

## **DONALD P. HAUBER**

### **I. VITA**

#### **a) Biographical Data**

Present Address:  
7924 S. Claiborne Ave.  
New Orleans, Louisiana 70125  
(504)865-7590 (home)  
(504)865-2769 (office)

Date of Birth:  
2 December 1955

Marital Status:  
Married with two children

Present Position:  
Professor  
Department of Biological Sciences  
Loyola University  
New Orleans, Louisiana 70118  
Off.: 504/865-2288  
Email: hauber@loyno.edu  
Fax: 504/865-2920

#### **b) Degrees Earned**

Ph.D. in Botany, Texas Tech University, 1984  
M.A. in Botany, University of Kansas, 1980  
B.S. in Cell Biology (with honors), University of Kansas, 1978

#### **c) Employment History**

Loyola University, Biological Sciences Faculty  
Departmental Chair. (fall, 2003 – summer 2005)

Loyola University, Biological Sciences Faculty  
Professor - Full-time teaching responsibilities for graduate and undergraduate courses for majors and non-majors. Academic advising. Undergraduate research advisor for 2 students on average. See vitae for other activities associated with position. (fall, 2000 - present).

Loyola University, Biological Sciences Faculty  
Associate Professor - Full-time teaching responsibilities for graduate and undergraduate courses for majors and non-majors. Academic advising. Undergraduate research advisor for 2-3 students on average. See vitae for other activities associated with position. (fall, 1988 - summer, 2000).

Loyola University Biological Sciences Faculty  
Assistant Professor - Full-time teaching responsibilities for graduate and undergraduate courses for majors and non-majors. Academic advising. Undergraduate research advisor for 3-4 students on average. See vitae for other activities associated with position. (Fall, 1985 - Summer, 1988).

Loyola University, Biological Sciences Faculty  
Visiting Professor - Full-time teaching responsibilities for graduate and undergraduate courses for majors and non-majors (Fall, 1984 - Summer, 1985).

Texas Tech University, Biological Sciences Staff  
Instructor - Part-time teaching including a three credit course in microbial genetics for undergraduates and graduates (Fall, 1983).

Texas Tech University, Biological Sciences Staff  
Part-time Instructor - Teaching responsibilities including laboratories in majors and non-majors freshman botany and graduate cytogenetics; four 2-hour labs per week (Fall, 1980 - Spring, 1984).

University of Kansas, Botany Staff  
Research Assistant - Part-time laboratory and greenhouse research responsibilities as part of a NSF project in plant evolutionary cytogenetics (Spring, 1980 - Summer, 1980).

University of Kansas, Biological Sciences Staff  
Graduate Teaching Assistant - Part-time teaching responsibilities in freshman general biology laboratories; four 2-hour labs per week (Fall, 1978 - Fall, 1979).

## II. TEACHING RECORD

### a) Courses Taught

#### Undergraduate Courses

BIOL 0201-110	General Biology I (discontinued fall, 1990)
BIOL 0201-350	Genetics (discontinued fall, 1990)
BIOL T122	Cultural Biology
BIOL T194	Investigating Nature
BIOL Z138	Genetics and Society
BIOL A102	Botanical Diversity (discontinued fall, 1999)
BIOL A106	Cells & Heredity
BIOL A107	Cells & Heredity Laboratory
BIOL A109-110	Biology of Organisms Laboratory and Recitation
BIOL A201	Genetics (discontinued fall, 2000)
BIOL A202	Genetics Laboratory (discontinued fall, 1999)
BIOL A207-205	Cell & Molecular Laboratory and Recitation (discontinued fall, 2008)
BIOL A302	Biological Research (discontinued fall, 1999)
BIOL A322	Population Genetics
BIOLA328	Genetic Analysis
BIOLA324	Evolutionary Biology

#### Graduate Courses

BIOL 0201-894	Plant Systematics
BIOL 0201-894	Molecular Genetics
BIOL 0201-701	Foundations of Biology I (Master's of Science Teaching degree)
BIOL 0201-702	Foundations of Biology II (Master's of Science Teaching degree)

**b) Courses Created**

**BIOL Z138 Genetics and Society**

Interdisciplinary course which provides an introduction to genetics and emphasizes contemporary social and ethical issues in human genetics and reproductive technology.

**BIOL 0201-894 Plant Systematics**

Graduate course dealing with the fundamentals of taxonomy and systematic analysis and focusing on angiosperm plant families. Lab mainly dedicated to the identification of plant specimens and field trips.

**BIOL 0210-894 Molecular Genetics**

Graduate genetics course dealing with DNA and RNA structure and synthesis in prokaryotes and eukaryotes and their viruses. Genetics expression and its control are also discussed. Laboratory in microbial genetics accompanies lecture.

**BIOLA322 Population Genetics**

Majors elective course dealing with genetic variation in natural populations and its origin, maintenance, and evolutionary significance. The course is both theoretical and applied with exercises dealing with actual populational data.

**BIOLA328 Genetic Analysis**

Majors elective course addressing advanced topics in transmission genetics, cytogenetics, evolutionary genetics, and mutagenesis. Emphasis is placed on development of quantitative skills and written and oral communication.

**BIOLA324 Evolutionary Biology**

Majors elective course addressing topics in Darwinian evolution, mechanisms of evolutionary change and speciation, life history characters, and others. Emphasis is placed on an understanding of how evidence from various disciplines such as morphology, genetics, ecology, development and geology supports the evolutionary synthesis.

**BIOLT194 Investigating Nature (co-creator)**

Interdisciplinary, team-taught, Common Curriculum course that examines the scientific process in order to introduce students to select research areas in the different natural science disciplines. Increasingly interdisciplinary teams of scientists work to understand and solve problems. This course provides students the opportunity to learn about, and follow the development of, three or four very narrow research areas in the sciences at much greater depth than traditionally afforded in a survey course. Through this course, students still will gain sufficient grounding in the natural sciences to allow them to take an advanced Natural Science in Context course.

**c) Creative Teaching Techniques**

Use HITT personal response system (“clickers”) in Cells & Heredity and Genetic Analysis lecture classes; multiple choice questions peppered throughout daily lectures providing feedback to instructor and students regarding understanding of concepts and student participation; students not graded but receive participation points

Use the PowerPoint framework to construct “Genetic Jeopardy” and “Evolutionary Jeopardy”. Students have to participate in the game to win (earn) class participation points. Works as an effective vehicle to review material prior to quiz.

