

# DEPARTMENT OF CHEMISTRY

## Seminar Series



November 3, 2017 - 12:00 Noon, H313

## Total Synthesis of Neurologically Active Terpenoid Natural Products



### Tim Newhouse

Assistant Professor of Chemistry

Yale University Department of Chemistry

[timothy.newhouse@yale.edu](mailto:timothy.newhouse@yale.edu)

*Tim was born in New Hampshire and grew up in northern New England. He received his B.A. in Chemistry from Colby College (2005) in Waterville, ME, where he was mentored by Prof. Dasan M. Thamattoor. After moving to La Jolla, CA, he completed his Ph.D. at The Scripps Research Institute with Prof. Phil S. Baran (2010). During his time at Scripps, he also worked in the laboratories of Prof. Donna G. Blackmond. He then returned to the east coast for postdoctoral studies with Prof. E.J. Corey at Harvard University. As of 2013, he is an Assistant Professor at Yale University in the Department of Chemistry.*

This talk will describe the total synthesis of neurologically active terpenoid natural products using novel strategies and methodologies for step-efficient syntheses. Methodological developments in the area of allyl-palladium catalysis will be described in detail that have allowed for alpha,beta-dehydrogenation of a variety of carbonyl compounds. Unique strategies and key retrosynthetic disconnections are guided by computational investigation.