## Meet our Keynote Speaker

**Dr. Molly Miller**
10:30-11:30 Marcum Technology Meeting Room A, B, and C

**Dr. Molly Miller,** has been a Professor at Vanderbilt University for the past 35 years, specializing in paleoecology, clastic sedimentology, and ichnology. She regularly travels to Antarctica to conduct experiments in climate change. The reason she studies this system is because the tops of mountains that stick up above the ice in Antarctica have the best records on earth of lake and stream environments. An engaging speaker and committed to students, she teaches all levels from undergraduate introductory geology to advanced courses for graduate students. Her presentation will be of interest to all members of TAS.

## Presentation Title

Giant Trees at the Ancient South Pole and Giant Worms on the Modern Seafloor: Antarctica's Clues to Earth Processes and Change.

**Abstract**

Over the last 280 million years, everything about Antarctica has changed (a lot!) except for its position at or near the South Pole. Its polar susceptibility to climate change is preserved in its luxuriant fossil forests of 250 million years ago, by its modern land-to-sea sediment transport systems that operate in the near absence of liquid water, and by its unique marine benthic communities characterized by absence of fast predators and by (some of) their members' gigantism. In addition to raising questions, the ancient terrestrial fossil record, modern ice processes, and modern benthic fauna constrain Antarctica's history of change and may provide insight about the future.