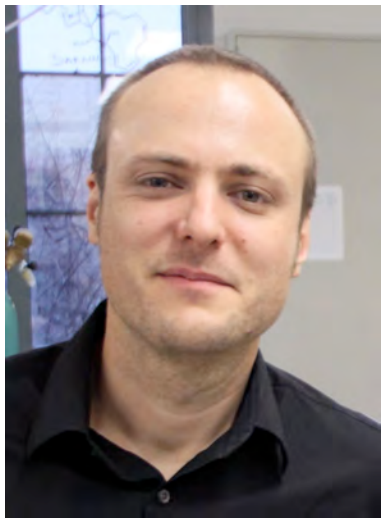

2015-2016 POCC Lecture Series

May 19, 2016, 8:00 PM

Professor Regan J. Thomson
Northwestern University

Methods and Strategies for Natural Product Synthesis

Carolyn Hoff Lynch Lecture Hall
Chemistry Building, University of Pennsylvania

The Philadelphia Organic Chemists' Club

POCClub.org

To join us for dinner before the lecture please contact POCC's secretary Thomas Razler (thomas.razler@bms.com) at least one week ahead of time.

Regan J. Thomson was born in New Zealand in 1976, and received his Ph.D. in 2003 at The Australian National University working with Professor Lewis N. Mander. Following postdoctoral studies with Professor David A. Evans at Harvard University, he joined the faculty at Northwestern University in 2006 where he is currently an Associate Professor. Regan's research interests include reaction development, natural product synthesis and discovery, and atmospheric chemistry. He is the recipient of an NSF CAREER Award (2009), an Amgen Young Investigator Award (2010), an Illinois Division American Cancer Society Research Scholar Award (2012), and a Novartis Chemistry Lectureship (2015–2016).

Abstract: Bond-forming processes that allow the controlled union of two or more molecular fragments with the simultaneous introduction of new stereochemical elements are especially powerful in the context of complex molecule synthesis. At the level of strategy, application of such transforms during synthetic planning allows for a rapid clearance of complexity and paves the way for the development of a maximally convergent synthesis. Within this context, my research group has been actively investigating a number of carbon–carbon bond forming reactions that have the capacity to convert simple starting materials into complex carbocyclic frameworks. In this lecture I will provide several case-studies from my laboratories that highlight the interplay between method development and target-directed synthesis.