

CURRICULUM VITAE

JAMES ROBERT AULT, Chicago Botanic Garden, 1000 Lake Cook Road, Glencoe, IL 60022.
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Education

Ph.D., Crop Physiology, 1987, Louisiana State University. Dissertation: Somaclonal Variation in *Hibiscus acetosella* Welw. ex Hiern: Altered Fertility and Floral Ontogeny

M.S., Botany, 1982, Louisiana State University. Thesis: Seed Dormancy and Germination in the Annual Grass *Rottboellia exaltata* (L.)L.f.

B.S., Botany, 1978, University of Michigan

Employment

March, 1995 - present. *Gaylord and Dorothy Donnelley* Director of Ornamental Plant Research, Chicago Botanic Garden, Glencoe, Illinois. Provides administrative leadership for the development, implementation, and promotion of research programs in ornamental plant breeding, evaluation and introduction. From March 1995 until August 2000 also provided leadership for the botanical research, conservation and reintroduction of Midwestern endangered plant taxa (Research Department divided in August, 2000). Supervises staff, students, interns and volunteers. Oversees departmental financial planning and budget control, and seeks financial support through grant proposals and other fund raising activities. Promotes research initiatives through publications and oral presentations. Stimulates cooperative projects with other departments within the Garden and with off-site research institutions and programs. Conducts applied research to develop novel hybrid perennial plants for introduction to the horticultural industry. Manages all tissue culture propagation studies (both ornamental and endangered plant taxa), including the training of volunteers and student interns in techniques. Manages the plant introduction program. Teaches courses for the Garden's continuing education program and the graduate program with Northwestern University. Participates in the Garden's plant exploration program.

May, 1988 - February, 1995. Plant Propagator/Physiologist, Longwood Gardens, Kennett Square, Pennsylvania. Conducted applied horticultural research on the cultivation and propagation of hardy and nonhardy plants for outdoor and conservatory display. Responsible for the cultivation and propagation (tissue culture, seed germination, rooted cuttings) of over 1,100 plant accessions in the Research Department. Managed the tissue culture laboratory and research greenhouses. Facilitated the transfer of plants and technical information from Research to the Production and Display Departments. Supervised one full time staff, as well as students and volunteers. Active participant in plant evaluation, selection, introduction, and exploration. Taught courses for the Professional Gardener (two year apprenticeship) program, and for continuing education programs.

February, 1987 - April, 1988. Post-doctoral Associate /Research Assistant, Department of Horticulture, University of Georgia, Athens, Georgia. Conducted tissue culture research on somatic embryogenesis and shoot proliferation of two pecan cultivars, the tissue culture propagation of several other woody species, and on breeding and development of *Silene* interspecific hybrids.

Academic Appointments

- Adjunct Associate Professor, Northwestern University, 2008
- Adjunct Assistant Professor, University of Illinois Urbana-Champaign, 2006-2007

Teaching Experience

- *Field And Laboratory Methods In Plant Biology And Conservation* Co-lecturer (Northwestern University Graduate School, Evanston, IL).
- *Deciduous Flowering Shrubs* Lecturer and Lab Instructor (Chicago Botanic Garden's Certificate Program).
- *Plant Propagation* Lecturer and Lab Instructor (Chicago Botanic Garden's Certificate Program).
- *Herbaceous Perennials* Co-lecturer and Lab Instructor (Chicago Botanic Garden's Certificate Program).
- *Plant Propagation* Lecturer and Lab Instructor (Longwood Garden's Professional Gardener Student Program, 1988 - 1995).
- *Plant Growth and Development* Lecturer and Lab Instructor (Longwood Garden's Professional Gardener Student Program, 1988 - 1995).
- *Small Flowering Trees* Co-lecturer and Lab Instructor (Longwood Garden's Continuing Education Program, 1988 - 1995).
- *Deciduous Flowering Shrubs* Courses I and II Lab Instructor (Longwood Garden's Continuing Education Program, 1988 - 1995).
- One-day enrichment courses: *Lilies for Midwestern gardens*; *Shrubs for all Seasons*; *Shrubs for Summer Interest*; *Plant Collection: from Exploration to Introduction*; *Viburnums for Midwest Gardens* (Chicago Botanic Garden's Certificate Program).

