

1086-Q5-2003      **Silvia Heubach\*** (sheubac@calstatela.edu), Department of Mathematics, California State University Los Angeles, Los Angeles, CA 90032-8204, and **Elizabeth Torres**. *Improving the quantitative skills of life science majors at California State University Los Angeles.*

In response to the BIO 2010 report on transforming undergraduate biology education, faculty from biology, mathematics, physics, biochemistry and computer science applied for and received an NIH T36 grant to support curricular changes. We used a three-pronged approach: 1) modifications in the introductory biology, physics, and mathematics courses for life science majors; 2) an interdisciplinary research seminar connecting the disciplines; and 3) a new bioinformatics minor.

We report on changes in the mathematics curriculum. Three new courses were created: Math 105, Introduction to Mathematical Models in Biology (replacing trigonometry), and Math 204/205 Applied Calculus I/II. In all new courses, the mathematical concepts are introduced and explained in the context of biological applications and terminology. The new sequence started in Fall 2011, and all three courses were taught at least twice. Assessments of student attitudes towards mathematics and its importance show positive change, and pass rates for the course sequence have improved. Workshops for life science faculty to learn or review concepts from the new math courses facilitate incorporation of these concepts into biology courses. Challenges of making and institutionalizing the curricular changes are discussed. (Received September 24, 2012)