Use the PowerPoint in a similar way with Group Discussion Questions where the group gets two minutes to agree upon an appropriate answer to a question on the screen and one member of the group (my choice, sometimes) has to present the answer to the class. That person’s response determines whether everyone in the group gets points.

Designed a library exercise to acquaint majors with the resources available for doing biology related library research with primary emphasis on on-line searching.

Require freshman biology majors to read selected articles on biology and the health sciences in the daily internet news site, "ScienceNow" in an effort to instill in the students the importance of keeping abreast of new discoveries and concepts in all areas of biology.

Require students in Population Genetics to find an article from the primary literature on an assigned topic, to prepare and deliver a 15-min oral summary of the article and to prepare at least two legitimate exam questions derived from their presentation that all students in the class are responsible for answering.

Developed several variations of assignments in which students are given a biological problem and raw data, then they are asked to formulate and test their hypothesis statistically using the SPSS computer program.

**d) Normal Teaching Load**

The normal teaching load for regular, full-time faculty in Biological Sciences is twelve credit hours. However, most faculty members are granted release from some teaching, enabling them to dedicate time to research. When release time is included, the teaching load of Biological Sciences faculty typically includes a biology majors core or elective course with lab(s), undergraduate research for juniors and seniors, and either a non-majors, common curriculum course, or an advanced biology majors course which may or may not include a lab.

**e) Evaluations** – some older ones are available at [www.loyno.edu/~hauber](http://www.loyno.edu/~hauber)

**f) Academic Advising**

In Biological Sciences, student advising is a major duty of all faculty. The present system has each faculty advising a block of students (20-30) that they will follow from sophomores through their senior year.

**g) Course/Faculty development grants / directed student research (since 1990\*)**

➤ **Course/Faculty development grants**

Course Development Grant for the New Common Curriculum, April, 2011 – summer stipends to develop modules for the interdisciplinary Investigating Nature course. Thirteen \$3000 stipends. This project was funded in full, \$39,000

Faculty/Course Development Grant, Loyola University, October, 2007 - Generating and analyzing microsatellite data using an automated sequencer. This project was funded in part, \$2000.

Louisiana Board of Regents Support Fund Undergraduate Enhancement. Enhancement of Cell and Molecular Biology Laboratory Experiences, submitted Oct. 2002. - Listed as PI with Maureen Shuh as coPI. \$53,917 requested, \$30,135 funded, April 2003.

Faculty Course Development Grant, Loyola University, submitted January, 1990 - Attendance to New England BioLabs Molecular Biology Summer Workshop. This project was funded in full, \$2,245.00.

National Science Foundation Young Scholars Program, submitted August, 1988 - Young scholars residential summer program. Listed as one of the senior personnel. Requested \$63,382. Not funded.

Faculty Course Development Grant, Loyola University, February, 1988 - Acquisition of skills necessary for performing and interpreting enzyme electrophoresis. This project was funded in full, \$478.00.

➤ **Student directed research (dates indicate completion of research and thesis)**

- 2011 – Slone Vom Baur – Genetic survey of cattails in the MS River delta (in progress)
- 2011 – Katie Soblosky – Isolating and identifying microsatellite loci in common salvinia (in progress)
- 2010 – John Nguyen - Population genetics of *Phragmites australis* ssp. *berlandieri* in southeastern U.S. and Belize
- 2009 - Truc Le - Microsatellite analysis of invasive populations of the common reed in the Mississippi River delta
- 2008 – J.A. “Randy” Englert - Genetic monitoring of an invasive reed in the fragile Mississippi River delta marshes
- 2002 – Thanh Nguyen and Linh Nguyen – ISSR/RAPDs variation in *Sagittaria platyphylla*
- 2002 – Deepthi Lingam – Isozyme analysis in common salvinia.
- 1999 - Vita Venezia and Brian Mailey - DNA bands reveal genetic patterns of spontaneous polymorphism in clonal populations.
- 1997 - John Prpich - Development of randomly amplified polymorphic DNA (RAPD) methods in search of potential markers of genetic variation within isozymically identical populations of *Phragmites australis*.
- 1996 - Lance Legé - Genetic structure and differentiation of local populations of *Sagittaria graminea* and *S. platyphylla*.
- 1995 - Warren Fournier - Sexual propagation of *Phragmites* in the Mississippi River delta.
- 1995 - Fred J. Rambeau - Morphological differences within the marsh plant *Sagittaria* in the Mississippi River delta.
- 1995 - Quang Vu - Analysis of synaptonemal complexes of B-chromosomes.
- 1993 - Pat O'Connell - Isozyme variation in *Phragmites australis* from the Mississippi River delta: unexplored subdeltas and a new phenotype.
- 1993 - Dana Pellegrin - isozyme variation among U.S. coastal and inland populations of *Phragmites australis*.
- 1993 - Rama Rao - Differentiating autopolyploidy from allopolyploidy in *Tradescantia*.
- 1992 - Jeff D. Hoefle - Staining and differentiation of *Tradescantia* chromosomes.
- 1992 - Richard Bafford - (co-advisor) Isozyme electrophoresis of the aquatic angiosperm *Lemna minor*: technique development and analysis of genetic variation.
- 1991 - Patricia Miller and Fred DeFrancesch - Chromosomal and allozyme variation in *Phragmites australis* (marsh reed) from the Mississippi River delta.
- 1990 - Sean Powers and Matt Meunier - Correspondence of infrared reflectance patterns and isozyme variation in *Phragmites australis* in the Mississippi River delta.
- 1990 - Kim Forman - Taxonomic considerations of *Rhexia* based on isozyme analysis.
- 1990 - John Cavallo - Linkage relationships of electrophoretic gene loci in *Youngia japonica* (Asteraceae).

\*data regarding student research projects supervised prior to 1990 are incomplete; more than ten thesis research projects were supervised from 1985-1990.

### III. RESEARCH ACTIVITY

#### a) Publications Prior to Joining Loyola's Faculty

##### Books

Jackson, R.C. and D.P. Hauber. 1981. Polyploidy (an edited series of classical papers on polyploidy - vol. 12 from the Benchmark Papers in Genetics series). Hutchinson and Ross, Inc., Stroudsburg, Pennsylvania.

