

Elizabeth M. Walsh

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EDUCATION

Texas A&M University (TAMU), College Station, TX

Ph.D. Entomology; Effects of In-Hive Miticides on Honey Bee Queens (*Apis mellifera* L.)

Advisor: Dr. Juliana Rangel-Posada, 2014–Expected 2020

Ripon College, Ripon, WI

B. A. Biology (Honors), English (Honors), Minor in Secondary Education; Magna Cum Laude, 2010–2014

HONORS AND AWARDS

Apprentice Master Beekeeper of Texas	2016
NSF-GRFP Honorable Mention	2016
USDA Diversity Student Program	2016
Texas Beekeepers Association	2015
<i>Graduate Student Research Award</i>	
***Entomological Society of America	2015
<i>2nd Place: Oral Competition</i>	
NSF-GRFP Honorable Mention	2015
Apprentice Beekeeper of Texas	2015
**Ecological Integration Symposium,	2015
<i>2nd Place: Oral Competition</i>	
Alltech	2015
<i>Young Scientist Award</i>	
*Foundation for the Preservation of Honey Bees	2014
<i>Foundation Scholar</i>	
National Honor Society in Biology (Beta Beta Beta)	2014–Present
National Honor Society in English (Sigma Tau Delta)	2012–Present
Laurel Society	2012–Present

GRANTS

California State Beekeepers Association (\$10,000)	2014
NSF-Undergraduate Travel Grant (\$1,500)	2013

SCHOLARSHIPS

NSF-Close the Gap Fellowship, TAMU	January, 2017
Student Scholarship, Texas Beekeeper's Association	November, 2015
Herb Dean '40 Endowed Scholarship, TAMU	June, 2015
Graduate Excellence Fellowship, COALS of TAMU	2014

PEER-REVIEWED PUBLICATIONS,

E.M. Walsh and Juliana Rangel. 2017. Extracting honey bee (*Apis mellifera*, L.) queen mandibular glands: Methodology for dissection and preparation. *Bee World*. (In prep.)

E.M. Walsh and Juliana Rangel. 2016. Local honey bee queen production and quality. *Bee World*. 93 (2): 30-32. DOI: 10.1080/0005772X.2016.1211501.

PRESENTATIONS AND POSTERS

E.M. Walsh and Juliana Rangel. The effects of pesticides on honey bee (*Apis mellifera*, L.) queen reproductive physiology and behavior. Student competitor. Ecological Integration Society. College Station, TX. 24 March, 2017.

E.M. Walsh and Juliana Rangel. The effects of pesticides on honey bee (*Apis mellifera*, L.) queen reproductive physiology and behavior. Student competitor. Association of American Professional Apiculturalists and American Beekeeping Federation meeting. Galveston, TX. 13 January, 2017.

E.M. Walsh and Juliana Rangel. The effects of agrochemicals on the reproductive health of honey bee (*Apis mellifera*) queens. Texas Beekeepers Association's annual meeting. Belton, TX. 4 November, 2016.

E.M. Walsh and Juliana Rangel. The effects of agrochemicals on the reproductive health of honey bee (*Apis mellifera*) queens. Student competitor. SEX in the post-genomic era. College Station, TX. 10 October, 2016.

E.M. Walsh and Juliana Rangel. Synergistic effects of acaricides used to control the ectoparasitic mite *Varroa destructor* on the reproductive health of honey bee (*Apis mellifera* L.) queens. Invited speaker in the Acarology symposium. International Congress of Entomology. Orlando, FL. 29 September, 2016.

E.M. Walsh. IPM and IPC: Why it matters to "US" rather than "YOU". Invited speaker. Williamson County Beekeepers Association Meeting. 26 May, 2016.

E.M. Walsh. Queen quality and rearing. Invited speaker. Williamson County Beekeepers Association Meeting. 26 May, 2016.

E.M. Walsh and Juliana Rangel. The synergistic effects of in-hive miticides on honey bee (*Apis mellifera*) queen retinue and mandibular glands. Student competitor. Ecological Integration Symposium at TAMU. 1 April, 2016.

E.M. Walsh and Juliana Rangel. The effects of miticides on honey bee queens: are we sabotaging ourselves?. Speaker. American Beekeepers Association. Jacksonville, FL. 8 January, 2016.

E.M. Walsh and Juliana Rangel. 2016. The synergistic effects of in-hive miticides on honey bee (*Apis mellifera* L.) queens. Student competitor. American Association of Professional Apiculturalists. Jacksonville, FL. 8 January, 2016.

*****E.M. Walsh** and Juliana Rangel. The effects of in-hive miticides on honey bee (*Apis mellifera* L.) queen mandibular pheromones. Student competitor. Entomological Society of America's annual meeting. Minneapolis, MN. 9 November, 2015.

E.M. Walsh. Foundation for the Preservation of Honey Bees (FPHB) scholar presentation. Invited speaker. Wisconsin Honey Producer's Association. Steven's Point, WI. 7 November, 2015.

E.M. Walsh and Juliana Rangel. The effects of in-hive miticides on honey bee (*Apis mellifera* L.) mature queens. Invited speaker. Wisconsin Honey Producer's Association. Steven's Point, WI. 6 November, 2015.

