

## **CURRICULUM VITAE: ACADEMIC AND PROFESSIONAL RECORD**

### **Education:**

**Ph.D. *Genetics (Molecular Biology)***, Iowa State University;

Dept. of Zoology and Genetics (1993)

**B.A. *Biology***, Drake University (1977) Magna cum laude

### **Teaching Experience:**

#### ***Secondary:***

1994-2011: D.H. Hickman High School, Columbia, MO.;

General Biology

Advanced Placement Biology

Science Independent Research Advisor

#### ***Post-Secondary:***

1986-1991: Department of Genetics and Zoology, Iowa State University,

Ames, Iowa;

Genetics 520L-Genetic Engineering Laboratory

Zoology 401-General Zoology Laboratory

Zoology 156-Human Anatomy and Physiology Lab

2000, 1999 (Summer sessions): University of Missouri-Columbia.

Co-instructor: Summer Genetics Institute for Teachers

### **Scientific Laboratory and Clinical Employment:**

1986 Research Technician, Dept. of Genetics, Iowa State University, Ames, Iowa,

(Short-term appointment). Soybean cytogenetic research.

1985-1986 Clinical Cytogenetic Technologist, University of Kansas Medical Center,

Dept. of Clinical Laboratories, Cytogenetic Laboratory, Kansas City, Kansas.

Chromosomal analysis of amniotic fluid, skin fibroblasts, lymphocyte and bone marrow cells, biochemistry.

1983-1985 Donor Collections Supervisor, United Blood Services, Albuquerque/

Roswell, New Mexico. Supervision of remote area blood products collection team

personnel, phlebotomy procedures, health screening, donor health and blood

products quality control.

1981-1983 Clinical Laboratory Supervisor / Medical Laboratory Technician, B.C.A.

Pediatric Medical Associates, Roswell, New Mexico. Clinical hematology, blood

chemistries, diagnostic microbiology, serology, X-rays and urinalysis. Hiring and

supervision of laboratory personnel.

1981 Laboratory Medical Technician, Eastern New Mexico Medical Center, Roswell,

New Mexico. Clinical hematology, blood chemistries, diagnostic microbiology,

serology and urinalysis.

1978-1981 Clinical Cytogenetic Technologist, University of Kansas Medical Center,

Dept. of Obstetrics and Gynecology, Cytogenetic Laboratory, Kansas City,

Kansas. Chromosomal analysis of amniotic fluid, skin fibroblasts, lymphocyte

and bone marrow cells.

1978 Chemical Technician, Olin Water Services, Kansas City, Kansas. Inorganic

chemical analysis of water and mineral deposit samples.

1975-1978 Laboratory Research Assistant/ Seed Technician, Pioneer Hi-Bred International, Inc. Plant Breeding Division, Johnston, Iowa; full time-summer, part time-academic year; May 1977-May 1978 full time. Mycology and Protein Biochemistry. Maintenance of genetic seed stocks.

### **Publications:**

- Yim, Y.S., G. Davis, P. Moak, H. Sanchez-Villeda, T. Musket, P. Close, P.E. Klein, J.E. Mullet, M.D. McMullen, Z. Fang, M. Shaeffer, J. Gardiner, and E.H. Coe, Jr. (2007) A BAC Pooling Strategy Combined with PCR-based Screenings in a Large, Highly Repetitive Genome Enables Integration of the Maize Genetic and Physical Maps . *BMC Genomics* 8:47
- J. Gray, D. Janick-Buckner, B. Buckner, P. S. Close, and G. S. Johal, (2002) Light-Dependent Death of Maize *lsl1* Cells Is Mediated by Mature Chloroplasts, *Plant Physiology*, 130: 1894-1907
- J. Gray, P.S. Close, S.P. Briggs and G.S. Johal (1997) A Novel Suppressor of Cell Death in Plants Encoded by the *Lsl1* Gene of Maize. *Cell*, 89: 25-31.
- G.J. Johal, E.A. Lee, P.S. Close, E. H. Coe, M.G. Neuffer, S. P. Briggs (1994) A tale of two mimics; Transposon mutagenesis and characterization of two disease lesion mimic mutations of maize. *Maydica* 39:69-76.
- Pamela S. Close, *Ph.D. Dissertation*, Iowa State University, Department of Genetics (1993), "Cloning and Characterization of Chaperonin 60 (cpn60) in Maize".
- P. S. Close, R.C. Shoemaker, and P. Keim (1989) Distribution of restriction site polymorphism within the chloroplast genome of the genus *Glycine*, subgenus *Soja*. *Theoretical and Applied Genetics* 77:768-776.
- Science and Mathematics Conference, Dept. of Secondary Education, Missouri.

