



Shoreline Community College
16101 Greenwood Avenue North
Shoreline, WA 98133

Biotech Advisory Meeting Minutes

Thursday, June 14, 2018

4:00-5:00 pm (with Lab Tour and Student Poster Session to Follow)

Board Room (1010M), Building 1000

Meeting Attendees

Shoreline Community College: Dina Kovarik, Louise Petruzzella, Jan Chalupny, Sandra Porter (also of Digital World Biology), and Jim Schulz

Industry Representatives: Joy Adiletta, Arthur Castleton, Jon Digel, Evan Henrich, Susan Julien, Roshan Liyanage, Richard Moran, Mark Parrish, Meg O’Conor, Dmitry Serbzhinskiy, Nadeem Sheikh, Don Sodora

1. Board Member Introductions and Introductions of New Members and Guests

- Melissa Austin, Universal Cells
- Abbe Kesterson, Bluegrass Community and Technical College
- Jan noted that Theripion, a small biotech start-up run by Jeff and Martha Ledbetter, will be renting space in the Biotechnology lab, and will include guest lectures and internships for students
- Mark mentioned that many things have happened since the February meeting, including Dina being hired as the official tenure-track Biotechnology Chair for Shoreline

2. Approve Minutes from the February 16, 2018 Meeting

Dina mentioned that the February Minutes were full of good information about the Tissue Culture course revisions discussed at the previous meeting. Rachel Castillo has been implementing these suggestions within her BIOL 249 course this spring.

Mark mentioned the Cascadia meeting in April, 2018, coordinated by Life Sciences Washington, was a terrific display of community, with exciting dialog. It will include a technical analysis – we should hear back about what industry needs, identify gaps and analysis, move ahead on curriculum, process for industry. This could include working with funding from “NIIMBL” (National Institute for Innovation in Manufacturing Biopharmaceuticals). Each institution of higher education at the meeting had 8 minutes to present about their program. Mark was impressed with Shoreline. Leadership role firm.

3. Cohort Updates (see Appendix, provided to Board as a handout)

a. 2016-2017 Cohort – employment opportunities (Dina)

- Only a few students still need internships (last program requirement)
- Many are already employed
- If you are looking for interns or employees, please let Dina know

b. 2017-2018 Cohort – internship opportunities

- Same as above, only a few looking for internships, some looking for entry-level positions

c. 2018-2019 Cohort – new students update

- Trying to move to two cohorts this fall; enrollment and interest numbers suggest that this may be possible (see Appendix for details).
- Note: Some interest (applications and registrations) for 2019-2020 and 2020-2021 cohorts already

General Note: All prospective students are invited to the Biotechnology Student Poster Session (immediately following this meeting) and the New Biotechnology Student Orientation and Welcome in September.

It was asked how students hear about the program. Most indicate “web search” when asked about this on their program application; one was recruited from PROJECT BIOTECH summer camp.

4. Quality Systems Subcommittee Update

- Will re-visit this summer

5. Program Updates

d. Project Biotech Summer Camps: Three in 2018 (see flier) (Reitha)

- Three camps this summer:
 - “Biotechnology Essentials,” for those new to biotechnology
 - “Biotechnology & Infectious Disease: Tracking Pandemic Flu”
 - “Biotechnology & Cancer: Causes, Cures & Careers” [New for 2018]
- All camps are full with waiting lists!
- 25% return rate
- Scholarships made possible by donations
- Small percentage of attendees from Shorewood and Shorecrest; apparent lack of interest by Shoreline school district despite attempts that have been made. More attendees come from Seattle than Shoreline
- Strong partnership with Edmonds School District
- It was asked if students are coming from, or interested in, Running Start. The pre-requisites throw many students off. We are considering re-ordering the courses to address this.
- Many students are excited about the prospect of an afternoon cohort [i.e., 2nd Biotech cohort]

e. National Science Foundation project update

- Making good progress on many fronts, especially immunoinformatics college course and high school infectious disease curriculum and kit development

- Annual report submitted
- More updates this fall

6. Tours Update & Thanks to Board Hosts (Louise & Dina)

- Dendreon: 3/2/18, Board member Nadeem Sheikh.
- Fred Hutch: 5/4/18, Board member Jon Digel.
- SystemImmune and Covance: 5/11/18: Anne-Marie Rousseau and Board Chair Mark Parrish
- We've had 4 tours this year (up from 1 previously). The tours were AMAZING! Thank you! Tours in the spring are particularly exciting for students because they are able to make connections with so much of what they have learned already.

7. Faculty Updates & Needs (Dina)

- f. Molecular Diagnostics (winter, 2019). Funds for curriculum revision available.
- g. Quality Systems (date TBD). Potential instructor identified. Funds for curriculum development available.
- h. Biotechnology Techniques (Summer, 2019). Protein Purification & HPLC. Ad taught previously. Team-teaching option. Richard Moran, Dmitry Serbzhinskiy and Roshan Liyanage expressed interest.

8. New Biotechnology Student Orientation & Welcome

- Thurs, Sept 20, Fri, Sept 21 or Mon, Sept 24; 10-15 minute presentations by Board members. Great opportunity to provide an overview of the industry for students, as well as a look at the work that you and your company do. Volunteers requested.

Action Steps & Networking

- Biotechnology Student Poster Symposium: 5:00-7:00 PM, Monday, June 18, 2018.
- Handout provided to Board members as part of Shoreline's Accreditation process (focus on program evaluation and outcomes). The handout helps Board members provide feedback to students about their posters and presentations. Jan noted to please focus feedback on how to improve and what was done really well, as this is particularly helpful for students.
- There will be 7 posters, with a major focus of evaluation of safety, repeating and trouble-shooting experiments, student engagement with questions.

Adjournment

- Next Meeting: To Be Determined

Submitted by

Dina Kovarik, MS, PhD
 Program Chair, Biotechnology Lab Specialist Program

Attachments / Meeting Handouts

Biotechnology Lab Specialist Program June, 2018 Student Update

Completing/Completed: 2016-2017 Cohort

| Student | Internship | Employment |
|-------------------|-------------|---------------------------------|
| Esha Afreen | Winter 18 | Seeking employment / In contact |
| Denisse Bazan | seeking | Seeking employment |
| Cole Ditzler | seeking | Seeking employment / In contact |
| Andrew Duffek | seeking | Seeking employment / In contact |
| Preethi Jayaraman | In Progress | Seeking employment |
| PL | unknown | Completing Classes |
| Prabhjot Singh | In Progress | Seeking employment |
| Anshu Yadav | Winter 18 | Seeking employment / In contact |

Current: 2017-2018 Cohort - 15 'core'

- AAAS Students: 5 [2 of whom are completing over '2' years (3 yr total)]
- Certificate of Completion Students: 8 [2 of whom are completing over 2 years]

2018-2019 Cohort

- AAAS Students = 2-4
 - Registered: 2
 - Met in person, applied, highly engaged: 2
- Certificate of Completion Students = 3-17
 - Registered: 3
 - Met in person, applied, highly engaged: 10
 - Communications via email / maybe: 4

2019-2020 Cohort

- AAAS Students = 4 (taking classes at Shoreline)
- Certificate of Completion Students = 1 (residency issues)

2020-2021 Cohort

- AAAS / AAS-T Students = 2 (taking classes at Shoreline)