

## 2016 Curriculum vitae



**NAME:** Laura Catherine Harrington  
**DEPARTMENT/UNIT:** Entomology  
**TITLE:** Professor and Chair  
**CAMPUS ADDRESS:** 3138/2130 Comstock Hall  
**PHONE:** 255-4475  
**EMAIL:** [lch27@cornell.edu](mailto:lch27@cornell.edu)  
**WEB PAGE:** <http://blogs.cornell.edu/harrington/>

### **BACKGROUND**

#### **EDUCATION:**

<u>Year</u>	<u>Degree</u>	<u>Institution</u>
2001	Post-doctoral	University of California, Davis, CA
1999	Ph.D.	University of Massachusetts, Amherst, MA
1993	M.S.	North Carolina State University, Raleigh, NC
1990	B.S.	St. Lawrence University, Canton, NY

#### **ACADEMIC RANK:**

Professor: 2013 to present

**PRIMARY DEPARTMENTAL / Unit PROGRAM AREA:** Medical entomology, 65% research and 35% teaching

**AREAS OF EXPERTISE:** Medical entomology, vector biology, global health, mosquito ecology and behavior, epidemiology, disease evolution and ecology

### **PROFESSIONAL EXPERIENCE**

<u>Year</u>	<u>Experience</u>
2013- Present	Chair, Department of Entomology, Cornell University, New York
2013- Present	Professor, Department of Entomology, Cornell University, New York
2007- 2012	Associate Professor, Department of Entomology, Cornell University, New York
2001 -2006	Assistant Professor, Department of Entomology, Cornell University, New York
1999- 2001	Post-doctoral researcher, Mosquito Research Laboratory, Department of Entomology, University of California, Davis
1995-1999	Research Assistant, Department of Entomology, University of Massachusetts, Amherst

- 1994-1995 Agricultural Biologist, BASF Corporation, Research Triangle Park, North Carolina
- 1993-1994 Field Research Intern, BASF Corporation, Research Triangle Park, North Carolina
- 1990-1993 Research Assistant, Department of Entomology, North Carolina State University
- 1987-1989 Research Assistant, Department of Biology, St. Lawrence University, New York

### **SABBATICALS AND STUDY LEAVES**

- 2010 Arthropod-borne Infectious Diseases Research Laboratory. Colorado State University (Ken Olson): Vector competence for US strains of the Asian tiger mosquito (*Aedes albopictus*) for Chikungunya virus (LR-OPY strain); and Venereal Transmission of Dengue-2 virus by *Aedes aegypti* males.

### **HONORS AND AWARDS**

- Stephen H. Weiss Presidential Fellow, for outstanding contributions to undergraduate education at Cornell. 2016-present
- North Carolina State University Outstanding Alumna Award 2015
- Eastern Branch ESA Distinguished Achievement Award in Teaching 2012, 2013
- Provosts Award for Distinguished Scholarship, Cornell University 2010
- Cornell University Advance Program Professional Development Award 2010
- Cornell Center for Sustainable Future Faculty Fellow 2009 to present
- International Programs Travel Award 2008
- Faculty Fellows in Service Grant Award, Malaria Interventions in Ghana 2007
- Best Paper Award at the International Conference in Modeling Health Advances 2007
- CALS Excellence in Mentoring Undergraduate Students in Research Award, April 2006
- Gordon Conference Invited Speaker, June 2006
- NSF/International Congress of Entomology Travel Award, August 2004
- CALS International Travel Award, May 2002

### **GRANT SUPPORT**

#### **Active Grants and Contracts:**

- |  |                          |
|--|--------------------------|
| <b>Harrington/Wolfner (Co-PIs)</b>                         | 06/01/2011-05/31/2017    |
| NIH 1R01AI095491   | \$1,549,472 total direct |
| “New Targets for Reproductive Control of Mosquito Vectors” |                          |

The goal of this study is to directly identify and determine the function of seminal fluid proteins produced in male mosquitoes and transferred to females during mating. We focus on targets that could be manipulated as a novel means of female mosquito reproductive/behavioral control.

**Harrington (PI)** 05/01/2015-10/31/2016

Bill and Melinda Gates Foundation \$100,000 total direct

“Novel acoustic surveillance techniques for male and female mosquitoes.”

In this project, we will utilize our knowledge of mosquito attraction to acoustic signals and other sensory modalities to develop the world’s first low cost and efficient trap for mosquito disease vectors across the sexes and a range of physiological states.

**Harrington/Wolfner (Co-PIs)** 10/01/2014-09/30/2017

NYC-139487, USDA NIFA – Hatch Federal Capacity \$75,000 total

Funds

“Taming the Tiger: Using Males to Control the Invasive Asian tiger mosquito in New York State”

The goal of this project is to understand strategies to use males to control the invasive Asian tiger mosquito in New York State

**Harrington (PI)** 10/01/2014-09/30/2017

NYC-139835/NE-1443 USDA NIFA- Multistate Federal \$75,000 total

Capacity Funds

Biology, Ecology & Management of Emerging Disease Vectors “Climate Change, Adaptation and range expansion of the Asian tiger mosquito in New York State”

The goal of this project is to understand how climate change influences the adaptation and range expansion of the Asian tiger mosquito in NYS.

**Harrington (Collaborator), Cator (PI)** 01/01/2016-12/31/2017

NIH R01AI118593 \$ 71,194 total subcontract

“Acoustic Mating Signals in Mosquitoes”

The goal of this project is to fully assess the fitness benefit of acoustic signaling in *Ae. aegypti* and *Ae. albopictus*.

**Harrington (Co-investigator), Radcliffe (PI)** 06/01/2015-05/31/2018

Morrison Animal Foundation D15ZO-058 \$30,000 total subcontract

“Tabanid fly host feeding and transmission patterns drive trypanosome infection in endangered Javan rhinoceroses in Ujung Kulon National Park Indonesia.”

My role is to develop methods to collect Trypanosome vectors and determine feeding and infection patterns as they relate to infection of the endangered Javan rhino.

**Harrington (co-investigator), Catteruccia (PI)** 04/01/2016-03/31/2021

NIH 1R01 \$59,790 total subcontract

“Targeting Steroid Hormone Signaling in Anopheles Mosquitoes for Malaria Control”

We will conduct experiments to understand the impact of 20E depletion on male acoustic signaling, female response and male mating success.

**Pending Grants and Contracts:**

**Harrington (co-investigator),** Murdock (PI) 05/01/2016 – 04/30/2021  
 NSF EEID 14-592 \$200,869 total subcontract  
 Mapping the potential for Chikungunya virus emergence in temperate North America: Multi-scale bio/social models of vector-borne disease transmission.

**Harrington (PI)** 08/01/2016-07/31/2017  
 USAID Grand Challenges GLOBAL-HEALTH-2016 \$300,000 total direct  
 Rapid surveillance of *Aedes* Zika vector populations using environmental DNA (eDNA)

**Harrington (PI)** 07/01/2016-10/31/2016  
 NYS Community IPM Program \$8,000 total  
 New York State Tiger Mosquito Education Network (TigerNET)

**Past Grants and Contracts:**

**Harrington, PI** 10/01/2010-09/30/14  
 Hatch 2010-11-184: Climate Change and Invasions in New York State: introduction of the Asian tiger Mosquito and Exotic Chikungunya virus \$75,000 total direct

**Harrington/Wolfner (Co-PIs)** 10/01/2011-09/30/14  
 Hatch NYC 2011-12-219 \$75,000 total direct

**Harrington (Co-investigator)** 08/05/2011- 08/04/2014  
 Bowman (PI) \$76,105 total direct  
 Novartis Animal Health Lab Service Contract  
 Research on Dog heartworm

**Harvell, Harrington, Zamudio, Co-PIs** 07/28/2008- 01/1/2012  
 Atkinson Center for Sustainable Future \$155, 000 total direct  
 Climate Warming, Disease Forecasting, and Economic Impacts

**Harrington, PI** 09/30/2009-06/09/2011  
 Cator, L., fellow \$32,327 total direct  
 Centers for Disease Control (CDC) training award  
 Acoustic signaling in the mating systems of medically important mosquitoes

**Harrington, Co-Investigator** 09/15/2005 – 09/14/2011  
 Anthony James, PI \$753,121 total subcontract  
 Grand Challenges in Global Health  
 Gates Foundation/ FNIH  
 Genetic strategies for control of dengue virus transmission

**Harrington, Collaborator** 8/01/2007- 10/01/2011  
 USDA/CSREES No direct funds

Multistate (MRF) project NE-507, Mosquitoes,  
Disease & Public Health

**Harrington, PI**

Wolfner, Co-PI

NIH/NIAID 1R21AI076828-01A1

Male Accessory Gland Proteins of the Dengue vector mosquito, *Aedes aegypti*: Novel targets for genetic control strategies.

