

Curriculum Vitae
Retha M. Meier, Ph.D.
Department of Educational Studies
Saint Louis University
3750 Lindell Boulevard, St. Louis, Missouri 63108
Phone: (314) 977-7111
September 2007

PERSONAL INFORMATION

Date of Birth:	February 27, 1955
Fields of Interest:	Pollination Biology & Ecology Science Education At-Risk Youth Programs Forensic Science

EDUCATION

Southeast Missouri State University	B.S. in Biology & Zoology, 1977
Southern Illinois University	M.S. in Biology, 1983
Southern Illinois University	Teaching Certificate, Middle/Secondary, 1984
Saint Louis University	Ph.D. in Biology, 1993
Southern Illinois University	Principal Certificate, K-12, 1998

CURRENT POSITION

Assistant Professor 1996 – Present	College of Education and Public Service Saint Louis University, St. Louis, Missouri
---------------------------------------	--

PREVIOUS POSITIONS

Assistant Professor 1993 – 1996	Department of Biology Saint Louis University, St. Louis, Missouri
Adjunct Instructor of Science 1991 – 1993	Anatomy & Physiology; Chemistry Maryville University, St. Louis, Missouri
Laboratory Supervisor 1993	Department of Biology Saint Louis University, St. Louis, Missouri
Research Assistant 1991 – 1992	Department of Biology Saint Louis University, St. Louis, Missouri
Teaching Assistant 1989 – 1991	Department of Biology Saint Louis University, St. Louis, Missouri
Teacher 1987 – 1989	Biology & Chemistry Cahokia High School, Cahokia, Illinois
Teacher 1985 – 1987	Science K – 12 The Governor French Academy, Belleville, IL
Adjunct Instructor of Science 1986	Forensic Chemistry McKendree College, Lebanon, Illinois
Forensic Scientist 1978 – 1983	Illinois Department of Law Enforcement Fairview Heights, Illinois

MEMBERSHIPS IN PROFESSIONAL SOCIETIES AND BOARDS

Sigma Xi
National Science Teachers Association (NSTA)
Missouri Environmental Education Association (MEEA)
Missouri Native Plant Society
Council For Exceptional Children (CEC) (2004)
Learning Disability Association (LDA) (2004)
E. Desmond Lee Regional Institute Of Tutorial Education (RITE) Board Member
National Science Foundation Grant Board Member For The School Of Professional
Studies (2004)
Beaumont and Summer Research Awards Evaluator (2001 – 2005)

HONORS AND AWARDS

2006	Faculty Excellence Award – Saint Louis University Student Government Association
2005	Who's Who Among America's Teachers
2005	Faculty Excellence Award – Saint Louis University Student Government Association
2003	Outstanding Teacher Award – Saint Louis University Student Government Association
1987	International Science and Engineering Fair Recognition for Student Involvement – San Juan, Puerto Rico
1987	SIUE Outstanding Science Teacher Award for Outstanding Leadership, Academic Achievements and Interest in Science
1986	SIUE Outstanding Science Teacher Award for Outstanding Leadership, Academic Achievements and Interest in Science
1986	Edison/McGraw Outstanding Science Teacher Recognition
1986	The National Science Teachers Association and The National Aeronautics and Space Administration Certificate of Participation in the "Space Shuttle Student Involvement Program"
1986	International Science and Engineering Fair Recognition for Student Involvement – Texas
1985	SIUE Outstanding Science Teacher Award for Outstanding Leadership, Academic Achievements and Interest in Science

PUBLICATIONS

Refereed Journal Articles

Meier (Edens), RM & Bernhardt, P., & Vance, N. (In Progress). Pollen-pistil interactions in North American and Chinese *Cypripedium* L. (Cypripediodeae: Orchidaceae).

Herring, T., Meier (Edens), R. & Bernhardt, P (In Progress). Evolutionary implications of floral constancy of Halictid bees to *Nuphar ozarkana* (Nymphaeaceae).

Meier (Edens), R. & Bernhardt, P. (In review). Charles Darwin and the yellow lady's slipper: Why is variation in the pollination ecology and breeding systems of orchids important for their conservation? Missouri Academy of Science.

Meier (Edens), R. & Bernhardt, P. (In review). Why is variation in the pollination ecology and breeding systems of orchids important for their conservation? Submitted for publication in China.

Edens, R. & Murdick, N. (In review). Are there toxic plants in your classroom? TEACHING Exception Children? TEACHING Exceptional Children Plus.

