1023-K1-161 **Timothy D Comar*** (tcomar@ben.edu), Department of Mathematics, Benedictine University, 5700 College RD, Lisle, IL 60532. *Bringing Life to Biocalculus: Lab Projects and Seminar Series*.

Benedictine University offers a rigorous two-semester biocalculus sequence for research oriented majors in the biological sciences. Two important course goals are the integration of mathematical and biological reasoning through the understanding of biological models and the development of skills to use appropriate computational software to analyze biological problems. In both courses, students work on computer laboratory projects to achieve these goals.

We describe three projects from the second course, which focuses primarily on biological models that can be represented by matrices or systems of differential or difference equations. The topics include age-structured population models, host-parasitoid models, and microbial growth. Each activity requires the students to use mathematics and elementary programming in MATLAB to analyze a biological problem and draw biological conclusions.

Another aspect of our biocalculus program is a seminar that is run jointly with the nearby community college, College of DuPage. We invite outside mathematical biologists to introduce undergraduates to current research trends that integrate the mathematical and biological sciences. This seminar is particularly crucial in recruiting students for biocalculus courses at College of DuPage. (Received August 15, 2006)