Improving Peptide Stability under Physiological Conditions (Drug Sciences, Pharmacy)

The aim of this project is to improve the stability of a cyclic peptide that acts as a regulator-recruiting peptide to interfere with complement activation on coated surfaces. In the human body, peptides can be cleaved and degraded by various proteases and peptidases. By changing the peptide sequence to other natural amino acids and/or unnatural amino acids, peptide stability can be greatly improved.

The student will receive training in several methods including:

- Solid-Phase Peptide Synthesis (SPPS)
- Bioconjugation Methods (Click-Chemistry)
- Liquid Chromatography–Mass Spectrometry
- Binding Assays (MST)

We are looking for a highly motivated, self-driven student to support the project. Applications can be sent directly to Jannes Felsch (jannes.felsch@unibas.ch).