Current Research Projects

- Developing through conventional plant breeding techniques clonal selections of interspecific perennial plants for garden use. Current targeted genera include *Baptisia* (false indigo), *Echinacea* (coneflower), *Phlox* (phlox), *Silene* (catchfly), and other taxa.
- Determining propagation protocols (seed, cutting propagation, tissue culture) of plants in the breeding program. Initiating seed germination studies of selected invasive taxa.

Commercial Releases from Plant Breeding Program

- *Baptisia* 'Solar Flare' Solar Flare Prairieblues™ False Indigo, 2009 introduction. (Plant Patent: PP 20,408).
- *Baptisia* 'Midnight' Midnight Prairieblues™ False Indigo, 2009 introduction. (Plant Patent: PP 20,432).
- *Baptisia* × *bicolor* 'Starlite' Starlite Prairieblues™ False Indigo, 2007 introduction. (Plant Patent: PP 19,971).
- *Baptisia* × *varicolor* 'Twilite' Twilite Prairieblues™ False Indigo, 2006 introduction. (Plant Patent: PP 19,011).
- *Echinacea* 'CBG Cone2' Pixie Meadowbrite™ Coneflower, 2006 introduction. (Plant Patent: PP 18,546).
- *Silene* 'Rockin' Robin' (made cross, plant introduced by T. Maness), 2005 introduction.
- *Echinacea* 'Arts Pride' Orange Meadowbrite™ Coneflower, 2004 introduction. First orange-colored coneflower ever released (Plant Patent: PP 15,090).
- *Echinacea* 'CBG Cone3' Mango Meadowbrite™ Coneflower, 2004 introduction.
- *Silene* 'Longwood', 1997 introduction (Plant Patent: PP 16,636).

Additional Research Experience

- Plant propagation (seed germination and rooting of stem cuttings) of more than 1,000 plant taxa.
- Designed, implemented, and managed two tissue culture propagation labs.
- Tissue culture (micropropagation, embryo rescue, somatic embryogenesis, organogenesis) of more than 50 plant taxa.
- Plant collecting trips to the Southeastern U.S. (2000), China (1996), South Africa (1994), and England (1992).

- Plant microtechniques for light and scanning electron microscopy.

Professional Service

- Chairperson for the Chicagoland Grows®, Inc. Plant Introduction Program (1995 - current).
- Manager for the Chicagoland Grows®, Inc. Plant Introduction Program (2008 - current).
- Board of Directors member, Ornamental growers Association of Northern Illinois (OGA) (2009).
- Board of Directors member, International Plant Propagators Society (IPPS), Eastern Region (2005-2006).
- Member of the USDA Herbaceous Ornamental Plant Germplasm Advisory Committee (1999 - 2006).
- Chairperson of the Ornamental Plant Germplasm Center advisory committee (2002 - 2005).
- Director of Seed Exchange, American Penstemon Society (1997 - 2001).
- President, American Penstemon Society (2002 - 2003).
- Local Site Planning Committee, IPPS (1998 - 2000).
- Long Range Planning Committee, IPPS (2001 - 2003).
- Local Site Planning Committee, Perennial Plant Association (2001 - 2002).
- Peer manuscript reviewer for refereed journals (*Australian Journal of Botany*, *HortScience*, *Journal of the American Society for Horticultural Science*, *HortTechnology*, *In Vitro Cellular and Developmental Biology-Plant*, *Native Plants Journal*, and *Scientia Horticulturae*).
- Grant proposal field reviewer, Institute of Museum and Library Services (IMLS) (1997, 2003, 2004).
- Grant proposal board reviewer, IMLS (1998; 2000; 2001).
- Grant reviewer, International Plant Propagators' Society (2003, 2004, 2005).
- Member, Research Grants Committee, North American Lily Society (2006 – current).
- Board of Directors, North American Lily Society (2008 – 2010).
- Board of Directors, Species Lily Preservation Group (2006 – current).