7/10/2008 to 6/30/2011

\$423,125 total direct

**REPRESENTATIVE ACADEMIC RESPONSIBILITIES**

**RESEARCH RESPONSIBILITIES:**

**•Current Postdoctoral Associates**

Susan Villareal (2012 to present)

I. Alexandra Amaro (2016-present)

Yassi Hafezi (2016-present)

**•Past Postdoctoral Associates**

Catalina Alfonso (2012 to 2015)

Gil Menda (2015)

Phanidar Kukutla (2015)

Frank Avila (2013-2014, 2014 to 2015)

Roy Faiman (2013 to 2014)

Amber Krauchunas (2012 to 2013)

Michelle Helinski (2008 to 2012)

Diego Ruiz Moreno (2009 to 2011)

Laura Sirot (2007 to 2010)

Melissa Hardstone (2009 to 2010)

Mari Kimura (2008 to 2009)

Sander Koenraadt (2006-2008)

Hongfei Gong (2006-2008)

**•Other Current Research Professionals Supervised**

Sylvie Pitcher (2009 to present)

Olivia Winokur (2015 to present)

**Other Past Research Professionals Supervised**

Rebecca Poulson (2005-2007)

M. Caitlin McKenna (2006-2008)

Renee Anderson, Extension Associate (2003-2006)

**TEACHING AND ADVISING RESPONSIBILITIES**

**Courses Taught:**

### **Undergraduate Courses**

ENTOM 3520 Medical and Veterinary Entomology Lecture, Even Fall (2002-2012, next offered Fall 2017), 4 cr.  
ENTOM 3530 Advanced Laboratory in Medical and Veterinary Entomology, Even fall (except 2010), 1 cr.  
ENTOM 2100/BIO&SOC2100 Plagues and People. Odd Fall (2003-2011) Even Fall (2014) Spring (2016). 2-3 cr.  
NS 2060 Introduction to Global Health 3 cr. Malaria Module, Spring 2007- 2009, 2011- present  
NTRES 4940 Conservation with Communities for One Health, Spring 2016, lectures on vector biology  
ENTOM 4100 &4101 Malaria Interventions in Ghana, Fall and Spring 2 cr., 2007 to 2011  
ENTOM 4110 Health Programs in Honduras, Spring 2008 2 cr.

### **Graduate Courses**

ENTOM 6900 Ecology and Evolution of Infectious Diseases, 1 cr (2012 to 2013) co-taught with EEID faculty)  
ENTOM 767 Special Topics in Entomology. Fall 2004, Spring 2005, 1 cr. (co-taught with Ann Hajek), Guest lectures each year 2007 to present (excluding 2010)

### **Field Courses**

Global Health Summer field Course. 2011. June 12-30. Moshi, Tanzania.

### **Guest lectures**

NTRES 4940, Conservation with Communities for One Health. Spring 2016, 1 lecture and 1 laboratory, disease vectors. (Participated in organization and planning of course and grant proposal for funding).  
BioNB321, State of the Planet. Spring 2007-2008, 1 lecture: Climate Change and Vector-borne Diseases.  
ENT 767, Current Topics in Entomology. Fall 2001-2002, 2007-2010, 1 lecture: Medical Entomology or “Making the most of your Graduate Career”  
ENT 201, Alien Empire: The Bizarre Biology of Bugs, Spring 2002, 2006, 2008, 2013. 1 lecture: Insects as Vectors of Disease.  
ENT 210, General Entomology. Fall 2005, 2007, 2013. 1 lecture: Medical Entomology  
ENT 241, Applied Entomology, Spring 2002-2009. 1 lecture: Arthropods of Importance to Public Health and 1 laboratory session: Live demonstrations, slides and pinned specimens of mosquito, lice, fleas and tick vectors of disease.  
Cornell Undergraduate Research Program in Biodiversity. 1 lecture Spring 2003.  
VETMI/BIOMI 431, Medical Parasitology, 1 lecture: Mosquitoes as vectors of disease. Fall 2003-2008  
VETMI/BIOMI 409, Principles of Virology, 1 lecture: The Arboviruses. Fall 2003-2007  
BIO G 101-104. Faculty in Residence Dinner, Spring 2006, 2008  
BIO G 101-104. Lecture on Malaria, Fall 2006

### **Undergraduates mentored in Honors and Independent research (23 total):**

Adam Hatala (Biology major '17) Influence of male seminal fluid proteins of *Aedes* female mosquito feeding behavior.

Daniela Schmulevich (Biology and Society major, Honors '13) Bioterror Threats Communicated: the Exacerbation of Fear by the Media and its Subsequent Effects

Rebecca Johnson (Entomology/Biology Double major, Presidential Research Scholar '12) Mosquito vectors of Eastern Equine Encephalitis virus in Maine.

Ayesha Ahsan (Biology and Society major, Honors '12) A Problem-Solving Approach to Public Health Risks during the Hajj.

Melissa Orteza (Biology and Society major, Honors '11). Effect of female mating status on female re-mating frequency in *Aedes aegypti*.

Laura Seeholzer (Entomology/Biology Double major '10, Honors), Biology Honors: Sperm usage patterns of the dengue vector mosquito, *Ae. aegypti*.

Laura Seeholzer (Entomology/Biology Double major '10, Honors), Entomology Honors: Synergistic effects of carbon dioxide and human skin volatiles in mosquito attraction: and its utility towards the development of a novel mosquito control strategy. Current status: Research Associate, Rockefeller University, NYC

Gaurvika Lal Nayyar (Human Ecology major '10, Honors), Knowledge, Attitudes and Practices of residents and doctors during an outbreak of Chikungunya in India. Current status: Research associate at the Fogerty Center/NIH

Cristina Munk (Entomology major '09, Honors), Host Orientation and Location Distances for the Malaria Vector, *Anopheles gambiae*, in Tanzania. Current status: Masters in Public Health Program at Johns Hopkins.

Vanessa Scialabba (Biology major '09, Honors), Larval development, survival and pupal survival of the transgenic 3604C L1 RIDL dengue vector strain compared to a wild-type Mexico strain of *Aedes aegypti*. Current status: Industry R&D.

Peter Hashim (History major '08, Independent research), Environmental effects on competitive success of the invasive Asian Tiger mosquito with mosquito species from New York State. Current status: Yale Medical School

Terence Zimmerman (Biology major '08, Independent research), Development of behavioral assays for mosquito mating behavior. Current Status: Columbia University Masters of Public Health program.

Bianca Chang (Biology major '08, Honors), Potential use of ACE inhibitors to reduce fertility of the dengue vector mosquito, *Aedes aegypti*. Current Status: NIH

Nishant Soni (Biology major '07, Independent research), Temperature dependent development of *Ae. aegypti* under fluctuating regimes. Current Status: Medical School. See article in Connecting with Cornell “Unparalleled Experiences” <http://www.research.cornell.edu/VPR/CWC201-07/undergrad/>

Beth Meccariello (Biology major '06 and Howard Hughes Student, Honors), Effect of climate change on range expansion of the Asian Tiger mosquito, *Aedes albopictus*, in the United States. Current Status: Cornell School of Veterinary Medicine for DVM/PhD program.

Roxanna Garcia (Animal Science major '06), Population genetics of *Oc. j. japonicus*, an invasive mosquito vector in North America. Current Status: MD, currently resident in neuroscience at UC San Francisco.

### **Undergraduate Honors Committee Memberships:**

Emily Shertzer (Biology and Society '16), Weather and Foraging Behavior in Free-Living Birds.

Brittany Hamlin (Biology and Society '15), The Socioeconomic Impact of Malaria Control and Eradication in Venezuela.

### **Current Undergraduate Advisees (7):**

Ben Lee '16 (Entomology)  
Allison Brockrath '16 (Biology and Society)  
Connor Hinsley '17 (Entomology)  
Joseph Biron '17 (Biology and Society)  
Danielle Olonoff '18 (Biology and Society)  
Kelly Pellegrino '18 (Biology and Society)  
Grace Winhoven '18 (Entomology)

### **Past Undergraduate Advisees (32):**

Ruth Enriquez '17 (Biology and Society)  
Karrine Guerrier '15 (Biology and Society)  
Dalal Hussain '15 (Biology and Society)  
Claire MacManus '15 (Biology and Society)  
Anita Mbogoni '15 (Biology and Society)  
Emily Bryce '14 (Biology and Society)  
Kadidjia Adula '14 (Biology and Society)  
Alysia Wiener '14 (Entomology)  
Jun Lee '14 (Biology/Entomology)  
Claire MacManus '14 (Biology and Society)  
Briana Walker '13 (Biology and Society)  
Tiffany Rose '13 (Biology and Society)  
William Jenkins '13 (Interdisciplinary Study)  
Itamar Niesvizky '13 (Biology and Society)  
April Dee Aviles '13 (Biology and Society)  
Mahindra Mohan '12 (Biology and Society)



Christopher Donovan '12 (Entomology)  
Rebecca Johnson '12 (Biology/Entomology)  
Jordan Leon-Atkins '11 (Biology and Society)  
Lauren Wetterhahn '11 (Biology)  
Laura Seeholzer '10 (Biology/Entomology)  
Renata West '10 (Biology and Society)  
John Xu '10 (Biology and Society)  
Michael Rossidis '09 (Biology and Society)  
Cristina Munk '09 (Entomology)  
Michael Bolling '09 (Entomology)  
Caeleigh Beerworth '08 (Biology and Society)  
Ashley Stewart '08 (Biology/Entomology)  
Jennifer Paress '08 (Biology and Society)  
Saqib Hassan '06 (Biology and Society)

**Past Teaching Assistants (Graduate & Undergraduate) and Other Teaching Support Professionals Supervised:**

Talya Shragai 2016  
John McMullen 2016  
Philip Loutz 2016  
Ethan Degner 2014  
Leticia Smith 2014  
Ashley Stewart 2014  
Nicholas Ledemsa 2012  
Ginny Howick 2011  
Prasit Deewatthanawong 2011  
Calum Russell 2011  
Elaine Fok 2011  
Punita Jujena 2009  
Gaurvika Nayyar 2009  
Katherine Connors 2008  
Lauren Cator 2007, 2009  
Emily Meyer 2007  
Cristina Munk 2007  
John Darbro 2004  
Alongkot Ponlawat 2006

**Other Relevant Teaching and Advising Activities and Accomplishments:**

Engaged Cornell Teaching Grant and Course, “Conservation with Communities for One Health”  
Teaching team member 2016 and 2017.

