Department of Extension Plant Sciences Department of Entomology, Plant Pathology, and Weed Science New Mexico State University Las Cruces, NM 88003 Office: N250 Skeen Hall joaniek@nmsu.edu (575) 646-3665

## **Education**

2022	Ph.D., Entomology, Texas A&M University
	Graduate Advisor: Dr. Edward Vargo

2017 M.Sc., Entomology, University of Georgia Graduate Advisor: Dr. Brendan G. Hunt

2013 B.Sc., Biology, University of Central Florida

2011 A.A., Valencia College

# **Professional Experience**

## Fall 2022 - present Assistant Professor & Extension Entomology Specialist

Department of Extension Plant Sciences, New Mexico State University, Las Cruces, NM Department of Entomology, Plant Pathology, and Weed Science New Mexico State University, Las Cruces, NM

Fall 2021 - Summer 2022 Route Setter for Outdoor Adventures, Texas A&M University, College Station, TX

Fall 2017 - Fall 2022 Graduate Research Assistant, Department of Entomology, Texas A&M University, College Station, TX

Summer 2015 - Summer 2017 Graduate Teaching Assistant, Department of Entomology, University of Georgia, Athens, GA

Fall 2014 - Spring 2015 Graduate Teaching Assistant, Department of Biology, University of Georgia, Athens, GA

May 2017 Lead Graduate Teaching Assistant for Animals and Insects of Ecuador and the Galápagos Islands. Department of Entomology, University of Georgia

Summer 2013 - Spring 2014 Research Assistant, UCF Ant Lab, University of Central Florida, Orlando, FL; Employer: Dr. Joshua R. King

Fall 2012 Student Worker University of Central Florida, Orlando, FL Employer: Dr. Linda G. Walters

## **Extension Presentations**

King, J.T., 2023 Combating Chile Pepper Pests Using IPM. 2023 NM Chile Conference. February 7. Las Cruces, NM

**King, J.T.,** 2023 How to Identify Insects (& Other Bugs) Common Insect Pests & Beneficials of the Home Garden. Master Gardeners Training Session. Spring 2023. Virtual

**King, J.T.,** 2022 Beneficial insects of New Mexico: get to know your backyard beauties and misunderstood "monsters". CEU Pesticide Applicator's Training. December 8. Truth or Consequences, NM

## **Publications**

King, J.T., Starkey, J., Holmes, V.R., Puckett R, Vargo E.L. *Quit bugging me: The influence of parasitoid phorid flies on foraging in fire ant workers.* Manuscript submitted to Insectes Sociaux. 2023

**King, J.T.,** Struminger, R., Vargo E.L.. *Planning Science Outreach: Who is your audience?* Manuscript in preparation for Annals of Entomological Society of America. 2023

**King, J.T.,** Thompson ,M., Martin, J. *The Mothers of Entomological History: Reflecting on Who We Honor and How We Do It.* Entomology Today. 2022

https://entomologytoday.org/2022/03/24/mothers-entomology-history-reflecting-honor-insect-science/

King, J.T., INVESTIGATING THE MOLECULAR BASIS OF HOST MANIPULATION BY PHORID FLY PARASITOIDS ON THE RED IMPORTED FIRE ANT AND EXPLORING HOW TO COMMUNICATE COMPLEX TOPICS IN ENTO-MOLOGY. Major professor: Dr. Edward Vargo. Committee members: Dr. Giridhar Athrey, Dr. Robert Puckett, Dr. Rhonda Struminger, and Dr. Aaron Tarone. Fall 2022. Dissertation. Texas A&M University

Kjeldgaard, M.K., Eyer, P., McMichael, C.C., Bockoven, A.A., **King, J.T.,** Hyodo, A., Boutton, T.W., Vargo, E.L., Eubanks, M.D. *Distinct colony boundaries and larval discrimination in polygyne red imported fire ants (Solenopsis invicta)*. Molecular Ecology. 2021.

Bernaola, L., Darlington, M., Britt K., Prade P., Roth, M., Pekarcik, A., Boone, M., Ricke, D., Tran, A., **King, J.,** Carruthers, K., Thompson, M., Ternest, J., Anderson, S., Gula, S., Hauri, K., Pecenka, J., Grover, S., Puri, H., Vakil S. *Technological Advances to Address Current Issues in Entomology - 2020 Student Debates*. Journal of Insect Science. 2021.