##### Articles

- Jackson, R.C., Sun Jizhong, and D.P. Hauber. 1983. Quantitative analysis of autotriploids and autotetraploids: applied and theoretical considerations. *J. Huazhong Ag. Col.* 2: 1-7.
- Hauber, D.P. and W.L. Bloom. 1983. Stability of a chromosomal hybrid zone in the *Clarkia nitens* and *Clarkia speciosa* ssp. *polyantha* complex (Onagraceae). *Amer. J. Bot.* 70: 1454-1459.
- Jackson, R.C. and D. P. Hauber. 1982. Autotriploid and autotetraploid cytogenetic analyses: correction coefficients for proposed binomial models. *Amer. J. Bot.* 69: 644-646.

**b) Publications Since Joining Loyola Faculty**

Articles

- Hauber, D.P., K. Saltonstall, D.A. White, and C.S. Hood. 2011. Genetic variation in the common reed, *Phragmites australis*, in the Mississippi River delta marshes: evidence for multiple introductions. *Estuaries and Coasts* DOI 10.1007/s12237-011-9391-9.
- Saltonstall, K. and D.P. Hauber. 2007. Notes on *Phragmites australis* (Poaceae: Arundinoideae) in North America. *J. Bot. Res. Inst. Texas* 1:385-388.
- White, D.A., D.P. Hauber, and C.S. Hood. 2004. Clonal differences in *Phragmites australis* from a unique wetland landscape - the Mississippi River delta, USA. *Southeastern Naturalist* 3:531-544.
- Tercek, M.T., D.P. Hauber, S.P. Darwin. 2003. Genetic and historical relationships among geothermally adapted *Agrostis* ("Bentgrass") of North America and Kamchatka: evidence for a previously unrecognized thermally-adapted taxon. *American Journal of Botany* 90:1306-1312
- Hauber, D.P., A. Reeves, and S. Stack. 1999. Synapsis in a natural autotetraploid. *Genome* 42:936-949.
- Hauber, D.P. and L. Legé. 1999. A survey of allozymic variation among three members of the *Sagittaria graminea* complex (Alismataceae) from southeastern U.S. *Journal of the Torrey Botanical Society* 126:181-187.
- Pellegrin, D., and D.P. Hauber. 1999. Isozyme variation among populations of the clonal species, *Phragmites australis* (Cav.) Trin. Ex Steudel. *Aquatic Botany* 63:241-259.
- Jackson, R.C., and D.P. Hauber. 1994. Quantitative cytogenetic analyses of autopolyploid and allopolyploid taxa in the *Helianthus ciliaris* group (Compositae). *American Journal of Botany* 81:1063-1069.
- Hauber, D.P., D.A. White, S.P. Powers, and F.R. DeFrancesch. 1991. Isozyme variation and correspondence with unusual infrared reflectance patterns in *Phragmites australis* (Poaceae). *Plant Systematics and Evolution* 178: 1-8.
- Hauber, D.P., R.J. Kuhnell, and M.K. Miller. 1989. Evidence for predominant autogamy in *Youngia japonica* (L.) DC. *Southwestern Natl.* 34: 251-253.
- Hauber, D.P. and K.A. Rovira. 1989. Supernumerary chromosomes in *Tradescantia* II. The effect of colchicine on meiotic isochromosome configurations. *Amer. J. Bot.* 76: 470-473.
- Hauber, D.P. 1987. Supernumerary chromosomes in *Tradescantia* I. Meiotic behavior of three homologous isochromosomes. *Genetica* 75: 117-121.

Hauber, D.P. 1986. Autotetraploidy in *Haplopappus spinulosus* hybrids: evidence from natural and synthetic tetraploids. Amer. J. Bot. 73: 1595-1606.

#### Web-based publications

Hauber, D., "Frustrated or faithless? Reflections on John's Gospel for April 19<sup>th</sup>," *Magis Moments*, issue no. 3, Mar./Apr. 2009, [https://app.e2ma.net/app/view:CampaignPublic/id:26702.1860118981/rid:8a1aa0e621903c27d7609f2ea95780a6](https://app.e2ma.net/app/view/CampaignPublic/id:26702.1860118981/rid:8a1aa0e621903c27d7609f2ea95780a6), Loyola University, New Orleans

#### Manuscripts in prep.

Kettenring, K., de Blois, S. and Hauber, D.P. Status of *Phragmites australis* in North America  
Jackson, R.C. and Hauber, D.P. Cytogenetics text – editing first three chapters.

#### Research in progress

Hauber, D.P. and Vom Baur, S. Genetic survey of cattails in southeastern Louisiana – presence of possible invasive types.

Hauber, D.P. and Soblosky, K. Microsatellite loci isolation and identification in common salvinia.

Hauber, D.P. Isozyme and RAPD variation in the common salvinia: an invasive introduced clonal species; search for microsatellite loci.

Hauber, D.P., K. Saltonstall, and D.A. White. Genetic variation within and among populations of *Phragmites australis* ssp *berlandieri*.

#### Reviews

Hauber, D.P. 1996. book review of Transgenic Modification of Germline and Somatic Cells (by: R.B. Flavell and R.B. Heap). Association of Southeastern Biologists Bulletin 43:229-230.

Hauber, D.P. 1993. book review of Glossary of Genetics: classical and molecular (by: R. Rieger, A. Michaelis, and M.M. Green). The Plant Genetic Newsletter 10(1).

Hauber, D.P. 1992. book review of Chromosome Engineering in Plants: Genetics, Breeding and Evolution, Part A (ed.: P.K. Gupta and T. Tsuchiya). Plant Science Bulletin 38(2):19-20

Hauber, D.P. 1989. book review of Chromosome Structure and Function: Impact of New Concepts (ed.: J.P. Gustafson and R. Appels). The Plant Genetics Newsletter 5(5).

Hauber, D.P. 1991. review of journal article, "Evolution of chromosome bands: Molecular ecology of noncoding DNA" (G.P. Holmquist, Journal of Molecular Evolution 28:469-486, 1989). The Plant Genetics Newsletter 7(3).

#### **c) Papers Read or co-Authored (Unless indicated, all papers listed below were published as abstracts.)**

Society of Wetland Scientists 2011 Annual Meeting, Prague, Czech Republic, July 3-8, Status of *Phragmites australis* in North America (talk). K. Kettenring (speaker), S. deBlois, and D.P. Hauber.

