

Maria Gallo*

Associate Professor

Institute of Food and Agricultural Sciences and the Genetics Institute,
Agronomy Department, and Plant Molecular and Cellular Biology Program
University of Florida, Gainesville, FL 32611-0300

Education:

- 1984 B.S., Agronomy, Cornell University, Ithaca, NY
- 1986 M.S., Crop Science, North Carolina State University, Raleigh, NC
- 1991 Ph.D., Genetics, North Carolina State University, Raleigh, NC

Research Experience:

- 2002-present Associate Professor, Agronomy Department, Plant Molecular and Cellular Biology Program, and Genetics Institute, University of Florida, Gainesville, FL
- Plant molecular biology, genetics and functional genomics; Plant transformation and tissue culture
- 1996-2002 Assistant Professor, Agronomy Department and Plant Molecular and Cellular Biology Program, University of Florida, Gainesville, FL
- Plant molecular biology and genetics; Plant transformation and tissue culture
- 1994-1996 Assistant Professor, Department of Agronomy and Plant Genetics, and Plant Molecular Genetics Institute, University of Minnesota, Saint Paul, MN
- Plant molecular genetics
- 1991-1994 Postdoctoral Research Associate, Texas Agricultural Experiment Station, Texas A&M University, Weslaco, TX
- Plant molecular biology; Tissue culture and transformation
- 1986-1991 Graduate Research Assistant, Department of Genetics, North Carolina State University, Raleigh, NC
- Molecular biology; Developmental plant biology

1984-1986 Graduate Research Assistant, Department of Crop Science, North Carolina State University, Raleigh, NC

Plant cytogenetics; Plant tissue culture

Selected Honors, Awards, Achievements, and Organizational Appointments:

2006-2009 Institute of Food and Agricultural Sciences University Senate Representative

2006 *Peanut Science* Associate Editor

2006 Chair-Elect C7 Division of Crop Science Society of America

2004 Fulbright Scholar Award (research and teaching in The Netherlands)

2004 Association for Communication Excellence Gold Award for Best Project in Distance Education and Instructional Design

2004 American Distance Education Consortium Educational Project Award

2003-2005 *Crop Science* Associate Editor

2003 President, Gamma Sigma Delta Florida Chapter

2002 Bailey Award for Best Research Presentation/Paper, The American Peanut Research and Education Society

2001 Nominated for Undergraduate Teacher of the Year for the College of Agricultural and Life Sciences, University of Florida

2000 Junior Faculty Award of Merit, Gamma Sigma Delta

1998 Best Research Paper Award, The Inter-American Sugarcane Seminars

Teaching Experience (last 9 years):**AGR 2612 – Seeds of Change (two courses: honors and non-honors):**

I developed these two courses in response to the need for new courses that would appeal to a wide cross-section of undergraduate non-science and science majors at the University of Florida and to satisfy my desire to educate people about plant biotechnology.

Content: An introductory course that focuses on the role of genetically-altered plants in agriculture, the environment, foods, and medicine. Basic concepts of DNA technology are introduced as a foundation for studying the applications of plant biotechnology. Critical thinking skills, logic, and reasoning are taught within the context of science to aid in understanding the implications of this technology.

Goals: Allow students to be knowledgeable of the basic science and principles of genetic engineering, familiar with the present applications and future potential of plant biotechnology, able to discuss the benefits and the risks of plant DNA technology, and better decision-makers regarding the role that genetically-altered plants should play in their daily lives.

Role: A general education course that was developed to meet the University's Biological (B) Sciences requirement. The Honors course was developed to meet the need for new and interesting Honors offerings for the university.

AGR 3303 – Genetics:

Content: An introductory course that examines the basic principles of genetics and heredity with application to all organisms, including humans. The chemical nature of hereditary material, the process of protein synthesis, and the control of gene expression are explored.

Goals: Enable students to understand the scientific principles of genetics and be prepared for future courses in genetics, biochemistry, plant and animal breeding.

