JESSICA (JESSIE) EBIE

(She/Her/Hers)

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Education

PhD in Animal Behavior ..... May 2020
Arizona State University
Tempe, AZ

Dissertation Title: *Mechanistic diversity in long-range regulation of worker reproduction in polydomous ant species*
Advisors: Dr. Jürgen Liebig and Dr. Bert Hölldobler

MS in Biology..... August 2012
University of Cincinnati
Cincinnati, OH

Thesis Title: *The role of sensory systems in directional perception of the fiddler crab Uca pugilator*
Advisor: Dr. John Layne

BA in Biology and Psychology, Cum Laude ..... May 2004
Wittenberg University
Springfield, OH

- University Honors
- Departmental Honors in Psychology
- Departmental Honors in Biology

Academic Appointments

Associate Teaching Professor ..... August 2023 – Present
Director ASU Online Biology Master's Program.....January 2024–Present
School of Life Sciences — Arizona State University, Tempe, AZ

Residential Faculty (tenure track) .....August 2020 – May 2023
Life Sciences Division — Estrella Mountain Community College, Avondale, AZ

Instructor .....August 2018 – July 2020
School of Life Sciences — Arizona State University, Tempe, AZ

Instructor .....August 2016 – December 2016
School of Life Sciences — Arizona State University, Tempe, AZ

Adjunct Faculty ..... January 2016 – May 2016
Department of Biology — Scottsdale Community College, Scottsdale, AZ

Instructor .....August 2013 – December 2013
School of Life Sciences — Arizona State University, Tempe, AZ

Teaching Experience

Course	Level	Sections	Students
Arizona State University			
In-Person Courses			
BIO 151: Biological thinking for majors	Undergrad	3	171
BIO 181: Introductory biology for majors I	Undergrad	1	430
Bio 194: Cutting-Edge Biology: Conversations w/SOLS Faculty	Undergrad	1	30
BIO 281: Conceptual approaches for biology majors I	Undergrad	6	912
BIO 282: Conceptual approaches for biology majors II	Undergrad	4	379
BIO 331: Animal behavior	Undergrad	1	170
BIO 492: Honors directed study	Undergrad	1	1
BIO 494: Topic: Advanced Study Practicum: Lecture	Undergrad	5	16
BIO 494: Topic: Gut-The Inside Story of Our Body's Most Underrated Organ	Undergrad	1	11
BIO 495: Undergraduate research	Undergrad	2	7
Bio 597: Reading &Conference: Mentoring Future Instructional Faculty	Grad	1	1
ANB 601/Bio 435: Research strategies in animal behavior	Undergrad/Grad	1	15
ANB 602: Current topics in animal behavior	Grad	1	5
Online Courses			
BIO 182: Introductory biology for majors II	Undergrad	2	400
Bio 194: Cutting-Edge Biology: Conversations w/SOLS Faculty	Undergrad	1	30
BIO 282: Conceptual approaches for biology majors II *(lecture and lab)*	Undergrad	1	24
BIO 340: General Genetics	Undergrad	1	350
BIO 432: Why do we cheat, steal, and lie?	Undergrad	1	91
BIO 494: Topic: Advanced Study Practicum: Lecture	Undergrad	1	3
Bio 598: Capstone for Online Biology MS Students	Grad	1	30
Estrella Mountain Community College			
In-Person Courses			
BIO 100: Introductory biology for nonmajors (*lecture and lab)*	Undergrad	3	72
BIO 181: Introductory biology for majors I *(lecture and lab)*	Undergrad	1	24
BIO 181XT: Introductory biology for majors I *(lecture, lab, & XT)*	Undergrad	3	72
Online Courses			
BIO 100: Introductory biology for nonmajors (*lecture and lab)*	Undergrad	10	240
BIO 181: Introductory biology for majors I *(lecture, lab)*	Undergrad	2	48
Scottsdale Community College			
In-Person Courses			
BIO 182: Introductory biology for majors II (lecture and lab)	Undergrad	1	24

Research Experience

Endeavour Research Fellow ..... February 2018 – August 2018
Australia Awards – Endeavour Research Fellowship
James Cook University
Townsville, QLD, AUS

Graduate Research Assistant .....Spring 2017, Fall 2015, Summer—Fall 2014, Summer 2013, Summer 2012
Supervisor: Bert Hölldobler
School of Life Sciences
Arizona State University

Tempe, AZ

Graduate Research Assistant .....Summer 2011, Winter—Fall 2010
Supervisor: John Layne
Department of Biology
University of Cincinnati
Cincinnati, OH

Project Coordinator/Laboratory Manager .....July 2007 – August 2009
Supervisor: Charles Emery
Cardiopulmonary Behavioral Medicine Lab
Department of Psychology
The Ohio State University
Columbus, OH