Biology Scholars Program for historically underrepresented students in biology. Freshman seminar presenter /lab tour and discussion leader. 2012, 2013, 2016

CIRTL Panel presentation 2014. “What I Wish I'd known about Mentoring before Becoming a Faculty Member”

Cornell Global Health Student Council Ted-Talk Event. 2013. Ted talk presenter “Global research on disease vectors and career opportunities”

CIRTLCast on "Mentoring Graduate Students and Postdocs." 2012. A national seminar on key tips for future faculty. [http://www.cirtl.net/files/Nov\\_30\\_CIRTLCast\\_2012Flier.pdf](http://www.cirtl.net/files/Nov_30_CIRTLCast_2012Flier.pdf)

Cornell University First Year Book Project Lecture for Homer and Langley. 2011. “1918 Influenza and other pandemics: what is next?”

Cornell University First Year Book Project Group Discussion Leader. 2009. The Grapes of Wrath.

Online lecture in “Epidemiology of Vector borne Diseases”. 2010. Henry Stewart Talks. (<http://hstalks.com/?t=BL1182705-Harrington> ).

Cornell CIRTL (Center for Integrated Research Teaching and Learning) and proposal team member (2011)

Faculty Advisor for Cover Africa Student Organization (2007 to present)

Faculty Advisor for the Cornell Student Society for Public Health (2009 to present)

Faculty Advisor for Partnership for Honduran Health Student Organization (2007 to 2008)

2007 Faculty Fellows-In-Service Awardee (\$2000), Malaria Interventions in Ghana

**EXTENSION/OUTREACH RESPONSIBILITIES:** (No formal extension responsibilities)

**Extension Professionals Supervised**

Renee Anderson (2003-2006)

**Program Work Team(s)/Program Councils, Administrative Leadership**

Chair, New York State Community IPM committee, 2005 to 2010.

**Recent Seminars for Lay Audiences**

“Tick and Mosquito borne disease in New York State” Kendall at Ithaca, June 2016

“The Science of Battling a Mosquito-borne Disease” Barbara McLintock Symposium, Cornell, May 2016

“Influenza: A case study in pandemics past and present” Cornell Institute for Biology Teachers, October 2011

“The Plight of African Nations” Cortland Rotary, January 2013

“Ticks and Lyme Disease” Cortland Rotary, May 2014

“Tick borne disease” Cortland Chapter of Cornell Women’s Alumni Association, May 2015.

“Zika virus- what you need to know” Kendall Senior Center, Ithaca, June 2015.

**Extension/Outreach Workshops, Field Days, and Conferences**

2016 New York State DEC recertification course seminar, Aedes mosquito vectors

2016 NAPCA Webinar on Zika Virus

2012-13 Hosted lab tours with Cornell Freshman Biology Scholars

2011 “Talk to an expert day” at Ithaca Elementary School (Beverly J. Martin)

2008, 2015 Worked with Kathy Kraft at the Ithaca Science Center to set up the “Blood Suckers” exhibit. Provided samples of live mosquitoes for the exhibit.  
 Annual Participant in Cornell Department of Entomology’s “Insectapalooza” (2006-present)

**Internet Presence/Distance learning**

Global Health Malaria module lectures offered on Cornell Program in International Nutrition and Health (2009)

**Other Relevant Extension/Outreach Activities, Accomplishments**

Answering phone calls/e-mail requests for information from citizens (annually, 25 individual responses in 2015)

Tick identification (3 specimens in 2015)

Participation in CALS alumni presentations/events (2009)

Participation in Expanding Your Horizons Program (2009)

Intel Science Summer mentor for high school students: Emily Bick 2008, Lori Ying 2009 (Finalist for Intel Science National Competition 2010)

**Summary of extension and outreach activities by CALS faculty.**

0 % Formal appointment in Extension (Professorial, Senior Extension Associates and Extension Associates)

5-10 % Estimation of time spent in outreach activities (other than or in addition to formal appointment in Extension)

Extension	Answering phone calls from citizens and pest control operators in New York State. Responding to e-mail inquiries. Maintain extension fact sheets on my website. Provide information to Cooperative Extension Agents. No standard indicators of success.
Outreach	Provide information to media about mosquitoes and vector borne diseases (interviewed for 8 different news articles and radio programs in 2015). Respond to questions and inquiries from Cornell parents, students and alumni (5 responses in 2015). Participate in Departmental and CALS Outreach activities such as Insectapalooza, CALS advisory council presentations and Alumni Weekend presentations. Identify insects for hospitals (e.g. Robert Packard Hospital in Sayre, PA). Provide informal guidance to international collaborators and students (for the National Institute of Malaria Research – Tapachula campus, Mexico). Participant in Expand Your Horizon’s Program. Conduct tick and mosquito identifications.

**GRADUATE FIELD MEMBERSHIPS:** Entomology, Ecology and Evolutionary Biology, Comparative Biomedical Sciences

**GRADUATE GROUP MEMBERSHIPS:** Infection and Pathobiology, Ecology and Evolution of Infections and Disease, Virology

**UNDERGRADUATE MAJOR MEMBERSHIPS and ADVISING:** Entomology, Biology and Society, Biology

## **GRADUATE MAJORS**

Ethan Degner, PhD candidate, estimated completion in May 2018

Talya Shragai, PhD candidate, estimated completion in May 2020

### **Total Completed:**

Nicholas Ledesma, PhD. January 2014. Thesis title: Mosquito transmission of dog heartworm (*Dirofilaria immitis*), from the laboratory to the field: DNA barcoding blood meal analysis for vector incrimination, refining degree-day development models for diurnal temperature fluctuation, and assessing knowledge and socio-behavioral risk factors in two endemic residential areas.

Prasit Deewatthanawong, M.S. January 2013. Thesis title: Mating biology of *Aedes aegypti* males.

Lauren Cator, PhD. May 2011. Dissertation title: The Role of Bioacoustics in the Mating Behavior of Medically Important Mosquitoes

Alongkot Ponlwat, Ph.D. December 2007. Dissertation title: Reproductive biology of the dengue vector, *Aedes aegypti*

Jonathan Darbro, Ph.D. December 2006, Dissertation title: Factors affecting blood feeding patterns of *Culex* mosquitoes: Studies of host-seeking patterns, avian anti-mosquito defensive behavior and host disease

## **GRADUATE MINORS**

Leticia Smith (Entomology), PhD candidate, estimated completion in May 2019.

Laura Figueroa (Entomology), PhD candidate, estimated completion in May 2020.

### **Total Completed since 2006:**

Gil Menda (Neurobiology and Behavior), PhD. December 2014

Jacob Crawford (Entomology), PhD, August 2012

Christine DeCarlo (Epidemiology), PhD, January 2010

Mari Kimura (Ecology and Evol. Biology), PhD January 2009

Melissa Hardstone (Entomology), M.S./PhD August 2009

Fabio Sanchez (Biomathematics), Ph. D. May 2006

## **REPRESENTATIVE PROFESSIONAL ACTIVITIES**

### **PROFESSIONAL SOCIETIES:**

Society for Vector Ecology (1996 to 2013)

Association of University Women (2001-2005)

Entomological Society of America (1990 to present)

American Mosquito Control Association (1996 to 2009)

Northeast Mosquito Control Association (2002 to 2010)

American Society for Tropical Medicine and Hygiene (1998 to present)

American Committee on Arthropod-Borne Viruses (ACAV) (2012 to present)

American Committee of Medical Entomology (ACME) (2001 to present)

### **EDITORIAL BOARDS:**

Subject editor, Journal of Medical Entomology (2008 to 2013), Guest Editor PLOS Neglected Tropical Diseases 2012.

## **COMMITTEE ASSIGNMENTS:**

### **International/National:**

Kelly Label Award Committee, 2011 to present, American Society for Tropical Medicine and Hygiene

Young Investigator Award Committee, Entomological Society of America, 2008 to present  
Education Committee, 2007 to present, American Society for Tropical Medicine and Hygiene  
ISPRS - Remote Sensing Applications and Policies Working Group VIII / 2 - Public Health, 2008-2012

ESA Early Career Innovation Award Committee (2008-present)

Executive Councilor, 2001-2006, American Committee of Medical Entomology

ESA Section D Secretary 2006

Commodity and Other Stakeholder: Member, 2002- 2006. Human Health Commodity Working Group. Northeastern Pest Management Center.

AMCA: Member, 2004 to 2007, Science and Technology Committee.

### **University:**

University Courses Advisory Board (2013-2016)

Adhoc tenure and promotion review committee (2013- 2014)

Cornell CIRTl (NSF Center for the Integration of Research, Teaching, and Learning (CIRTl) Steering committee (2011-2016)

CU-CIRTl Advisory Board (2012- present)

CIRTl program director search committee (2012)

Cornell Program in Global Health Advisory Board (Ithaca and Weill-NYC Campuses), 2006 to 2010

CALS, Undergraduate biology task force, 2007 to 2008

Life Sciences Advisory Committee, 2008 to 2011

Cornell Biology Implementation committee, 2008 to 2009

CALS, Faculty Senate, 2006 to 2007

CALS faculty financial advisory committee, 2005 to 2008

Chair, Community IPM committee, 2005 to 2010

### **Department:**

2013 to present, Department Chair

2012 to 2013, Faculty mentoring committee

2011 to 2013, Awards Committee (chair 2012-13)

2011 to 2012 Insect Immunology Search Committee

2010 to 2011 Strategic Planning Committee

2008 to 2010, Executive Committee

2007 to 2013, Sarkaria Arthropod Research Laboratory (SARL) Committee

2006 to 2009, Entomology Graduate Admissions Committee

2003 to 2010 Griswold Committee (Chair Griswold, 2006)

2003 to 2007, Outreach Committee

2003 to present, Rogoff Committee

2003 to 2013, Curriculum and Teaching Committee

2002 Fall Faculty Retreat Planning Committee

## **REPRESENTATIVE PROFESSIONAL CONTRIBUTIONS**

### **CONFERENCES/WORKSHOPS/IN-SERVICE PARTICIPATION**

NESCent Catalysis Meeting “Ecological Immunology Applied to Vector Biology and Vector-Borne Disease.” August 2015.

