

Kristen A. Hopperstad

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EDUCATION

- PhD Student in Entomology, Certificate in Geospatial Information Systems** **Jan 2013 to Present**
North Carolina State University (NCSU), Raleigh, NC
“*Connecting pattern and process in the landscape ecology and genetics of invasive and native mosquitoes.*” Advisor: Dr. Michael Reiskind, Department of Entomology, NCSU
- BSc in Biology, Minors in Statistics & English** **Aug 2007 to Jun 2011**
The University of Texas-Rio Grande Valley (UT-RGV), Edinburg, TX
“*Impact of a trematode parasite on the consumption, growth, and reproduction of an aquatic snail host.*”
Advisor: Dr. Brian Lund Fredensborg, Department of Biology, UT-RGV

RESEARCH EXPERIENCE

- Graduate Research Assistant** **Jan 2013 to Present**
North Carolina State University, Raleigh, NC
Study the geospatial and evolutionary responses of the yellow fever mosquito to the invasive Asian tiger mosquito using interdisciplinary ecological and genetic approaches in the lab of Dr. Michael Reiskind.
- Research Technician I** **Jan 2012 to Dec 2012**
U.S. Department of Agriculture (USDA)/UT-RGV Cooperative, Edinburg, TX
Methods development for a USDA Sterile Insect Technique Mexican fruit fly mass-rearing facility.
- Biological Science Technician** **Aug 2011 to Sept 2011**
USDA Animal and Plant Health Inspection Service, Edinburg, TX
Population genetics of invasive mite species known to vector *Citrus leprosis*.
- Student Researcher** **Aug 2009 to May 2011**
University of Texas-Rio Grande Valley, Edinburg, TX
Research on the ecosystem energetics of parasites using a snail-trematode model. Independent research resulted in an undergraduate thesis and defense.

GRANTS AND FELLOWSHIPS

- National Science Foundation (NSF) Graduate Research Fellowship** **Aug 2014**
Student support for three years. Includes a tuition and fees honorarium and an annual stipend of \$32,000 to study the landscape patterns and population genetics of *Aedes aegypti* in the southern US.
- Undergraduate Research Initiative Grant** **Jan 2010**
Research support and travel funds to present at the Ecological Society of America meeting. \$2,000
- Howard Hughes Medical Institute Undergraduate Research Training Program** **Aug 2010**
Research stipend and travel funds to present at the Ecological Society of America Conference. \$6,200
- NSF UT-RGV Research Experiences for Undergraduates (REU) Fellowship** **Aug 2009**
Research stipend and travel funds to present at the American Society of Parasitologists and Texas Academy of Science meetings. \$5,312

PEER-REVIEWED PAPERS

Hopperstad, KA, Reiskind, MH. (2016) Recent changes in the local distribution of *Aedes aegypti* (Diptera: Culicidae) in South Florida, USA. *Journal of Medical Entomology*, doi: 10.1093/jme/tjw050. (*In Press*)

Reiskind, MH, Griffin, RH, Janairo, MS, **Hopperstad, KA**. (2016) Mosquitoes of Field and Forest: The Scale of Habitat Segregation in a Diverse Mosquito Assemblage. *Medical and Veterinary Entomology* (*Accepted*)

PUBLISHED ABSTRACTS

Hopperstad, KA, Reiskind, MH. (2015) Response of *Aedes aegypti* to *Aedes albopictus* Invasion. Oral presentation at the “30 years of hunting the tiger, *Aedes albopictus* in America: Current perspectives and future challenges” symposium at the Entomological Society of America conference, Minneapolis, MN. (*Invited*)

Hopperstad, KA, Reiskind, MH. (2015) Possible range expansion of *Aedes aegypti* in Palm Beach County, Florida. First place poster winner at the American Mosquito Control Association conference, New Orleans, LA.

Reiskind, MH, Griffin, RH, Janairo, MS, **Hopperstad, KA**. (2015) Where the reviled things are: Habitat segregation of a diverse mosquito assemblage. Poster at the Society of Vector Ecology conference, Albuquerque, NM.

Hopperstad, KA, Reiskind, MH. (2014) Historical changes in the local distribution of the yellow fever mosquito (*Aedes aegypti* L.) in south Florida, USA. Oral presentation at the Entomological Society of America conference, Portland, OR.