Society of Wetland Scientists 2010 "Peaks to Playas" Annual Meeting, Salt Lake City, UT, June 27-July 2 – Genetic variation in *Phragmites australis* in the Mississippi River delta marshes: multiple introductions is likely the cause for the genetic diversity (poster). D.P. Hauber, K. Saltonstall, D.A. White, and C.S. Hood.

Botany 2003 (BSA) Meetings, Mobile, AL, July, 2003 - Ecology and evolution of geothermally adapted *Agrostis* of North America and the Kamchatka peninsula (poster) M. Tercek, **D. Hauber** and S. Darwin,

- Botany 2001 (BSA ) Meetings, Albuquerque, NM, August, 2001 - Synaptonemal complex formation in diploid *Tradescantia ohiensis* (poster)
- International Botanical Congress, St Louis, MO, August, 1999 - Patterns of genetic variation in clonal populations of the common reed revealed by RAPDs (poster - co-authored with two students).
- AIBS Meetings, Baltimore, MD, August, 1998 - Synapsis in an autotetraploid.
- World Delta Symposium, New Orleans, August, 1998 - A genetic and morphological survey of *Phragmites australis* throughout the Mississippi River delta: Evidence of introduced genotypes and infrequent sexual propagation. (poster - co-authored with student; abstract not published)
- World Delta Symposium, New Orleans, August, 1998 - Plant communities of the Mississippi River delta: Consequences of geological and hydrological events. (presented by co-author, D. White)
- AIBS Meetings, Seattle, WA, August, 1996 - Isozyme analysis of three members of the *Sagittaria graminea* complex from southeastern U.S. (One student co-author)
- AIBS Meetings, San Diego, CA, August, 1995 - Evidence of infrequent sexual propagation of *Phragmites australis* throughout the Mississippi River delta. (One student co-author, one faculty co-author)
- AIBS Meetings, Knoxville, TN, August, 1994 - *Phragmites australis* clones within the Baptiste Collete subdelta of the Mississippi River: Their morphological differences. (Two co-authors. Presentation made by student co-author)
- AIBS Meetings, Knoxville, TN, August, 1994 - Isozyme variation among coastal and inland populations of the common reed. (One student co-author)
- AIBS Meetings, Knoxville, TN, August, 1994 - Polyploid cytotypes of *Helianthus ciliaris* with intraspecific auto- and allopolyploidy. (Presentation made by co-author.)
- AIBS Meetings, Ames, IA, August, 1993 - Differentiating autopolyploid and allopolyploid meiotic behavior in *Tradescantia hirsutiflora*.
- AIBS Meetings, Honolulu, HI, August, 1992 - Patterns of genetic variation in *Phragmites australis* along the U.S. Gulf Coast.
- AIBS Meetings, San Antonio, TX, August, 1991 - Linkage relationships among electrophoretic gene loci in *Youngia japonica*. (One student co-author)
- AIBS Meetings, Richmond, VA, August, 1990 - Correspondence of isozyme variation and infrared reflectance patterns in *Phragmites australis* from the Mississippi River delta. (Two student co-authors)
- Association of Southeastern Biologists Meetings, Baltimore, MD, April, 1990 - Correspondence of genetic variation with infrared reflectance patterns in *Phragmites australis* in the Mississippi River delta. (Two student co-authors. I did not make presentation.)
- Louisiana Academy of Science Meetings, Southern University, Baton Rouge, LA, February, 1990 - Genetic variation in infrared patterns of populations of *Phragmites australis* in the Mississippi River delta. (Two student co-authors)
- Boone Chromosome Conference, Boone, North Carolina, October, 1989 - *Tolmiea menziesii*: equivocal cytogenetic evidence for autopolyploidy.



AIBS Meetings, University of Toronto, August, 1989 - *Phragmites australis*: analysis of reproductive differences in two adjacent populations in the Mississippi River delta. (One student co-author. I did not make presentation)

AIBS Meetings, University of Toronto, August, 1989 - Quantitative cytogenetic analysis of tetraploid *Tolmiea menziesii*: a test for autopolyploid behavior.

International Congress of Genetics Conference, Toronto, Canada, August, 1988 - (workshop) Cytogenetic evidence for natural autotetraploidy in *Haplopappus spinulosus* (Asteraceae).

AIBS Meetings, University of California at Davis, August, 1988 - Evidence for autogamy in *Youngia japonica* L. (DC.) (Asteraceae). (Two student co-authors.)

AIBS Meetings, Ohio State University, August, 1987 - The effect of colchicine treatment on the prophase I behavior of homologous iso-chromosomes.

Boone Chromosome Conference, Boone, North Carolina, October, 1986 - The effect of premeiotic colchicine on multiple iso-supernumerary chromosomes.

AIBS Meetings, University of Massachusetts, August, 1986 - Meiotic behavior of three homologous isochromosomes.

AIBS Meetings, Colorado State University, August, 1984 - Cytogenetic evidence for a hybrid-derived natural autotetraploid.

SWARM/AAAS Meetings, Texas Tech University, March, 1984 - Cytogenetic evidence for the hybrid origin of a natural autotetraploid.

AIBS Meetings, Penn State University, August, 1982 - Quantitative analysis of natural and synthetic tetraploids in *Haplopappus*.

SWARM/AAAS Meetings, University of Texas at El Paso, March, 1982 - Natural autotetraploids in *Haplopappus*.

AIBS Meetings, Indiana University, August, 1981 - The stability of chromosomal variation in a hybrid zone over ten years.

#### **d) Research Proposals Involvement**

Faculty Research Grant, Loyola University, March, 2011 - Identification of microsatellite genetic markers of the invasive exotic, common salvinia. This project was funded in full, \$3500.

Faculty Research Grant, Loyola University, submitted September, 2007 - Population genetic analysis of marked stands of *Phragmites australis* in interior marshes of the MS River delta. Project was 90% funded, \$2,500.

Louisiana Education Quality Support Fund, research and development component, submitted November, 2007 - An analysis of the effects of the invasive grass *Phragmites australis* on marsh insect populations. Listed as subcontractor. Resubmission from 2006. Requested \$7,400 for my part, not funded.