Refereed Publications

Ault, J.R. and S.S. Siqueira. 2008. Morphogenetic Response of *Lilium michiganense* to four Auxin-type Plant Growth Regulators *In Vitro*. *HortScience*. 43(6):1922–1924.

Jefferson, L.V., Pennacchio, M., Havens, K., Forsberg, B., Sollenberger, D., and Ault, J. 2008. Ex Situ Germination Responses of Midwestern USA Prairie Species to Plant-derived Smoke. *Am. Midl. Nat.* 159(1):251–256.

Jefferson, L., K. Havens, and J. Ault. 2005. Implementing Invasive Screening Procedures: The Chicago Botanic Garden Model. *Weed Technology*. 18:1434-1440.

Ault, J. 2004. Explant Initiation Date and BA Concentration Influence Shoot Proliferation in vitro of two *Liatris* Interspecific Hybrids. *HortScience*. 39(5):1098-1100.

Ault, J. 2004. The Chicagoland Grows© Plant Introduction Program – A Model For Success. *Acta Hort.* 630:113-118.

Ault, J. 2003. Breeding and development of new ornamental plants from North American native taxa. *Acta Hort.* 624:37-42.

Ault J.R. 2002. Micropropagation of the rare Lakeside daisy (*Hymenoxys acaulis* var. *glabra*). HortScience. 37(1): 200-201.

Ault, J. and K. Havens. 1999. Micropropagation of *Baptisia* 'Purple Smoke'. HortScience 34(2): 353-354.

Ault, J.R. 1996. *In vitro* rooting and greenhouse acclimatization of *Veltheimia bracteata* and *V. capensis* shoots. HortScience 31(7): 1229-1230.

Ault, J.R. 1995. *In vitro* propagation of *Eucomis autumnalis*, *Eucomis comosa*, and *Eucomis zambesiaca* by twin scaling. HortScience 30(7):1441-1442.

Ault, J.R. 1995. *In vitro* rooting and greenhouse acclimatization of *Lachenalia* shoots. HortScience 30(6):1304-1305.

Ault, J.R. 1994. *In vitro* propagation of *Eriostemon myoporoides* and *Eriostemon* 'Stardust'. HortScience 29(6):686-688.

Ault, J.R. 1992. *In vitro* propagation of a *Silene* hybrid (*S. polypetala* x *S. virginica*). HortScience 27(11):1226.

Ault, J.R. and W.J. Blackmon. 1987. *In vitro* propagation of *Ferocactus acanthodes* (Cactaceae). HortScience 22(1):126-127.

Wetzstein, H.Y., Ault, J.R. and Merkle, S.A. 1990. Factors influencing somatic embryogenesis and plantlet regeneration in pecan, *Carya illinoensis*. Acta Hort. 280:69-74.

Wetzstein, H.Y., J.R. Ault, and S.A. Merkle. 1989. Further characterization of somatic embryogenesis in pecan (*Carya illinoensis*). Plant Science 64:193-201.

Wetzstein, H.Y., S.A. Merkle, J.R. Ault, and H.E. Sommer. 1988. Somatic embryogenesis in pecan (*Carya illinoensis*). SAAS Bulletin Biochem. Biotech. 1:64-68.

Book Chapter

Ault, J. 2006. Coneflower, *Echinacea species*, p. 799-822. In: N.O. Anderson (ed.). Flower Breeding & Genetics: Issues, Challenges, and Opportunities for the 21st Century. Springer, Netherlands.

Popular Press Publications

Ault, J. 2009. *Baptisia australis* and Other False Indigos. Perennial Plants, Fall 2009. 7-20.

Ault, J. 2008. Lilies for Chicagoland. Chicagoland Gardening. July/August. 18.

Ault, J. 2006. Perennial Research at the Chicago Botanic Garden – an Update. Perennial Plants, Number 2. 6-11.

