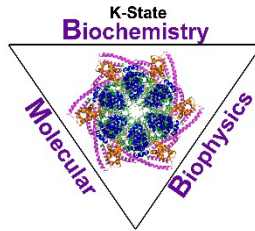


Ackert Hall, Room 120
Wednesday, October 2, 2024
4:00 P.M.



Coffee and Cookies
Chalmers Hall, Room 168
3:45 P.M.

Biochemistry
&
Molecular
Biophysics

Seminar

**New branches on the tree of life:
Engineered speciation and its applications
in pest control and crop biotechnology**

Michael Smanski

Biochemistry, Molecular Biology and Biophysics
University of Minnesota - Twin Cities

In this talk I will describe a generalized approach to engineer genetic incompatibilities in sexually-reproducing organisms. These incompatibilities essentially serve as engineered speciation events that prevent gene flow between the recombinant organisms and their wild-type counterparts. I will share several proof-of-concept examples and discuss ongoing applications of this technique to combat insect pests, aquatic invasive species, and to provide genetic biocontainment for transgenes in GMO crops.