NYS Tick-Borne Disease Research Workshop. March 2015.

Inside Cornell: Health, Climate and Mosquito-Borne Disease, May 2012.

(<http://www.cornell.edu/video/?videoID=2109>)

Washington Congressional Briefing “Insect Invasions”, July 2011

CALS “Making a World of Difference” Panel Speaker, April 2009

Symposium Organizer, 2008. Symposium Organizer, 2008. “Progress towards understanding the fitness of transgenic mosquitoes”, Annual American Society of Tropical Medicine and Hygiene meeting.

Research on mosquito vectors in the community. 2007. NYS Community IPM meeting Roundtable host – Career Development in Tropical Medicine and Health. 2007. ASTMH Meeting, Philadelphia, PA

Climate change and invasive mosquito vectors of human and animal pathogens, 2007. CALS Advisory Board Meeting

Vector Containment Guidelines Working Group, Foundation for NIH (FNIH), 2006 to 2008.

Grant Review Panels, 2005 to present. NOAA/SBIR program reviewer. Climate applications for advanced decision making.

2005 NIH Special Emphasis Panel.

NIH International Research in Infectious Diseases Panel, 2007- 2008.

NIH Vector Biology Study Section Ad Hoc member 2011,

NIH Vector Biology Study Section Permanent Member 2012-2016.

Subject editor, 2003 to 2012. Journal of Medical Entomology.

Journal Peer Reviewer. 2001 to present. (8 reviews in 2015). Science, PNAS, American Journal of Tropical Medicine and Hygiene, Journal of Medical Entomology, Journal of the American Mosquito Control Association, Journal of Vector Ecology, Vector Borne and Zoonotic Diseases, Emerging Infectious Diseases. PLoS Biology, PLoS NTD, Parasitology research, Science, Nature, Environmental Health, Parasites and Vectors. Journal of Environmental Entomology.

Books/Other Peer Reviewer. 2001. Encyclopedia of Pest Management, Cornell Cooperative Extension.

Symposium Organizer, 2005, Mosquito Mating Systems. International Meeting of the Society of Vector Ecology, Reno, NV.

Symposium Organizer, 2004, Honoring the Contributions of Professor John D. Edman. Society for Vector Ecology Meeting, Boston MA.

Section D Student Competition Moderator, 2003 Entomological Society of America Meeting 2003.

Cornell Department of Entomology Linnaean Games Coach, February 2003 to 2005.

Chair, Howard Hoogstraal Medal Award Committee, International award for achievement in Medical Entomology, 2003-2004.

Symposium Organizer, New Technology for Field Based Studies of Disease Vectors. Society for Vector Ecology Meeting, 2002, Albuquerque, NM.  
Developed and administered 1st American Committee of Medical Entomology (ACME) Student Travel Award, 2002. To be awarded annually to fund student travel to present research pertaining to arthropods affecting human health.  
West Nile Virus National Response Team. 2002 to 2007.  
Symposium Organizer, Management of insecticide resistance in medically important insects. Entomological Society of America Meeting, 2001, San Diego, CA.  
Student Competition Judge, Entomological Society of America Meeting, 2001, San Diego, CA.  
Participant, Thornfield Teaching Workshop. 2001. Cornell University College of Agriculture and Life Sciences workshop promoting more effective teaching.  
Panel presenter, Lyme disease and West Nile vectors in New York State. 2001. Presentation for “The risks and implications of Lyme disease and West Nile virus in the Southern Tier.” Tanglewood Nature Center and Museum, Elmira College.

### **INVITED PRESENTATIONS (since 2006)**

VectorBiTE RCN: Vector Behavior in Transmission Ecology Research Coordination Network, session leader “How do age and stage-specific life history and behavioral traits impact transmission dynamics?” March 2016

University of Georgia, Department of Infectious Diseases, College of Veterinary Medicine. “Biology and behavior of the Zika vector” March 2016

North Carolina State University, Department of Entomology. “Nuances of mosquito behavior and biology: subtle and critical components of disease transmission.” October 2015.

Virginia Tech, Fralin Life Science Institute. “Seminal influences: biology and behavior within the mosquito mating system.” September 2015.

Kenote Speaker, EEID: Ecology and Evolution of Infectious Diseases Conference. “Mosquito-host-virus dynamics influencing the transmission patterns of dengue and Chikungunya viruses.” Athens, GA, March 2015

New Jersey Mosquito Control Association. “Dog Heartworm transmission by *Aedes albopictus*.” March 2015

University of Texas Medical Branch, Galveston. Seminar Series. January 2015

Global Health Distinguished Scholar Series. “Malaria: Global Risk Requires Global Solutions” Ithaca College. April 2013.

Harvard School of Public Health Department of Immunology and Infectious Diseases mini-symposium “Towards malaria eradication: targeting the mosquito vector”. March 2013

Gordon Conference on Tropical Infectious Diseases. “Vector behavior essential for genetic control”. Galveston, TX. February 2013.

University of Maryland Center for Health & Homeland Security (CHHS) Public Health Preparedness Conference. Panel presenter on emerging vector borne diseases in the United States: Mosquito-borne Threats in a Changing World. January 2013

Research and Policy for Infectious Disease Dynamics (RAPIDD) Workshop. Title: Movement of *Aedes* mosquito vectors: future considerations and research goals. September 2012.

Climate change, globalization and emerging vector borne diseases. Ithaca College Environmental Sciences Seminar Series. November 2012.

Movement of *Aedes aegypti*: a review of the literature and critical unanswered questions. Fogerty Center’s Research and Policy for Infectious Disease Dynamics (RAPIDD) workshop. September 2012.

Medical entomology: direct injury and disease transmission. Cayuga Medical Center Seminar Continuing Education Series for medical personnel, Ithaca, NY. March 2012

Research on mosquito disease vectors in Thailand. Cornell Southeast Asia Program, Brown Bag Seminar Series. April 2012.

Mosquito mating biology and behavior. Penn State University, Department of Entomology, October 2011

Reproductive Success of Mosquito Vectors: Why Male Biology Matters. Vanderbilt University, Department of Biology, April 2011

Mosquito borne infections in a changing world: rethinking our approach to vector-borne disease control and prevention. Snodwigs, Department of Entomology, Cornell University. October 2010.

Dengue on a shrinking planet: Present and future challenges for understanding and controlling an emerging mosquito-borne infection. Annual Meeting of the American Society of Parasitologists. President’s Symposium. Knoxville, TN. August 2009.

Emerging mosquito-borne viruses. Zoonotic Diseases Symposium. Cornell University, February 2009.

From fruit flies to mosquitoes: Building on the research mentorship of Dick Axtell. ESA Annual Meeting, November 2008.

Climate Change: Insect Pests and Vector-borne Diseases in New York. November 2008. L.C. Harrington. Albany Agriculture and Markets.



Research on Dengue and West Nile Virus Vectors. September 2008. L.C. Harrington. Cornell Virology Program Retreat. Cayuga Nature Center.

Mosquito vector biology and behavior: factors leading to the global emergence of human dengue infections. Shoals Marine Laboratory, July 2008

Biology and behavior of the dengue vector, *Ae. aegypti*. Ifakara Health Research Center, Ifakara, Tanzania, June 2008.

Male reproductive proteins and mating behavior of the dengue vector, *Aedes aegypti*. Johns Hopkins School of Public Health. May 2008.

Grand Challenges in Global Health: Can We Design a Dengue Refractory Mosquito? Department of Entomology. Cornell University. April 2008

Mosquito Mating Biology and Behavior: New Targets for Vector-borne Disease Control. New Jersey Mosquito Control Association Annual Meeting. March 2008.

Mating biology and behavior of the dengue vector, *Aedes aegypti*. Department of Entomology and Nematology. University of Florida, Gainesville. February 2007.

Biology of the dengue vector mosquito *Aedes aegypti*: new insights into the complexity and transmission of vector borne diseases. Department of Parasitology, New York University. February 2007.

Gordon Research Conference on the Biology of Host-Parasite Interactions. Salva Regina University, RI. June 2006.

New insights into the ecology and behavior of the dengue mosquito, *Aedes aegypti*. February 2006. Cornell Department of Entomology. Geneva, NY.

#### **CONFERENCE PRESENTATIONS (\*presenter)**

When the bite is right: *Aedes aegypti* feeding patterns in nature. Laura C. Harrington\* International Congress of Entomology. Orlando 2016.

Seminal influences: male mosquitoes and their contribution to female biology, behavior and disease transmission. Laura C. Harrington\*. Entomological Society of America Meeting. Minneapolis 2015.

Polyandry in the dengue vector *Aedes aegypti*. Ethan Degner\* and Laura C. Harrington. Entomological Society of America Meeting. Minneapolis 2015.

Mosquito hearing: opening the door to a new mosquito sensory modality. Laura C. Harrington\*. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Philadelphia 2015.

Male accessory gland function in the dengue vector, *Aedes aegypti*. Catalina Alfonso\* and Laura Harrington. Annual Meeting of the American Society of Tropical Medicine and Hygiene. New Orleans 2014

Post-insemination transcriptional response in the lower reproductive tract of *Aedes aegypti* females. Ethan Degner\*, Catalina Alfonso and Laura Harrington. Annual Meeting of the American Society of Tropical Medicine and Hygiene. New Orleans 2014

Human blood feeding patterns of *Aedes aegypti*: implications for dengue epidemiology. Laura C. Harrington\*; Thomas W. Scott; Diego Ruiz Moreno. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Washington. 2013.