Ault, J. 2005. A New Dawn for baptisias. NMPRro. 21(4):37-44.

Ault, J. 2004. What's New in the World of Coneflowers (*Echinacea*). Comb. Proc. Intl. Plant Prop. Soc. 54:402-406.

- Ault, J. 2004. Breeding New Perennials for Midwestern Gardens. Perennial Plant Association 2002 Annual Meeting Proceedings. 11-14.
- Ault, J. 2002. Echinacea evolution. NMPPro. 18(11): 34-36.
- Ault, J. 2002. The Best Plants from the Chicago Botanic Garden's Evaluation Program. 2002 Pennsylvania Landscape & Nursery Conference Proceedings 54-56. Penn State Cooperative Extension.
- Ault, J. 2002. Developing New Ornamental Plants Through Breeding and Selection at the Chicago Botanic Garden. 2002 Pennsylvania Landscape & Nursery Conference Proceedings 112-114. Penn State Cooperative Extension.
- Ault, J. and R. Hawke. 2001. The Top Performing Plants from the Evaluation and Breeding Programs at Chicago Botanic Garden. Comb. Proc. Intl. Plant Prop. Soc. 51:401-407.
- Ault, J. 2001. *Penstemon grandiflorus*, the Pride of the Plains. Bull. of the American Penstemon Soc. 60(1):8-14.
- Ault, J. 2001. (Penstemon Breeding Program 1999 Summary). Bull. of the American Penstemon Soc. 60:41-47.
- Ault, J. (Editor). 2000. Plant Exploration: Protocols for the Present, Concerns for the Future. Symposium proceedings. Chicago Botanic Garden, Glencoe, Ill. 87 p.
- Ault, J. 2000. Ornamental Plant Development at Chicago Botanic Garden. Landscape Plant News 11(2): 2-7.
- Ault, J. 2000. (Penstemon Breeding Program 1998 Summary). Bull. of the American Penstemon Soc. 59(1):38-48.
- Ault, J. and R. Hawke. 2000. Breeding and Evaluation of Perennials at Chicago Botanic Garden. Comb. Proc. Intl. Plant Prop. Soc. 50:337-340.
- Ault, J. 1999. New Plant Forum (*Acer miyabei* 'Morton' State Street® miyabe maple and *Rhus copallina* var. *latifolia* 'Morton' Prairie Flame™ Shining Sumac). Comb. Proc. Intl. Plant Prop. Soc. 49:353-356.
- Ault, J. 1998. (Penstemon Breeding Program 1997 Summary). Bull. of the American Penstemon Soc. 57(2):27-31.
- Ault, J. and K. Havens. 1997. Chicago Botanic Garden (describes the Garden's Endangered Plant Research Program). Plant Conservation 11(1): 1.
- Ault, J. 1996. (Penstemon Breeding Program 1996 Summary). Bull. of the American Penstemon Soc. 56 (1):42-44.
- Ault, J.R. 1995. Plant Breeding Initiative at the Chicago Botanic Garden. OGA Notes. Fall 1995.

Ault, J.R. 1994. Mediterranean Plants under Glass at Longwood Gardens. Comb. Proc. Intl. Plant Prop. Soc. 44:104-107.

Ault, J. 1989. New Plant Forum: *Hydrangea paniculata* 'Unique' and *Sorbus rufoferruginea* 'Longwood Sunset'. Comb. Proc. Intl. Plant Prop. Soc. 39:558.

Sixteen published abstracts from presentations at professional meetings.

Technical Bulletins

Solar Flare Prairieblues™ False Indigo. Plant Release Bulletin #26, Chicagoland Grows®, Inc. Plant Introduction Program. 2009.

Midnight Prairieblues™ False Indigo. Plant Release Bulletin #25, Chicagoland Grows®, Inc. Plant Introduction Program. 2009.

Exclamation!™ London Planetree. Plant Release Bulletin #24, Chicagoland Grows®, Inc. Plant Introduction Program. 2009.

