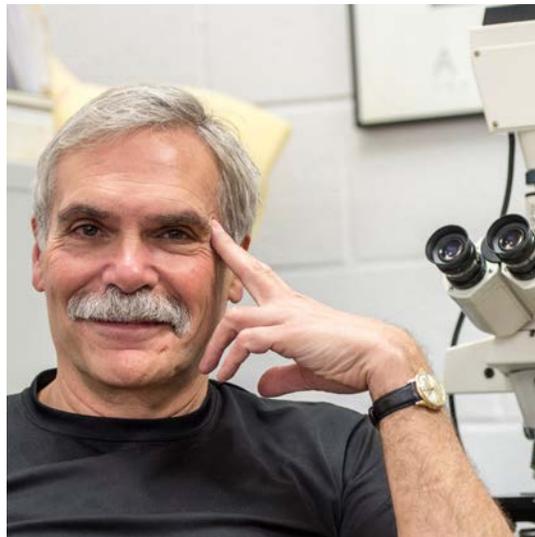




Sweet are the Uses of Adversity: Insights into adaptation and speciation using experimental evolution



Experimental evolution under selection dates back to the dawn of modern genetics, where it helped to shape our understanding of allele and chromosome dynamics in populations under selection. Modern experimental evolution, coupled with genomic analyses, promises to transform our view of the adaptive process and the mechanisms by which major evolutionary transitions have occurred and are occurring. For example, we can now directly probe into the mechanisms underlying antagonistic pleiotropy, the origin and fate of new genes, multicellularity, and the emergence of simple community structure. We will discuss recent insights into these phenomena afforded by experiments in which we analyze the evolutionary process in real time using Bakers yeast, *Chlamydomonas* and *E. coli*.

Dr. Frank Rosenzweig

Professor of Biology
University of Montana

Host: Dr. Marc Meneghini

Date: Friday May 1st, 2015

Time: 2PM

Place: 160 College Street, Donnelly
Centre Red Seminar Room