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**Rebecca Dibbs\*** (rebecca.dibbs@unco.edu), Greeley, CO 80639, and **Anne-Marie Hoskinson** (amhoskinson@gmail.com). *Breathing life into mathematics for biologists: teaching quantitative practices to undergraduate biology students.*

In light of numerous recent calls for reforming teaching and learning in undergraduate biology, instructors of biology and mathematics are seeking ways to increase both quantitative literacy of students and relevancy of problems to their professional development. We propose that mathematics instructors can enrich biology students' numeracy skills by focusing on three practices: engaging multiple representations of data (graphs, tables, equations, narratives), solving authentic problems, and building models. We illustrate the implementation of disciplinary practice-based instruction with case studies of two courses: calculus for the life sciences, taken at the beginning of the biology major, and mathematical modeling in biology, taken at the end of the major. By focusing on disciplinary practices rather than content alone, we equip students to master the fundamental concepts of both mathematics and biology. (Received September 18, 2013)