- Coastal Restoration and Enhancement Through Science and Technology Program, pre-proposal submitted November, 2006 - Growth rate analysis of *Phragmites australis* genotypes in the interior and exterior marshes of the Delta National Wildlife Refuge. Principal investigator. Requested \$75,000; not funded.
- Faculty Research Grant, Loyola University, submitted September, 2006 - Development of molecular markers for genetic identification of important genotypes of *Phragmites australis* in the MS River delta. Project was 100% funded, \$2,491.
- Faculty Research Grant, Loyola University, submitted September, 1999 - Analysis of synaptonemal complexes from the sunflower and spiderwort in order to evaluate the importance of microtubules in meiotic synapsis. Requesting \$2495.00. This project was 100% funded.
- Faculty Research Grant, Loyola University, submitted August, 1996 - Use of RAPD analysis to examine for genetic variability in isozymically uniform populations of *Phragmites australis*. This project was 100% funded, \$1,820.00.
- Faculty Research Grant, Loyola University, submitted August, 1995 - Isozyme variation in the *Sagittaria graminea* complex and closely related *S. platyphylla*. This project was 65% funded, \$1460.00.
- Louisiana Sea Grant College Program Preliminary Proposal, submitted November, 1992 - Invasive potential and negative ecological impact of *Phragmites australis*. Projected budget: \$53,571. Full proposal was not recommended. (Co-PI with David White)
- United States Department of Agriculture National Research Initiative Competitive Grants Program, submitted April, 1992 - Symposium: Genetics of economically important tropical plant species. Principal investigator. Requested \$3594.00. Project was funded \$2000.00.
- National Science Foundation Genetics Program, submitted January, 1992 - Symposium: Genetics of economically important tropical plant species. Principal investigator. Requested \$3594.00. Project was not funded.
- Faculty Research Grant, Loyola University, submitted January, 1992 - Investigations of clonal growth competition between the two resident genotypes of *Phragmites australis* in the Mississippi River delta. This project was funded in full, \$815.00.
- Faculty Research Grant, Loyola University, submitted September, 1990 - Analysis of genotypic variation and vegetative propagation among clones of *Phragmites australis*. A principal co-investigator. The project was funded with \$1860.00.
- National Science Foundation Research in Undergraduate Institutions Program, submitted December, 1989 - *Phragmites australis*: isozymic, morphometric, and chromosomal investigations of Mississippi River delta populations. Co-PI. Requested \$98,238. Not funded.
- Faculty Research Grant, Loyola University, submitted September, 1989 - Genetic variation within and between populations of *Phragmites australis* in the Mississippi River delta. A principal co-investigator. This project was funded in full, \$2,500.
- Faculty Research Grant, Loyola University, October, 1988 - A genetic analysis of three polymorphic enzyme loci in *Youngia japonica* (Asteraceae). Principal investigator. This project was funded in full, \$720.00.
- Louisiana Education Quality Support Fund, research and development component, submitted November, 1988 - *Phragmites austrlais*: isozymic, morphometric, and chromosomal analysis of Mississippi River delta populations. Co-PI. Requested \$75,752. Not funded.

Roger Tory Peterson Institute Research Grant, March, 1988 - Investigation of the genetic relationship of *Rhexia mariana* var. *mariana* and *R. interior* (Melastomataceae) in populations of southeastern Louisiana. Principal investigator. Requested \$1958.31. Not funded.

Faculty Research Grant, Loyola University, October, 1986 - Genetic analysis of a mixed population of *Rhexia mariana* from Honey Island Swamp. Principal investigator. This project was funded in full, \$1348.50 and helped to produce a publication (Hauber and Rovira, 1989).

Faculty Research Grant, Loyola University, October, 1984 - Induction of new recombinant types in cultivated plants. This project was funded in full, \$1137.64 and helped to produce a publication (Hauber, 1987).

Awarded summer research assistantships by the Graduate School of Texas Tech University in April 1981, April 1982, and April 1983.

**e) Exhibitions on or off campus** (none)

**f) Plays or musicals performances directed on or off Loyola's campus** (none)

**g) Seminars On or Off Campus as an Invited Participant or Panel Member**

Presented seminar entitled, "The common reed in the Mississippi River delta marshes: new haplotypes and high genetic diversity." Loyola University New Orleans, Dept. of Biological Sciences, March 9, 2010.

Presented invited seminar entitled, "*Phragmites australis* in the Mississippi River delta: genotype and haplotype variation," to the faculty and students of the University of New Orleans, Dept. of Biology, February 16, 2009

Presented invited seminar entitled, "*Phragmites*: the good, the bad, the genetics," at the COSEE:CGOM Two-Day Workshop, Aquarium of the Americas, New Orleans, LA, January 17, 2009.

Led discussion on two recent articles presenting arguments for and against "Adult stem cell vs. embryonic stem cell research and therapy." Dr. Bernard Cook's University Honors Seminar class, September 11, 2007.

Presented invited seminar entitled, "Genetic studies of *Phragmites* from the Gulf Coast and Mississippi River delta," to the faculty and students of the Department of Biological Sciences, Rockhurst University, Kansas City, MO, Oct. 20, 2005

Presented invited seminar entitled, "Genetic studies of *Phragmites* from the Gulf Coast and Mississippi River delta," to the LSU Marine Environmental Researchers organization, March, 2000.

Presented invited seminar entitled, "Genetic variation among *Phragmites* populations and questions of exotic phenotypes in the eastern United States" to the annual Estaurine Research Federation Conference in New Orleans, September, 1999.

Presented invited seminar entitled, "Synapsis in an autotetraploid: *Machaeranthera pinnatifida*" to the students and faculty of the Dept. of Biological Sciences, Loyola University, New Orleans, LA - Oct. 1998.

Presented invited seminar entitled, "Patterns of genetic variation and geographic distribution of *Phragmites australis*, the common reed" to the students and faculty of the Dept. of Biology at Colorado State University, Fort Collins, CO - Sept. 1997.

Presented invited seminar entitled, "Roseau: Its patterns of distribution and clonal reproduction" to the students and faculty of the Dept. of Biological Sciences, Southeastern Louisiana University, Sept. 1996.

Presented invited seminar to the students and faculty of the Rancho Santa Ana Botanical Garden on "Patterns of colonization and genetic variation in *Phragmites australis* along the Gulf coast, " April, 1992.

Presented a talk to the Tulane University Ecology and Evolutionary Biology Journal Club on "Meiotic pairing behavior in polyploids: Examples from several naturally occurring species," January, 1990.

Presented invited seminar to the Botany Department student and faculty of the University of Kansas on "Meiotic pairing behavior in polyploids: Examples from several naturally occurring species, " December, 1989.