Research Assistant .....November 2005 – July 2007
Supervisor: David Culver
Limnology Laboratory
Evolution, Ecology, and Organismal Biology Department
The Ohio State University
Columbus, OH
Marine Ecology Intern .....May 2003 – August 2003
Supervisor: Ken Heck
Marine Ecology Lab
Dauphin Island Sea Lab
Dauphin Island, AL

Refereed Publications

1. **Ebie, J.**, Robson, S., Hölldobler, B., and Liebig, J. Workers respond to queen-specific hydrocarbon profile in the arboreal, polydomous weaver ant *Oecophylla smaragdina. In prep.*
2. Supriya, K., Bang, Christofer, **Ebie, Jessica**, Pagliarulo, Christopher, Tucker, Derek, Villegas, Kaela, Wright, Christian, and Brownell, Sara. Optional exam retakes reduce anxiety but may exacerbate score disparities between students with different social identities. *CBE – Life Sciences Education.* Under review.
3. **Ebie, Jessica D**, Hölldobler, Bert., and Liebig, Jürgen. Larval regulation of worker reproduction in the polydomous ant *Novomessor cockerelli*. *The Science of Nature*,102:72, 2015. doi:10.1007/s00114-015-1323-2
4. Penick, CA, **Ebie, J**, and Moore, D. A non-destructive method for identifying the sex of ant larvae. *Insectes Sociaux*, 61:51–55. 2014. doi:10.1007/s00040-013-0323-5

Other Publications

1. Ebie, Jessica. On the internet searching for ants leads to new paths to engage with science. *Myrmecological News Blog*. March 31, 2021.

Conference Talks

1. **Ebie, Jessica D**, Robson, Simon, Hölldobler, Bert, and Liebig, Jürgen. Workers respond to queen-specific hydrocarbon profile in the arboreal, polydomous weaver ant *Oecophylla smaragdina*. In: *International Union for the Study of Social Insects Meeting*, July 2022.

2. **Ebie, Jessica D**, Millar, Jocelyn, Robson, Simon, Hölldobler, Bert, and Liebig, Jürgen. Long-range regulation of reproduction in the arboreal, polydomous Weaver Ant, *Oecophylla smaragdina*. In: *The International Society of Chemical Ecology Annual Meeting*, June 2019.
3. Robson, Simon KA, Bochynek, Tom, Deneubourg, Jean-Louis, Jones, Lochlan, and **Ebie, Jessica D**. Arboreal nest construction in the weaving ant *Oecophylla*: a possible model for the development of 3D robotic construction systems. In: *The International Conference of Robotics and Automation; Workshop: Swarms: From biology to robots and back* , May 2018.
4. **Ebie, Jessica D**, Hölldobler, Bert., and Liebig, Jürgen. Regulation of worker reproduction in the polydomous ant *Novomessor cockerelli*. In:*The International Congress of Entomology*, September 2016.
5. **Ebie, Jessica D**, Hölldobler, Bert, and Liebig, Jürgen. Larval regulation of worker reproduction in the polydomous ant *Aphaenogaster (=Novomessor) cockerelli*. In: *University of Würzburg and Arizona State University Social Insect Meeting*, University of Würzburg, May 2014.
6. **Ebie, Jessica D** and Pavlic, Theodore P. Bringing honeybees into the classroom: Using agent-based modeling to teach the scientific process. In: *International Symposium on Biomathematics and Ecology: Education and Research*, October 2013; *Invited Talk*.
7. **Ebie, Jessica D**, Hauser, Theresa, and Layne, John. Change in retinal image location due to optokinetic stimulation similarly changes escape direction in the fiddler crab. In: *Cognition, Action, and Perception Conference*, May 2011.
    - ***Awarded Outstanding Presentation***