### **Recognitions**

- 2011: Honorary member/Faculty mentor HHS National Honor Society
- 2006 Outstanding Secondary Science Teacher, Sigma Chi Science Research Society, University of Missouri-Columbia Chapter
- 2007, 2006, 2005, 2004: Supporting Teacher/Sponsor of Student Finalist, Intel International Science Fair.
- 2009 Supporting Teacher/Sponsor of Student National Finalist, Siemens-Westinghouse Science Midwest Competition. Notre Dame University.
- 2004 Supporting Teacher/Sponsor of Student Semi-Finalist, Siemens-Westinghouse Science Midwest Competition. Notre Dame University.

### **Recognitions, Training Institutes, and Experiences:**

- 2011, 2010, 2009, 2008\*, 2007\*, 2006, 2005, 2004, 2001: Advanced Placement Biology Reader - College Board ®.\* Table Leader
- 2011: College Board ® AP Biology Training Institute, Olathe, KS
- 2011: Honorary member/Faculty mentor HHS National Honor Society
- 2006 Outstanding Secondary Science Teacher, Sigma Chi Science Research Society, University of Missouri-Columbia Chapter
- 2007, 2006, 2005, 2004: Supporting Teacher/Sponsor of Student Finalist, Intel

International Science Fair.

2009 Supporting Teacher/Sponsor of Student National Finalist, Siemens-Westinghouse Science Midwest Competition. Notre Dame University.

2004 Supporting Teacher/Sponsor of Student Semi-Finalist, Siemens-Westinghouse Science Midwest Competition. Notre Dame University.

2009-2010: ENTICE technology institute, Columbia Public Schools.

2008, 2007: Missouri Master Naturalist, Booneslick Chapter. UM Extension/Missouri Dept. of Conservation Volunteer training and service program. Certified 2008.

2010-1995(annually): College Board ® AP Biology Teacher Training Workshop. St. Louis, MO.

2007-08: Partnership for Research and Education in Plants (PREP), UM-Columbia, MO.

2006, 2005, 2004: MUPGRET: MU Plant Genomics & Advisory Committee.

2006: TIE: Teachers and Industry Workshops, Columbia, MO

2005: College Board ® AP Biology Training Institute, Honolulu, HI

2004: 3M Company “Teachers Working in Science and Technology” Summer Internship.

2003, 2002: NSF Teacher Research Experience Fellow, Dept. of Agronomy, University of Missouri-Columbia, Columbia, MO.

2002: Cold Spring Harbor Informatics Workshop for Science Educators, Stower’s Institute, Kansas City, Missouri

2001: Summer Research Fellowship in Maize Genetics and Bioinformatics, Dept. of Agronomy, University of Missouri-Columbia, Columbia, Missouri

1998: A.P. Biology Summer Workshop, Truman State University, Kirksville, MO.

1998: Genes and Human History Summer Institute for Teachers, Department of Biological Sciences, University of Missouri, Columbia.

1997: Mini-Medical School, University of Missouri Medical School, Columbia, MO.

1997: Blood, Genes and Identity, Department of Biological Sciences, University of Missouri, Columbia.

1995: Conservation Honors Program, University of Missouri, School of Natural Resources, Columbia, Missouri.

### **Other Programs/Activities**

1999-present Health Sciences Club associate sponsor, Hickman High School.

2000-present HHS Independent Science Research Advisor