

Department of Biology

Spring 2020

Periodic Program Review

Biology (BS)

Michel Pelletier, Ph.D., Chair

Professors: Adam Rich, Ph.D., Rey A. Sia, Ph.D, Stuart Tsubota, Ph.D.

Associate Professors: Laurie Cook, Ph.D., Michael Fox, Ph.D., Huey Hing, Ph.D., Craig Lending, Ph.D., Bernardo Ortega, Ph.D., Michel Pelletier, Ph.D.

Assistant Professors: Rongkun Shen, Ph.D.

Instructional Support Technicians: Sarah Bolton, Dawn Cobin Administrative Assistant 1: Lori Cornell Part One-Program Self-Study Outline

## I. Executive Summary

The Department of Biology offers several programs, including the BS in Biology. This program provides very strong knowledge of biological processes in important fields such as cellular and molecular biology, and biotechnology. The program is focused on providing a high quality academic experience that prepares its majors to achieve their career goals. The program provides excellent preparation for postgraduate education and careers in biomedicine, health and secondary education, as well as other fields that require an understanding and practice of scientific reasoning and methods. Our primary goal is to enable our students, both majors and non-majors, to become knowledgeable of life processes, and to gain competence in data analysis and current laboratory techniques. Our faculty is second to none when it comes to teaching students effectively and providing undergraduate students opportunities to do research, pursue scholarly activities, and serve the needs of the Department, School, College, and professional organizations. The Department works well with other departments in the School of Arts and Sciences, but also with other departments including Nursing, KSSPE, and Environmental Sciences and Ecology.

The Department has seen the high success of its students who have participated in independent research projects with faculty. These students have gone on to professional schools, graduate programs, and hired for research positions in academics and industry. The research topics of the faculty are very diverse and cover most of the major scientific major topics such as gene regulation, signal transduction, virulence factors, development, and bioinformatics.

Despite the drop in undergraduate enrollment throughout the School and the College, enrollment in the Biology program has remained fairly stable. This can be attributed to the quality and reputation of the program and faculty, as well as our recruitment efforts. Because of demographic trends, we anticipate that enrollment will be impacted in the next few years as New York State's projected number of high school graduates is trending downward. In addition, enrollment in community colleges in the Rochester area has been down, suggesting that the number of transfer students enrolling in our program is likely to be impacted as well. Although representatives from our department have been attending recruitment events at Monroe Community College and Genesee Community College, we plan on increasing these efforts in the future.