



THE 38th
ANNUAL



ADOLPH E.
WALLER

MEMORIAL
LECTURE SERIES



DEPARTMENT OF
MOLECULAR GENETICS

105 BIOLOGICAL SCIENCES BUILDING
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STUDENTS OF THE
DEPARTMENT OF
MOLECULAR GENETICS



THE OHIO STATE UNIVERSITY



The 38th ANNUAL ADOLPH E. WALLER MEMORIAL LECTURE SERIES

Public Lecture: **April 3, 2014**
Technical Lecture: **April 4, 2014**

Commemorating and Honoring the Life and Career of Ohio State
University's Botany Professor
Emeritus Adolph E. Waller — 1892 - 1975

The Waller Lectures were established by Professor Waller's bequest
that provided for an annual lecture series on important botanical topics.
Generous gifts from the Waller family ensure its ongoing success.
Waller specified that these lectures be organized by department
graduate students.

This year, the Department of Molecular Genetics graduate students
host the 2014 Waller Lecturer, Dr. Peggy Lemaux, Cooperative
Extension Specialist, University of California, Berkeley, speaking on:

Feast, Famine and the Future of Food,
April 3, 4 p.m., Jennings Hall Room 355

*From Basic to Applied Research: How Modifying Expression
of Thioredoxin in Cereals Led to Unexpected Improvements in
Grain Properties - So, Where Are They?*
April 4, 4:10 p.m., Jennings Hall Room 001



20TH CENTURY PIONEER PLANT RESEARCHER—ADOLPH E. WALLER

Adolf E. Waller was a renowned plant biologist and gardener. He planned the University Botanical Gardens (pictured above), where he served as curator for 15 years. In addition, he planted the campus Iris Gardens where he conducted the genetic research that made him an authority on plant hybridization and propagation. Waller also was deeply involved in graduate education. Waller received a PhD from Ohio State in 1918, was a postdoctoral researcher at the Royal Botanical Gardens in England, and served on Ohio State's faculty for 45 years (1919-1964). Waller's research was directly applied, leading to increased food production during WWI, controlling flooding of Ohio's Miami River Valley using native grasses on river banks and flood plains, and defining the impact of air pollution from copper smelters on arid land crop production in the Salt Lake Basin.

(Above L to R) Adolph E. Waller; Gardens on
the Ohio State University campus, circa 1924;
Peggy Lemaux

21st CENTURY PIONEER PLANT RESEARCHER—PEGGY LEMAUX

Lemaux's laboratory performs both basic and applied research focused primarily on cereal crops, like sorghum, wheat, rice and barley. The goal of these studies is to better understand crop plants and to use that knowledge to improve their performance and quality. Recently efforts with colleagues have extended to inserting algal genes into tobacco to produce advanced hydrocarbon fuels. Additionally, Lemaux is developing a variety of educational resources on food and agriculture disseminated to professionals, the media and consumers. These include middle school/ afterschool curricula, educational displays and games, videos and fact sheets. Lemaux is the former president of the American Society for Plant Biologists. She is an AAAS Fellow and is the recipient of the Society for In Vitro Biology's 2010 Lifetime Achievement Award.