Conference Posters

1. **Ebie, Jessica D**, Millar, Jocelyn, Robson, Simon, Hölldobler, Bert, and Liebig, Jürgen. Long-range regulation of worker reproduction in the arboreal, polydomous Weaver Ant, *Oecophylla smaragdina*. In:*Behaviour 2019*, July 2019.
2. **Ebie, Jessica D**, Hölldobler, Bert, and Liebig, Jürgen. Investigation of vitellogenin as the proximate mechanism of larval regulation of worker reproduction in the ant *Novomessor cockerelli*. In: *Graduate and Professional Student Association Research Symposium*, Arizona State University, March 2017.
    - ***Awarded Outstanding Presentation***
3. **Ebie, Jessica D**, Hölldobler, Bert, and Liebig, Jürgen. Larval regulation of worker reproduction in the polydomous ant *Aphaenogaster (=Novomessor) cockerelli*. In: *University of Würzburg and Arizona State University Social Insect Meeting*, Arizona State University, December 2015.
4. **Ebie, Jessica D**, Hölldobler, Bert, and Liebig, Jürgen. Regulation of worker reproduction in the polydomous ant *Aphaenogaster (=Novomessor) cockerelli*. In: *Interdisciplinary Research Symposium*, Arizona State University, March 2015.
5. **Ebie, Jessica D**, Hölldobler, Bert, and Liebig, Jürgen. Regulation of worker reproduction in the polydomous ant *Aphaenogaster (=Novomessor) cockerelli*. In: *Entomological Society of America Meeting*, November 2014.
6. **Ebie, Jessica D**, Shaffer, Zachary, and Pratt, Stephen. To Recruit or not to recruit: When do *Temnothorax rugatulus* recruit to natural prey?. In: *Animal Behavior Society Meeting*, July 2013.
7. **Ebie, Jessica D**, Shaffer, Zachary, and Pratt, Stephen. To Recruit or not to recruit: When do *Temnothorax rugatulus* recruit to natural prey?. In: *IUSSI-NAS Meeting*, October 2012.
8. **Ebie, Jessica D**, Hauser, Theresa, and Layne, John. Role of oculomotor reflexes in the directional perception of the fiddler crab, *Uca pugilator*. In: *Animal Behavior Society Meeting*, June 2012.
9. **Ebie, Jessica D**, Hauser, Theresa, and Layne, John. Change in retinal image location due to optokinetic stimulation similarly changes escape direction in the fiddler crab, *Uca pugilator*. In: *Cognition, Action, and Perception Conference*, May 2011.
10. **Ebie, Jessica D**, Zito, Adrianna N, Haley, Valerey S, Welch, James M and Reinsel, Kathleen A Response to light by the hermit crab *Clibanarius tricolor* at North Point, San Salvador, Bahamas. In: *Benthic Ecology Meeting*, March 2004.

11. **Ebie, Jessica D**, Zito, Adrianna N, Haley, Valerey S, Welch, James M and Reinsel, Kathleen A. Response to light by the hermit crab *Clibanarius tricolor* at North Point, San Salvador, Bahamas. In: *Ohio Academy of Sciences Meeting*, March 2003.

Media Coverage and Public Talks

1. **Ebie, Jessica D**. How do green ants know their mom is home?. In: *Pecha Kucha Night, Townsville*, June 2018. https://www.pechakucha.com/presentations/how-do-green-ants-know-their-mom-is-home.
2. Ceurstemont, Sandrine. "Baby ants have a host of unexpected superpowers", *BBC Earth*, April 6, 2017. http://www.bbc.com/earth/story/20170405-baby-ants-have-a-host-of-unexpected-superpowers
3. Kurth, Julie. "Scientists mentor female science fair winners", *ASU Now*, May 24, 2012. https://asunow.asu.edu/content/scientists-mentor-female-science-fair-winners

Grants

Year	Grant or Fellowship	Award
2021	Ebie, Jessica, Smith, Rachel, and Parmiter, Catherine. Creating self-regulated learners to increase success and persistence in life sciences. Estrella Mountain Community College Learning and Innovations Grant	$8,748.00
2018	Ebie, Jessica. Reproductive regulation in the polydomous weaver ant *Oecophylla smaragdina*. Australia Awards Endeavour Research Fellowship.	$23,000 *AUD*
2017	Ebie, Jessica, Handler, Amalia, and Bernard, Miranda. Interdisciplinary problem-solving through water allocation. School of Life Sciences Interdisciplinary Research Grant	$1000.00
2017	Ebie, Jessica. Investigation of vitellogenin as the proximate mechanism of larval regulation of worker reproduction in the ant *Novomessor cockerelli*. Graduate Field Work Grant; Arizona State University, School of Life Sciences Research Training Initiative	$1500.00
2017	Ebie, Jessica. Investigation of vitellogenin as the proximate mechanism of larval regulation of worker reproduction in the ant *Novomessor cockerelli*. Graduate Research and Support Program; Arizona State University Graduate and Professional Student Association.	$2000.00
2016	Arizona State University School of Life Sciences Travel Grant for travel to the International Congress of Entomology	$400.00
2016	Arizona State University Graduate and Professional Student Association Travel Grant for travel to the International Congress of Entomology	$950.00
2015	Ebie, Jessica. Regulation of worker reproduction in the polydomous ant *Aphaenogaster cockerelli*. Arizona State University, School of Life Sciences Research Training Initiative Graduate Field Work Grant.	$1106.00
2014	Arizona State University School of Life Sciences Travel grant for travel to the Entomological Society of America Meeting	$400.00
2014	Arizona State University Graduate and Professional Student Association Travel Grant for travel to the Entomological Society of America Meeting	$320.00
2013	International Symposium in Biomathematics and Ecology: Education and Research Symposium Travel Grant to travel the International Symposium in Biomathematics and Ecology: Education and Research Symposium	$500.00
2012	International Union for the Study of Social Insects Travel Grant for travel to the International Union for the Study of Social Insects-North American Section Meeting	$400.00
2012	Arizona State University School of Life Sciences Travel Grant for travel to International Union for the Study of Social Insects-North American Section Meeting	$400.00

