

IBHE Short Progress Report
Master of Science (M.S.) in Biochemistry and Biotechnology (BCT)
Submitted by Dr. Thomas Canam (BIO)
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Short progress reviews need only discuss whether or not the program has achieved the goals and objectives established for it in the original sent to the IBHE.

Original purpose:

The Master's degree in Biochemistry and Biotechnology was designed as an advanced interdisciplinary program for students interested in pursuing a career in Biochemistry and Biotechnology. This program was intended to allow students to gain the skill sets to improve products and services through molecular-biological and analytical techniques while also being trained in the fundamental business strategies to succeed in the fast-paced field of biotechnology and medical services.

Student Data:

Number	Student Name	Type	Date Admitted	Status
1	Oluwafunmilola Ojo	International	December 16, 2016	Graduated (May 6, 2019)
2	Theresa O'Connor	Domestic	March 10, 2017	Graduated (December 17, 2018)
3	Idiahi Okosun	International	June 15, 2017	Last semester attended was Spring of 2018; currently not enrolled in classes
4	Imoh Etim	International	June 30, 2017	Last semester attended was Spring of 2018; currently not enrolled in classes
5	Devansh Singh	International	June 30, 2017	Graduated (May 6, 2019)
6	Pearley Chinta	International	November 10, 2017	Last semester attended was Spring of 2018; transferred to Texas Woman's University
7	Islamiat Muhammed	International	February 15, 2018	Last semester attended was Fall of 2018
8	Willie Elliott	Domestic	May 16, 2018	Graduated (July 24, 2019)
9	Jocelyne Mendoza	Domestic	March 20, 2019	Currently enrolled; 20 hours completed (of 34)
10	Brian Pondenis	Domestic	August 5, 2019	Currently enrolled; 0 hours completed (of 34)

Since the program began in the fall semester of 2015, the M.S. BCT program has had 77 applicants: 12 (pending admission), 14 (denied), and 51 (admitted). The majority of the admitted students were international with most not attending EIU due to difficulty acquiring a student visa.

Status of Graduates:

- Devansh Singh is a Research Associate at Senti Biosciences (San Francisco, CA)
- Theresa O'Connor is a Lab Assistant at Carle Foundation Hospital (Urbana, IL)
- Oluwafunmilola Ojo is a Quality Control specialist at AmbioPharm (North Augusta, SC)
- Willie Elliott (recent graduate) is exploring employment options while preparing for entrance to medical school

Conclusion:

The Master of Science degree in Biochemistry and Biotechnology (BCT) aimed for graduates to be *“well prepared to take positions in biotechnology and pharmaceutical industries or pursue advanced degrees especially in the medical sciences.”* This new program has had four graduates, with two of these students currently employed in the pharmaceutical industry (Senti Biosciences - Singh; AmbioPharm - Ojo), and one in the medical industry (Carle Foundation Hospital - O'Connor). The fourth student (Elliott) is pursuing a career in medicine. These early successes suggest that the program is achieving its original goals and objectives.

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Decision:

- Program in Good Standing**
 Program flagged for Priority Review
 Program Enrollment Suspended

Dean's Comments

The MS in BCT program got off to a slow start, mainly because it was launched during the budget impasse and several associated faculty left the institution as it was gearing up. Despite the less than ideal launch, the program has made recent progress as the student data suggest. The program has already graduated four students who are finding jobs in their field and it continues to garner interest: there have been 77 total applicants to the program. The MS in BCT has also been impacted by difficulties for international students to secure student visas (this is, unfortunately, a common problem in graduate programs that attract a high degree of international interest). Now that we have replaced departed faculty, and as EIU continues to recover its enrollments, we are confident that enrollment in this program will grow. Stabilization in the visa process for international students will also have a very positive impact on enrollment of international students.

Provost's Feedback

While the dean notes that this program was launched during the impasse with limited resources and during an unprecedented change in visa practices, the program does not at this time meet the IBHE criteria for enrollment/graduates (specifically a rolling three year average of 10 students and at least 5 degrees per year). More importantly though, I am pleased to see that the program has met, and continues to meet, its articulated objectives/contributions—and for that reason I am assigning the program “good standing” at this time. Likewise, I am pleased to see students have completed the degree in a timely fashion. Finally, I applaud the program for high quality student placements and outcomes.

Going forward, the program and faculty are encouraged to enhance program funding through extramural grants that can be used to support students and enhance enrollment. Likewise, the program is encouraged to diversify enrollments through enhanced domestic recruitment initiatives. Beyond recruitment, faculty should also reflect on the observed retention/completion rate as professional, or more applied, master's degree programs ordinarily have high levels of student success. Given that the IBHE standards are based on either observed enrollments or degrees awarded, high levels of persistence and completion would enable this program to be successful even in a challenging international environment. In the end though, the program will need to meet or exceed IBHE standards in the future to remain in good standing.