

Fall 2017 Program Advisory Meeting Minutes

Program: Biotechnology

October 17, 2017

Location of Meeting: Main Dining Area & Room D010 at Essex Technical High School

Guest Attendees:

Arllyssa LaPorte - Essex Tech (Facilitator)

Deb O'Reilly - Essex Tech

Attendees:

Laura Rubin - NSCC (Chair)

Gene Wong - Endicott College

Brianne Hantzis - Industry Rep. Curis Inc.

Natacha Miller - Parent & Industry Rep. Shire Pharm

Kalomira Kalaitzis - VWR

Racquel Sherwood - VWR - Life Science Specialist

Mark Bruso - Mass Bio

Alana Arangio - Industry Rep. Sanofi

Anna Miller - Student, Essex Tech

Agenda Items:

- **Attendance sign in sheet** - was circulated and signed by all.
- **Appendix 22 Membership form** - was circulated and members were asked to include their name, and list their organization/institution and check the composition and representation boxes. Was signed by chair and submitted.
- **A Program Advisory committee member information form** - given to Racquel Sherwood to fill out. Placed in red folder.
- **Essex Technical High School CVTE Annual Programmatic Review** was explained and discussed. All items were looked at and all checks were made. The Review was signed by the chairperson - Laura Rubin and placed in the red folder.
- **Essex Technical High School Curriculum Bias Review Checklist** was read and course/curriculum materials were reviewed by members and the checklist was completed. Arlyssa LaPorte signed the form as the program staff member. Form was placed in red folder.
- **The biotech competencies** were discussed and advisory members asked how they were kept track of. The old rating system (spreadsheet) was explained how the ratings of 0-5 were assigned. We discussed what our biotech strand 2 curriculum entails and how we go about implementing the standards in a hands-on manner. Kalomira explained that VWR can support our curriculum with some customizable kits. Brianne asked if the students receive training for SOP writing and some of the exercises where the students practice that were explained.

- **Student employment opportunities:** Brianne suggested that we partner with MSMR (she has a contact) because they have many educational opportunities for schools & bio programs
<https://msmr.org/teachers-students/career-training-programs/>. Mark Bruso mentioned that Mass Life Sciences Center would also be an excellent contact & resource- (contact: Ryan Mudawar)
<http://www.masslifesciences.com/about/team/> "MLSC's Internship Challenge, a program which has created nearly 3,000 internship opportunities for college students at over 600 companies across the Commonwealth. He also oversees the STEM Equipment and Supplies Grant Program for high schools and middle schools, which has awarded over \$16 million to nearly 150 public schools. In addition, he manages equipment grants for colleges and industry-matched research grants for research institutions." Other possibilities for student employment may come if an Animal Technology component was added to our curriculum. Industry reps confirm that Animal tech positions often do not require a college degree and that might be an easy leap for coop and job placement if students had lab animal technician training. Charles River labs is a large employer of animal technicians - they reached out to Carol Sullivan in the past. Arlyssa has a contact - Stephanie Duby who works for CRL.
https://jobs.criver.com/?active_tab=ui-id-1. Jackson Labs in Farmington and Maine also provide training for students and educators.
<https://www.jax.org/education-and-learning> Racquel can provide some contacts.
- **Funding/grants:** NSF has grant money for research, academic fellowships/scholarships. <https://www.nsf.gov/funding/azindex.jsp>, Kalomira mentioned that Dupont has a CASE grant program that may be helpful for genotyping projects,
<http://www.case4learning.org/index.php/professional-development/scholarships-grants>.
- **Attracting Applicants to Essex Tech that are interested in Biotech -** Kalomira also mentioned that VWR would be able to sponsor an event that could bridge the gap between middle school and Essex Tech applicants that could offer a service learning component - like poster presentations that could target upper elementary and middle schools. Deb and Arlyssa could work on having senior students develop and implement outreach activities that could be brought to in district middle and elementary schools by reaching out to Stem administrators, or another possibility would be to run a science lab "field trip" for in district schools to attend or possibly have a weekend event that districts could send interested students to - (like open house). Racquel has NEB contacts that could be helpful for supplying reagents & materials.
- **Equipment Needs -** Kalomira can provide quotes for any equipment we are interested in obtaining with perkins grant. Some of our equipment interests were mentioned & Arlyssa will provide a more specific list for

quotes. It was mentioned that many equipment suppliers will “demo” a piece of equipment for weeks or sometimes months, which could be a good option to try equipment out before buying.