

**Noland H. Martin, Ph.D.**  
**Texas State University, San Marcos**  
**601 University Drive**  
**San Marcos, TX 78666**

**I. Academic/Professional Background**

**A. Name:** NOLAND H. MARTIN, Ph.D.

**Title:** Assistant Professor

**B. Educational Background**

<b>Degree</b>	<b>Year</b>	<b>University</b>	<b>Major</b>
Ph.D.	2004	Duke University	Biology
Dissertation title: <i>Evolution, Genetics, and Maintenance of Reproductive Isolation in Mimulus guttatus and Mimulus nasutus.</i>			
M.S.	2000	University of Oregon	Biology
B.S.	1996	University of Texas, Austin	Biology

**C. University Experience**

Assistant Professor,	Texas State University,	2006-present.
Postdoctoral Researcher,	University of Georgia	2004-2006

**D. Relevant Professional Experience**

Analytical Consultant	Milwaukee Public Museum	2003-2004
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**II. TEACHING**

**A. Courses Taught**

BIO 2410	Introduction to General Botany	Spring 2007- 2009
BIO 2450	Genetics (250+ students)	Fall 2007- 2008, Spring 2009
BIO 4299	Undergraduate Research	Spring 2007 – 2009
BIO 4301	Evolution	In Prep.
BIO 5399A	Graduate Thesis	2007-2009
BIO 5399B	Graduate Thesis	2007-2009
BIO 7120	Population Biology Seminar: Natural Hybridization	Spring 2007
BIO 7102	Seminar in Aquatic Resources	Fall 2008, Spring 2009
BIO 7114	Research Experience	Spring 2009
BIO 7302	Problems in Aquatic Resources	Fall 2008, Spring 2009
BIO 7314	Research Experience	Spring 2009
BIO 7303	Research	Spring 2009
BIO 7427	Population Biology (Quantitative Genetics Module)	Fall 2007, Fall 2008

## B. Undergraduate Researchers Mentored

Bobby J. Cast (Strandtmann Field Biology Award)	Spring 2007
Benjamin D. Rickman	Spring 2007
Scott R. Sandilos	Spring 2007
Katherine Cummings	Summer1&2 2007
James May	Fall 2007
Heath Goins	Fall 2007 – Fall 2008
Mary Dobson (Francis Rose Undergraduate Grant Recipient)	Fall 2007 – Fall 2008
Rees Willard	Fall 2008 - Present
Charlene Farias	Present
Mark Foster	Present
Loren Kempf	Present

## C. Graduate Theses/Dissertations or Exit Committees (\*Major Advisor)

Sunni J. Taylor*,	M.S.	<i>Genetic Architecture of Hybrid Fitness in the Louisiana Iris species complex.</i>	Completed August 2008
Celeste Espinedo,	M.S.	<i>Reproductive Isolation in Gambusia</i>	Completed August 2008
Michelle Downey,	M.S.		Current
Sunni J. Taylor*,	Ph.D.		Current
Josh Shaw*,	M.S.		Current
Mary Dobson*,	M.S.		Current

## III. SCHOLARLY/CREATIVE

### A. Works In Print (A number of works are “in preparation” or “submitted” and are not listed). - This font color represents “layperson” publications – not peer reviewed.

- Taylor, S.J.**, M.L. Arnold, and **N.H. Martin**. Genetic architecture of reproductive isolation in Louisiana Irises: hybrid fitness in nature. **Evolution** **63** (Accepted pending revisions).
- P.J. DeVries, G.T. Austin, and **N.H. Martin**. 2009. Estimating species diversity in a guild of Neotropical skippers (Lepidoptera: Hesperidae) with artificial lures is a sampling problem. **Insect Conservation and Diversity 2: (In press)**.
- Martin, N.H.** 2008. Pollination Biology of Louisiana Iris. **American Iris Society Bulletin**.
- Martin, N.H.** 2008. Scientist meets Louisiana Irises... love grows after rough introduction. **Fleur de Lis 211: 9-11**.
- Arnold, M.L., S. Cornman, and **N.H. Martin**. 2008. Genetic Exchange and the Origin of Adaptations – Prokaryotes to Primates. **Philosophical Transactions of the Royal Society B: Biological Sciences** **363**: 2813-2820.
- Martin, N.H.** Y. Sapir, M.L. Arnold, 2008. The genetic architecture of reproductive isolation in Louisiana Irises: pollination syndromes and pollinator preferences. **Evolution** **62**: 740-752. **Accompanying cover photo**.
- A.L. Sweigart, **Martin, N.H.**, and J.H. Willis, 2008. Hybrid origin of a new *Mimulus* species. **Molecular Ecology** **17**: 2089-2100. (“Perspective” written about this work to come out in same journal – “**Co-first author**”).
- P.J. DeVries, G.T. Austin & **N.H. Martin**, 2008. Patterns of diversity and temporal activity in a mega-diverse community of rainforest skipper butterflies. **Biological Journal of the Linnean Society** **94**: 723-736.
- Arnold M.L., R. S. Cornman and **N.H. Martin** 2008. Hybridization, hybrid fitness and the evolution of adaptations. **Plant Biosystems** **142**: 166-171..
- Martin, N.H.**, A.C. Bouck, and M.L. Arnold, 2007. The genetic architecture of reproductive isolation in Louisiana Irises: Flowering Phenology. **Genetics** **175**: 1803-1812.

