

IRENE AI-YIN LIU

Department of Biology
Duke University
130 Science Drive
Room 137, Box 90338
Durham, NC 27708

irene.liu at duke.edu
919-660-0927

Education

- 2007 – pres. **Duke University**, Biology, Ph.D. program
 Advisor: Dr. Stephen Nowicki
- 2002 – 2006 **University of Maryland, College Park**, B.S. and B.A., *summa cum laude*
 Zoology (High Honors) and Spanish Language and Literature

Grants, Scholarships and Fellowships

- 2011 – 2013 **Doctoral Dissertation Improvement Grant**, National Science Foundation
- 2011 **Sigma Delta Epsilon Fellowship**, Graduate Women in Science
- 2011 **Louis Agassiz Fuertes Award**, Wilson Ornithological Society
- 2010 **Graduate Dissertation Research Travel Award**, Duke University
- 2010 **Grant-in-Aid of Research**, Sigma Xi
- 2010 **Graduate Student Field Research Grant**, Center for Latin-American and Caribbean Studies,
 Duke University
- 2010 **Graduate Mini-Grant**, Duke Sigma Xi
- 2008 – 2013 **Graduate Research Fellowship**, National Science Foundation
- 2008 – 2011 **Graduate Mentor Fellowship**, University Scholars Program, Duke University
- 2008 – 2009 **McKinley Research Award**, Pymatuning Lab of Ecology, University of Pittsburgh
- 2008 **Graduate Research Award**, American Ornithologists' Union
- 2008 **Grant-in-Aid of Research**, Sigma Xi
- 2008 **Paul A. Stewart Award**, Wilson Ornithological Society
- 2007 – 2011 **James B. Duke Fellowship**, Duke University
- 2007 – 2008 **University Scholars Program Fellowship**, Duke University
-
- 2006 **Travel Award**, IV North American Ornithological Conference
- 2006 **Phi Beta Kappa National Honor Society**
- 2005 – 2006 **Undergraduate Research Fellowship**, Howard Hughes Medical Institute
- 2005 **Senior Summer Scholars Grant**, Maryland Center for Undergraduate Research
- 2005 **Honors Research Grant**, University of Maryland Honors Program
- 2005 **Study Abroad Scholarship** (Costa Rica), University of Maryland
- 2004 **Study Abroad Scholarship** (Spain), University of Maryland

Peer-reviewed Publications

- Olsen, B.J., R. Greenberg, I.A. Liu, J.M. Felch, and J.R. Walters. 2010. Interactions between sexual and natural selection on the evolution of a plumage badge. *Evolutionary Ecology* 24:731-748.
- Liu, I.A., B. Lohr, B. Olsen, and R. Greenberg. 2008. Macrogeographic vocal variation in subspecies of swamp sparrow. *Condor* 110:102-109.

Posters and Presentations

(all are presentations unless noted otherwise)

- Liu, I.A.** Sep. 2010. Mating behavior, sperm competition and reproductive protein evolution in *Agelaius* blackbirds. New Directions in Sexual Selection Research Conference, University of Bath, UK. (poster)
- Liu, I.A.** Jun. 2010. Mating behavior, sperm competition and the evolution of avian reproductive proteins. Archbold Biological Station, Lake Placid, Florida.
- Liu, I.A.** Jun. 2010. Effect of genetic diversity on mating behavior in populations of a songbird. Bahamas National Trust, Grand Bahama, The Bahamas.
- Liu, I.A.** Mar. 2010. Mating behavior, sperm competition and the evolution of avian reproductive proteins. Behavioral, Population and Community Ecology seminar, Duke University.
- Liu, I.A.** Dec. 2008. Male song type matching and female eavesdropping in a songbird. Behavioral, Population and Community Ecology seminar, Duke University.
- Liu, I.A., B. Lohr, B. Olsen, and R. Greenberg.** Aug. 2008. Macrogeographic vocal variation in subspecies of swamp sparrow. 45th annual meeting of the Animal Behavior Society, Snowbird, Utah. (poster)
- Liu, I.A.** Sep. 2007. Neophobia in the Florida scrub-jay: correlates of response. Behavioral, Population and Community Ecology seminar, Duke University.
- Olsen, B.J., R. Greenberg, I.A. Liu, J.M. Felch, and J.R. Walters.** Aug. 2007. Interactions between sexual and natural selection in the plumage divergence of the Coastal Plain Swamp Sparrow. 125th stated meeting of the American Ornithologists' Union, Laramie, Wyoming.
- Liu, I.A., B. Lohr, B.J. Olsen, and R. Greenberg.** Oct. 2006. Macrogeographic vocal variation in subspecies of swamp sparrow. IV North American Ornithological Conference, Veracruz, Mexico.

Other Publications and Presentations

- Liu, I.A., and P.A. Durst.** 2011. Permits and procedures for field research. Responsible Conduct of Research (RCR) seminar, Duke University.
- Liu, I.A.** 2011. Women in Science and Engineering at Duke. DukEngineer Magazine <<http://www.dukengineer.pratt.duke.edu/node/140>>.

Teaching Experience

- 2010 – pres. **Undergraduate research mentor**, J. Abe, work-study student
- Fall 2010 **Teaching assistant**, BIO 108L, Vertebrate Anatomy. Instructor: Dr. Kathleen Smith

Research Experience

- 2007 **Research intern**, Archbold Biological Station, Florida
with Dr. Reed Bowman, Associate Research Biologist
- 2006 **Field technician**, University of Maine
with Brent Horton, doctoral candidate, School of Biology and Ecology
- 2004 – 2006 **Biology Honors Project**, University of Maryland
with Dr. Russell Greenberg, Smithsonian Migratory Bird Center; Dr. Bernard Lohr, Department of Psychology; and Brian Olsen, doctoral candidate, Department of Biological Sciences, Virginia Tech
- 2004 **Field technician**, University of Maryland
with Shannon Borges, doctoral candidate, Department of Biology
- 2004 **Data analyst**, University of Maryland
with Dr. Bernard Lohr, Department of Psychology
- 2003 **Data analyst**, University of Maryland
with Jean-François Savard, doctoral candidate, Department of Biology

Professional Affiliations

Reviewer for Auk, Journal of Avian Biology

Member of American Ornithologists' Union, Animal Behavior Society, Cooper Ornithological Society, Society for Integrative and Comparative Biology, Society for the Study of Evolution, Wilson Ornithological Society

Service Activities

- 2011 - pres. **Program co-coordinator**, Women in Science and Engineering, Duke University
2011 - pres. **Basketball committee**, Graduate and Professional Student Council, Duke University
2010 - pres. **Organizer**, Behavioral, Population and Community Ecology seminar series, Biology Department, Duke University
2009 - 2011 **Program committee**, Women in Science and Engineering, Duke University
2009 **Martial arts instructor**, El Kilombo community organization, Durham, NC
2008 - pres. **Graduate mentor**, University Scholars Program, Duke University
2008 - pres. **Mentor**, Women in Math Mentoring Program, Durham and Wake County, NC
2008 - 2010 **ESL instructor**, El Kilombo community organization, Durham, NC
2007 - 2009 **Cookie czar** (snack-maker extraordinaire), Biology Department, Duke University

Languages

High proficiency in Spanish and Mandarin Chinese