Presented a talk to the Tulane University Ecology and Evolutionary Biology Journal Club on "New perspectives on chromosome pairing in diploids and polyploids," January, 1989.

Invited participant in a workshop on "Polyploidy" at the International Congress of Genetics, Toronto, Canada, August, 1988.

h) **Film and/or videotapes produced** (none)

i) **Conventions attended** (no presentation; see IIIc above for presentations)

3<sup>rd</sup> National Conference on Coastal and Estuarine Habitat Restoration, Dec. 9-13, 2006, New Orleans, LA

j) **Written evaluations of the above items by competent authorities** - n/a

k) **Workshops attended**

Media Interview Training Workshop, sponsored by Loyola's Institutional Advancement, hosted by Liz Reyes, Aug. 25, 2010, 8:30-12:30

Introduction to the LI-COR sequencer workshop, presented by Charlie Troxel, field application scientist from LI-COR Biosciences, June 26-27, 2007, Loyola University New Orleans.

Introduction to *ArcGIS I* workshop, presented by Steve Hartley from the USGS, June 23-24, 2005, Loyola University New Orleans.

Project Kaleidoscope Workshop, "Leadership in developing a technologically-intensive learning environment," Oct. 7-10, 2004, Rensselaer Polytechnic Institute, Albany, NY. Part of two-person team from Loyola.

Project Kaleidoscope Workshop, "Linking Insights About How People Learn to Curricular Reform," Oct. 30 – Nov. 1, 2003, University of Richmond, Richmond, VA. Part of two-person team from Loyola.

BioForum Education workshop, April, 2002, Association of Southeastern Biologists meeting at Appalachian State University, Boone

U.S. Coast Guard Boating Skills and Seamanship, 8-week course, completed November, 1994.

New England BioLabs Molecular Biology and Biotechnology Workshop, June 3-16, 1990, Smith College, Northampton, MA.

Biotechnology Training Programs DNA Fingerprinting Workshop, May 15-18, 1990; Introduction to PCR Workshop, July 11, 1994; Quantitative RNA-PCR Workshop, July 12-13, 1994; DNA Sequencing without Radioactivity, July 14-15, 1994, Loyola University, New Orleans, LA

IBI Recombinant DNA Workshop, May 9-12, 1989, Loyola University, New Orleans, LA

#### IV. SERVICE TO THE COMMUNITY

##### a) Service on University, College, and/or Departmental Committees

Chair of the Standing Committee for the Common Curriculum – (fall 2011 – present)

- Member of Natural Science in Context workgroup (fall 2011 – present)
- Member of Natural Science Lab workgroup (fall 2011- present)

Coordinated piloting of Investigating Nature (the Science Process course) (fall 2009-present)

Natural Sciences representative to Common Curriculum Implementation Task Force (Fall 2009-spring 2010)

Natural Sciences representative to the Common Curriculum Review Committee (fall 2005-Spring 2009)

College Curriculum Committee, fall 2009 – present; fall 2000 – fall, 2005; committee chair, fall 2002 – spring 2004.

Natural Science alternate representative on Monroe Hall Renovations Steering Committee – fall 2010 – present.

Department Assessment Committee member (spring 2004 – present)

- Conducted senior exit interviews (2004-2005)
- Helped develop and implement plan for assessing department learning outcomes (oral presentation, writing assessment, overall biological knowledge).
  - Organized and proctored senior exit exams (2005-2007, 2009-2011)
  - Helped organize oral assessment (2005-2007, 2009-2011)
  - Helped organize and participated in written assessment (2005-2006)
  - Conducted phone survey of non-returning (Psychology) freshmen (exchanged lists with Elizabeth Hammer) – spring 2005

Departmental Associate Chair - fall, 2000 – fall, 2003; fall 2010 – present.

Departmental faculty search committee for 2011-12 sabbatical replacement

Department Administrative Assistant Search Committee, Fall 2009

Department Cell/Molecular Biologist Faculty Search Committee, Fall 2008-Spring 2009

Department Curriculum Committee (2005-2008)

Department Chair – fall, 2003 – summer 2005.

Chair of Computational Science minor exploratory committee – spring, 2007 – fall, 2007

Member of A&S ad hoc Course Evaluation Committee (spring 2005 – fall, 2007)

Departmental representative on the A&S Natural Sciences Protocol Review committee – spring 2004 – spring 2005

Chair of Lab Coordinator Search Committee (summer 2004-fall 2004)

Member of Loyola's Project Kaleidoscope team (summer, 2004 – present)

- Presented experiences and take-home messages from Project Kaleidoscope workshop to interested Loyola faculty at Faculty Dialogue session, Jan. 30, 2004.

Chair of Weilbaeher Award Committee (2004, 2005)

Internship Advisory Committee, fall 2004 – spring 2006

Chair of faculty search committee for 2005 maternity leave replacement

Chair of faculty search committee for 2004-05 sabbatical replacement (summer 2004)

Department admissions liaison meeting with prospective students and parents throughout the year (fall 2003 – summer 2005).

Organized phonathon through admissions office to contact prospective biological science majors to answer their questions and act as a liaison - Mar. 1999, Feb. 2000, Feb. 2003, Feb. 2004, Mar. 2005.

Participated in President's Open Houses - conducted short lecture class and answered questions at the dept. booth during the fair - April 10, 1999, April 1, 2000, and April 2001. Led pre-health presentation and answered questions in dept. booth April 6, 2002, March 29, 2003, March 27, 2004.

Member of campus interest group on Curricular Reform and Pedagogy (CRAP) meeting once a month, spring 2004 – spring 2005

Brought a group of eight students to a symposium, "Genetics: Your Family & Your Health," held on November 15, 2003 from 9:00 – 1:00 at the LSU School of Dentistry. The event was organized by the LSU Health Sciences Center and The South Louisiana Region Area Health Education Centers.

College Faculty Evaluation Committee, spring 2000 – spring 2002.

Member of departmental equipment committee, fall, 1989 - 2003.

Departmental Microscope Evaluation Committee, chair – examined and accessed all departmental compound microscopes in effort to determine need for repair and replacements, spring 2002 – 2003.

