The NIH Training Program in Biomolecular Science and Engineering incorporates various academic and extra-curricular elements that enabling students to develop both the knowledge and skills to further their careers in biotechnology.

General

1. Slack
   Trainees must create a Slack account and join the NIH Training Program’s Slack workspace and associated channels. Slack is used to post content and reminders related to Training Program activities and provide a means for trainees to communicate with each other.
   Join Slack
   [ICAL Calendar of Training Program Activities]

2. Individual Development Plan
   The Individual Development Plan (IDP) is a student-development based instrument that provides the advisor and the student a reliable means to help assess their individual efforts and effectiveness in developing and maintaining a plan for meeting the trainee’s educational and career goals.
   The IDP is found at: [http://myidp.sciencecareers.org](http://myidp.sciencecareers.org)
   Trainees will complete and submit the IDP no later than 3 weeks from the first day of classes of the term in which they began fellowship support (fall/spring). The IDP is submitted annually until graduation to CBIS Administrative Coordinator Ryan Weaver at: weaver@rpi.edu.

3. Progress and Forecast Report
   The Progress and Forecast Report (PFR) provides a record of the trainee’s progression through the Training Program. It should be completed together with the trainee’s advisor and updated each semester. Trainees will complete and submit the PFR no later than 3 weeks from the first day of classes. A Graduate Plan of Study should be submitted along with the PFR. The PFR and Graduate Plan of Study are submitted each semester until graduation to CBIS Administrative Coordinator Ryan Weaver at: weaver@rpi.edu.

4. Feedback
   Trainees will complete the “Pre-Graduation Trainee Survey” form in their last semester prior to graduation. Trainees will send the form to CBIS Administrative Coordinator Ryan Weaver at: weaver@rpi.edu. Trainees and faculty trainers are encouraged to suggest areas for improvement for upcoming or past Training Program activities.

5. Research presentations
   Fellowship-supported trainees will prepare a short (~10 min.) PowerPoint presentation of their research followed by comments and questions from committee members and a discussion of research and career goals. Research presentations to the Executive Committee will be done annually.

6. Annual retreat
   Trainees will design a program for the annual retreat related to professional development and/or entrepreneurship and commercial translation. Trainees are expected to participate in the planning of this event until graduation. All trainees must provide research project posters during the retreat’s poster session. In addition to the poster session, trainees who have completed their 2-years of fellowship support are required to give an oral presentation at the annual retreat. Faculty trainers will attend this event.

7. Industrial internship
   Trainees will typically spend 2-3 months completing an industrial internship in either the summer after their 1st year or the summer after their 2nd year of fellowship support. Trainees will work with their advisor to select a company in which to intern. Trainees electing to pursue an internship during their period of fellowship support will continue to receive a fellowship stipend regardless of internship support.

8. Committee membership and meetings
   Trainees and faculty trainers may be tasked with serving on 1 or more Training Program committees until graduation. Trainees and faculty trainers may also be called to attend ad hoc meetings.

9. Awareness/Education and outreach
   Trainees and faculty trainers will participate in both awareness/education and outreach activities to both learn methods for strengthening inclusivity and accommodation of various student populations and to promote the Training Program to students of all backgrounds and groups.

10. International Partner Exchange (optional)
    The Training Program facilitates exchange of trainees to partnered institutions for 1 semester. The Training Program and CBIS will support up to 2 trainees per year to spend a semester abroad in their final semester of fellowship support. Trainees should consult with their advisor if they wish to pursue an international exchange. This option is contingent upon the availability of Training Program and CBIS funds.

Student’s initials: ____________ Date: ____________

Advisor’s initials: ____________ Date: ____________
Center for Biotechnology and Interdisciplinary Studies
NIH Training Program in Biomolecular Science and Engineering
Training Program Requirements

Coursework

1. Perspectives in Biomolecular Science and Engineering
   This course is designed to expose trainees and other graduate students to overviews of the fundamental science and engineering principles inherent in research conducted by faculty trainers. This course is offered every semester and trainees will enroll each semester until graduation.

2. Instruction in responsible conduct of research
   Trainees will have taken “Ethical Considerations in Biotechnology” in their first year of graduate studies. Trainees will attend 1 course module per semester until graduation. Faculty trainers may be tasked to contribute to the instruction of this course.

3. Quantitative background for biotechnology
   Trainees must take at least 1 course from each of the core areas of biomolecular science and engineering: Synthetic Biology, Biomolecular Systems, Molecular Biology & Bioinformatics, Data Science/Data Analytics. Trainees and their advisors will select courses that align with the 4 core areas. Trainees are required to take 1 course outside their school and 3 courses outside their major to satisfy the core area requirement. Courses taken prior to enrollment in the Training Program may count towards satisfying coursework requirements. The course requirement should be completed within the 2 years of a trainee’s fellowship support.

Entrepreneurship and Commercial Translation Experience

1. Activities
   Trainees will participate in 2 courses, events or programs related to training in Entrepreneurship and Commercial Translation. Trainees and faculty trainers are expected to participate in all entrepreneurship and commercial translation activities which are sponsored/co-sponsored by the Training Program. Announcements of entrepreneurship and commercial translation-related courses, events and programs will be disseminated to trainees throughout the year. The trainee should utilize travel funds for at least 1 of the activities used to satisfy the requirement. The entrepreneurship and commercial translation experience requirement should be completed within the 2 years of fellowship support. Trainees that wish to participate in a course, event or program that is not advertised by the Training Program should consult with their advisor and make a request to CBIS Administrative Coordinator Ryan Weaver at: weaver@rpi.edu. Faculty trainers are highly encouraged to participate in entrepreneurship and commercial translation events.

2. Entrepreneurship Bootcamp
   Trainees will also plan and attend the annual Entrepreneurship Bootcamp. Trainees will participate in the planning of this event until graduation. Faculty trainers will attend this event.

Professional Development Experience

1. Activities
   Trainees will participate in 2 courses, events or programs related to training in professional development. Announcements of professional development-related courses and events and programs will be sent out to trainees throughout the year. Trainees and faculty trainers are expected to participate in all professional development activities which are sponsored/co-sponsored by the Training Program. The professional development experience requirement should be completed during the 2 years of fellowship support. Trainees that wish to participate in a course, event or program that is not advertised by the Training Program should consult with their advisor and make a request to CBIS Administrative Coordinator Ryan Weaver at: weaver@rpi.edu. Faculty trainers are highly encouraged to participate in professional development activities.

2. Conferences
   Trainees will utilize travel funds to attend at least 1 conference in which they present a paper or abstract. Trainees should acknowledge the training grant in their publications (T32GM067545).

Training Enrichment

1. Activities
   Trainees are encouraged utilize their travel and expense stipends to pursue activities that are non-affiliated with the Training Program but related to the trainee’s research and/or align with other elements of the Training Program. Trainees and faculty trainers are expected to participate in all training enrichment activities which are sponsored/co-sponsored by the Training Program.

2. Seminars
   Trainees and faculty trainers will attend the “Frontiers in Biotechnology Seminar Series” lectures in addition to departmental seminar series lectures. The “Frontiers in Biotechnology Seminar Series” is sponsored by the Training Program and CBIS. Trainees and faculty trainers will play an active role in bringing speakers to campus under the sponsorship of this seminar series. Seminars that are sponsored or co-sponsored by the “Frontiers in Biotechnology Seminar Series” should feature interdisciplinary topics.

Student’s initials: ____________ Date: ____________

Advisor’s initials: ____________ Date: ____________