

# **Mentoring Undergraduate Research Projects in Mathematical Biology**

**Timothy D. Comar**<sup>1</sup>

*<sup>1</sup>Department of Mathematics, Benedictine University, 5700 College RD, Lisle, IL  
60532*

*Phone: 630-829-6555, Fax: 630-829-6551, tcomar@ben.edu*

## **Abstract**

For several years, we have been mentoring undergraduate research projects in the areas of the dynamics of impulsive differential equation models for pest management and epidemiology and the dynamics of gene regulatory networks. We are now also considering the introduction of stochastic behavior into these models and agent based versions of some of these models. In this presentation, we discuss the students' course preparation before they begin research activities, the structure of the research group, the use of the research project as a learning opportunity and a tool to motivate and engage students. We will also discuss samples of the projects and their results.

---