2012	Arizona State University School of Life Sciences Travel Grant for travel to the Animal Behavior Society Meeting	$400.00
2010	Ebie, Jessica. Gravireception as a mechanism for the fiddler crab Uca pugilator to detect three-dimensional terrain. University of Cincinnati Department of Biology Wieman, Wendel, Benedict Research Grant.	$1200.00

Teaching Experience in K–12 STEM Education

Conservation Education Overnight Counselor .....March 2007 – December 2007
Conservation Education Columbus Zoo and Aquarium, Columbus, OH

- Provided educational presentations with live animals to K-12 groups spending the night at the zoo
- Proficient in animal handling skills
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Marine Education and Aquarium Intern .....September 2004 – August 2005
Marine Extension Services University of Georgia, Savannah, GA

Courses taught to visiting K–12 groups:

- Fish phylogeny and identification
- Invertebrate zoology
- Plankton ecology
- Marsh exploration (students were taken on a walk through a estuarian marsh)
- Estuarian trawling (students participated in a trawl in the Skidaway River)
- Barrier Island exploration (students were taken by boat to a barrier island where they explored the ecosystem and learned about the ecology)
- Introduction to marine biology (K–4)

Other responsibilities:

- Served as a day camp counselor for K–12 students attending marine science summer camp
- Assisted aquarium staff with animal husbandry

Undergraduate Honors Thesis Student Mentoring

1. **Sofia Zimmerman**, ASU Biological Sciences Majors, Second Reader .....December 2023 – Present
    - Project topic: Educational videos for undergraduate biology course, Director: Dr. Zack Shaffer
2. **James Alagna**, ASU Biological Sciences Majors, Second Reader .....December 2023 – Present
    - Project topic: Educational videos for undergraduate biology course, Director: Dr. Zack Shaffer
3. **Austin Egler**, ASU Biological Sciences Major, Thesis Director .....August 2019 – May 2020
    - Thesis topic: The relationship between socioeconomic status and access to IVF treatment

Undergraduate Honors Contract Student Mentoring

BIO 181: Introductory Biology for Majors I .....Fall 2023

- Students mentored: Ariel Aslan, Kiera Mooney, Alexandra Harting, Vivianne Carroll, Elizabeth Navarro, Amrit Kaur, Triton Johnson, Mitchell Finkelstein, Riley Basteyns

Undergraduate Teaching Assistant/Room Leader Mentoring

School of Life Sciences, Arizona State University, Tempe, AZ

1. **Katie Stuart**, Biological Sciences major .....Aug 2023 – Dec 2023
   - Undergraduate teaching assistant
   - Bio 181: Introduction to biology for majors I
2. **Ravi Manchikalapati**, Biological Sciences major .....Aug 2023 – Dec 2023
   - Undergraduate teaching assistant
   - Bio 181: Introduction to biology for majors I
3. **Emma Gerrard**, Biological Sciences major .....Aug 2023 – Dec 2023
   - Undergraduate teaching assistant
   - Bio 340: General Genetics

Life Sciences Division, Estrella Mountain Community College, Avondale, AZ _____

4. **Bliss Olorunfemi**, Associate in Applied Science in Nursing Program .....Jan 2023 – May 2023
   - Embedded tutor
   - Bio 181: Introduction to biology for majors I
5. **Chelsea Lee**, Associate in Applied Science in Nursing Program .....Aug 2021 – Dec 2022
   - Embedded tutor
   - Bio 181: Introduction to biology for majors I

School of Life Sciences, Arizona State University, Tempe, AZ _____

6. **Holly Hohn**, Psychology and neuroscience major .....Dec 2019 – Aug 2020
   - Head room leader
   - Bio 281: Conceptual approaches for biology majors I
   - Bio 282: Conceptual approaches for biology majors II
7. **Lindsey Furman**, Biomedical sciences Major .....Jan 2020 – May 2020
   - Undergraduate teaching assistant
   - Bio 282: Conceptual approaches for biology majors II
8. **Pooja Girwarr**, Neurobiology, physiology and behavior major .....Feb 2020 – May 2020
   - Room leader
   - Bio 282: Conceptual approaches for biology majors II
9. **Michael Esposito**, Genetics, cell, and developmental Biology .....Aug 2019 – May 2020
   - Undergraduate teaching assistant
   - Bio 281: Conceptual approaches for biology majors I
   - Bio 282: Conceptual approaches for biology majors II
10. **Ethan Nguyen**, Neurobiology, physiology and behavior .....Aug 2019 – May 2020
    - Room leader
    - Bio 281: Conceptual approaches for biology majors I
    - Bio 282: Conceptual approaches for biology majors II
11. **Hilary Polk**, Neurobiology, physiology and behavior.....Aug 2019 – May 2020
    - Undergraduate teaching assistant
    - Bio 281: Conceptual approaches for biology majors I
    - Bio 282: Conceptual approaches for biology majors II
12. **Emma Howell**, Genetics, cell, and developmental biology ..... Aug – Dec 2019; Aug – Dec 2017
    - Undergraduate Teaching Assistant
    - Bio 281: Conceptual approaches for biology majors I
    - Bio 151: Biological thinking for majors
13. **Jessica Jones**, Genetics, cell, and developmental biology .....Aug 2019 – Dec 2019
    - Undergraduate Teaching Assistant
    - Bio 281: Conceptual approaches for biology majors I
14. **DeQuan Weston**, Biomedical sciences .....Dec 2019 – May 2019