Male accessory gland function in the dengue vector mosquito. Catalina Alfonso\*; Laura C. Harrington. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Washington. 2013.

A knowledge, attitudes and practices study for dog heartworm in Florida. Nicholas Ledesma; Phillip Kaufman, Rue Xui and Laura C. Harrington. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Washington. 2013.

Influences of male seminal fluid proteins in the absence of sperm on female blood feeding and sexual receptivity for the dengue vectors, *Ae. aegypti* and *Ae. albopictus*. Laura C. Harrington\*, Michelle Helinski, Sylvie Pitcher, Laura K. Sirot and Mariana F. Wolfner. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Atlanta 2012.

Vertical and venereal transmission of DENV2 in *Aedes aegypti*. Irma Sanchez-Vargas\*, Laura C. Harrington, Jeff Doty and Ken E. Olson. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Philadelphia PA. 2011

Dose and duration effects of seminal fluid proteins on female mating behavior in *Aedes aegypti* and *Aedes albopictus*. Michelle EH Helinski\*, Prasit Deewatthanawong, Laura K Sirot, Mariana F Wolfner, Laura C Harrington. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Philadelphia PA. 2011

Vector Competence of US strains of the Asian Tiger Mosquito, *Aedes albopictus*, for Chikungunya Epidemic Virus (CHIKV 226OYP). Laura C. Harrington\*, Irma Sanchez-Vargas, and Kenneth E. Olson. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Philadelphia PA. 2011

Seminal fluid protein identification and potential functions in the dengue vector, *Aedes aegypti* Laura K. Sirot, Melissa C. Hardstone, Michelle E. H. Helinski, Mari Kimura, Prasit Deewathanawong, Mariana F. Wolfner, Laura C. Harrington\*. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Atlanta, GA. 2010.

Harmonic convergence and the sexy sons hypothesis in *Aedes aegypti*. Lauren J. Cator\*, Ronald Hoy and Laura C. Harrington. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Atlanta, GA. 2010.

Blood-Feeding patterns in mosquito communities. Luis F. Chaves\*, Carolyn Keogh, Laura C. Harrington, Uriel Kitron. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Atlanta, GA. 2010.

Multiple mating in *Aedes aegypti*: sperm transfer and usage patterns. Prasit Deewatthanawong\*, Laura C. Harrington. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Atlanta, GA. 2010.

Investigation of polyandry in *Aedes aegypti* under semi-field conditions in Southern Mexico. Michelle Helinski\*, Laura Valerio, Luca Facchinelli, Thomas W. Scott, Janine Ramsey-Willoquet, Laura C. Harrington. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Atlanta, GA. 2010.

Effect of male mating history on female fecundity and longevity in the dengue vector *Aedes aegypti*. \*Michelle Helinski, Laura K. Sirot, Mariana F. Wolfner, and Laura C. Harrington. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Washington, D.C. 2009.

Assortative mating in the dengue vector mosquito, *Aedes aegypti*. \*Laura C. Harrington, Katherine J. Connors, Lauren J. Cator, and Michelle E. Helinski. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Washington, D.C. 2009

Bioacoustics and courtship in *Aedes aegypti* and *Anopheles gambiae*. \*Lauren J. Cator, Ronald R. Hoy, Laura C. Harrington. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Washington, D.C. 2009

Allelic diversity of the putative sex peptide receptor homolog in *Anopheles gambiae* from the Kilombero district of Tanzania. \*Melissa C. Hardstone, Laura K. Sirot and Laura C. Harrington. Annual Meeting of the American Society of Tropical Medicine and Hygiene. Washington, D.C. 2009

Male fitness and mating biology of transgenic *Ae. aegypti*. \*Laura C. Harrington, Annual Meeting of the American Society for Tropical Medicine and Hygiene. New Orleans, LA. 2008

The effect of male age on female lifetime reproductive success of the dengue vector, *Aedes aegypti*. \*Alongkot Ponlawat and Laura C. Harrington. Annual Meeting of the American Society for Tropical Medicine and Hygiene. New Orleans, LA. 2008

A behavioral approach to fitness studies in the laboratory: comparing a transgenic RIDL strain of *Aedes aegypti* to a recently colonized wild-type strain. \*Michelle Helinski, Terrence Zimmermann, Morgan McKenna, Laura C. Harrington. Annual Meeting of the American Society for Tropical Medicine and Hygiene. New Orleans, LA. 2008.

Is cytochrome P450-mediated permethrin resistance costly in *Culex pipiens quinquefasciatus*? \*Melissa C. Hardstone, Xiao Huang, Laura C. Harrington, Jeffrey G. Scott. Annual Meeting of the American Society for Tropical Medicine and Hygiene. New Orleans, LA. 2008

The effect of West Nile Virus Perceptions and Knowledge on Human Prevention Practices and Vector Breeding in Residential Yards in Upstate New York. \*W. Tuiten, C.J. Koenraadt, K. McComas and L.C.Harrington. Annual Meeting of the American Society for Tropical Medicine and Hygiene. Philadelphia, PA. 2007

A New Climate Based Model for Forecasting West Nile Mosquito Vector Population Abundance and Human Risk. \*L.C.Harrington, H. Gong and A. DeGaetano. Annual Meeting of the American Society for Tropical Medicine and Hygiene. Philadelphia, PA. 2007

The Role of Flight Tone Characteristics on Mate Selection of the Yellow Fever Mosquito, *Aedes aegypti*. 2007. \*L.J. Cator, R. Hoy and L.C.Harrington. Annual Meeting of the American Society for Tropical Medicine and Hygiene. Philadelphia, PA.

Measuring the Impact of Unpredictable Environments on Mosquito Vectors and Implications for Disease Risk Modeling. 2007. \*C. J. Koenraadt, H. Gong, L.C. Harrington. Annual Meeting of the American Society for Tropical Medicine and Hygiene. Philadelphia, PA

Traits influencing male reproductive success of the dengue vector mosquito, *Aedes aegypti*. \*A. Ponlawat and L.C.Harrington. 2007. Late Breaker Session. Annual Meeting of the American Society for Tropical Medicine and Hygiene. Philadelphia, PA.

A Climate based Model for West Nile mosquito vectors in the Northeastern USA. 2007. \*H. Gong, A.T. DeGaetano and L.C.Harrington. The International Conference in Modeling Health Advances, San Francisco, October, 2007. Winner of the Best Paper Award.

Variability in morphology prevents accurate adult identification of the West Nile vectors, *Culex p. pipiens* and *Culex restuans*. 2006. L.C.Harrington and R.L. Poulson. Entomological Society of America Annual Meeting. Indianapolis, IN.

Male sperm capacity and mating biology of the dengue vector mosquito, *Ae. aegypti*. 2006. L.C.Harrington and A. Ponlawat. Annual Meeting of the American Society for Tropical Medicine and Hygiene. Atlanta Georgia

New Insights into Blood Feeding Behavior and Ecology of the Dengue Vector, *Aedes aegypti*. 2006. L.C. Harrington. Gordon Conference on Host Parasite Interactions. Salva Regina University, RI.

Blood feeding patterns of *Aedes aegypti* and *Aedes albopictus* in Thailand. 2006. A. Ponlawat\* and L.C.Harrington. Asa Fitch Award Presentation. Eastern Branch- Entomological Society of America, Charlottesville, Virginia.

## RESEARCH PANELS

Global Health Advisory Panel. Cornell University 2006 – 2010  
Cornell University Minority Health and Health Disparities Advisory Panel member. 2006  
International Research Training Program (MHIRT): Biomedicines and Control of Tropical Infectious Diseases and Vectors. January 2005 – 2006.

## CONSULTING

Global Justice Clinic at NYU School of Law 2014  
West Nile virus and Lyme disease risk factors 2007  
Cornell Environmental Health and Safety 2007  
Indiana Economic Development Corporation. 2007  
Ranger Rick Magazine. 2007  
New York State Museum. Wall of Invasives. 2006-2007

## RESOURCE FOR MEDIA (Last 5 years only)

### 2016 to March

- Interview by Amanda Garris for CALS Magazine spring issue on Rhino Conservation project in Indonesia (March 2016)
- Resource for Buzz Feed's Dan Vergano, Zika (March 2016)
- Interview by Krishna Ramanujan for the Cornell Chronicle (March 2016)  
<http://news.cornell.edu/stories/2016/03/female-gene-changes-post-sex-may-lead-mosquito-controls>
- Resource for Mary Brophy Marcus, CBS news, Zika (March 2016)
- Cornell in Washington Briefing, Zika (March 2016)  
<http://www.news.cornell.edu/stories/2016/03/cornell-scientists-brief-press-zika-virus-dc>
- interviews by Liz Szabo, USA Today, Zika and *Aedes aegypti* (January-March 2016)  
<http://www.wkyc.com/news/health/experts-dismiss-claims-that-pesticide-not-zika-causes-birth-defects/44797337>  
<http://nvs24.com/news/world/Bold-Zika-mosquitoes-love-to-hang-with-humans-4562499.html>
- Interview and Resource for Susan Milius, Science News on mosquitoes (February 2016)  
<https://www.sciencenews.org/article/efforts-control-mosquitoes-take-new-urgency>
- Resource and interviews by Alex Ranken, Yap Films (a BBC affiliate) on Climate, mosquito and disease documentary (February 2016 to present)
- Resource for Brady Dennis, The Washington Post, Zika (February 2016)
- Interview by Erica Cirino, Audobon, (February 2016)  
<https://www.audubon.org/news/can-birds-survive-without-mosquitoes>
- Interview by Aryn Baker, African Bureau Chief, Time Magazine (February 2016)  
Television Interview for NBC Nightly News (February 5, 2016)
- Interview by Paul Blake for BBC, Zika and mosquitoes (February 2016)
- Interview by Renee Montagne for NPR (February 2016)  
<http://www.npr.org/2016/02/02/465246337/attention-turns-to-repelling-mosquitos-that-carry-zika-dengue>
- Cornell cast. Cornell Vector biologist answers Zika virus FAQs (February 2016)  
<http://www.cornell.edu/video/zika-virus-faqs-laura-harrington>

