

# UW Chemical Engineering

*Spring 2013 Seminar Series*

**Date:** Monday, June 3

**Time:** 4:00 - 5:00 p.m.

**Place:** PAA A110

## ***Artificial enzymes created by in vitro evolution – proteins with unexpected structure and dynamics***



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### **Abstract**

The research in the Seelig lab focuses on the engineering of *de novo* biocatalysts using principles of Darwinian evolution. The lab utilizes libraries of trillions of randomized proteins to create novel enzymes that nature has never seen before. The objective of the research is to create 'designer biocatalysts' that catalyze reactions for which there are no known natural enzymes, and to investigate the origin and evolution of enzymes.