Clinical Immunology Laboratory

Colorado State University, Avery Lab Fort Collins CO 80523-1619

Dear Dr. Anne Avery,

Given my hands-on molecular biology experience, a strong work ethic and precise attention to detail, I would make an excellent Research Associate for the Avery lab and relish the opportunity to help diagnosing companion animals around the US and the world. After a B.Sc. in Biology and participation in the iGEM (international Genetically Engineered Machine) competition, I received a M.Sc. in Biology before starting to work with Europe's flagship laboratory for the life sciences, EMBL, in Rome. Across various research projects I have worked both independently and as part of a team, gaining strong problem-solving, excellent organisational and communication skills and a proven ability to quickly adapt to new challenges.

August 4, 2018

My theses (*Publication*) have left me with excellent critical thinking skills and well-versed in gathering, analyzing, interpreting and communicating scientific data with meticulous attention to detail. More specifically, I have substantial experience in using PCR for molecular biology purposes and, with a proven ability to adapt to new topics and environments, I will have no issue familiarizing myself with flow cytrometry assays. As an example, during a reorganization of my current lab, I consulted relevant literature to establish standard protocols to produce viral vector tools in mammalian cell culture and to quantify them using qPCR. Here I precisely documented and monitored the generated data to identify areas for improvement and confered with my supervisor to continually improve the procedure.

For the iGEM competition I participated in an interdisciplinary team of 20 highly motivated students. Within a month we agreed on an influential topic, and after only eight months of wet lab we produced high-value *data*, finally presenting our team's findings on our *website* and at an international conference. This experience has not only left me with a strong work ethic, but also with the ability to efficiently identify the essentials from scientific findings and to present these in a comprehensive way to veterinarians or other clients. During this time we ran our own lab independently, including ordering reagents, communicating with companies and funding agencies for financial or material aid, making and sterilizing media and keeping the lab orderly.

At my current position our facility only consists of my supervisor and me, meaning I not only produce high-quality viral vectors and genetic constructs independently but also maintain a functional laboratory. Furthermore, I took the initiative to improve the facility's database (FileMaker)—leaving me with excellent organizational skills I can invest to ensure accurate data recording and storage at the Clinical Immunology Laboratory. I have also attended a professional course on presenting with impact and project management for scientists and am able to apply these techniques to balance multiple projects—currently more than 12 at once—while managing my time to deliver final products as quickly as possible. Additionally, as part of a summer school for high school students I supervised and coordinated students alongside my daily schedule and am well prepared to supervise undergraduates or student hourly employees.

Given my skillset I believe I could make valuable contributions to the Avery lab and it would be an honor to contribute to the health and wellbeing of canine and feline patients. If you agree, I would appreciate the opportunity to discuss a the position and my skills in more detail. Thank you for your time and consideration, I look forward to hearing from you soon.

Sincerely,

Rabea Jesser