- Interview by Lena Sun, Washington Post, Zika Virus (January 2016)

## 2015

- Interview by Sam Halpern, Documentary on Climate Change Impacts on Vector Borne Disease for the Discovery Channel (December 2015)
- Interview by Michael Toper, Time Warner Cable News, Powassan Virus (June 2015)
- Interview by Crystal Sarkakas, WSKG Public Radio, on tick borne disease (May 2015)
- Interview by Charles Simmins, North Shore Journal (May 2015)
- Interview by Matt Hayes, Ithaca Journal, Lyme Disease (May 2015)
- Interview by Kaitlyn Pirie, Real Simple Magazine, “16 Tips for an Effortless Outdoor Party” (July 2015) <http://www.realsimple.com/holidays-entertaining/entertaining/seasonal-events/outdoor-party/0205green-plants>
- Interview by John Pastor VA Tech University Relations, Commentary on Virginia Tech Article about New PNAS paper using CRISPR gene editing technology for *Ae. aegypti* (March 2015)
- Interview by Susan Milius for ScienceNews, “Sexual conflict in mosquitoes may have worsened spread of malaria”  
<https://www.sciencenews.org/article/sexualconflictmosquitoesmayhaveworsenedspreadmalaria>

## 2014

- Interview by Kate Chappel, free lance journalist, Chikungunya in Jamaica (Nov 2014)
- Buzz Saw Magazine, Insectapalooza (November 2014)  
<http://www.buzzsawmag.org/2014/11/13/creepy-crawlers-invade-cornell-university/>  
Cornell Chronicle article on mosquito blood feeding patterns on individual hosts (September 2014)
- AARP Magazine “Super bugs” by Julie Bain (October 2014)  
[http://pubs.aarp.org/aarptm/20141011\\_PR?pg=4#pg37](http://pubs.aarp.org/aarptm/20141011_PR?pg=4#pg37) \
- Interview by Carrie Miller, Suffolk Times Review, Mosquitoes and Health (June 2014)
- New York Times Science Q&A section,  
[http://www.nytimes.com/2014/06/24/science/mosquito-bait.html?\\_r=0](http://www.nytimes.com/2014/06/24/science/mosquito-bait.html?_r=0)
- Commentary for SciDev Net <http://www.scidev.net/asia-pacific/innovation/news/mosquito-genes-could-be-key-to-halting-dengue-spread.html> (March 2014)
- City Newspaper, Rochester NY. Article on ticks and Lyme disease.  
<http://www.rochestercitynewspaper.com/rochester/lyme-disease-on-the-rise/Content?oid=2384666> (May 2014)
- Mosquito Control Magazine. Article on Chikungunya Virus. (April 2014)
- America’s North Shore Journal. Article on Chikungunya and Dengue (February 2014)
- BBC Natural History Unit. Resource for mosquito biology piece for One Planet program (February 2014)
- DR. Oz, The Good Life Magazine. Interview on insect bites. (February 2014)

## 2013

- Tick information (and high resolution photos). Cabin Life Magazine, November 2013

- Science News Interview. Invasion of the Asian Tiger Mosquito by Carrie Arnold, February 2013
- Newsday. Winter cold temperatures and mosquitoes. Patricia Kitchen. January 2013
- WHCU radio interview on mosquito borne disease. August 2013
- WIVB-TV CBS affiliate in Buffalo, NY. Interview on ticks. July 2013
- WAER 88.3 Syracuse Public Radio. Interview on ticks. July 2013.
- WNBF-FM in Binghamton. Interview on ticks. July 2013
- Long Island Exchange Interview on Ticks. July 2013
- Syracuse Post Standard, Outdoors article on mosquito repellents. July 2013.
- Albany times Union. Interview on mosquito forecasting. June 2013.
- Utica Observer Dispatch. Interview on Ticks. August 2013
- Ithaca times article on Ticks and Lyme disease. October 2013.
- NBC News. [http://science.nbcnews.com/\\_news/2013/01/24/16684974-the-bright-side-of-this-winters-big-chill-fewer-mosquitoes-this-summer](http://science.nbcnews.com/_news/2013/01/24/16684974-the-bright-side-of-this-winters-big-chill-fewer-mosquitoes-this-summer). John Roach. January 2013
- Associated press. Winter temperatures and mosquito populations. Malcolm Ritter. January 2013.

#### 2012 (21 total)

- Alaska Native News. [http://alaska-native-news.com/health\\_news/7364-chances-seen-rising-for-chikungunya-outbreaks-in-nyc-atlanta-miami.html](http://alaska-native-news.com/health_news/7364-chances-seen-rising-for-chikungunya-outbreaks-in-nyc-atlanta-miami.html) December 2012
- Newswise. <http://www.newswise.com/articles/chances-rising-for-chikungunya-outbreaks-in-nyc-atlanta-miami> December 2012
- Cornell Chronicle. “Chikungunya outbreaks in U.S. are increasingly likely” <http://www.news.cornell.edu/stories/Dec12/Chikungunya.html>
- Cornell Daily Sun. <http://cornellsun.com/node/53497> October 2012
- The Examiner.com. <http://www.examiner.com/article/west-nile-season-almost-over-for-many> September 2012
- America’s North Shore Journal. “The hidden horror in the closet” blog by C. Simmins. September 2012.
- Post Journal, Jamestown, NY. September 2012. <http://post-journal.com/page/content.detail/id/609859/Increase-In-West-Nile-Caused-By-Weather.html?nav=5192>
- Syracuse Post Standard, August 2012. [http://www.syracuse.com/news/index.ssf/2012/08/cornell\\_prof\\_west\\_nile\\_outbrea.html](http://www.syracuse.com/news/index.ssf/2012/08/cornell_prof_west_nile_outbrea.html)
- Discovery news (Chikungunya), June 2012. <http://news.discovery.com/human/exotic-disease-120605.html>
- Accuweather.com, 6/4/12. <http://www.accuweather.com/en/health-articles/aches-and-pains/exotic-diseases-from-warmer-cl/66037>
- Weather Channel live segment on mosquito borne disease risk. 6/8/12 via Skype.
- Scientific American. Exotic Diseases from Warmer Climates Gain Foothold in U.S. <http://www.scientificamerican.com/article.cfm?id=exotic-diseases-warmer-climate-us-gain&page=2> (6/8/12)
- EQUUS magazine. Vector borne diseases of horses. Karin Baril. For June 2012 issue (1/19/12)

- Real Simple Magazine July issue. Summer/outdoor entertaining and mosquitoes. (4/9/12)
- Ithaca Journal, Ticks and Lyme Disease (2/12/12)
- New Scientist, climate change and CHIKV  
<http://www.newscientist.com/article/dn21816-chikungunya-virus-loves-warm-new-york-winters.html> (5/16/12)
- MSNBC climate change and CHIKV  
[http://today.msnbc.msn.com/id/47358597/ns/us\\_news-environment/#.T7u2v8Ugw3E](http://today.msnbc.msn.com/id/47358597/ns/us_news-environment/#.T7u2v8Ugw3E) (5/9/12)
- Live Science <http://www.livescience.com/20173-mosquito-virus-disease-york.html> (5/9/12)
- Inside Cornell: Health, Climate and Mosquito-Borne Disease  
<http://www.cornell.edu/video/?videoID=2109> (5/8/12)
- Voice of America, Increasing threat of insecticide resistance in malaria vectors, (5/22/12)
- USDA Radio, resistance in malaria vectors (5/22/12)

## 2011

- Interviewed for NPR and 103.5 WTOP Washington Radio July 2011 USA Today, July 2011 [http://www.usatoday.com/tech/science/2011-07-21-mosquitoes-carry-diseases\\_n.htm](http://www.usatoday.com/tech/science/2011-07-21-mosquitoes-carry-diseases_n.htm)
- Voice of America television (July 2011).
- Interviewed by the Canadian Broadcasting Corporation (CBC). For the documentary: The Nature of Things. 2011.

## 2010

- Interviewed by Heidi Leidford for Nature. Malaria may not rise as world warms: Studies suggest that strategies to combat the disease are offsetting the impact of climate change. Published online 19 May 2010, Nature 465, 280-281 (2010) doi:10.1038/465280a (<http://www.nature.com/news/2010/100519/full/465280a.html> )
- Resource for Newspapers – 2005- present. New York Times, Philadelphia Inquirer, Rochester Democrat and Chronicle, Ithaca Journal, Cornell Daily Sun, Ithaca Times, Daily Saratoga Republican, Poughkeepsie Journal, Salt Lake Tribune, Environmental Health Perspectives (<http://ehp.niehs.nih.gov/>)
- Interviewed for Environmental Health Perspectives: “Dengue Reborn: Widespread Resurgence of a Resilient Vector” by Melissa Lee Phillips. Environmental Health Perspectives. September 2008.  
<http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2535648>
- Interviewed for The Lancet: Is climate change affecting dengue in the Americas? Eliza Barclay. The Lancet. London: Mar 22-Mar 28, 2008. Vol. 371, Iss. 9617; pg. 973, 2 pg
- Radio and television: National Public Broadcasting, National Public Radio, Canadian Broadcasting Service, Syracuse Channel 5 and Channel 9 News, British Broadcasting service.
- NIH/Environmental Health: How Big is the Threat of Dengue and What's Causing It?, Science Podcast 2009



## RESEARCH PUBLICATIONS- JOURNAL ARTICLES (PEER-REVIEWED)

### In press:

68. Degner, EC and **LC Harrington**. 2016. A mosquito sperm's journey from male ejaculate to egg: mechanisms, molecules and methods for exploration. *Molecular Reproduction and Development*.

