



AMPEL BioSolutions Scientific Internship

(Immunology, Bioinformatics, Genetics, Data Science, Mathematics, Machine Learning, AI)

AMPEL Harnesses Data to Transform Healthcare & Improve Lives of Patients

AMPEL is a science-driven company developing a clinical genomic blood test for autoimmune and inflammatory diseases to predict “flares” and “the right drug for the right patient at the right time”, true personalized precision medicine. In addition, AMPEL uses proprietary tools and ML/AI approaches to identify druggable targets for disease testing in preclinical models and clinical trials.

Paid internships are available for Summer2021 as well as the academic semesters this Fall or next Spring. **Interns who demonstrate exceptional aptitude will be considered for a full-time position after graduation.**

Interns are integrated into the R&D Team and projects make a real difference to the company’s mission.

- **ML/AI**—Using R and/or Python, use machine learning and AI approaches (e.g. random forest, gaussian mixture modeling, autoencoder) to predict patients with potential to respond to a drug treatment.
- **Bioinformatics/DataScience**—Analyze bulk or single cell derived gene expression from microarray and/or RNA-seq data using the R platform (LIMMA differential expression, DE-seq2, weighted gene correlation network analysis [WGCNA] & multiscale embedded gene co-expression network analysis [MEGENA]).
- **Genetics**—Investigate genetic variants that contribute to autoimmune diseases such as Lupus, along with the genes and signaling they affect. Utilize available bioinformatics and pathway analysis tools (IPA, STRING) to identify genetic drivers of gene expression networks and “druggable” targets.

AMPEL’s environment is team-oriented and each intern will work closely with a senior scientist.

Successful applicants will possess excellent organizational skill, the ability to think critically, prowess in written and oral communication (one-on-one and in groups) and will be self-motivated to work proactively with limited supervision. Outstanding candidates will be further distinguished by lab experience.

Interns must be able to synthesize results and formulate conclusions based on their data as well as the scientific literature (articles identified using PubMed or GoogleScholar) and design an experimental approach for further inquiry. High caliber work for presentation at scientific meetings and publication is expected. Time-management, including establishing and meeting deadlines is crucial. The ability to accept and learn from constructive criticism is necessary.

A positive outlook and strong work ethic are key for success. AMPEL’s interns must be able to operate and navigate in non-academic, “real-world” situations. Interns at AMPEL are not “cogs in the wheel”; applicants must be able to verbalize ideas and be comfortable communicating “one-on-one” with peers, supervisors and collaborators.

Where are AMPEL interns now? Permanent employees at AMPEL, in grad or med school or in full-time positions in biotech/Pharma. AMPEL interns present at scientific meetings and are co-authors of publications. Current and former interns have also been awarded top honors or have been finalists for prestigious national (SigmaXi student research) and international (Nature Research Innovating Science Award) awards.

Please send your resume, three letters of recommendation, and a note describing your background/career aspirations to: Amrie C. Grammer, PhD (UVA BS’89, MS’91), COO/ChiefScientificOfficer, amriegrammer@ampelbiosolutions.com
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