- Martin, N.H.** and J.H. Willis, 2007. Ecological divergence associated with mating system causes nearly complete reproductive isolation between sympatric *Mimulus* species. *Evolution* **61**: (1) 68-82.
- Martin, N.H.**, A.C. Bouck, and M.L. Arnold, 2006. Detecting adaptive trait introgression between *Iris fulva* and *Iris brevicaulis* in highly-selective field conditions. *Genetics* **172**: 2481-2489.
- Martin, N.H.**, A.C. Bouck, and M.L. Arnold 2005. Loci affecting long-term hybrid survivability in Louisiana Irises: implications for reproductive isolation and introgression. *Evolution* **59**: 2116-2124.
- Martin, N.H.** 2004. Flower size preferences of the honeybee (*Apis mellifera*) foraging on *Mimulus guttatus* (Scrophulariaceae). *Evolutionary Ecology Research* **6**: 777-782.

## B. Reports

Ellerbe Creek Watershed Plan, 2003 - [www.ellerbecreek.org/watershed-plan-intro.htm](http://www.ellerbecreek.org/watershed-plan-intro.htm)

## C. SCIENTIFIC PRESENTATIONS AT INTERNATIONAL MEETINGS

- QTL Analysis of Floral Traits Affecting Introgression and Reproductive Isolation in Iris Hybrids.* (poster)
- Tang, Shunxue, R.A. Okashah, N.H. Martin, Y. Sapir, S.J. Knapp, and M.L. Arnold.
  - Plant and Animal Genome Conference, San Diego, CA. Jan 10-14, 2009.
- The genetic architecture of reproductive isolation in Louisiana Irises: pollination syndromes and pollinator preferences.* (oral)
- Noland H. Martin and Michael L. Arnold,
  - Botanical Society of America, Victoria, BC, Canada. July 26-30, 2008.
- The genetic architecture of hybrid fitness in the Louisiana Iris species complex.* (poster)
- Sunni. J. Taylor, Noland H. Martin and Michael L. Arnold
  - Botanical Society of America, Victoria, BC, Canada. July 26-30, 2008.
- Components of reproductive isolation between sympatric Mimulus guttatus and Mimulus nasutus* (poster)
- Noland H. Martin and John H. Willis
  - Plant Speciation meetings 2003 (Plant Canada)
- Hybrid lethality in sympatric Mimulus: the importance of Dobzhansky-Muller and nuclear-cytoplasmic interactions* (oral)
- Noland H. Martin and John H. Willis
  - Evolution meetings 2002.
- Reproductive isolation in Mimulus: the importance of Dobzhansky-Muller and nuclear-cytoplasmic interactions* (oral)
- Noland H. Martin and John H. Willis
  - Botany meetings 2002.

## D. INVITED TALKS

- Genetic Architecture of Speciation and Reproductive Isolation in Mimulus.*  
University of Houston 14 November 2007
- Speciation in Mimulus and Iris.*  
(Class Lecture: Frances Rose) October 2006.
- How I Became a Scientist.*  
Texas State University. November 2006.
- Natural History of Speciation and Introgressive Hybridization: case studies in Mimulus and Iris.*  
Texas State University, April 2006.
- The identification and quantification of prezygotic and postzygotic isolation.*  
Department of Genetics, University of Georgia, 19 November 2005.

*Evolution and Maintenance of Reproductive Isolation: a genetic, ecological, and genomic approach to studying speciation.*

University of New Orleans,

18 April 2005.

*The Biology of Speciation.*

Mesa State College,

6 May 2005.

- *Speciation in Mimulus.*

Duke University - Population Biology Group,

2001-2004.

