

FACULTY PROFILE

Dr. Robert J. Swanson

Assistant Professor of Biology

NSC 304219-464-5312 rob.swanson@valpo.edu

Website

<http://faculty.valpo.edu/rswanson/Swanson-Arabidopsis.htm>

Education

B.S. - Purdue University 1995 Ph.D. - The University of Chicago 2001

Research Interests

Genomics and Plant Evolution Robert Swanson is interested in genomics and plant evolution. Specifically, in using quantitative genetics to track genes that change over evolutionary time that lead to new species. Recent studies in his lab concentrate on changes in mate choices made by geographically isolated strains of the flowering plant *Arabidopsis thaliana*.

Publications

- Carlson, A. L., Telligman, M. & Swanson, R. Incidence and post-pollination mechanisms of nonrandom mating in *Arabidopsis thaliana*., *Sexual Plant Reproduction* 22: 257-262., (2009)
- Dobritsa, A. A., Nishikawa, S. I., Preuss, D., Urbanczyk-Wochniak, E., Sumner, L. W., Hammond, A., Carlson, A. L. & Swanson, R. J. LAP3, a novel plant protein required for pollen development, is essential for proper exine formation., *Sexual Plant Reproduction* 22: 167-177., (2009)
- Dobritsa, A. A., Shrestha, J., Morant, M., Pinot, F., Matsuno, M., Swanson, R., Moller, B. L. & Preuss, D. CYP704B1 is a Long-Chain Fatty Acid omega-Hydroxylase Essential for Sporopollenin Synthesis in Pollen of *Arabidopsis*., *Plant Physiology* 151: 574-589., (2009)
- R. Swanson, A.F. Edlund and D. Preuss. Species specificity in pollen-pistil interactions., *Annu Rev Genet* 38:793-818., (2004)
- A.F. Edlund, R. Swanson and D. Preuss. Pollen and Stigma Surfaces: The role of structural diversity in pollination., *Plant Cell* 16: S84-97., (2004)

The PDF Footer