### Published (since 2006):

67. Alfonso-Parra C, Ahmed-Braimah YH, Degner E.C., Avila FW, Villarreal SM, Pleiss JA, Wolfner MF and **LC. Harrington**. 2016. Mating-Induced Transcriptome Changes in the Reproductive Tract of Female *Aedes aegypti*. *PLOS Neglected Tropical Diseases*.  
 Press: <http://www.bionity.com/en/news/157270/change-in-mosquito-mating-may-control-zika-virus.html>  
<http://news.cornell.edu/stories/2016/03/female-gene-changes-post-sex-may-lead-mosquito-controls>
66. Degner, EC and **LC Harrington**. 2016. Polyandry depends on post-mating time interval in the dengue vector *Aedes aegypti*. *American Journal of Tropical Medicine and Hygiene*. doi: 10.4269/ajtmh.15-0893.
65. Ledesma, N and **LC Harrington**. Fine-scale temperature fluctuation and modulation of *Dirofilaria immitis* larval development in *Aedes aegypti*. 2015. *Veterinary Parasitology*, 209(1-2):93-100.
64. Alfonso-Parra, CA; Deewatthanawong, P; Avila. FW, Sirot, LK, Wolfner, MF; **Harrington, L.C.** 2014. Synthesis, depletion and cell-type expression of a protein from the male accessory glands of the dengue vector mosquito *Aedes aegypti*. *Journal of Insect Physiology*. 70:117-24
63. Hardstone, Melissa; Strycharz, Joseph; Kim, JunHeon; Park, Il-Kwon; Yoon, Kyong; Ahn, Young-Joon; **Harrington, Laura**; Lee, Si Hyeock; Clark, John. 2014. Development of multi-functional metabolic synergists to suppress the evolution of resistance against pyrethroids in insects that blood feed on humans. *Pest Management Science*. 71(6):842-9.
62. **Harrington LC**, Fleisher A, Ruiz-Moreno D, Vermeylen F, Wa, C, Poulson RL, Edman JD, Clark JM, Jones JW, Kitthawee S, and Scott TW. 2014. Heterogeneous feeding patterns of the dengue vector, *Aedes aegypti*, on individual human hosts in rural Thailand. *PLoS Neglected Tropical Diseases*. 10.1371/journal.pntd.0003048. 8 (8), e3048
61. Guerra, CA, Reiner RC, Perkins TA, Lindsay SW, Midega JT, Brady OJ, Barker CM, Reisen WK, **Harrington LC**, Takken W, Kitron U, Lloyd AL, Hay S, Scott TW and D L Smith. 2014 In press. Global assembly of adult female mosquito mark-release-recapture data to inform the

control of mosquito-borne pathogens. *Parasites and Vectors*. 7:276 doi:10.1186/1756-3305-7-276 <http://www.parasitesandvectors.com/content/7/1/276/abstract>

60. Boes KE, Ribeiro JMC, Wong A, **Harrington LC**, Wolfner MF and Laura K. Sirot. 2014. Identification and Characterization of Seminal Fluid Proteins in the Asian Tiger Mosquito, *Aedes albopictus*. *PLoS Neglected Tropical Diseases*. 19;8(6):e2946. <http://www.ncbi.nlm.nih.gov/pubmed/24945155>

59. Dongmei Wang, Dwight D. Bowman, Heidi Brown, **Laura C. Harrington**, Phillip E. Kaufman, Tanja McKay, C. Thomas Nelson, Julia L. Sharp and Robert Lund. 2014. Factors Influencing U.S. Canine Heartworm (*Dirofilaria immitis*) Prevalence. *Parasites and Vectors*. 7:264 <http://www.parasitesandvectors.com/content/7/1/264/abstract>

58. Brown HE, **Harrington LC**, Kaufman PE, McKay T, Bowman DD, Nelson CT, Wang D and R. Lund. 2012. Key Factors Influencing Canine Heartworm, *Dirofilaria immitis* in the United States. *Parasites and Vectors*. 5(1):245. <http://www.parasitesandvectors.com/content/5/1/245>

57. Ruiz-Moreno D, Vargas IS, Olson KE and **LC Harrington**. 2012. Modeling Dynamic Introduction of Chikungunya Virus in the United States. *PLoS Negl Trop Dis* 6(11): e1918. doi:10.1371/journal.pntd.0001918. <http://www.plosntds.org/article/info%3Adoi%2F10.1371%2Fjournal.pntd.0001918>

56. Menda G, Uhr JH, Wyttenbach RA, Vermeulen FM, Smith DM, **Harrington LC**, and RR Hoy. 2012. Associative learning in the dengue vector mosquito, *Aedes aegypti*: Avoidance of a previously attractive odor or surface color that is paired with an aversive stimulus. *J. Exper Biol* 216(2): 218-223. <http://jeb.biologists.org/content/early/2012/09/19/jeb.074898.short>

55. Helinski MEH, Deewatthanawong P, Sirot LK, Wolfner MF and **LC Harrington**. 2012. Duration and dose-dependency of female sexual receptivity responses to seminal fluid proteins in *Aedes albopictus* and *Ae. aegypti* mosquitoes. *J Insect Phys*. 58(10):1307–1313

54. Helinski MEH and **LC Harrington**. 2012. The role of male harassment on female fitness for the dengue vector, *Ae. aegypti*. *Behavioral Ecology and Sociobiology*. 66:1131–1140. <http://www.springerlink.com/content/9p541jr028t5128q?MUD=MP>

53. Helinski MEH, Valerio L, Facchinelli L, Scott TW, Ramsey J and **LC Harrington**. 2012. Evidence of polyandry for *Aedes aegypti* in semi-field enclosures. *Journal of the American Society of Tropical Medicine and Hygiene*. 86(4):635-41.

52. Ledemsa, N and **Harrington, L.C.** 2011. Topical Review: Vectors of Dog Heartworm in the United States: Vector status and factors effecting transmission efficiency. *Topics in Companion Animal Medicine*. Volume 26 (4): 178-185. <http://www.sciencedirect.com/science/article/pii/S1938973611000869>

51. Cator, LJ and **LC Harrington**. 2011. Harmonic convergence of fathers and the mating

- success of sons in the yellow fever mosquito. *Animal Behaviour*. Volume 82 (4): 627-633. <http://www.sciencedirect.com/science/article/pii/S0003347211002934>.
50. Cator LJ, Arthur BJ, Ponlawat A and **LC Harrington**. 2011. Behavioral observations and sound recordings of free-flight mating swarms of *Ae. aegypti* in Thailand. *Journal of Medical Entomology*. . 48(4):941-6.
49. Facchinelli L, Valerio L, Bond JG, Wise de Valdez M, **Harrington LC**, Ramsey JM, Casas-Martinez M and Thomas W. Scott. 2011. Development of a semi-field system for contained field trials with *Aedes aegypti* in Southern México. *Journal of the American Society for Tropical Medicine and Hygiene*. 85(2):248-56.
48. Sirot LK, Hardstone MC, Helinski MEH, Marinotti O, Kimura M, Deewatthanawong P, Wolfner MF and **LC Harrington**. 2011. Towards a Semen Proteome of the Dengue Vector Mosquito: Protein Identification and Potential Functions. *PLoS Neglected Tropical Diseases*. 15;5(3):e989.
47. Helinski, M. and **LC Harrington**. 2011. Male mating history and body size influence female fecundity and survival in the dengue vector mosquito *Aedes aegypti*. *Journal of Medical Entomology*. 48(2):202-11.
46. Koenraadt CJM., Kormaksson M and **LC Harrington**. 2010. Effects of Inbreeding and Genetic Modification on *Aedes aegypti* Larval Competition and Adult Energy Reserves. *Parasites and Vectors*. 3(92): 1-11. <http://www.springerlink.com/content/44p773n96g00303h/>
45. Gong, H., DeGaetano AT and **LC Harrington**. 2011. Climate-based Models for West Nile Culex Mosquito Vectors in the Northeastern USA. *International Journal of Biometeorology*. 55:435-436. <http://www.springerlink.com/content/84716m71v4601262/>
44. Cator LJ, Ng'Habi, K, Hoy RR and **L.C. Harrington**. 2010. Sizing up a mate: variation in production of and response to acoustic signals in *Anopheles gambiae*. *Behavioral Ecology*. 21(5): 1033-1039.
43. Lavery, JV, Tinadana, PO, Scott, TW, **Harrington, LC**, Ramsey, JM, Ytuarte-Nunez, C and AA James. 2010. Towards a framework for community engagement in global health research. *Trends in Parasitology* 26:279–283.
42. Kimura, M, Darbro, J.M. and **L. C. Harrington**. 2010. Avian Malaria Parasites Share Congeneric Mosquito Vectors. *Journal of Parasitology*: Vol. 96(1): 144-151.
41. Chaves, L.F., **Harrington, L.C.**, Keogh, C.L, Nguyen, A.M. and U. D. Kitron. 2010. Blood feeding patterns of mosquitoes: random or reflective of preferences? *Frontiers in Zoology*. 7:3. <http://www.frontiersinzoology.com/content/7/1/3/abstract> (Highly accessed).