#### **E. Grants and Contracts (Funded External Grants)**

- National Science Foundation: REP: *Ecology, Evolution, and Genetic Architecture of Reproductive Isolation in Iris nelsonii: a homoploid hybrid (pending)* (2008) \$8500
- National Science Foundation: *Ecology, Evolution, and Genetic Architecture of Reproductive Isolation in Iris nelsonii: a homoploid hybrid.* (January 2008) \$135,000
- Society for Louisiana Irises (2 awards) (2007, 2008) \$2000
- American Iris Society Foundation (2 awards) (2007, 2008) \$10,140
- Duke University Keever Fund Research Award 2002 (2002) \$1000
- Duke University Conference Travel Award (2002) \$500
- National Science Foundation, Dissertation Improvement Grant (2000) \$5331
- National Institute of Health, Genetics Research Fellow, (1999-2000) stipend
- Sigma Xi, Grant-in-Aid-of-Research (1999) \$700

#### **F. Submitted but not funded external grants and contracts**

- Ecology, Evolution, and Genetic Architecture of Reproductive Isolation in Louisiana Iris, National Science Foundation (*not funded*) (July 2007) \$569,350
- Genetic Architecture of Speciation / Reproductive Isolation in Louisiana Iris Advanced Research Program (state of Texas) (*not funded*) (October 2007) \$125,000

#### **G. Funded Internal Grants and Contracts**

- Research Enhancement Program – Texas State University (2007) \$7966
- Research Enhancement Program – Texas State University (2006) \$7993
- Startup Funds from Texas State University (2006) \$175,000

#### **H. Funded Graduate-Student Grants**

- *Sunni-Taylor*: Sigma Xi Grant in Aid of Research (2007) \$400
- - Texas State Travel Awards (2007,2008) \$1050
- - Botanical Society of America Research Award (2007) \$1000
- - American Iris Society Foundation (2007) \$2550

### **IV. SERVICE**

#### **A. Departmental Committees**

- Seminar Committee (2006-present)
- Undergraduate Committee (2006-present)
- Target of Opportunity Committee (2006-present)
- Vehicle Use Committee (2006-present)
- Greenhouse Committee (2006-present)
- Tenure and Promotion Committee (2008-present)

## **B. Departmental Activities**

- Coordinate departmental graduate student luncheons with speakers (2006-present)
- Invited and hosted University of New Orleans speaker Philip J. DeVries (12 Feb 2007)
- Invited and hosted University of New Orleans speaker Carla Penz (26 Mar 2007)
- Invited and hosted university of Georgia speaker Mike Arnold (15 Oct 2007)
- Served as grant panel judge for Francis Rose Undergrad. Res. Award (2007, 2008)
- Served as judge for student Colloquium (2008)

## **C. University Service**

- Became “Media Expert” for Texas State University in the areas of evolutionary biology, speciation, natural hybridization, and genetics (2007)

## **D. Training**

- “National Science Foundaton Regional Grants Conference”
  - National Science Foundation organizers (October 20-22 2008)
- “Introduction to QTL Mapping” Module – Summer Institute in Statistical Genetics
  - R. Doerge, Z.B. Zeng instructors (Summer 2005)
- “Advanced QTL Mapping” – Summer Institute in Statistical Genetics
  - K. Broman, B. Yandell, Z.B. Zeng instructors (Summer 2005)

## **E. Organizational Memberships**

- Member: Society for Louisiana Irises (2007-present)
- Member: American Iris Society (2007-present)
- Member: Society for the Study of Evolutionary Biology (2006-present)
- Member: Botanical Society of America (2007-present)
- Member Sigma Xi Scientific Research Society (2007-present)

## **F. Professional Service**

- Grant Panelist for National Science Foundation: Population and Evolutionary Processes (2009)
- Grant Reviewer for National Science Foundation: Population and Evolutionary Processes (2008)
- Reviewer for **Acta Botanica Cracoviensia** (2009)
- Reviewer for **Diversity and Distributions** (2008)
- Reviwer for **Botanical Journal of the Linnean Society** (2008)
- Reviewer for **New Phytologist** (2008, 2009)
- Reviewer for **Evolution** (2007, 2008, 2009)
- Reviewer for **Journal of Heredity** (2007)
- Reviewer for **Plant Systematics and Evolution** (2007)
- Reviewer for **Philosophical Transactions of the Royal Society** (2007,2008)
- Reviewer for **Lundellia** (2007)
- Reviewer for **Genetics** (2006-2007)
- Reviewer for **American Journal of Botany** (2006-2007)
- Reviewer for **Planta** (2006)
- Reviewer for **Journal of the Lepidopterists' Society** (2001, 2002)
- Reviewer for **Biotropica** (2001, 2002)
- Board Member for Ellerbe Creek Watershed Association (Land Trust) (2002, 2003)