Role: This is a service course for students in the College of Agricultural and Life Sciences, and is a required course for most enrolled in the college.

Publications (refereed journals, 2003-2006):

Thomas, J.M.G., K.J. Boote, L.H. Allen, Jr., M. Gallo-Meagher, and J.M. Davis. 2003. Elevated temperature and carbon dioxide effects on soybean seed composition and transcript abundance. *Crop Sci.* 43:1548-1557.

Gesch, R.W., I-H. Kang, M. Gallo-Meagher, J.C.V. Vu, K.J. Boote, L.H. Allen, Jr., and G. Bowes. 2003. Rubisco expression in rice leaves is related to genotypic variation of photosynthesis under elevated growth CO₂ and temperature. *Plant, Cell and Environ.* 26:1941-1950.

He, X., M.B. Hall, M. Gallo-Meagher, and R.L. Smith. 2003. Improvement of forage quality by down-regulation of maize O-methyltransferase. *Crop Sci.* 43: 2240-2251.

Meagher, R.L., Jr. and M. Gallo-Meagher. 2003. Identifying host strains of fall armyworm (Lepidoptera: Noctuidae) in Florida using mitochondrial markers. *Florida Entomol.* 86: 450-455.

Rodrigues, J.C.V., C.C. Childers, M. Gallo-Meagher, R. Ochoa, and B.J. Adams. 2004. Mitochondrial DNA and RAPD polymorphisms in the haploid mite *Brevipalpus phoenicis* (Acari: Tenuipalpidae). *Experimental Applied Acarol.* 34:275-290.

Zhang, L., M.C.K. yang, X.L. Wang, B.A. Larkins, M. Gallo-Meagher, and R.L. Wu. 2004. A model for estimating joint maternal-offspring effects on seed development in autogamous plants. *Physiol. Genomics* 19:262-269.

Zhao, W. J. Zhu, M. Gallo-Meagher, and R.L. Wu. 2004. A unified statistical model for functional mapping of environment-dependent genetic expression and genotype by environment interactions for ontogenetic development. *Genetics.* 168:1751-1762.

Chengalrayan, K., A. Abouzid, and M. Gallo-Meagher. 2005. In vitro regeneration of plants from sugarcane seed-derived callus. *In Vitro Cell. Dev. Biol.-Plant.* 41:477-482.

Gilbert, R.A., M. Gallo-Meagher, J.C. Comstock, J.D. Miller, M. Jain, and A. Abouzid. 2005. Agronomic evaluation of sugarcane lines transformed for resistance to sugarcane mosaic virus strain E. *Crop Sci.* 45: 2060-2067.

Chengalrayan, K. and M. Gallo-Meagher. 2005. Evaluation of runner and virginia market types for tissue culture responses. *Peanut Sci.* 31: 74-78.

Jain, M. K. Chengalrayan, M. Gallo-Meagher, and P. Mislevy. 2005. Embryogenic callus induction and regeneration in a pentaploid hybrid (*Cynodon dactylon* x *C. transvaalensis*) bermudagrass cv. Tifton 85. *Crop Sci.* 45:1069-1072.

Murakami, M., M. Gallo-Meagher, D.W. Gorbet, and R.L. Meagher. 2006. Utilizing immunoassays to determine systemic tomato spotted wilt virus infection for elucidating field resistance in peanut. *Crop Protect.* 25:235-243.

Friedel, C.R., T. Irani, R.D. Rudd, M. Gallo, and E.E. Eckhardt. 2006. Influences of overtly teaching for critical thinking on critical thinking skills of undergraduates in a college of agriculture. *J. South. Ag. Ed. Res. Conf.* (in press).

Ramos, M.L., G. Fleming, Y. Chu, Y. Akiyama, M. Gallo-Meagher, and P. Ozias-Akins. 2006. Chromosomal and phylogenetic context for conglutin genes in *Arachis* based on genomic sequence. *Mol. Gen. Genom.* (in press).

*Gallo and Gallo-Meagher are the same author.