Dr. Keriann Backus
Assistant Professor
Biological Chemistry and Chemistry and Biochemistry
UCLA

“Expanding the Activity-Based Chemoproteomic Toolbox”

We investigate how protein function and cellular fate can be studied and manipulated by chemical probes. By developing new methods that combine chemical biology, genomics, and proteomics, we aim to identify functional, disease-linked, and probe-accessible pockets in human proteins. Current applications of our methods include: (i) the production of probes to alter protein interactions, (ii) precision anti-cancer probes, and (iii) probes that enhance T cell proliferation.

https://www.backuslab.com/