Elected to serve on the College Rank and Tenure Committee, fall, 1991 – 1994; fall, 1996 – 1999; fall, 2000 - 2003. Chair - fall, 2001 – summer, 2002; spring, 2006

Appointed to the Pre-Medical Advisory Board (a.k.a. Pre-Health Professions Advisory Board)

- Member fall, 1990 - spring, 1997 and fall, 1999 - present.
- PHPAB Chair, fall 1994 – fall 1997
- Chief editor of second edition of Loyola Pre-Health Professions Handbook.
- Interim PHPAB Chair, spring 2002 – fall 2002.
- Principle author of internal proposal for summer salary, one course release (per year) and an annual budget for PHPAB chair, submitted April 2003.

Member of departmental faculty search committee - Fall-Spring, 1993-94, Fall-Spring, 1994-95, Fall-Spring 1996-97, Fall-Spring, 1999-2000, Fall-Spring 2001-02, Fall-Spring 2008-09.

Organized First Annual Loyola Student Research Symposium and picnic - March, 1991. Organizer again in March, 1994, April, 1997 and March, 2000.

Served as Round Table discussion monitor for summer orientation students - summer 1999.

Appointed to serve on university search committee for Dean of Campus Ministries, spring, 1998 and spring, 1999.

Departmental curriculum revision committee - served on the "cell wing" of the curriculum revision committee. Also, headed the revision of the research/honors courses, 1998-1999.

Attended the Heartland Conference II in St. Louis as a faculty representative of Loyola University (May 1997).

Served on search committee for Career Counselor position in the Office of Counseling and Career Development, spring 1997.

Served as chair of the Chemistry Department Evaluation Team as part of a 5-year internal review/ - spring, 1996.

Served as member of the Educational Support Services Subcommittee of the Southern Association of Colleges Self-Study. Summer, 1993 - spring, 1994

Appointed by the Academic Vice President to the Library Oversight Committee, spring, 1993 – Spring 1996

Secretary for departmental faculty meetings in charge of minutes, fall, 1988 - fall, 1995.

Departmental library liaison, fall, 1986 - fall, 1997.

Served as consultant and adjunct member of M.S. thesis committee of Tulane University Ecology and Evolutionary Biology graduate student, Michael Tercek, 1999-present.

Served as an adjunct member of the Ph.D. dissertation committee of Tulane University Cell and Molecular Biology doctoral candidate, Shane Latimer, 1992 - 1994

Served as an adjunct member of the Ph.D. dissertation committee of Tulane University Biology doctoral candidate, Mia Molvray, 1990.

Appointed by Academic Vice President to University Library Committee, spring, 1990 – fall, 1993.

Appointed by the Dean of A&S to the University Honors Advisory Board, fall, 1990 - 1993. Chaired committee to develop 5-year plan - fall, 1991.

Appointed as departmental representative on the University Faculty Senate, spring, 1989 - fall, 1990, and spring, 1985 - spring, 1986.

Served on the Faculty Senate Cabling Subcommittee, spring, 1989 - spring, 1991.

Member of departmental curriculum committee, spring, 1989 - fall, 1989.

Member of the University Parking Committee, fall, 1988 - spring, 1992.

Served on two A&S College grade appeal committees, fall, 1988.

Principal author of a proposal to redistribute undergraduate research/seminar credits in order to 1) provide the students with a reasonable number of credits that is more reflective of the work they perform, and

2) to make it possible for faculty to officially add undergraduate research to their load, fall, 1987. Proposal was approved.

Collaborated with the departmental chairperson on a proposal to allow for early entry into Graduate School (5 yr B.S./M.S. program), fall, 1985 - spring, 1986. Proposal was approved.

Organized the designing, printing, and mailing of an advertisement flier/poster of the M.S. program in Biological Sciences, spring, 1986.

**b) Special Service for the Benefit of Loyola**

Bayou immersion trip – sponsored by Loyola Office of Mission + Ministry, March 28-29, 2010, Golden Meadow, LA; gave students presentation on invasive species impact on southeastern Louisiana and helped in harvesting marsh grass for transplanting in marsh recovery project.

Faculty advisor to the Eta Lambda chapter of TriBeta, the national biological honor society: fall, 1989 – 1999; 2002 – present Co-advisor: fall, 1988 - summer and fall, 1999 – fall 2002. Interim advisor: fall, 1987 - summer, 1988.

Calzada, M., Gorham, E., Hauber, D., Spence, T., and Kargol, A. Project Kaleidoscope Leadership Initiative Grant, 2-year project that includes free tuition and meals for any or all of the team members to attend two (or more) two-day workshops each year and access to PKAL consultant to advance implementation of the agenda, namely increasing interdisciplinary curricula and programs. Loyola was one of the 36 institutions selected to receive the grant. (Summer 2004 – Summer 2006)

Appointed faculty coordinator of six Loyola faculty delegates for the first Faculty Conversations in the Heartland/Delta conference of Jesuit universities, Creighton University, Omaha, Feb., 1999.

**Service to the New Orleans Community**

Coalition to Restore Coastal Louisiana –; April 21, 2011 and June 25, 2011, participated in all-day marsh grass planting on Grand Isle. Oct. 1, 2010; Participated in an all-day marsh grass planting in Big Branch March National Wildlife Refuge. Summer 2006, participated in all-day marsh grass planting in Bayou Savage.

Jean Lafitte Park swamp field trip – led nature hike for group of HS exchange students from Santiago, Chile attending Academy of the Sacred Heart, February 9, 2009.

Opening Doors – participated in Sept. 22, 2010 and November 4, 2009 faculty/staff visit with first-years in the dorm.

Wolves on the Prowl – participated in St. Bernard Project rebuild, November 7, 2009.

Participated in Bike-a-thon for the Poor sponsored by Academy of the Sacred Heart, September 2008

Barataria-Terrebonne Rapid Assessment Project – 3 day ecological assessment conducted by Barataria-Terrebonne National Estuaries Program, of plant diversity throughout local wetlands in Southeastern Louisiana, Aug. 4-6, 2008.

Participated as SCORE research team leader (two UG students, four New Orleans HS students, one New Orleans HS science teacher, one research scientist leader) – Project: “Development and application of protocols for microsatellite analysis of the common reed using LI-COR 4300 DNA analyzer,” Jun-Jul 2008



Mentored students from Patrick F. Taylor Science & Technology Academy on science fair projects dealing with the influence of saltwater intrusion on freshwater mosquitofish reproductive fitness. Oct. 2007 – Jan. 2008.

