Troy A. Brier, PhD

COMPUTATIONAL CHEMIST · BIOPHYSICIST
1314 N. DuPont St, Wilmington, DE 19806

(+1) 732-859-9742 | troya.brier@gmail.com | troy-a-brier | T.A. Brier

PLACHOLDER Recruitment Team *February 19, 2025*

PLACHOLDER
100 PLACHOLDER LN
PLACHOLDER, USA, US 00000

Job Application for PLACEHOLDER

To whom it may concern,

About Me

I am a physical chemist by training with a background in scientific computing, specializing on biological systems. Specifically, I have integrated principles from chemistry, physics, and statistics to investigate diverse phenomena within bacterial cells, such as a regulatory mechanisms for stress response and the interplay between the transcriptome and proteome. In my career, I have achieved proficiency in a wide array of computational tools to design and implement analytical pipelines within multiple different environments (HPC, AWS, Docker, Conda) on various operating systems (Linux, MacOS, Windows) leveraging both custom and pre-built software packages with standard coding languages (Python, R, Bash, etc). Additionally, I have developed skills in designing, managing, and contributing to exploratory multi-year projects that require flexibility, self-assessment, reproducibility, and publication-level documentation. I have extensive experience working in highly collaborative environments, both domestically and internationally, and I am well practiced in presenting technical material to audiences of varying subject-matter expertise.

Why PLACHOLDER?

My former experience has given me a deep appreciation for scientific innovation and the need for more efficient and accelerated methods to extend innovation beyond the laboratory and into the real world. Therefore, I am particularly drawn to PLACHOLDER's mission to the rigorous pursuit of research and development excellence to improve the lives of patients, make a difference in health care, and build sustainable value. I am inspired by PLACHOLDER's commitment as a leader in biopharmaceuticals to use patient-relevant data and disease models to uncover novel insights and targets for unmet medical needs, regardless of the disease or size of the patient population. I am excited at the opportunity to join the PLACHOLDER team and contribute to its vision with my computational skills.

Why Me?

As a computational chemist and biophysicist I would bring a deep understanding of biological research complemented by hands-on experience in scientific computing across diverse operating systems and environments. I have significant knowledge of Python and am proficient in R as tools to solve complex scientific questions including using software such as JupyterNotebook for interactive data visualization. Throughout my career I have worked with many data sets of varying type and size, and I am confident in my capacity to adapt, manage, and utilize new data sets regardless of size for addressing challenging biological questions. This includes preparing data sets for integration within various software and algorithms capable of predictive analytics and complex data relationships. While my AI/ML experience is currently foundational, I have experience with AI/ML approaches such as ChatGPT and AlphaFold, and I am very eager to learn more and employ them towards real world applications. My ability to achieve and communicate scientific discovery is exemplified through my publication and presentation record. In summary, I believe my problem-solving abilities, commitment to learning and integrating novel techniques across disciplines, and aptitude for collaboration makes me an ideal candidate for a position at PLACHOLDER.

Thank you for considering my application. I would welcome the opportunity to discuss my qualifications further.

Sincerely,

Troy A. Brier, PhD