbadging for professional skills, the interview with the candidate will help assess their professional skills.
 - One way to determine a student's passion/interest in the field is to look at their past projects.

2. How can Skyline develop and sustain relationships with local Industry partners?

- It is not only important for students to develop relationships within the industry, but also important for Biotech programs to host similar opportunities for its current professionals, faculty, and industry members. Some events that bridge this gap are this PAC meeting, speed networking, volunteering, symposiums, etc
- Industry partners should also share amongst themselves about their students' performance. This will build trust and a solid company network.
- The program's faculty should have an understanding of the industry needs.