Presentations

From Native Habitats to Your Landscapes: Domesticating Our Natural Plant Heritage. New Directions in the American Landscape Symposium, Connecticut College, New London, CT. March 16, 2010. Invited speaker.

From Native Habitats to Your Landscapes: Domesticating Our Natural Plant Heritage. New Directions in the American Landscape Symposium, Haverford College, Haverford, PA. March 11, 2010. Invited speaker.

Confessions of a Pollen Dabbler Developing New Perennials for Midwest Gardens. Chicago Flower and Garden Show Seminar Series, Chicago, IL. March 7, 2010. Invited speaker.

Growing Lilies (*Lilium*) From Seed. Wisconsin-Illinois Lily Society Seminar Series, Glencoe, IL. January 17, 2010. Invited speaker.

Baptisia australis and Other False Indigos. Perennial Plant Association Symposium and Trade Show. St. Louis, MO. July 23, 2009. Invited speaker.

Discover the World of Coneflowers. Mt. Cuba Center, Coneflower Field Day. Hockessin, DE. July 16, 2009. Invited speaker.

Species Lilies for Midwestern Gardens. Wisconsin-Illinois Lily Society Seminar Series, Glencoe, IL. February 8, 2009. Invited speaker.

Breeding New Garden Perennials from Native Plants. New England Grows annual trade show and meeting, Boston, MA. February 5, 2009. Invited speaker.

Developing New Perennial Plants for North American Gardens. Mid-America Horticultural Trade Show, Chicago, IL. January 16, 2009. Invited speaker.

Musings of a Mid-Western Lily Grower. North American Lily Society Annual Meeting, Sidney, British Columbia, Canada. July 4, 2008. Invited speaker.

Species Lilies Worth Growing. Manitoba Regional Lily Society Spring Seminar And Annual Meeting, Winnipeg, MB, Canada. March 29, 2008. Invited speaker.

A Walk Down one Lily Breeder's Garden Path. Manitoba Regional Lily Society Spring Seminar And Annual Meeting, Winnipeg, MB, Canada. March 29, 2008. Invited speaker.

Lilies (*Lilium*) for Midwest Gardens. Chicagoland Flower and Garden Show, Rosemont, IL. March 15, 2008.

Perennial Breeding Program at Chicago Botanic Garden. Perennial Plant Symposium, Chicago Botanic Garden, Glencoe, IL. September 27, 28, 2007. Invited speaker.

Versatile and Underused Viburnums for Midwest Gardens. Morton Arboretum Symposium. May 11, 2007. Invited Speaker.

You've Got Questions; We've Got the Answers. Wisconsin-Illinois Lily Society Lecture Series, Glencoe, IL. April 1, 2007. Invited panel speaker.

False Lupins, Lilies, and Coneflowers, oh my! Breeding new Garden Plants. University of Connecticut Perennial Plant Conference. Storrs, CT. March 8, 2007. Invited speaker.

Chicagoland Grows® ... Behind-the-Scenes of a Unique Plant Introduction Program. Mid-America Horticultural Trade Show. Chicago, IL. January 17, 2007. Invited Speaker.

Update on New Plants from Chicago Botanic Garden's Breeding Program. Chicagoland Grows annual business meeting. Mid-America Horticultural Trade Show. Chicago, IL. January 18, 2007. Invited Speaker.

Breeding Lilies for Midwestern Gardens. North American Lily Society Annual Meeting, Eau Claire, WI. July 15, 2006. Invited speaker.

How to Breed Lilies for Midwestern Gardens. Wisconsin-Illinois Lily Society Lecture Series, Glencoe, IL. January 15, 2006. Invited speaker.

The Latest Releases from Chicago Botanic Garden's Breeding Program. Chicagoland Grows annual business meeting. Mid-America Horticultural Trade Show. January 19, 2006. Invited Speaker.

From Nature to Your Garden: The Art and Science of Breeding Native Perennial Plants. Perennial Plant Conference, Swarthmore College, Swarthmore, PA. October 14, 2005. Invited Speaker.

