Teachers play an indirect role in learning by providing a facilitating environment for students. I believe the best learning environments require that students play an active role in their own learning. I will describe some of the tools I have used to create active learning experiences as well as describe examples of some of the active learning experiences I have previously implemented. In addition to my views on teaching, I will share my research interests and what types of research I envision as a professor of practice in biomedical engineering.

Rachel Childers is a PhD candidate in Biomedical Engineering at The Ohio State University. She completed her Bachelor's of Science in Biological Engineering with an emphasis in Biomedical Engineering at the University of Georgia in 2010. Before starting graduate school, she worked as a programmer on statistical analysis of the genetics of schizophrenia, autism, and bipolar disorder at Nationwide Children's Hospital. Her current graduate research utilizes whole animal models, mechanical testing of tissue, in vivo cell studies, and molecular assay techniques to study volume overload induced heart failure. Her research resulted in 2 fellowships: a HHMI Med into Grad Scholars fellowship and a 2-year predoctoral fellowship from the American Heart Association.

During her graduate work, Rachel was also involved in various teaching and mentoring activities. She worked as a teaching assistant for the first year engineering program at OSU and as a graduate assistant to a new Humanitarian Engineering Scholars Program for a year. She also designed and lead workshops to introduce high school and middle school students to biomedical engineering for a Women In Engineering summer program. Finally, Rachel has mentored several undergraduate students in a research lab, leading to multiple poster presentations and a poster award.