Many individuals have a passion for a particular thing in their life, or rather many things that they are passionate about. Each person reading this journal article has something that strikes a smile upon your face. You have that one thing that gives a spark in your life. It could be on the spectrum of going out on a jog each morning, painting a canvas, playing a sport, spending time with friends, writing a paper, researching a topic, or even studying microbiology. Matthew Cabeen is an individual who has a passion for microbiology, but more specifically a passion within the antibiotic’s world. He has a spark for the history behind antibiotics, why they are what they are, how they arose, how they affect humans, and the issues that have resulted from the overuse of this medication. Not only does he have a passion for antibiotics, but he has a drive for researching new things within the microbiology world to better educate the public.

Dr. Cabeen studied human genetic diagnostics at the University of Connecticut and attended Yale University for his graduate degree. He is now studying Bacillus as a professor at Oklahoma State University. He discovered he had a passion for microbiology when he had a conservation with cell biologists on a staircase. It was then he found his passion for microbiology. He is a family orientated man who has a passion for what he does and strives to make the students of Oklahoma State University knowledgeable of antibiotics, the antibiotics resistance crisis, and microbiology in general.

An interesting factor of Dr. Cabeen is he is starting a new course at Oklahoma State University and making it his own authentic course. This course will be over the Antibiotics and the Antibiotics Resistance Crisis. He created the course for students to be aware of what is happening in the world of medicine, and for students to inform other students on and off campus about important information within the antibiotic’s world. He decided an individual within the faculty at Oklahoma State needed to take initiative and create a course that is so relevant in today’s world. Dr. Cabeen recently started studying Antibiotics and Antibiotics Resistance just a little over a year ago. As this is a fairly new topic for Dr. Cabeen he is still studying and doing research over antibiotics, and the antibiotics resistance.

Across the Oklahoma State University research projects that are currently undergoing research, each topic of research has a unique aspect to it. Not too long ago, Dr. Cabeen and his team found a new kind of protein. This protein is called lysophospholipase and they believe it is doing something very unexpected in bacterial cells. They found that the cells have a significant role in a particular kind of signaling which helps bacterial cells stick together, and not separate from one another. This particular research that Matthew Cabeen and his team found with the protein lysophospholipase is new and exciting. More specifically this protein has a role in bacteria sticking together to form structures called biofilms. The team hypothesized that the phospholipases can alter biofilm formation by cleaving a cyclic nucleotide signal. This research is exciting due to the fact that this would represent a completely new and unexpected role for phospholipases. There are still questions as to way this protein is doing what it is doing, but the teams hope to find new extensive results with this research. He hopes to create new pathways within this research and have those pathways take microbiology further into what it already is.

In the end, find your passion, like Matthew Cabeen did in the microbiology world. He found his passion that strikes a smile upon his face. He is getting to research everyday of what he loves to do, he is getting to look closer into a new protein of the way that it reacts. Oklahoma State students are lucky to have a faculty member who is incredibly excited for new research results and to share those to the public to get Oklahoma State University on the map as a research institution and raise the profile of the Microbiology department.