

The Scripps Research Institute Tate Storey Internship

Project Scope

The Paegel lab uses directed evolution and in vitro compartmentalization to discover novel proteases as next-generation tools for mass spectrometry-based proteomics. This project is highly interdisciplinary, integrating skills in microfluidics and engineering, molecular biology and biochemistry, and synthetic chemistry. In addition to supporting daily laboratory operations (buffer, media, and glassware preparation along with maintaining inventory of general laboratory supplies), Mr. Storey will be responsible for producing microfluidic devices, conducting bacterial transformations, carrying out scaled up PCR, isolating DNA, performing basic coupling reactions and HPLC-based compound purification. This opportunity will provide additional training in the development of fluorogenic protease activity assays and high-throughput screening in conjunction with advanced data analysis and modeling techniques. Upon completion of this internship, Mr. Storey should expect to be proficient in maintaining a detailed laboratory notebook, data collection and interpretation, experiment design and execution, and presentation of results to a technical audience.