- Undergraduate Teaching Assistant
- Bio 281: Conceptual approaches for biology majors I

15. **Julianna Torres**, Biomedical sciences .....Dec 2019 – May 2019
    - Undergraduate Teaching Assistant
    - Bio 281: Conceptual approaches for biology majors I
16. **Erin Hong**, Biomedical sciences .....Dec 2019 – May 2019
    - Undergraduate Teaching Assistant
    - Bio 281: Conceptual approaches for biology majors I
17. **Isaiah Sampson**, Biomedical sciences.....Aug 2018 – Dec 2018
    - Undergraduate Teaching Assistant
    - Bio 282: Conceptual approaches for biology majors 2
18. **Austin Eagler**, Biological sciences.....Aug 2018 – Dec 2018
    - Undergraduate Teaching Assistant
    - Bio 432: Why do we cheat, steal, and lie?
19. **Haley Ziesemer**, Biological sciences .....Aug 2017 – Dec 2017
    - Undergraduate Teaching Assistant
    - Bio 151: Biological thinking for majors
20. **Lauren Slade**, Biological sciences .....Aug 2017 – Dec 2017
    - Undergraduate Teaching Assistant
    - Bio 151: Biological thinking for majors
21. **Annmarie Barton**, Education.....Aug 2017 – Dec 2017
    - Undergraduate Teaching Assistant
    - Bio 151: Biological thinking for majors
22. **Giovanna Santana**, Education .....Aug 2017 – Dec 2017
    - Undergraduate Teaching Assistant
    - Bio 151: Biological thinking for majors
23. **Jordyn Dolan**, Biological Sciences.....Aug 2017 – Dec 2017
    - Undergraduate Teaching Assistant
    - Bio 151: Biological thinking for majors
24. **Natalie Iannuzo**, Biological Sciences .....Aug 2017 – Dec 2017
    - Undergraduate Teaching Assistant
    - Bio 151: Biological thinking for majors

Graduate Teaching Assistant Mentoring

School of Life Sciences, Arizona State University, Tempe, AZ

1. **Maksym Dankovskyy**, Molecular and Cellular PhD program .....Aug 2023 – Dec 2023
    - Bio 340: General Genetics
2. **Sofia Gonzalez Salazar**, Evolutionary Biology PhD program .....Aug 2023 – Dec 2023
    - Bio 340: General Genetics
3. **Samantha Harker**, Neuroscience PhD program .....Aug 2023 – Dec 2023
    - Bio 340: General Genetics
4. **Colin Lynch**, Animal behavior PhD program .....Dec 2020 – May 2020, Aug 2023 – Dec 2023
    - Bio 181: Introductory Biology for Majors I
    - Bio 282: Conceptual approaches for biology majors II
5. **Mengdi Lu**, Environmental life sciences PhD program .....Aug 2018 – May 2019, May 2020 – Aug 2020
    - Bio 281: Conceptual approaches for biology majors I
    - Bio 282: Conceptual approaches for biology majors II
6. **Adrian Esqueda**, Molecular and cellular biology PhD program .....Dec 2020 – May 2020
    - Bio 282: Conceptual approaches for biology majors II