Spoke to entire sixth grade class at the Academy of the Sacred Heart on “Fun with slime molds and water molds.” Brought culturing supplies to allow students to set up their own slime mold and water mold cultures. February, 2004; April, 2006.

Spoke to entire sixth grade class at Lusher Extension School on single-gene inheritance in humans, April, 1995, October, 1995, and December, 1996.

Spoke to entire second grade and fourth grade classes at Holy Name of Jesus on tree and leaf identification, Oct., 1994.

Served as judge of Botany projects at the January, 1997, January, 1998 and January, 1999 Ursuline Academy Science Fair.

Served as judge of outstanding projects at the March, 1989 St. James Parish Science Fair.

Helped direct the Loyola Science Olympiad Quiz Bowl, April, 1988, April, 1989, April, 1990, April, 1991, and April, 1992.

Served as judge of the Botany section of the New Orleans Science Fair, March 2002, April, 1999, April, 1998, April, 1990, April, 1989, and March, 1988

Served as judge at the St. Francis Cabrini Science Fair, January, 1988.

Spoke to the Serra Club of Downtown New Orleans on "The Social and Ethical Implications of Technical Advances in Human Reproduction," August, 1987.

**d) Service at the state and/or national level**

PlantingScience mentorship project – Botanical Society of America-sponsored program involving online mentorship of two HS science group projects, Fall 2008, Spring 2009, Fall 2009, Spring 2010, Fall 2010.

Member of the state's Salvinia Task Force and the Nonindigenous Invasive Species Task Force - fall 2000-present.

**e) Contributions to the Profession**

Active member in the following professional societies:

- Society for the Study of Evolution
- Botanical Society of America
- Association of Southeastern Biologists
- Southeastern Louisiana Ecology and Evolutionary Biology Group

Appointed by the president of the Botanical Society of America to serve on the Membership and Appraisals Committee - fall, 1998 – summer, 2004. Committee Chair, spring 2003 – summer, 2004.

Served as judge of student papers at the TriBeta National Convention April 2005, April 2004, April 2002, April 2000 (poster judge), April 1997, April 1996, April 1995, April 1992, April 1991, April 1990, April 1989.

Served as peer reviewer of manuscripts (~four/year) submitted to the journals, American Journal of Botany, Aquatic Botany, Genome, Evolution, Rhodora, Chromosome Research, International Journal of Plant Sciences, Wetlands, Weed Research, Invasive Plant Science and Management, and Journal of Heredity.

Member of Local Arrangements Committee for the Association of Southeastern Biologists 2001 meetings in New Orleans. Chair of commercial exhibits committee and hosting co-advisor for southeast regional TriBeta meetings - fall, 1999 - spring, 2001

Appointed by the president of the Association of Southeastern Biologists to serve on the Education Committee: Spring, 1999 – spring 2002. Co-Chair: spring, 2001- spring, 2002

Served as chair and organizer of the Margaret Menzel Special Lecture at the AIBS meetings in Baltimore, MD - August, 1998

Served as judge for the Margaret Menzel Outstanding Paper in Genetics presented in the Genetics Section, AIBS meetings, August, 1987, August, 1989, August, 1995, August, 1997 and August, 1998.

Elected as Chair of the Genetics Section of the Botanical Society of America (BSA), August, 1995 – August, 1997.

Elected as Vice-chair of the Genetics Section of the Botanical Society of America (BSA), August, 1993 - 1995.

Served on the Botanical Society of America Council August, 1992 - August, 1995

Served on nomination committee for the section chair of the Southeastern Section of the Botanical Society of America, November, 1993.

Nominated as Program Director for the Botanical Society of America, December, 1992.

Served as Chair of the paper session during the AIBS Meetings in August, 1992, and August, 1991

Served as judge of papers for the Cooley Award given to the presenter of most outstanding paper in systematics at the AIBS Meetings, 1990 and 1991.

Elected as Secretary/Treasurer of the Genetics Section of the Botanical Society of America (BSA), August, 1991 - August, 1993

Served as Chair of the 1992 Plant Genetics Symposium Committee August 1991 - August 1992.

Served as the Plant Genetics Newsletter Support Committee Chair of the Genetics Section of BSA, August 1990-August, 1992.

Served on editorial board of the Plant Genetics Newsletter (South Region), January, 1990 - January, 1992.

Served on the Nomination Committee for the Genetics Section of the BSA, 1989 and 2002.

Proposal reviewer for the National Science Foundation (NSF), 1992, 2006.

Served as session discussion monitor at the Chromosome Conference in Boone, NC, October, 1986.

f) **Department infrastructure grants**

Dorn, P.A. (Program Director), **D.P. Hauber (Program Coordinator)**, L. Joyner (Program Coordinator), A. Li (Program Coordinator), M. Shuh (Program Coordinator), J. Wee (Program Coordinator). Howard Hughes Medical Institute 2004 Undergraduate Science Education Program, Student research and broadening access to science. Four-year project requesting \$1,166,604, submitted Oct. 2003. Project was not funded

**Hauber, D.P. (PI)** and M. Shuh (co-PI) Louisiana Education Quality Support Fund, research and development component, Undergraduate Enhancement Program - Enhancement of cell and molecular biology laboratory experiences. Requested \$53,917, submitted October, 2002. Project was funded May, 2003, \$30,135.

**Hauber, D.P. (PI)** and D.A. White (co-PI) Louisiana Education Quality Support Fund, research and development component, Undergraduate Enhancement Program - Enhancement of field biology instruction and research in wetlands of southeastern Louisiana. Requested \$38,504.50, submitted October, 1993. Project was not funded.

See II. g

g) **Other service to the New Orleans community and beyond**

Volunteer for St. Bernard Project – helped one day on rebuild – June (twice) 2011, April (twice) 2011, Aug. 2010, Nov. 2009, Oct. 2007

Volunteer on Habitat for Humanities projects – fall 2010, fall 2007, summer 2006, spring/summer 2005, spring 2004, fall 2003, spring 2003.

Preservation Resource Center October Rebuild Program – volunteered Saturday October 10, 2009 to help restore hurricane damaged home.

Volunteer for house gutting and flood clean-up – spring 2007; spring/summer/fall 2006

Volunteer for conservation service in Kansas City – removal of invasive honeysuckle – fall 2005

Volunteer serving meal to Ozanam Inn patrons – fall 2003