40. Arthur, BJ, Wytenbach, RA, **Harrington, LC** and R R. Hoy. 2010. Neural Responses to One- and Two-Tone Stimuli in the Hearing Organ of the Dengue Vector Mosquito. *Journal of Experimental Biology*. 213: 1376-1385.
39. Hardstone, M. C. Huang, X. **Harrington, LC** and J. G. Scott. 2010. Differences in development, glycogen, and lipid content associated with cytochrome P450-mediated permethrin resistance in *Culex pipiens quinquefasciatus* (Diptera: Culicidae). *Journal of Medical Entomology*. 47(2): 188-198.
38. Tuiten , W. Koenraadt, C.J.M, McComas, K. and **L.C. Harrington**. 2009. The Effect of West Nile Virus Perceptions and Knowledge on Protective Behavior and Mosquito Breeding in Residential Yards in Upstate New York. *Eco Health* 6(1): 42-51.
37. Harvell,D, Altizer,S, Cattadori,IM, **Harrington, LC**, and E Weil. 2009. Climate Change and Wildlife Disease: When Does the Host Matter the Most. *Ecology*. Vol. 90, No. 4, pp. 912-920.
36. Cator, LJ, Arthur, BJ, **Harrington, LC** and RR Hoy. 2009. Harmonic convergence in the love songs of the dengue vector mosquito. *Science*. Feb 20; 323(5917):1077-9.
35. Ponlawat, A., and **L.C.Harrington**. 2009. Factors associated with male mating success of the dengue vector mosquito, *Aedes aegypti*. *Amer. Soc. Trop. Med. Hyg.* 79(3):312-8.
34. Lavery, J., **Harrington, LC**. and T.W. Scott. 2008. Ethical, social and cultural considerations for site selection for research with genetically modified mosquitoes. *Amer. Soc. Trop. Med. Hyg.* 79(3):312-8.
33. Benedict, M, D’Abs, P.,Dobson, S., Gottlieb, M. **Harrington, L.C.** et al. 2008. Guidance for Contained Semi-Field Trials of Genetically-engineered Vector Mosquitoes: Recommendations of a Scientific Working Group. *Vec. borne and Zoonot. Dis.* 8(2): 127-166.
32. **Harrington, L.C.** A. Ponlawat, J.D. Edman and T.W. Scott. 2008. Physical container traits influence oviposition behavior of the *Aedes aegypti* mosquito in Thailand. *Vect. Zoonot. Dis.* 8(3): 415-423.
31. **Harrington, L.C.** Vermeulen, F., Jones, J.J., Kitthawee, S., Sithiprasasna, R., Edman, J.D. and T.W. Scott. 2008. Age-dependent survival of the dengue vector, *Ae. aegypti*, demonstrated by simultaneous release and recapture of different age cohorts. *J. Med. Entomol.* (7): 307-313.
30. Sirot, L.K. Poulson, R.L, McKenna, M.C., Girnary, H., Wolfner, M.F. and **L.C.Harrington**. 2008. Identity and transfer of male reproductive gland proteins of the dengue vector mosquito, *Aedes aegypti*: potential tools for control of female feeding and reproduction. *Insect. Biochem. Mol. Biol.* Volume 38 (2):176-189.
29. Koenraadt, CJM and **L.C.Harrington**. 2008. The flushing effect of rain on a temporal and tropical mosquito vector of disease. *J. Med. Entomol.* 45(1): 28-35

28. **Harrington, L.C.** and R.L. Poulson. 2008. Variation in morphological traits prevents accurate adult identification of the West Nile vector *Culex restuans*. *J. Med. Entomol.* 45(1):1-8.
27. Hardstone, M., Leichter, C., **Harrington, L.C.**, Tomita, S. and J.G. Scott. 2007. Cytochrome P450 nonoxygenase-mediated permethrin resistance confers limited cross resistance in larvae of the southern house mosquito, *Culex pipiens quinquefasciatus*. *Pest. Biochem. Phys.* 89 (3):175-184.
26. Darbro, J.M., Dhondt, A., Vermeulen, F. and **L.C.Harrington**. 2007. *Mycoplasma gallisepticum* infection in house finches (*Carpodacus mexicanus*) affects mosquito blood feeding patterns. *Amer. Soc. Trop. Med. Hyg.* 77(3): 488-494
25. Darbro, J.M. and **L.C.Harrington**. 2007. Avian defensive behavior and blood-feeding success of the West Nile vector mosquito, *Culex pipiens*. *Behavioral Ecology.* 750-757.
24. Ponlawat, A., and **L.C.Harrington**. 2007 . Age and body size influence male sperm capacity of the dengue vector, *Aedes aegypti* (Diptera: Culicidae). *J Med Entomol.* 44: 422-426.
23. Kent RJ, Harrington L.C., Norris DE. 2007. Genetic Differences Between *Culex pipiens* f. *molestus* and *Culex pipiens pipiens* (Diptera: Culicidae) in New York. *Journal of Medical Entomology:* 44, No. 1 pp. 50–59
22. M. A. Slotman, N. B. Kelly, **L.C.Harrington**, S. Kitthawee, J. W. Jones, T. W. Scott, A. Caccone, and J.R. Powell. 2007 . Polymorphic microsatellite markers for studies of *Aedes aegypti* (Diptera: Culicidae), the vector of dengue and yellow fever. *Molecular Ecology.* 7: 168.
21. S. Higgs, D.L. Vanlandingham, K.A. Klinger, K.L. McElroy, **L.C.Harrington**, T.W. Monath and F. Guirakhoo. 2006. Growth characteristics of Chimerivax-Den vaccine viruses in *Aedes aegypti* and *Aedes albopictus* from Thailand. *American Journal of Tropical Medicine and Hygiene.* Am. J. Trop. Med. Hyg., 75:986-993.
20. Scott, T.W. Fleisher A, **Harrington, L.C.** and G. Yan. 2006. DNA profiling of human blood in anophelines from lowland and highland sites in western Kenya. *American Journal of Tropical Medicine and Hygiene.* 75:231-7.
19. Sanchez, F., Engman, M., **Harrington, L.C.**, and C. Castillo-Chavez. 2006. Models for dengue transmission and control. In: *Modeling the dynamics of human diseases: paradigms and challenges.* Gumel, A. (chief editor), Castillo-Chavez, C. , Clemence, D.E. and R.E. Mickens. American Mathematical Society.
18. Darbro, J.M. and **L.C. Harrington**. 2006. Bird-baited Traps for Surveillance of West Nile Mosquito Vectors: Effect of Bird Species, Trap Height and Mosquito Escape Rates. *Journal of Medical Entomology.*43(1): 83-92.

17. Paul, A., **Harrington, L. C.**, Zhang, L. and Scott, J. G. 2006. Evaluation of new and novel insecticides for control of the yellow fever mosquito, *Aedes aegypti*. *Journal of Medical Entomology*. 43(1): 55-60.

### **ONLINE LECTURES**

**Harrington, L.C.** (2010), "Epidemiology of vector-borne diseases", in Edman, J. (ed.), *Vector-Borne Diseases: The Biomedical & Life Sciences Collection*, Henry Stewart Talks Ltd, London (online at <http://hstalks.com/?t=BL1182705-Harrington> )

### **BOOK CHAPTERS:**

Helinski, MEH and **Harrington, L.C.** 2013. Considerations for male fitness in successful genetic vector control programs. In: Takken and Koenraadt (eds). *Ecology of parasite-vector interactions. Ecology and control of vector-borne diseases Volume 3*, 2013, pp 221-244.

Kiang RK, Soebiyanto RP, Grieco JP, Achee NL, **Harrington LC**, Reisen WK, Anyamba A, Linthicum KJ, Pinzon JC, Zollner G, and M. Colacicco-Mayhugh. 2012. Vector-borne infectious diseases and influenza (Harrington section: Remote sensing for dengue surveillance and control) In: ISPRS - Environmental Tracking for Public Health Surveillance. Morain and Budge (eds). 421 pp.

Scott, T.W., **Harrington, L.C.** Knols, B.G.J. and W. Takken. 2008. Applications of mosquito ecology for successful transgenic based disease prevention programs. In: Aksoy S. *Transgenesis and Management of Vector-Borne Disease*. Landes Bioscience. pg. 151-168.

### **PROFESSIONAL BIO, OVERVIEW AND OBJECTIVES**

Dr. Harrington is currently Professor and Chair of the Department of Entomology at Cornell University. She earned a PhD in Entomology in 1999 from the University of Massachusetts and completed Postdoctoral training at the University of California at Davis. Professor Harrington became interested in global health issues and vector-borne diseases after living and working for several years in rural Thailand. She contracted both dengue and malaria while living abroad and realized the impact these infections have on children and adults in resource poor nations. Her research focuses on the biology, ecology and behavior of mosquitoes that transmit human diseases. Current research projects in her laboratory address the feeding and mating behavior of mosquito vectors of dengue fever, West Nile virus, Chikungunya, malaria, human and animal-mosquito interactions and the role of climate change and globalization on emerging vector borne diseases such as dengue, zika and chikungunya viruses. Dr. Harrington studies mosquito biology in the field locally as well as abroad, with past or present field sites in Thailand, Tanzania, and Mexico. Dr. Harrington has no formal extension appointment, but she is active in extension and outreach activities in New York and the Northeastern United States. She offers courses in Medical and Veterinary Entomology (ENTOM 3520), a non-majors course, Plagues and People (BIO&SOC/ENTOM 2100), she teaches the malaria module of Introduction to Global Health (NS 2060), and she has offered seminars with international service learning formats (ENTOM 4100: Malaria Interventions in Ghana and ENTOM 4110: Health Care in Honduras). Harrington mentors undergraduate and graduate students in the areas of entomology, ecology and

evolutionary biology, comparative biomedical sciences, biomathematics, general biology, animal science, and biology and society. Professor Harrington has published 68 peer-reviewed articles and 3 scientific book chapters; many of these have focused on the biology and behavior of *Aedes* disease vectors. Her research has been supported by funding from the National Institutes of Health, Gates foundation, USDA and Centers for Disease Control. More information is available on her website <http://blogs.cornell.edu/harrington/> .