7. **Katherine Arguez**, Evolutionary biology PhD program .....Dec 2020 – May 2020
   - Bio 282: Conceptual approaches for biology majors II
8. **Calvin Koelbel**, Molecular and cellular biology PhD program .....Dec 2020 – May 2020
   - Bio 282: Conceptual approaches for biology majors II
9. **Ioulia Bespalova**, Animal behavior PhD program .....Dec 2020 – May 2020
   - Bio 282: Conceptual approaches for biology majors II
10. **Anthony Basile**, Evolutionary biology PhD program .....Aug 2019 – May 2020
    - Bio 281: Conceptual approaches for biology majors I
    - Bio 282: Conceptual approaches for biology majors II
11. **Michele Clark**, Environmental life sciences PhD program .....Aug 2019 – May 2020
    - Bio 281: Conceptual approaches for biology majors I
    - Bio 282: Conceptual approaches for biology majors II
12. **Daniela Mera Rodríguez**, Environmental life sciences PhD program .....Aug 2019 – Dec 2019
    - Bio 281: Conceptual approaches for biology majors I
13. **Fransiska Kangombe**, Environmental life sciences PhD program .....Aug 2019 – Dec 2019
    - Bio 281: Conceptual approaches for biology majors I
14. **Kavita Manhas**, Molecular and cellular biology PhD program ..... June 2019 – Aug 2019
    - Bio 182: Introductory biology for majors II
15. **Levi Helm**, Biology and society PhD program ..... June 2019 – Aug 2019
    - Bio 182: Introductory biology for majors II
16. **Mary Pardhe**, Molecular and cellular biology PhD program ..... June 2019 – Aug 2019
    - Bio 182: Introductory biology for majors II
17. **Kyle Gray**, Evolutionary biology PhD program ..... June 2019 – Aug 2019
    - Bio 182: Introductory biology for majors II
18. **Cole Larson-Whittaker**, Plant biology and conservation PhD program ..... June 2019 – Aug 2019
    - Bio 182: Introductory biology for majors II
19. **Seyyed Mahmoud Hashemi**, Biology and society PhD program ..... June 2019 – Aug 2019
    - Bio 182: Introductory biology for majors II
20. **Nicole DesJardins**, Animal behavior PhD program .....Jan 2019 – May 2019
    - Bio 282: Conceptual approaches for biology majors II
21. **Yohan Cho**, Animal behavior PhD program .....Jan 2019 – May 2019
    - Bio 331: Animal behavior
22. **Zackary Graham**, Animal behavior PhD program .....Aug 2018 – May 2019
    - Bio 492: Why do we cheat, steal, and lie?
    - Bio 331: Animal behavior
23. **Brandon Favre**, Molecular and cellular biology MS program.....Aug 2018 – Dec 2018
    - Bio 282: Conceptual approaches for biology majors II
24. **Gyan Harwood**, Evolutionary biology PhD program.....Aug 2018 – Dec 2018
    - Bio 492: Why do we cheat, steal, and lie?
25. **Megan Wheeler**, Environmental life sciences PhD program.....Aug 2016 – Dec 2016
    - Bio 151: Biological thinking for majors
26. **Miranda Bernard**, Environmental life sciences PhD program .....Aug 2016 – Dec 2016
    - Bio 151: Biological thinking for majors

Undergraduate Research Assistant Mentoring

School of Life Sciences, Arizona State University, Tempe, AZ

1. **Chrisovalantou Karakozis**, Conservation biology major ..... Jan 2019 – Aug 2019
   - Project: *Oecophylla smaragdina* reproductive regulation