Arsenault S.V.\*, **King J.T.\***, Kay S, Lacy K.D., Ross K.G.\*\*,& Hunt B.G.\*\* *Simple inheritance, complex regulation: supergene-mediated fire ant queen polymorphism.* Molecular Ecology. 2020. \*Contributed equally; \*\*Corresponding author.

Nourani, M., **King J.T.**, Ragan, E.D. *The Role of Domain Expertise in User Trust and the Impact of First Impressions with Intelligent Systems*. Vol. 8 (2020): Proceedings of the Eighth AAAI Conference on Human Computation and Crowdsourcing. 2020.

**King, J.T.,** Exploring gene regulatory differences between monogyne and polygyne red imported fire ants (Solenopsis invicta). Major professor: Dr. Brendan Hunt. Committee members: Dr. Kenneth Ross and Dr. Patricia Moore. Summer 2017. Master's thesis. University of Georgia

## **Outreach**

### Ask an Entomologist July 2017-present

Science communication & outreach project - I run Ask an Entomologist (AaE) alongside

Nancy Miorelli, Joseph Ballenger, and Jamie Kopco. AaE is a blog where people may submit a question(s) to be answered by myself or another qualified person. In addition to the blog, AaE is also on Twitter.

We have made guest appearances on podcasts, been invited to speak at primary schools,

and have been interviewed by the media (such as The Washington Post).

https://askentomologists.com

Twitter: @BugQuestions

#### 2022 STEM Ag Career Fair, Las Cruces, NM.

Taught children about insects and other arthropods and shared various career options possible as an entomologist approx. 402 children.

### Camacho Nature Club in Austin, TX

*April 8th, 2021* General entomology outreach presentation for the Camacho Nature Club in Austin, Texas. Showed live bugs and talked about entomology via Zoom .approx. 12 adults and children ages 8-12

### Lil Dudes Insect Academy

December 18th, 2019 Podcast Guest for Lil Dudes Insect Academy

### Dragon\*Con 2018

August 30 - September 3, 2018

Nancy Miorelli and I attended Dragon\*Con 2018 as professionals.

We created and presented a panel titled, "Insects: Aliens on Earth," as well as served on other panels as scientists/entomologists. Please note that I have the alias, "Joanie Mars."

## The Hands-On Science Power Hour Presented With the Atlanta Science Festival

Everyone is welcome at this hands-on science activity party!

We've got fun demonstrations of science and a passel of take-home activities.

Activities are suitable for everyone and definitely come in costume!

Presented with the Atlanta Science Festival.

K. Hari, J. Fooshee (M), N. Householder, SciBugs, J. Mars, S. Harris; Sun 10:00 am; 309-312 [Hilton]; 2.5 Hrs

## Does It Fart?

You've heard the age old adage that everybody poops. This year brings an exciting new twist: Does it fart? Come on by; there's science in the air!

L. DeRosier, J. Greco, K. Hari (M), K. Holder, J. Mars; Sun 4:00 pm; Crystal Ballroom [Hilton]

#### **Insects: Aliens on Earth**

Ever look at an insect and think, "It looks alien"?

Everything from bursting out of body cavities to elaborate sand traps are in the magnificent world of insects.

We'll dive into insect biology and physiology to see how these magnificent animals have inspired our favorite other-worldly monsters.

SciBugs, J. Mars; Mon 10:00 am; 210-211 [Hilton]

## Community Outreach Coordinator for the Texas A&M Entomology Graduate Student Organization May 2018-May 2020

Coordinated and planned seven outreach events since May 2018. Personally attended many events.

## **Outreach Continued...**

#### 4-H Summer Camp for high school students in Huntsville TX

June 9, 2018 Showcased insects and other arthropods and discussed possible careers in entomology. 5 adults and 26 children.

## **CSISD Early Childhood Carnival Outreach Event**

April 12, 2018 Brought pinned and live arthropods to present to attendees. approx. 100 adults and children.

#### Monarch March at Lick Creek Park

March 4, 2018 Brought pinned and live arthropods to present to attendees. approx. 60 adults and children.

