

## Teaching Philosophy - Sarah Ades

Benjamin Franklin once said, "Tell me and I forget. Teach me and I remember. Involve me and I learn." For me, this quote represents the difference in what it takes to become an average teacher, a good teacher, and a great teacher. So far in my life, I have not come across many great teachers. I have only met one in elementary school and one in high school until spring semester of my freshman year here at Penn State.

Dr. Ades is one of the few great teachers that I have had the honor of learning under and getting to know. Her passion for teaching has opened my eyes to science in ways that I have not experienced before. I have had the chance to have Dr. Ades teach both my Microbiology 202 class and my Biochemistry and Molecular Biology 488 class. My microbiology class was an inquiry-based lab, and one of the first opportunities I had to see what the BMB major was going to be like. Dr. Ades helped to inspire my inner curiosity in regards to science and the world around me. She taught me other ways to view science and to question everything. Since the first class I had with Dr. Ades, I have been able to look deeper into the entirety of what I am learning. I have even begun to wonder more about why things work the way they do or how I could find the answers to these questions. Dr. Ades has given me lifelong tools that I can use to further my learning in all things.

Involvement is one of most important ways for me to truly learn and understand any material, like Ben Franklin had said. Most of the professors I have had do not make an effort to involve the class beyond clicker questions, at least those that I have had thus far. Especially when thinking about my BMB 488 class, Dr. Ades' priority is to involve me and my other classmates in discussion. It would be easier and more time efficient to just to give us the answers; instead, Dr. Ades gets everyone to participate in a discussion. Even if people answer incorrectly, by getting the whole class to participate, we are able to learn and understand perspectives that we may never have considered before. She inspires us to come up with our own ideas for other experiments that could be done as an alternative or in addition to what we had read about in a published paper. Dr. Ades creates a learning environment that fosters deeper thinking and understanding along with ideas that could one day lead to amazing new discoveries in science.

Dr. Ades has helped to discover my passion for antibiotics and the problem of antibiotic resistance that continues to grow without the knowledge of most people. Through the discussions that Dr. Ades has facilitated on resistance with tuberculosis and advancements with antibiotics for TB, I have learned so much more than in any of my other classes. She is able to expose us to these major world problems and guide us in understanding the steps that are being taken to fix them. Everything that Dr. Ades has taught me has helped me to create a deeper understanding of my research. Previously, I had very minimal understanding of the tests and mechanisms that were involved in my research.

Clearly, Dr. Ades is worthy of any teaching award with her passion for teaching and science so evident in the classes I have taken with her. Dr. Ades continues to inspire me to be a better scientist and student every day. Her involvement in her students' learning and dedication to involving them rather than just telling sets her apart from countless other teachers and professors. Dr. Ades will always hold a special place in my life as one of the few excellent teachers I will have that has inspired me as well as my research.