Breeding New Garden Perennials from North American Native Plants. Nebraska Nursery & Landscape Association Winter Conference and Trade Show. Omaha, NE. January 25, 2005. Invited speaker.

What's New in the World of Coneflowers. IPPS Eastern Region Annual Meeting, Milwaukee, WI. September 27, 2004. Invited speaker.

Shrubs for all Seasons. Illinois Master Gardener Conference, Decatur, IL. September 11, 2004. Invited speaker.

Breeding Herbaceous Perennial Crops at the Chicago Botanic Garden. ASHS annual meeting, Austin, TX. July 19, 2004. Workshop invited speaker.

Morphogenetic Response of *Lilium Michiganense* to Four Auxins in vitro. ASHS annual meeting, Austin, TX. July 19, 2004. Poster presentation.

Plant Breeding Program at Chicago Botanic Garden. Ornamental Growers Association Meeting, April 22, 2004. Invited speaker.

Breeding New Perennials from Native Plants. Native Plants in the Landscape Conference, Millersville, PA. June 5, 6, 2003. Invited speaker.

What do Botanic Gardens Have to Offer in Floriculture Research? National Floriculture Forum, Columbus, OH. February 22, 2003. Invited speaker.

Breeding and Development of New Perennials at Chicago Botanic Garden. Department of Horticulture, Michigan State University. February 13, 2003. Invited speaker.

Developing New Perennials for Midwestern Gardens. Wicker Park Garden Club, Chicago, IL. January 13, 2003. Invited speaker.

Breeding new Perennials for Midwestern Gardens. Herbaceous Perennials Across the State annual conference, Davenport, Ames, IA. November 8, 9, 2002. Invited speaker.

Recommended Perennials for Midwestern Gardeners. Continuing education lecture for Olbrich Botanic Garden, WI. October 26 2002. Invited speaker.

Breeding new Perennials for Midwestern Gardens. First Annual Perennials Colloquium. Milwaukee, WI. October 18, 2002. Invited speaker.

Developing new perennials for American gardens. Oregon Association of Nurserymen annual Greenhouse Growers Meeting, Portland Oregon. Oct. 9, 2002. Invited speaker.

Outstanding Perennials for the Midwest. Commercial Flower Growers of Wisconsin Fall Greenhouse Conference Mukwonago, WI. September 25, 2002. Invited speaker.

The Chicagoland Grows© Plant Introduction Program – A Model For Success. 26th International Horticultural Congress, Toronto, Canada. August 13, 2002.

Breeding and Development of New Ornamental Plants from North American Native Taxa. 26th International Horticultural Congress, Toronto, Canada. August 12, 2002.

Breeding New Perennials for Midwestern Gardens. Perennial Plant Association Annual Meeting, Rosemont, Illinois. Invited speaker. July 9, 2002

The Best Plants from the Chicago Botanic Garden's Evaluation Program. 2002 Pennsylvania Landscape & Nursery Conference, University Park, PA. Invited speaker. February 7, 2002.

Developing New Ornamental Plants Through Breeding and Selection at the Chicago Botanic Garden. 2002 Pennsylvania Landscape & Nursery Conference, University Park, PA. Invited speaker. February 7, 2002.

Top Performing Plants from Chicago Botanic Garden's Programs. Wisconsin Nursery Association Winter Workshop. Brookfield, WI. Invited speaker. January 8, 2002.

Top Performing Plants from CBG's Program. IPPS Eastern Region Annual Meeting, Lexington, KY. Invited speaker. October 2, 2001.

Plant Breeding at the Chicago Botanic Garden: Developing New Perennials for the Midwest. New Ornamental Crops Research Symposium. Chicago Botanic Garden, Glencoe, IL. September 28, 2001.

Breeding Better Perennials at Chicago Botanic Garden. Perennial Plant Conference, University of Connecticut, Storrs, CT. Invited speaker. March 20, 2001.

