## UNIVERSITY OF RHODE ISLAND Department of Chemistry

### **SEMINAR**

Room 105 Beaupre 3:00 p.m, Monday, Nov. 14, 2016

### Prof. Charles Jakobsche

Department of Chemistry & Biochemistry
Clark University
Worcester, MA

# "From Organic Synthesis to Chemical Biology"

**HOST** 

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### From organic synthesis to chemical biology

Prof. Charles Jakobsche

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#### Abstract

The Jakobsche group has a wide range of interests, which spans the interface of organic chemistry, chemical biology, and medicine. The group's research projects each embody several of these major themes: (1) Using synthetic organic chemistry to make target molecules, whether they are structures derived from natural products or artificial compounds created through rational design; (2) Designing functional molecular probes that have well defined interactions with particular proteins or other biological structures and that can be used for chemical biology analysis of these systems; (3) Developing new organic chemistry reactions that can help enable more efficient synthesis of target molecules; (4) Performing detailed analysis of reactions or molecular structures to better understand the properties and reactivities of unusual organic molecules; and (5) Using chemistry to learn about biological systems that are relevant to diseases, medicines, or the immune system.