Fernandez, F, Vitek, C, Conway, HE, **Hopperstad, KA**. (2013) Effect of cold temperature treatment on confused flour beetle, *Tribolium confusum*. Poster at the Entomological Society of America conference, Austin, TX.

Hopperstad, KA, Fredensborg, BL. (2010) Parasites and Host Energetics: Effects of a parasitic castrator on the consumption and metabolism in an aquatic snail host. Poster at the Ecological Society of America Conference, Pittsburgh, PA.

Hopperstad, KA, Fredensborg, BL. (2010) Parasites and Host Energetics: Effects of a parasitic castrator on the consumption and metabolism in an aquatic snail host. Poster at the International Congress of Parasitology, Melbourne, Australia.

Hopperstad, KA, Fredensborg, BL. (2010) Parasites and Host Energetics: Effects of a Parasitic castrator on the consumption and metabolism in an aquatic snail host. Oral presentation at the American Society of Parasitologists Meeting, Colorado Springs, CO.

TEACHING EXPERIENCE

North Carolina State University, Raleigh, NC

Teaching Assistant, Conservation Genetics

Spring 2016

Teaching Assistant, Insects and Human Disease

Fall 2013

Duke University, Durham, NC

Guest Lecturer, Duke Global Health Institute One Health training program

May 2015

CONFERENCE PRESENTATIONS

- Hopperstad, KA**, Reiskind, MH. (2015) *Aedes aegypti* population genetics. Oral presentation at the North Carolina Mosquito and Vector Control conference, Atlantic Beach, NC. (*Invited*)
- Hopperstad, KA**, Reiskind, MH. (2015) Regaining lost ground? Local distributional changes of the yellow fever mosquito (*Aedes aegypti* L.) in recent history. Oral presentation at the Mid-Atlantic Mosquito Control Association conference, Savannah, GA.
- Hopperstad, KA**, Reiskind, MH. (2014) Historical changes in the local distribution of yellow fever mosquito (*Aedes aegypti* L.) in south Florida, USA. Oral presentation at the North Carolina Mosquito and Vector Control Association conference, Greenville, NC.
- Hopperstad, KA**, Reiskind, MH. (2014) Possible range expansion of the yellow fever mosquito in Palm Beach County, FL. First place poster winner at the North Carolina Entomological Society conference, Raleigh, NC.
- Hopperstad, KA**, Reiskind, MH. (2014) Isolation by Invasion: Yellow fever mosquito response to a competitive invasive species. Oral presentation at the USDA-PPQ-APHIS facility, Mission, TX. (*Invited*)
- Braswell, WE, Farris, R, **Hopperstad, KA**, Lukaszewski, C, Salas, B. (2012) Molecular genetic analysis of the *Citrus Leprosis* Virus vector, *Brevipalpus* (Acari: Tenuipalpidae). Poster at the USDA Hispanic Serving Institutions Project Directors Conference, UT-RGV, Edinburg, TX.
- Braswell, WE, Farris, R, **Hopperstad, KA**, Lukaszewski, C, Salas, B. (2012) Molecular genetic analysis of the *Citrus Leprosis* Virus vector, *Brevipalpus* (Acari: Tenuipalpidae). Oral presentation at the Subtropical Biology Conference, UT-RGV, Edinburg, TX.
- Hopperstad, KA**, Fredensborg, BL. (2010) Effects of a parasitic castrator on the consumption, growth and reproduction of an aquatic snail host. Poster at the HESTEC Science Symposium, Edinburg, TX.
- Hopperstad, KA**, Fredensborg, BL. (2009) Parasites & Appetites: Impact of parasitic infection on consumption Rates of Red-Rim Melania. Oral presentation and poster at the HESTEC Science Symposium, Edinburg, TX.
- Cruz, L, **Hopperstad, KA**, Fredensborg, BL. (2009) Effects of host density and tidal height on parasite abundance in fiddler crabs in Laguna Madre, Texas. Poster at the HESTEC Science Symposium, Edinburg, TX.

