

# BRIAN A. WHYTE

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*Ph.D. Candidate*

*University of California Berkeley*

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## **EDUCATION:**

**Ph.D. University of California Berkeley** (2015-Present), Environmental Science, Policy & Management

*Advisor: Dr. Neil Tsutsui*

*Research focus: Social evolution, animal behavior, chemical ecology, parasitology*

**B.S. SUNY Plattsburgh**, (2012-2014) Ecology with Biology minor, Summa Cum Laude - *GPA: 3.96/4.00*

**A.S. Monroe Community College** (2010-2012), Liberal Arts, Graduate with Distinction - *GPA: 3.59/4.00*

## **PUBLICATIONS:**

Buellesbach, J, **Whyte BA**, Cash E, Gibson JD, Scheckel KJ, Sandidge R, & Tsutsui ND. 2018. Desiccation resistance and micro-climate adaptation: Cuticular hydrocarbon signatures of different Argentine ant supercolonies across California. [Journal of Chemical Ecology 44:1101-1114](#).

\***Maccaro JJ**, \***Whyte BA**, Tsutsui ND. 2020. The ant who cried wolf: Argentine ant olfactory habituation to conspecific alarm pheromone. *In Review for Journal of Insect Behavior*.

**Whyte BA**, Lacey EA. *In Prep for Trends in Ecology and Evolution*. The weird eusociality of polyembryonic parasites.

Xu W, Burnett T, **Whyte BA**, Huntsinger L. *In Prep for Frontiers in Sustainable Food Systems*. The good, the bad, and the nasty neighbor: Ramifications of fences as socio-ecological barriers.

\* = co-first author, ♦ = undergraduate mentee authorship

## **RESEARCH EXPERIENCE:**

2017- **Graduate Student Researcher**, University of California Berkeley, Dept. of ESPM

2019 *Research Assistant to: Neil Tsutsui*

*Skills: Gas-Chromatography Mass-Spectroscopy, R Statistics on survival & chromatography data*

2017 **Caribbean Mangrove Dynamics Project**, Smithsonian Tropical Research Institute, Panama

*Field Assistant to: Wayne Sousa*

*Skills: Mangrove field work, Biodiversity survey, Long-term ecological research*

2015 **Primate Conservation Field Research**, Jama-Coaque Reserve, Manabi, Ecuador

*Skills: Neo-tropical rainforest field work, Independent study design, Pop. density sampling, QGIS*

2014 **National Institute of Mathematical and Biological Synthesis**, University of Tennessee Knoxville

*Skills: Agent-based modelling, Social evolutionary modelling, R programming, Invasive biology*

2013 **Independent Undergraduate Research**, SUNY Plattsburgh & University of Vermont

*Skills: Global change biology, Independent study design, DNA/RNA extraction, qPCR*

## **HONORS AND AWARDS:**

- 2019 **Second Place Student Presentation, Social Insects**, Entomology Society of America Meeting  
2018 **Student Mentoring and Research Teams (SMART) Program Award**, UC Berkeley  
2019 **Julius H Freitag Memorial Award**, UC Berkeley, Summer 2019  
2018 **Edna & Yoshinori “Joe” Tanada Endowed Fellowship**, UC Berkeley, Summer 2018  
2017 **ESPM Organisms & Environment Awards**, UC Berkeley, Summer 2017  
2017 **Sigma Xi Grants in Aid of Research (GIAR)** Spring 2017  
2016 **Animal Behavior Society Student Research Grant**, Spring 2016  
2016 **NSF GRF 2015-16 Honorable Mention**, Spring 2016  
2014 **Gerhard Gruending Undergraduate Research Award**, SUNY Plattsburgh, Spring 2014  
2013 **Applied Environmental Science Certificate**, William H. Miner Research Institute, Fall 2013  
2013 **James A. Fitzpatrick Scholarship in Environmental Science**, SUNY Plattsburgh, Fall 2013  
2012-2014 **SUNY Plattsburgh Dean’s List**, All semesters  
2010-2012 **Monroe Community College Dean’s List**, All semesters

## **TEACHING EXPERIENCE:**

### Graduate Student Instructor | University of California Berkeley

- 2020 **Insects & Human Society (ESPM 40)**, Dept. of Environmental Science, Policy, & Management  
2019 **Global Change Biology (ESPM 152)**, Dept. of Environmental Science, Policy, & Management  
2018 **Insects & Human Society (ESPM 40)**, Dept. of Environmental Science, Policy, & Management  
2017 **Global Change Biology (ESPM 152)**, Dept. of Environmental Science, Policy, & Management  
2016 **Ecosystem Ecology (ESPM 111)**, Dept. of Environmental Science, Policy, & Management

