

Agricultural Biotechnology Undergraduate Degree Program Implementation Plan Report for 2019-2020

Action item #1: Enhance student awareness and strengthen the profile of ABT across the UK campus

Assessment Method: Increase in the number of students enrolled in ABT

Results: ABT enrollment in Fall 2012 was 149 students. Current enrollment (Fall 2020) is now 251 students, representing an increase of 68% over the 6-year period.

Analysis of results and reflection: Development of competing undergraduate programs remains a concern for the ABT Steering Committee. Therefore, enhancing prospective student awareness and strengthening the profile of ABT across the UK campus is an important objective. Based on the increase in enrollment over the past four years, we have been successful in accomplishing this. Our current enrollment is up again from our enrollment last fall (245, which is due to another large incoming freshman class. Our steering committee has expressed concern with the logistics of higher enrollment, and we are planning additional sections of existing courses.

Improvement actions: To maintain awareness of the ABT program across campus, the ABT program Chair, Director of Undergraduate Study, and the Academic Coordinator will continue to work with program partners, such as the CAFE Office of Diversity, Dr. Becky Dutch (COM Associate Dean for Biomedical Education), and other faculty members outside of CAFE. We continue to recruit at regional events held for Kentucky high school students, and we take advantage of existing online UK resources. To address our increased enrollment, we have added an additional sections of nearly all of our courses in addition to expanding our research presentation series.

Action item #2: Increase funding to establish a full-time academic coordinator (AC) position and recurring support for teaching assistants in ABT 120 and ABT 495.

Assessment Method: The hiring of a full-time academic coordinator (AC) and the initiation of on-going financial support for teaching assistants.

Results: A full-time AC position was approved by Dean Cox in 2014, and Esther Fleming began full-time duties on September 8, 2014. In November of 2014, Dean Cox committed recurring support for teaching assistants in ABT 120 and ABT 495.

Analysis of results and reflection: Establishment of the full-time AC for the program and TA support for ABT 120 and 495 has benefited students in the program and the instructors for ABT courses. We are exploring the possibility of adding existing courses and securing additional resources to account for consistent increases in the size of the incoming freshman class.

Improvement actions: This action item has been accomplished.

Action item #3: Change the program's name to better reflect the scientific disciplines now encompassed by ABT.

Assessment Method: The actual change of the ABT program name.

Results: Suggestions for new program names were solicited from ABT-affiliated faculty, students, and alumni. A vote by ABT-affiliates selected the new name "Agricultural and Medical Biotechnology." A program change proposal was submitted to CAFE Associate Dean Grabau to initiate the approval process (October, 2015).

Analysis of results and reflection: A change in the program name to "Agricultural and Medical Biotechnology" will better reflect the scientific disciplines that ABT students engage in and the career opportunities they pursue after graduation. With increases in the incoming class size, we believe that the name change is having an impact on student recruitment as well.

Improvement actions: This action item has been accomplished.

Action item #4: Establish an ABT alumni database.

Assessment Method: The actual creation of an ABT alumni database.

Results: To help the program keep track of ABT alumni, Esther Fleming (ABT AC) is developing an "exit survey" that will be sent to pending graduates during their final semester. This is in progress. We were also informed by the CAFE Office of Development that keeping an alumni database was their purview, and that we should consult with them about tracking and contacting ABT alumni rather than establishing our own database.

Analysis of results and reflection: It will be very beneficial if the ABT program can survey ABT alumni, track the success, and present them with opportunities to contribute to the program.

Improvement actions: Our AC has established an exit survey for graduating students. We will cooperate with the Office of Development regarding tracking and contacting graduated students. Our AC has established an ABT newsletter with the help of Seth Riker that regularly goes out via e-mail to ABT students and faculty (starting Spring 2017). We will continue to work with the Office of Development to get this newsletter to interested parties. The AC is also establishing connections with ABT students and graduates via social media (LinkedIn).

Action item #5: Establish more formal partnerships with other Colleges at the University of Kentucky.

Assessment Method: Tracking of partnerships with other colleges within the university.

Results: Through the efforts of Dr. Bob Houtz (CAFE) and Dr. Joe Springer (Director, M.S. in Medical Sciences), a Master's degree option has been established through the University Scholars program. The name of the program has been formally changed from "Agricultural Biotechnology" to "Agricultural and Medical Biotechnology". We currently have two members of the ABT steering committee from outside CAFE (COM and College of Pharmacy) as a means to strengthen ties between the ABT program and related disciplines.

Analysis of results and reflection: We already have students enrolled in the new MS program, and anticipate that this will grow as more students become aware of the new option. The name change will acknowledge the continued support of members of other colleges (e.g. Dentistry, Medicine, Pharmacy) to our program and strengthen our relationship with these colleges. Faculty in these (and other) colleges contribute broadly to the ABT program by teaching courses and by serving as research mentors to ABT students.

Improvement actions: The ABT Chair and Steering Committee members will continue to seek cross-disciplinary collaboration with other colleges at UK. A Master's option in the area of plant sciences will be pursued. With the College of Pharmacy, we are exploring a program that will allow students to complete the ABT BS degree during their first year in the PharmD program. We hope to have this implemented within the next academic year.

Action item #6: Revise the ABT webpage to make it more student-centered.

Assessment Method: A new ABT webpage will be developed.

Results: Our AC has updated the ABT website with the help of Ag Communications.

Analysis of results and reflection: The ABT webpage is active and curated by our AC, with rotating pictures and stories of ABT students in action.

Improvement actions: This action has been completed, but we will continue to monitor and update as necessary.

Action item #7: Establish a physical “home” for ABT.

Assessment Method: Allotment of permanent, office space to the ABT program.

Results: An office in the Equine Programs suite, N212J, is being used by Esther Fleming as the ABT “home”. A sign for the Agricultural Biotechnology Program has been added outside the Equine Programs suite to help direct people to Esther’s office. New office furniture has been purchased with ABT funds to provide adequate work space for the AC for meeting with students and potential students.

Analysis of results and reflection: An office dedicated to the ABT program enhances the efforts of the ABT Academic Coordinator and gives students greater access to this individual.

Improvement actions: This action has been accomplished.

Action item #8: Establish a more structured process to help ABT students identify faculty mentors for the ABT 395 research projects.

Assessment Method: Establishment of specific events that allow students to meet and talk with potential research mentors. Development of an up-to-date list of past faculty research mentors on the ABT website.

Results: The ABT website has an updated list of faculty across several colleges that have served as mentors for ABT 395 projects. Dr. Sharyn Perry has dedicated one class time of ABT 201 (second year ABT students) each fall semester for a “meet-and-greet” mixer with potential faculty research mentors. ABT faculty academic advisors and our AC also serve as an informal source of information for students.

Analysis of results and reflection: Some students continue to have difficulty identifying mentors—we will track the success of the newly updated website in working toward this goal.

Improvement actions: Further methods will be discussed by the ABT steering committee, including additional “meet and greet” opportunities in other ABT courses,

reaching out to faculty in other colleges, and an increased role for ABT academic advisors. We are also exploring additional venues by which ABT students can interact with interested faculty. Our DUS continues to meet with interested faculty in colleges across campus.