The Best Perennials from the Midlands. Perennial Plant Conference, University of Connecticut, Storrs, CT. Invited speaker. March 20, 2001.

Chicagoland Grows Plant Introductions. Woody Plants for Midwest Landscapes Symposium, Chicago Botanic Garden, Glencoe, IL. Feb. 11, 2000.

Perennial Plant Breeding and Evaluation at Chicago Botanic Garden. IPPS Eastern Region Annual Meeting, Oak Brook, Illinois. Invited speaker. October 4, 2000.

Update on Research at Chicago Botanic Garden. Ornamental Grower's Association of Northern Illinois Winter Seminar. Chicago Botanic Garden, Glencoe, IL. Invited speaker. February 5, 1999.

Top nine Chicagoland Grows Introductions and eleven more for the near future. Northwestern Indiana Nurseryman's Association, Valparaiso, IN. Invited speaker. February 9, 1999.

Twenty Flowering Shrubs - From Spring to Fall Blooming - for the Home Landscape. Crestview Garden Club, Crestview, IL. Invited speaker. August 3, 1999.

Prairie Flame™ Shining Sumac and State Street® Miyabe Maple. New plants forum. International Plant Propagator's Society Eastern Region Annual Meeting, Minneapolis, MN. September 18, 1999.

Chicagoland Grows — Why it Works. AABGA Annual Meeting, Philadelphia, PA. Invited speaker. June 20, 1998.

Horticultural Research at Chicago Botanic Garden. Ornamental Growers Association of Northern Illinois Winter Update. Glencoe, IL. February 13, 1997.

Perennial plants for the Landscape. University of Wisconsin Extension Grounds Maintenance Short Course, same presentation at four sites over two days. Invited speaker. February 26, 27, 1997.

Introducing and Evaluating New Plants for the Chicago Region. Ornamental Growers Association of Northern Illinois Summer Field day, St. Charles, IL. Invited speaker. August 20, 1997.

Plant Breeding - Strategies and Results at the Chicago Botanic Garden. International Plant Propagator's Society Area Meeting, St. Charles, IL. Invited speaker. August 27, 1997.

Development of new ornamental plants at Chicago Botanic Garden. Illinois Park and Recreation Association Conference, Rosemont, IL. Invited speaker. January 13, 1996.

Research Initiatives at the Chicago Botanic Garden. Lake Forest Garden Club, IL. Invited speaker. January 18, 1996.

Horticultural research at CBG. Ornamental Growers Association of Northern Illinois Winter Update. Glencoe, IL. Invited speaker. February 14, 1996.

Plant Breeding at Chicago Botanic Garden. Landscape Plant Development Center Research Symposium, University of Minnesota Arboretum, Minneapolis, MN. June 27, 1996.

Funded Grants

- Co-Principal Investigator, Acquisition of a Seed Biology Laboratory, \$284,066. National Science Foundation – Major Research Instrumentation (NSF-MRI). 2005.
- Principal Investigator, enhanced lateral shoot production in the false lupines and purple coneflowers, \$1,877. Perennial Plant Association, 2004-2005.
- Principal Investigator, breeding powdery mildew resistant *Monarda*, \$2,100. Perennial Plant Association, 2003-2004.
- Principal Investigator, equipment and operational support for the Garden's Plant Breeding Program, \$8,425. Stanley Smith Horticultural Trust, 2002-2003.
- Principal Investigator, plant exploration trip to China in 2003 to collect lily and chrysanthemum germplasm for the USDA seed repository, \$25,000. United States Department of Agriculture, 2003.
- Co-Principal investigator, restoration of threatened and endangered plants, \$31,310. Chicago Wilderness, 1996.
- Principal Investigator, display booth, \$2,500. Illinois Landscape Contractors Association, 1996.
- Principal Investigator, research general operating grant, \$760,000. Froehlich Foundation, 1995-1998.

Current Society Memberships

- Garden Writers of America
- North American Lily Society
- North American Rock Garden Society
- Perennial Plant Association
- Species Lily Preservation Group
- Wisconsin Illinois Lily Society