

Thursday, October 3, 2019, 12:30 pm Verna and Peter Dauterive Hall, VPD 105

## **Professor Brett VanVeller**

Department of Chemistry Iowa State University

## Surfing the ground and excited state energy surfaces towards new applications in chemical biology

The behavior of molecules in the excited states can be dramatically different from the ground state, which can lead to a whole host of new reactivity. We seek to design molecules that can be controlled to exhibit different responses (i.e. bond cleaving reactions, emission of different colors of light) depending on the environment and conditions set by the user. These designs have applications in biomaterials and medical diagnostics. We are also developing methods to insert thioamide isosteres into previously uncharted peptide sequence space.

Hosted by Professor Matthew Pratt

The scientific community is invited