



Indiana University Department of Biology announces
The tenth annual
Carlos O. Miller Lecture in Plant Molecular Biology

“Gene Discovery in Aid of Plant Nutrition, Human Health, and Environmental Remediation”

Presented by

Professor Mary Lou Guerinot

Department of Biological Sciences, Dartmouth College
Ronald and Deborah Harris Professor in the Sciences

Thursday, November 21, 2013 • 4 p.m. • Myers Hall 130

About Professor Guerinot



Photo courtesy of Dartmouth College

Research

Guerinot is a molecular geneticist whose principal expertise is on metal transport and regulation of gene expression by metals. Plants are the major point of entry for essential metals into the food chain in most cases, so her work is laying the foundation for crops that offer sustainable solutions for malnutrition. In particular, she has been systematically dissecting how iron gets from the “soil to the seed” and has identified many key genes. Guerinot’s work has had impact far beyond plant biology. Her investigations are providing an integrated picture of the genes involved in a fundamental feature of all living systems—the selective accumulation of essential minerals. Her work also has applications for environmental remediation with the goal of using metal-accumulating plants to remove toxic metals from the soil.

Education

- Postdoctoral Fellow, DOE-Plant Research Laboratory, Michigan State University, East Lansing, MI
- Postdoctoral Fellow, Microbiology, University of Maryland, College Park, MD
- Ph.D. Biology, Dalhousie University, Halifax, Nova Scotia
- B.S. Biology (with distinction), Cornell University, Ithaca, NY

Honors

- Dennis R. Hoagland Award, American Society for Plant Biologists, 2012
- Women in Science Project Recognition Award: 20 years as a WISP sponsor, 2012
- Fellow of the American Society of Plant Biologists, 2009, and of the American Association for the Advancement of Science, 2007
- National Science Foundation Award for Special Creativity, 1996



The Carlos O. Miller Lectures honor Professor Carlos Miller (1923-2012), a beloved member of the Indiana University Department of Biology faculty for 55 years, who had a longstanding interest in the mechanisms of plant growth and development. Established in 2004, the lecture series brings prominent scientists to Bloomington to discuss their research.