### Student Mentoring | University of California Berkeley

- 2018- Casey Kwok – Undergraduate research assistant  
Present *Project*: Testing the fluidity of supercolony identity in invasive Argentine ants  
2019 Benjamin Malit♦ – SMART Program Mentee, Research assistant  
*Project*: Levels of aggression and activity show colony-specific recognition in eusocial trematodes  
2016- Jessica Maccaro♦, Undergraduate research assistant  
2018 *Project*: The ant who cried wolf: Argentine ant olfactory habituation to conspecific alarm pheromone  
2018 Crystal Chan, Undergraduate lab assistant, *Tasks*: Dissecting snails, ID trematode species  
2018 Viraj Sharma, Undergraduate lab assistant, *Tasks*: Dissecting snails, ID trematode species  
2017 Joie Lin, Undergraduate lab assistant, *Tasks*: Dissecting snails, ID trematode species  
2016 Miranda Theonen\*, Undergraduate honor’s thesis  
2015 Gwyneth Teft, High school student, Peddie School research experience program

\* = successfully completed honors thesis, ♦ = continued onto graduate school or research position

### Pre-Graduate Experience:

- 2015 **Naturalist**, Aspen Center of Environmental Studies, Aspen, CO  
Tour guide and educator for adults and children in the Rocky Mountains of Colorado  
2014 **Ecology Lab Teaching Assistant**, SUNY Plattsburgh  
2013- **Calculus I & Ecology Tutor**, SUNY Plattsburgh  
2015

## **PRESENTATIONS OF RESEARCH:**

- 2018 \***Entomological Society of America Meeting**, Vancouver, Canada (Talk & Poster)  
*Title: The weird eusociality of polyembryonic things: What we can learn from parasite societies*
- 2018 **Endless Forms: Non-model system symposium**, University of California Berkeley (Talk)  
*Title: Discovering the chemical cues of colony identity in eusocial trematodes*
- 2018 **SMART program symposium**, University of California Berkeley, CA, USA (Poster)  
*Title: Friend or Foe: Discovering the colony recognition system of eusocial flatworms*
- 2018 **YouTube video**, “*Worms inside of snails that behave like ants*”, Link: <https://youtu.be/swlaGcaRrLg>
- 2017 **Essig Brunch Talk**, Essig Museum, University of California Berkeley, CA, USA (Talk)  
*Title: Comparative social evolution of ants, trematodes, and a surprising amount of other things*
- 2017 **Bay Area Ant Group**, California Academy of Sciences, CA, USA (Talk)  
*Title: The weird eusociality of polyembryonic things*
- 2016 **International Conference of Computer Science (ICCS)**, San Diego, CA, USA (Talk)  
*Title: Why invasive Argentine ant supercolonies are a limited social transition*
- 2015 **Bay Area Ant Group**, California Academy of Sciences, CA, USA (Talk)  
*Title: Could diminishing aggression in the invasive Argentine ant lead to supercolony collapse?*
- 2014 **NIMBioS Undergraduate Research Conference**, University of Tennessee Knoxville, USA (Talk)  
*Title: Could diminishing aggression in the invasive Argentine ant lead to supercolony collapse?*
- 2014 **U of Tennessee STEM symposium**, University of Tennessee Knoxville, TN, USA (Poster)  
*Title: Could diminishing aggression in the invasive Argentine ant lead to supercolony collapse?*
- 2014 **WBIR Knoxville News (TV)**, “Aggressive Ants” story, TV interview
- 2014 **Knoxville News Sentinel (Newspaper)**, Link: <https://youtu.be/nhk3HyLHXmk>

\* = Awarded presentation

## **POPULAR WRITING**

**Whyte BA.** “A Conversation with E.O. Wilson”. *E.O. Wilson Biodiversity Foundation*, Aug. 31, 2015.  
<https://eowilsonfoundation.org/a-conversation-with-e-o-wilson-with-aces-naturalist-brian-whyte/>

## **COMMUNITY SERVICE & OUTREACH**

- 2019 **Summer Explorations**, Academic Talent Development Program, University of California Berkeley  
Lead a half-day of insect-themed classroom and field activities for a nearby elementary school
- 2018 **Cal Day Entomology Table**, University of California Berkeley  
Berkeley’s annual public festival. Hosted table showing ant colonies for observation.
- 2017 **Social Chair**, Dept. of Env. Sci., Policy, & Management, University of California Berkeley  
Organized departmental social events, managed budget, created new community events
- 2016-  
2018 **Night Life @ Cal Academy**, California Academy of Sciences  
Regularly hosted “ant tables” where I discussed ant facts centered around a weekly theme
- 2016-  
2018 **Bay Area Science Festival**, San Francisco AT&T Park  
Family oriented interactive science festival. Hosted table showing ant colonies for observation.
- 2016-  
2018 **Bay Area Science in Schools (BASIS)**, University of California Berkeley  
Mentored a group of middle school students through a one-month-long science project. Also lead the BASIS presentations and activities about ant pheromones for elementary school classes.