

## **Introducing Phylogeny to General Biology Laboratory**

*Lynette Winters  
Piedmont Virginia Community College  
501 College Drive  
Charlottesville, VA 22902  
lwinters@pvcc.edu*

Three challenges that instructors face during the first laboratory session in any general biology course are 1) to excite students about the diversity of life 2) to encourage students to think like scientists, and 3) to promote peer interaction among students. In an inquiry based introductory lab exercise at Piedmont Virginia Community College, we address all of these challenges in a basic phylogeny construction lab. Students work together to classify four unique shells based on morphological traits and subsequently construct a simple phylogenetic tree illustrating their findings. Each lab group presents its classification to the rest of the class. Most students have an intuitive feeling for "important" traits, and this exercise allows them to articulate why certain traits are more useful in constructing phylogenies than others. In addition to the lab activity, instructors receive common powerpoint presentations for pre-lab introductions and common online quizzes for evaluation of student learning.