## **Greens Prairie Elementary "Animal Club"**

Feb. 28, 2018 Brought pinned and live arthropods to present to attendees. approx. 5 adults and 26 children.

## Rock Prairie Elementary "Discovery Night"

Feb. 22, 2018 Brought pinned and live arthropods to present to attendees. approx. 60 children with parents.

#### Forest Ridge Elementary "Bug Out"

Oct. 18, 2017 Brought pinned and live arthropods to present to attendees. approx. 20 children and five adults.

### Greens Prairie Elementary "STEM Night"

Oct. 17, 2017 Brought pinned and live arthropods to present to attendees, approx. 200 parents and children.

## **Boonville Days at the Brazos Museum of Natural History**

Oct. 14, 2017 Brought pinned and live arthropods to present to attendees. Large event with hundreds of attendees.

#### Entomology Presentation and Showcase of UGA Entomology Insect Zoo

Oct. 12, 2016 Presentations to three classrooms at Athens Academy Lower School Science Center Brought arthropods and insects to classrooms to teach approx. 30 first graders about entomology.

## Supervising Showcase of UGA Entomology Insect Zoo

May 3, 2016 Classroom Presentation at Prince Avenue Christian School.

Brought arthropods to classroom to teach approx. 30 kindergartners about entomology.

#### Supervising for the Don't Bug Me event

March 28, 2015 Part of the Elementary Science Olympiad at North Oconee High School.

Helped run and judge a bug competition during the event.

#### **Presentation for Tech Trek:**

A national program from the American Association of University Women (AAUW).

July 25, 2013 Taught middle school girls about how to preserve our local Indian River Lagoon by making oyster mats.

## **Presentations at UCF Creative School**

July 26, 2013 Brought interactive touch tanks to pre-school; Taught children about Florida native sea life.

Mar. 22, 2013 Ocean Day at the school; created animal-habitat matching game for an educational presentation.

#### Presentation at UCF Book Festival

April 13, 2013 Taught children about marine habitats through an educational game.

## Presentation at Andover Elementary School in Orange County, Florida

Mar. 15, 2013 Communicated invasion biology to 4th grade classroom through an interactive presentation and games.

## Presentation at Sanford Middle School in Seminole County, Florida

*Mar.* 29, 2012 Presented about the scientific method and marine biology research to 7th - 8th graders through an interactive presentation and games.

## **Awards & Honors**

November 2022 2nd Place for Student Competition for the President's Prize in Grad MUVE: Genetics and Genomics Quit bugging me: The influence of phorid flies on foraging and immunity in fire ant workers

April 2017 Best Artistic for the ESA-Southwestern Branch (SWB) Photo Competition- Seeing red in black, \$50

April 2022 Best Traditional Macro for the ESA-SWB Photo Competition - Psammophore, \$50

August 2022 3rd place in the Texas A&M University Department of Entomology 25th Annual Graduate Student Forum Quit bugging me: The influence of Parasitoid Phorid Flies on Foraging in Fire Ant Workers, \$100

Spring 2022 GPSG TAMU Travel Award, \$250

2021 ESA's 2021 Early Career Professional Outreach and Public Engagement Award, \$1000

*March* 2021 1st place in Graduate Oral in Agriculture Economics Category Student Research Week 2021 at Texas A&M University, \$300

September 2019 Pest Management Foundation Graduate Student Scholarship, \$2,000

March 2019 2nd place in Graduate Oral in Agriculture and Life Sciences Category Student Research Week 2019 at Texas A&M University, \$150

May 2019 BugShot Student Scholarship, \$895

April 2018 Pi Chi Omega Osmun Scholarship, \$3000

August 2017 Dr. Roger E. Gold Endowed Graduate Scholarship, \$2000

April 2017 1st Place in the Photo Competition for Macro Photography - African Stink Ant, \$50 The University of Georgia, Department of Entomology Annual, Lund Week April 14th, 2017

April 2012 STEM (Science, Technology, Engineering, Mathematics) Award; UCF Service-Learning Showcase

# **Professional Organizations & Service**

2024 ESA-SWB Program Chair

Games Master for the SWB Entomology Games Fall 2022- present

Member of the Entomological Society of America Science Communication Committee *January 2021- present* 

Entomological Society of America (ESA) Fall 2014- present

International Union for the Study of Social Insects, North American Section Spring 2018- present