

Pasadena City College Biotechnology Program

CTE Advisory Committee Meeting



1:30pm-3:00pm, Friday, June 18, 2021

1570 E. Colorado Blvd., Pasadena, CA 91106

Meeting held via Zoom

| Time | Agenda Description | Facilitator | Outcome |
|-------------|---|--|---|
| 1:36pm | Call to Order | Barbara Driscoll, Ph.D., Chair | Informational |
| 1:36-1:57pm | Welcome and Introductions In attendance: Barbara Driscoll, Martha House, Pamela Eversole-Cire, Karol Lu, Marilyn Johnson, J. Jack Whalen, Aron Kamajaya, Janet Chen, Justin Ichida, Jack Hale, Robert Chow, Eleanor Tsark*, Emily Bangham*, Manuel Santana*, Jeffrey Cole*, Francesca Mariani**, Marie Csete** *New committee member **In attendance during presentation of funding opportunities and open discussion | Pamela Eversole-Cire, Ph.D. Program Director Karol Lu, Ed.D. Program Coordinator Committee Members | Informational |
| 1:57pm | Approval of minutes from June 19, 2020 meeting | Barbara Driscoll, Ph.D., Chair | Informational |
| 1:58-2:48pm | Overview of the PCC Biotechnology Program Certificates of Achievement (CoA): Update of CoA – Computational Biology, including course update for Biology 28: Introduction to Bioinformatics and use of MinION sequencing device in the course – Jeffrey Cole, Ph.D. Vote: CoA – Stem Cell Culture and proposal for A.S. degree. Committee members voted and approved by unanimous consent to modify current CoA and propose a related A.S. degree COVID – 19 Response: Redesign of online curriculum, use of lab kits, return to on-campus instruction | Pamela Eversole-Cire, Ph.D. Program Director Committee Members | Presentation Informational Discussion |
| | Overview of Program Metrics: Performance of graduates Enrollment (2019-2020): 89 CoA awarded (2019-2020): 24 | Karol Lu, Ed.D. Program Coordinator | Presentation Informational |

| *Biotechnology Industry Workforce: there is racial and | | |
|---|-----------------------------|---------------|
| ethnic disparity in the biotechnology industry. | | |
| Demographics of program students demonstrate that | | |
| PCC Biological Technology Program student | | |
| demographics is similar to PCC campus-wide | | |
| demographics, notably recruiting Hispanics and | | |
| females who are historically underrepresented in | | |
| biotechnology and STEM | | |
| Reference: Measuring Diversity in the Biotech Industry: | | |
| Building an Inclusive Workforce, January 2020, Center for | | |
| Talent Innovation (CTI) and Biotechnology Innovation | | |
| Organization (BIO), <u>http://go.bio.org/rs/490-EHZ-</u> <u>999/images/Measuring Diversity in the Biotech Indust</u> | | |
| ry Building an Inclusive Workforce.pdf? ga=2.1973411 | | |
| 03.1867659190.1591900080-113068757.1591900080 | | |
| | Committee Members | Discussion |
| Increase the diversity student by taking advantage of | | Feedback |
| recruitment opportunities with PCC Pathways program | | recuback |
| and collaboration with PCC STEM success coach and | | |
| Success Coach Lead, Emily Bangham, M.Ed. | | |
| | | |
| CIRM Outcomes: 78 student participants in the CIRM | | |
| Bridges Program reporting 27 publications and/or | | |
| patent applications | | |
| | | |
| Labor Market Information: Occupational demand | | |
| demonstrates a need for middle-skill and above | | |
| middle-skill workers in LA-OC region, including | | |
| biological technicians. Resources suggest that there | | |
| will be a rise in gene and cell therapy projects, an | | |
| emerging industry that will require labor demands in | | |
| Good Manufacturing Practice (GMP) and experienced | | |
| trainees | | |
| Reference: "The Rise of Gene and Cell Therapy and the | | |
| Resulting Need for In-House Production Facilities: A | | |
| Guide" by Jay Biggins, Cell and Gene | | |
| | | |
| Funding Opportunities: Grant applications were | Pamela Eversole-Cire, Ph.D. | Presentation |
| submitted to request additional funding to support | Program Director | Informational |
| program activities, including Strong Workforce | | |
| Program, CTEA Perkins, CIRM Bridges application, | | |
| private donor | | |
| Private Donor: W.M. Keck Foundation | | |
| Investment in the amount of \$1,000,000 | | |
| directly awarded to the program. Funds will be | | |
| used to develop a training pathway to include | | |
| CoA in Stem Cell-based Biomanufacturing, | | |
| internship, and equipment to meet | | |
| occupational demands in an emerging industry | | |
| | | |
| Meeting with Dr. Joseph Gold, Diamonufacturing Senior Director at City of | | |
| Biomanufacturing Senior Director at City of | | |
| Hope for recommendations on course and | | |
| training pathway development, GMP facility | | |
| tour | | |

| | | 1 | |
|-------------|--|--------------------------------|------------------------|
| | New CoA in Stem Cell-based Biomanufacturing | | |
| | Vote: Committee members voted and | | |
| | approved by unanimous consent for | | |
| | development of a new Certificate of | | |
| | Achievement in Stem Cell-based | | |
| | Biomanufacturing | | |
| 2 40 2 57 | | | Discustor |
| 2:48-2:57pm | Open Discussion | Committee Members | Discussion Feedback |
| | Stem cell-based biomanufacturing pathway adds a | | |
| | training pathway for biotechnology students who are | | |
| | not interested in a pathway for research in | | |
| | | | |
| | academia/industry | | |
| | Potential collaboration with USC GMP Program and Dr. | | |
| | Ichida | | |
| | Committee members recommend seeking internship | | |
| | opportunities and establish partnerships with various | | |
| | GMP labs/facilities | | |
| | Recruitment and program marketing opportunities at | | |
| | UCLA MedTech Partnering Conference 2021 | | |
| 2:57-3:00pm | Meeting Summary | Karol Lu, Ed.D. | |
| • | Program Overview | Program Coordinator | |
| | Program Metrics | | |
| | Update: CoA – Laboratory Skills; approved by | | |
| | LAOCRC and PCC Curriculum and Instruction | | |
| | | | |
| | Update: CoA - Computational Biology, | | |
| | approved by LAOCRC and PCC Curriculum and | | |
| | Instruction | | |
| | Vote: Committee members voted and | | |
| | approved a proposal to modify the CoA – Stem | | |
| | Cell Culture and a proposal for a new related | | |
| | | | |
| | A.S. degree. | | |
| | Vote: Committee members voted and | | |
| | approved a proposal for a new CoA in Stem | | |
| | Cell-based Biomanufacturing | | |
| | • Labor Market Demands: there is a demand for | | |
| | middle skill and above middle skill | | |
| | occupations; emerging industry in gene and | | |
| | cell therapy and stem cell-based | | |
| | | | |
| | biomanufacturing, including labor demands | | |
| | Funding opportunities and/or grant | | |
| | applications submitted: SWP, CTEA Perkins, | | |
| | Prop 14 – CIRM Bridges, and W.M. Keck | | |
| | Foundation. W.M. Keck Foundation | | |
| | investment award will support new GMP stem | | |
| | | | |
| | cell biomanutacturing training nathway and | | |
| | cell biomanufacturing training pathway and | | |
| 3:01pm | cell biomanufacturing training pathway and new CoA in Stem Cell-based Biomanufacturing Adjournment | Barbara Driscoll, Ph.D., Chair | |