****E.M. Walsh** and Juliana Rangel. The effects of in-hive miticides on honey bee (*Apis mellifera*) queen retinue and mandibular glands. Student competitor. Ecological Integration Symposium at TAMU, College Station, TX. 26 March, 2015

E.M. Walsh and Juliana Rangel. The effects of in-hive miticides on honey bee (*Apis mellifera*) queen retinue and mandibular glands. Student competitor. Student Research Week at TAMU, College Station, TX. 27 March, 2015.

E.M. Walsh. Introduction to Queen Rearing. Invited speaker. Williamson County Beekeepers Association Meeting. 21 January, 2015.

***E.M. Walsh** and Juliana Rangel. The effects of in-hive miticides on honey bee (*Apis mellifera*) queen retinue and mandibular glands. Invited student. American Beekeeping Federation's Annual Meeting. Anaheim, CA. 9 January, 2015.

E.M. Walsh. The effects of in-hive miticides on honey bee (*Apis mellifera*) queens. Invited speaker. Southeastern Wisconsin Honey Producers Annual Meeting. 5 November, 2014.

E. M. Walsh. The effects of in-hive miticides on honey bee (*Apis mellifera*) queens. Invited speaker. South-Central Wisconsin Honey Producers Annual Meeting. 10 July, 2013.

E. M. Walsh and Juliana Rangel-Posada. The effects of in-hive miticides on honey bee (*Apis mellifera*) queen retinue response. Student competition. Presented at the Entomological Society of America's annual meeting. 2013.

E. M. Walsh. Feral Africanized honey bee hunting in Southern Texas. Invited speaker. Dodge/Jefferson Beekeeping Club Meeting. 2013.

PROFESSIONAL AFFILIATIONS

Society of Environmental Toxicology and Chemistry	2015-2016
Williamson County Area's Beekeeping Association	2014-Present
Texas Beekeepers Association	2014-Present
Entomology Graduate Student Organization, TAMU	2014-Present
Entomological Society of America,	2013-Present
Wisconsin Honey Producers Association	2009-Present
East Central Beekeepers Association	2010-Present
Dodge/Jefferson County Beekeeping Club	2010-2014

SERVICE

Volunteer, STEM Night, Texas A&M High School	2017
Monthly columnist, XYZ of Beekeeping, <i>Kelley Online Newsletter</i>	2015-Present
Volunteer, Wish Upon a Butterfly, Brazos Natural History Museum	2014, 2015
VP and founder, Soc. of Env. Toxicology and Chemistry, TAMU Chapter	2015
Seminar Chair, Entomology Graduate Student Organization of TAMU,	2015-2017
Volunteer, Insect Expo, Entomological Society of America,	2015
Volunteer, Green Prairie STEM Night, Green Prairie Elementary School,	2014
Volunteer, Boonville Days, Brazos Natural History Museum	2014
Outreach Coordinator, East Central Wisconsin Beekeepers Association	2012-2014
Beekeeping Chair, Environmental Club of Ripon,	2010-2014
Honey Queen, Dodge/Jefferson Beekeepers Club	2010-2012
Beekeeping Mentor, 4-H	2009-2014

LECTURER

Instructor, "Art of Queen Rearing," Rangel Honey Bee Lab, TAMU	2015, 16, 17
Instructor, "Bee School," Austin Annual Bee School	2015, 16, 17
Instructor, "Annual Bee School," Central TX Beekeepers	2015, 16, 17
Instructor, "Summer Clinic," Texas Beekeepers Association	2015, 16, 17
Speaker, Walworth County Bee Club, WI	July 2016
Speaker, Williamson County Beekeepers Association	May 2016
Speaker, Annual Meeting, American Beekeeping Federation	January 2015, 16
Speaker, Summer Meeting, Wisconsin Honey Producers Association	November 2015
Speaker, Williamson County Beekeepers Association	October 2015

Keynote Speaker, Harris County Beekeepers	October 2015
Speaker, Walworth County Bee Club, WI	June 2015
PROFESSIONAL WORK EXPERIENCE	
Texas A&M University, Entomology Department—College Station, TX	
<i>Graduate Research Assistant</i>	2014-2020
“The Effects of In-Hive Miticides on Honey Bee (<i>Apis mellifera</i>) Queens”	
Cared for 40-80 honey bee colonies and authored two successful grant proposals while researching, teaching, and taking classes.	
<i>Teaching Assistant</i>	
ENTO 320 (online): Honey bee biology	Spring 2017
Instructor: Ms. Ashley Jones	
ENTO 320: Honey bee biology	Fall 2016
Instructor: Dr. Juliana Rangel	
ENTO 320 (online): Honey bee biology	Fall 2016
Instructor: Ms. Lauren Ward	
ENTO 401: Principles of integrated pest management	Fall 2016
Instructor: Dr. Raul Medina	
<i>Research Experience for Undergraduates (NSF)</i>	Summer 2013
“The Effects of In-Hive miticides on Honey Bee (<i>Apis mellifera</i>) Queen Retinue Behavior”	
Dadant and Sons Beekeeping Supplies—Watertown, WI	2010-2014
Answered new beekeepers’ questions, assisted in package bee selling and care	
Queen B Honey	2009-Present
Owner, founder, and beekeeper	

REFERENCES AVAILABLE UPON REQUEST