HONORS AND AWARDS

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| 1st place poster at the American Mosquito Control Association meeting (First-author). | Apr 2015 |
| 1st place poster at North Carolina Entomological Society meeting (First-author). | Oct 2014 |
| Certificate of Appreciation from the USDA for “excellent performance in coordinating and supervising rearing research and production studies of Mexican fruit fly.” | Sept 2012 |
| Honors Program Graduate at the UT-RGV. | May 2011 |
| International Women’s Board Scholarship at the UT-RGV. | May 2010 |
| 1st place undergraduate poster in biology at the Hispanic Engineering Science and Technology Conference (HESTEC) (First-author). | Aug 2009 |
| 2nd place undergraduate poster in biology at HESTEC (Co-author). | Aug 2009 |

K-16 AND PUBLIC OUTREACH

- Guest Speaker** **Apr 2016**
Dillard Drive Middle School. Taught 8th grade class lesson plan I developed on mosquito biology and guided students on a mosquito trapping citizen science project.
- SOVE Symposium Organizer** **Feb 2016 to Present**
Society of Vector Ecology. Organizing student symposium for the 2016 Society of Vector Ecology meeting in Anchorage, AK in collaboration with a fellow graduate student.
- ESA Conference Volunteer** **Feb 2016**
Staffed the AV ready room and uploaded speakers' talks at the Annual Southeastern Branch of the Entomological Society Meeting.
- SciREN Triangle 2016 Organizing Team Member** **Jan 2016 to Present**
North Carolina Museum of Natural Sciences. Helping coordinate networking event that brings K-12 educators and researchers together to share classroom-ready lesson plans based on current research.
- Citizen Science Research Advisor** **Dec 2015 to Present**
Calvert County Public School District. Advising citizen science project based on my mosquito biology lesson plan that will be conducted at six middle schools and will engage roughly 1,100 students.
- SciREN Triangle 2015 Researcher** **Aug 2015**
North Carolina Museum of Natural Sciences. Authored and shared classroom-ready lesson plans based on my current research with K-12 teachers.
- AMCA Young Professionals Committee Past-Chair** **Aug 2015 to Present**
American Mosquito Control Association. Organized events at the annual meeting including a professional development workshop, symposium, and social activities, as well as coordinate a monthly webinar series.
- BugFest Volunteer** **Sept 2013, 2014, 2015**
North Carolina Museum of Natural Sciences. Engaged the public using live insects & educational games.
- AMCA Young Professionals Committee Chair** **Aug 2014 to Present**
American Mosquito Control Association. Led committee in organizing events at annual meeting. Contributed articles to the AMCA newsletter and hosted a monthly young professional webinar series.
- Entomology Graduate Student Association Seminar Committee Member** **Aug 2014 to May 2016**
Helped organize two annual seminars per year for the NCSU Entomology Department.
- WakeNature Data Roundup GIS Data Wrangler** **May 2014**
North Carolina Museum of Natural Sciences. Enter local biological data into a GIS.
- Raulston Blooms Garden Festival Volunteer** **Apr 2013, 2014**
JC Raulston Arboretum at NCSU. Showed live insects and led children in crafts at the NCSU Entomological Graduate Student Association table.
- Entomology Graduate Student Association Social Co-chair** **Aug 2013 to May 2014**
NCSU Entomology Department. Co-coordinated social functions for entomology graduate students, including a welcome back barbecue, department holiday party entertainment, and new student recruitment.
- Undergraduate Preparation for USDA Career Success Mentor** **Jun 2012 to Aug 2012**
USDA Animal and Plant Health Inspection Service. Lead three undergraduate students on a project that evaluated the pathogenic effects of microbes on Mexican fruit fly development.
- Science Saturdays Student Mentor** **Oct 2010 to Mar 2011**
Weslaco Independent School District. Helped middle and high school students conduct research projects for local, regional, and state science fairs.

MEDIA & POPULAR SCIENCE WRITING

The AMCA Young Professionals: In their Own Words, contributed to article in *Wing Beats* Vol. 26, No. 1.

Talkin' About the New Generation: Young, Professional and Motivated, interview for *Mosquito Control Magazine*.

A Whirlwind of Activity and Encouragement, authored article in AMCA newsletter Vol. 43, Issue 2.

Young Professionals Group Update, authored article in AMCA Newsletter Vol. 42, Issue 4.

PROFESSIONAL AFFILIATIONS

Entomological Society of America

American Society of Naturalists

American Mosquito Control Association

Mid-Atlantic Mosquito Control Association

North Carolina Entomology Society

North Carolina Mosquito and Vector Control Association

NCSU Entomology Graduate Student Association

Society of Vector Ecology