Edens, R and Gilsinan, J. (2005). Rethinking School Partnerships. *Education and Urban Society*.

Vance, N., Bernhardt, P., and Edens, R. (2004). Pollination and seed production in *Xerophyllum tenax* Melanthiaceae) in the Cascade Range of Central Oregon. *American Journal of Botany* 91:2060-2068.

Bernhardt, P. and Edens, R. (2004). A fertility clinic for flora. *Plant Talk*, No. 36, pp. 26 – 31.

Edens, R., Murdick, N., and Gartin, B. (2003). The Use of Universal Precautions In The Classroom. *Teaching Exceptional Children*, Volume 35, No. 4, pp. 62-66.

Edens, R. and Chittooran, M. (2003). Cataracts. *Childhood Disorders Diagnostic Desk Reference*, John Wiley & Sons, Inc., pp. 112 – 114.

Chittooran, M. and Edens, R. (2003). Carpenter Syndrome (Acrocephalopolysyndactyly, Type II). *Childhood Disorders Diagnostic Desk Reference*, John Wiley & Sons, Inc., pp 107 – 109.

Edens, RM, Anand, SC, and Bolla RI (1995). Enzymes of the phenylpropanoid pathway in soybeans infected with *Meloidogyne incognita* or *Heterodera glycines*. *Journal of Nematology* 27(3): pp. 292-303.

Bolla RI, Edens RM, Anand SC, Huang R, and Kozlowski P (1995). Molecular genetics and biochemistry of soybean resistance to *Meloidogyne incognita* and *Heterodera glycines*. Abstracts of the First English Language Symposium of the Russian Society of Nematologists: 10-11.

Edens R, Anand SC, and Bolla RI (1994). Involvement of phenylpropanoids in the resistance of soybeans to root knot and cyst nematode. *Journal of Nematology* 26:543.

Matthews (Edens) RM and Stolorow, MD (1981). The development of carbonic anhydrase II in the group I buffer system. *Journal of Police Science and Administration* (9)1; pp. 99-101.

Briner RC, Longwell CR, and Matthews (Edens) RM (1980). Isoenzyme typing of dried bloodstains using mylar-backed cellulose membranes. Handbook. Helena Laboratories, Beaumont, Texas.

Nonrefereed Journal Articles

Edens, RM (2000). Keeping kids in school SLU Newslink at <http://www.slu.edu/newslinks/kidsinschool.htm>

Edens, RM (2000). Survival of the mutant toad. <http://askeric.org/cgi-gin/lesson>

Edens, RM (2002). Friends. *The Fugue*.

PRESENTATIONS

International

Why is variation in the pollination ecology and pollen-pistil interactions of orchids important for their conservation? The First National Chinese Orchid Conference in China. Beijing, China. Bernhardt, P., Vance, N., and Edens, R. Presented by Bernhardt. January 2007.

Forensic science. ABC Radio Interview by Robyn Williams. Full transcript Edens, R. 7/15/2006.

The pollination biology of the genus *Cypripedium* in North America and China. Melbourne Systematics Forum; Melbourne, Australia. Bernhardt, P., Vance, N., and Edens, R. Presented by Bernhardt. 2006.

The use of Universal Precautions in the classroom; Council For Children With Behavior Disorders Annual Conference; Edens, R. & Murdick, N. Presented by Edens and Murdick. St. Louis, Missouri. 2003.

National

Pollination ecology and factors affecting pre-zygotic process in *Cypripedium montanum*, the mountain lady's slipper orchid. Botanical Society of America; Chicago, Illinois. Vance, N., Bernhardt, P., Edens, R., & Smith, J. Presented by Vance. 2007.

Comparing the reproductive ecology of some North American and Chinese Lady Slipper Orchids. Native Orchid Conference, Ashland, Oregon. Vance, N., Bernhardt, P., and Edens, R. Presented by Bernhardt. 2006.

Regional

Charles Darwin and the yellow lady's slipper: Why is variation in the pollination ecology and breeding systems of orchids important for their conservation? The Missouri Academy of Science. Bernhardt, P. & Meier, R. Presented by Bernhardt & Meier. 2007.

The North American and Chinese lady's slipper orchids: A fresh look at the sexy and successful *Cypripedium*. The 2006 John D. Dwyer Lecture. Missouri Botanical Garden. Bernhardt, P., Vance, N., & Edens, R. Primary presenter Bernhardt. 2006.