2. **Julianna Torres**, Biomedical sciences major ..... Jan 2019 – Aug 2019
   - Project: *Oecophylla smaragdina* reproductive regulation
3. **Anika White**, Biological sciences major ..... Jan 2019 – Aug 2019
   - Project: *Oecophylla smaragdina* reproductive regulation
4. **Avina Naqvi**, Biological sciences major .....Jan 2019 – May 2019
   - Project: *Oecophylla smaragdina* reproductive regulation
5. **Emma Howell**, Biological sciences major ..... Oct 2016 – Aug 2017, Dec 2018 – Jan 2019
   - Project: *Camponotus floridanus* queen fertility signal inhibits worker reproduction
   - Project: Investigation of vitellogenin as the proximate mechanism of larval regulation of worker reproduction in the ant *Novomessor cockerelli*
   - Traveled to Townsville, Australia to assist in collecting colonies of *Oecophylla smaragdina* to bring back to Arizona State University
6. **Alex Crawley**, Material science engineering major .....May 2017 – Feb 2018
   - Project: *Camponotus floridanus* queen fertility signal induces acceptance by foreign workers
   - Project: *Camponotus floridanus* queen fertility signal inhibits worker reproduction
7. **John Andrade**, Interdisciplinary studies in biochemistry and Spanish .....May 2017 – Sept 2017
   - Project: *Camponotus floridanus* queen fertility signal inhibits worker reproduction
8. **Breanna Sykes**, Biological sciences major ..... Jan 2017 – Sept 2017
   - Project: *Camponotus floridanus* queen fertility signal inhibits worker reproduction
9. **Alex Labban**, Neuroscience major.....May 2017 – Aug 2017
   - Project: *Camponotus floridanus* queen fertility signal inhibits worker reproduction
   - Project: Worker exchange between nests within a polydomous *Novomessor cockerelli* colony
10. **Jihan Valencia-Gaber**, Biological sciences major.....May 2017 – Aug 2017
    - Project: *Camponotus floridanus* queen fertility signal inhibits worker reproduction
    - Project: Worker exchange between nests within a polydomous *Novomessor cockerelli* colony
11. **Jordan Erhardt**, Biological sciences major.....May 2017 – Aug 2017
    - Project: Worker exchange between nests within a polydomous *Novomessor cockerelli* colony
12. **Mark Matiski**, Biological sciences major ..... Nov 2016 – June 2017
    - Project: *Camponotus floridanus* queen fertility signal induces acceptance by foreign workers
13. **Madeline Higgins**, Biological sciences major.....Sept 2016 – Dec 2017
    - Project: *Camponotus floridanus* queen fertility signal induces acceptance by foreign workers
    - Project: *Camponotus floridanus* queen fertility signal inhibits worker reproduction
14. **Jennifer Graves**, Conservation ecology and biology major ..... Feb 2015 – Dec 2016
    - Project: *Camponotus floridanus* queen fertility signal inhibits worker reproduction
    - Project: Occurrence of rescue behavior in *Novomessor cockerelli*
    - Project: Worker exchange between nests within a polydomous *Novomessor cockerelli* colony
    - Project: Larval regulation of worker reproduction in the polydomous ant *Novomessor cockerelli*
15. **Jacob Hayton**, Biological sciences major ..... Jan 2016 – Aug 2016
    - Project: *Camponotus floridanus* queen fertility signal induces acceptance by foreign workers
16. **Anni Poetzl**, Conservation ecology and biology major .....Aug 2014 – May 2016
    - Project: *Camponotus floridanus* queen fertility signal inhibits worker reproduction
    - Project: The role of pheromones in larval regulation of worker reproduction in the polydomous ant *Novomessor cockerelli*
17. **Taylor Mazzacavallo**, Conservation ecology and biology major .....Jan 2013 – Dec 2014
    - Project: Worker exchange between nests within a polydomous *Novomessor cockerelli* colony
    - Project: Larval regulation of worker reproduction in the polydomous ant *Novomessor cockerelli*
18. **Beth Ponn**, Conservation ecology and biology major.....Jan 2012 – May 2012
    - Project: Larval regulation of worker reproduction in the polydomous ant *Novomessor cockerelli*

Biological Sciences Department, James Cook University, Townsville, QLD, Australia _____

19. **Taylor Knudson**, Biological sciences major .....Feb 2018 – June 2018
    - Project: *Oecophylla smaragdina* reproductive regulation

Biological Sciences Department, University of Cincinnati, Cincinnati, OH

20. **Theresa Hauser**, Biological sciences major .....Aug 2011 – May 2012
    - Project: The role of oculomotor reflexes in navigation by the fiddler crab, *Uca pugilator*

Staff Supervised

School of Life Sciences, Arizona State University, Tempe, AZ

1. **Dr. Paul VanGilder**, Faculty Associate Teaching Assistant .....Aug 2023 – Dec 2023
    - Bio 340: General Genetics
2. **Mary Brabebtz**, Instructional Assistant .....Aug 2023 – Dec 2023
    - Bio 340: General Genetics

Honors and Awards

Year	Award	Honorarium
2020	Finalist for CLAS Outstanding Instructor Award, Arizona State University, College of Liberal Arts and Sciences	
2019	SOLS Award for Excellence and Innovation in Teaching, Arizona State University, School of Life Sciences.	$1000.00
2019	Finalist for CLAS Outstanding Instructor Award, Arizona State University, College of Liberal Arts and Sciences	
2018	CLAS Graduate Excellence Award, Arizona State University, College of Liberal Arts and Sciences	$100.00
2017	CLAS Dean's Student Success Award, College of Liberal Arts and Sciences, Arizona State University	$250.00
2017	Outstanding Presentation Award, Graduate and Professional Student Association Research Symposium, Arizona State University	$25.00
2016	Graduate Mentor Award, Graduate and Professional Student Association, Arizona State University	$500.00
2016	Teaching Excellence Award, Graduate and Professional Student Association, Arizona State University	$500.00
2015	Summer Scholarship, School of Life Sciences, Arizona State University	$100.00
2011	Outstanding Presentation Award, Cognition, Action, and Perception Conference, University of Cincinnati	$25.00

Professional Development

School of Life Sciences Leadership Academy ..... Oct 2023 – Apr 2024
Host: School of Life Sciences, ASU Tempe, AZ

The Heart of Teaching Conference: Best practices and engaging activities that are sure to strike at the heart of your passion, spirit, pride, and soul! ..... February 24, 2022
Host: Center for Teaching and Learning, Glendale Community College Glendale, AZ

EDU250: Teaching and learning in the community college ..... Fall 2021
Host: Estrella Mountain Community College Virtual

iCURE Virtual Workshop ..... June 4–5, 2021
Host: Arizona State University West Campus Virtual

Equity Minded Teaching in STEM Workshop ..... April 23, 2021
Host: Center for Teaching and Learning, Estrella Mountain Community College Virtual

