Amy Mbacke Janet Rinehart-Kim Biology 294 September 06, 2024

## Personal Statement

The microscopic world has always captivated me. From the moment I first peered through a microscope, I was drawn to the idea that entire ecosystems could exist on a scale invisible to the naked eye. This fascination with microorganisms and their impact on life as we know it led me to pursue a degree in biology, with a focus on microbiology. Through my academic journey, I have discovered how microorganisms play critical roles in both human health and environmental systems, and I am excited to further explore this intricate field as I progress in my studies.

While my coursework so far has included foundational classes such as genetics, cell biology, and introductory biology, these subjects have sparked my passion for microbiology. Cell biology has shown me the complexity of cellular processes, while genetics, in particular, has always fascinated me since I've learned about it in high school and now in college too. These courses have not only deepened my curiosity but also prepared me to dive deeper into specialized microbiology courses, which I plan to take next semester. I look forward to expanding my knowledge in areas such as immunology and microbiome research etc.

Although my formal coursework is still developing, I have been proactive in seeking out learning opportunities related to microbiology. I've engaged in independent reading and research on topics like antibiotic resistance and the role of microorganisms in human health. These experiences have only strengthened my determination to contribute to the field, particularly in addressing the growing global challenge of drug-resistant infections.

Looking ahead, I plan to pursue a graduate degree in microbiology, focusing on microbial pathogenesis and antibiotic resistance. The potential to make a real-world impact through research motivates me, especially as antibiotic resistance becomes a more pressing global health issue. My long-term goal is to become a researcher in a lab dedicated to discovering new antimicrobial agents or alternative therapies. I am committed to applying my passion and knowledge to advancing this critical area of microbiology.

As I continue my studies and gain more hands-on experience, I am confident that my academic background and growing interest in microbiology will enable me to contribute meaningfully to the field. I look forward to expanding my expertise and making a lasting impact in both scientific research and public health.