Children's needs as addressed by universities and agencies. Regional Institute of Tutorial Education, E. Desmond Lee Conference. Edens, R. 2005.

New direction for RITE. Regional Institute of Tutorial Education, E. Desmond Lee Conference. Edens, R. 2005.

The practical application of technology to pedagogy; Saint Louis University Faculty Winter Institute. Edens, R. 2004.

Reptiles & Amphibians in high school; Presented at the St. Louis Chapter of The Missouri Herpetological Society; Kirkwood, Missouri; Co-presented by Edens, R. & Lucy, K. 2002.

Toads in the classroom; Presented at the Fifth Annual Conference on Environmental Education; Osage Beach, Missouri; Edens, R. November 11, 2000.

Local

Forensic science and CSI – what is real? Plants and Cultural Diversity Class, Saint Louis University. Edens, R. 2007.

Reproductive success of the genus *Cypripedium*. Saint Louis University, Biology Department. Edens, R., and Bernhardt, P. 2006.

The pollination biology of *Cypripedium parviflorum* var. *pubescens*, the yellow lady's slipper, in Missouri. Missouri Native Plant Society Meeting. Herring, T. & Edens, R. Presented by Herring. 2006.

Fall flora of an Ozark glade located in Branson, Missouri. Missouri Native Plant Society. Edens, R. 2006.

Cypripedium parviflorum in the Missouri Ozarks. Missouri Native Plant Society. Edens, R. 2005

Are there toxic plants in your classroom? Know your plants. Presented to faculty of Department of Educational Studies. Edens, R. & Murdick, N. 2005. .

Forensic analysis of rape evidence. Saint Louis University Student Health & Counseling. Edens, R. 2005.

A pollination study of *Xerophyllum tenax*, AKA Bear Grass. Faculty Research Seminar for the Department of Educational Studies. Edens, R. 2005.

Rethinking school partnerships. Dr. James Gilsinan and Dr. Retha Edens. Research Seminar – 2004

The application of DNA fingerprinting in the Forensice Science Lab; Dr. Tsubota's Genetic's Class; Saint Louis University. Edens, R. Spring 2004.

Fiber analysis in the Forensic Science Lab; Dr. Bernhardt's Ethnobotany Class; Saint Louis University. Edens, R. Spring 2007, 2006, 2005, 2004, 2003, 2002, 2001, 2000.

Agnostic fish behavior; Truancy Program at the Juvenile Court System; Edens, R. Spring 2004.

Science and Art; Truancy Program at the Juvenile Court System. Edens, R. Spring 2004.

Human genetics; Truancy Program at the Juvenile Court System. Edens, R. 2004.

Paper chromatography; Truancy Program at the Juvenile Court System. Edens, R. 2004.

Owl ecology; Truancy Program at the Juvenile Court System. Edens, R. 2004.

Nutrition and healthy choices; Truancy Program at the Juvenile Court System. 2004.

Healthy choices: The food pyramid and portions. Presented at The Epworth Crisis Center – October 11, 2004.

Forensic analysis of evidence from rape cases; Sexual Health and Alcohol Peer Education Group (SHAPE); Saint Louis University. Edens, R. February 27, 2003.

Air molecules; Truancy Program at the Juvenile Court System;. Edens, R. 2003

Slime and other interesting polymers; Truancy Program at the Juvenile Court System; Edens, R. 2003.

Forensic science; No such thing as a perfect crime. Roosevelt High School. Edens, R. 2002.

Project T.E.A.M. – What we learned; E. Desmond Lee Regional Institute of Tutorial Education. Edens, R. 2002.

Professional Training

Real-Time Polymerase Chain Reaction for Forensic Application; Summer 2004

Project Learning Tree (Conservation & Environmental Education); Spring 1997

Project Wild (Conservation & Environment Education); Spring 1997

Project Wet (Conservation & Environment Education); Spring 1997

Molecular Biology (DNA); DNA probes; Southern Blots; Isolation and purification of RNA from plant tissue; hybridizing DNA probes to RNA; Northern blots and dot blots; 1989-1993.

Serology Workshop; Fall 1982

Microscopy of Hair Analysis; Fall 1982

Advanced Fiber Analysis; Fall 1981

Blood Spatter Interpretation; Fall 1981

FBI Fiber Analysis; Fall 1980

Forensic Serology Training 1979-1980.