Stop Describing and Start Analyzing Workshop ..... April 23, 2021
Host: Maricopa County Community College District Virtual

Cool Apps to Promote Student Learning and Engagement Showcase ..... February 23, 2021
Host: Center for Teaching and Learning, Estrella Mountain Community College Virtual

Teach Students How to Learn in the New Normal: Metacognition is the Key ..... January 22, 2021
Host: Estrella Mountain Community College Virtual
Speaker: Dr. Saundra Yancy McGuire

EMCC Life Sciences Division Reading Group ..... Fall 2020 – Spring 2021
Host: Estrella Mountain Community College Life Sciences Division Virtual

Education Reading Group ..... Fall 2020
Host: Teaching Innovation Center, School of Life Sciences Arizona State University Virtual

Scientific Teaching Short Course ..... October 21 – November 23, 2020
Host: Macmillan Learning and The Summer Institutes for Scientific Teaching Virtual

Panel Discussion: Representation in the field: How to bust assumptions about who does conservation biology and make training more inclusive for People of Color..... September 30, 2020
Host: Center for Teaching and Learning, Estrella Mountain Community College Virtual

Global Awareness Series "There are numerous ways to be a Muslim: Oral Histories" ..... September 25, 2020
Host: RISE Center, School of Life Sciences Arizona State University Virtual

2020 Pedagogicon Conference ..... Spring 2020
Host: Eastern Kentucky University Virtual

Developing Critical Thinkers Lunch and Learn ..... Spring 2020
Host: Teaching Innovation Center, School of Life Sciences Arizona State University Tempe, AZ

Asking Guiding Questions Workshop ..... Spring 2020
Host: Teaching Innovation Center, School of Life Sciences Arizona State University Tempe, AZ

Devils 4 Devils Workshop: Providing Students with Resources to Improve Mental Health ..... Spring 2020
Host: Arizona State University Tempe, AZ

Education Reading Group ..... Spring 2020
Host: Teaching Innovation Center, School of Life Sciences Arizona State University Tempe, AZ

Teaching Diverse Students Lunch and Learn ..... Fall 2019
Host: Teaching Innovation Center, School of Life Sciences Arizona State University Tempe, AZ

Animal Behavior Labs Workshop: Engaging Students in the Science of Animal Behavior.....Summer 2019
Host: Behavior (Joint ABS + Ethology) Meeting Chicago, IL

Workshop: Developing a Concept Inventory to Evaluate Student Learning in Undergraduate Animal Behavior Courses .....Summer 2019
Host: Behavior (Joint ABS + Ethology) Meeting Chicago, IL

Education Reading Group ..... Spring 2019
Host: Teaching Innovation Center, School of Life Sciences Arizona State University Tempe, AZ

"HOT" Assessment Questions Workshop.....Fall 2018
Host: Teaching Innovation Center, School of Life Sciences Arizona State University Tempe, AZ

Certificate of TA Training for Online Courses.....Fall 2017
Host: Teaching Innovation Center, School of Life Sciences Arizona State University Tempe, AZ

Papers in Discipline-based Education Research Seminar Group ..... Spring 2016
Host: Sara Brownell Lab, School of Life Sciences Arizona State University Tempe, AZ

Papers in Discipline-based Education Research Seminar Group .....Fall 2016
Host: Sara Brownell Lab, School of Life Sciences Arizona State University Tempe, AZ

Arizona State University Diversity and Inclusion Conference .....November 2016
Host: Arizona State University Tempe, AZ

How to Actively Engage Your Students: A Workshop on Active Learning..... March 2014
Host: Teaching Innovation Center, School of Life Sciences Arizona State University Tempe, AZ

Faculty "Best Practices" with Clickers ..... October 2013
Host: Teaching Innovation Center, School of Life Sciences Arizona State University Tempe, AZ

Computational Modeling for SocioEcological Science (CoMSES)
Workshop on ABM in Education..... February 28–March 2 2013
Host: Center for Complex and Adaptive Systems, Arizona State University Tempe, AZ

Bio 591: Scientific Teaching Course .....Fall 2012
Host: School of Life Sciences, Arizona State University Tempe, AZ

Evidence-Based Teaching in Biology Graduate Course .....Fall 2010
Host: Department of Biology, University of Cincinnati Cincinnati, OH

Professional Service and Committees

Arizona State University, Tempe, AZ

- Computational Life Sciences Teaching Assistant Professor Hiring Committee..... Spring 2024
- Evolutionary Medicine Assistant Teaching Professor Hiring Committee..... Spring 2024
- SOLS Social Insect Research Group (SIRG) Seminar Speaker: Teaching in grad school and how to make a career of it .....Feb 2024

- SOLS Bioethics Breakfast Club Speaker (What happens when biologists think of sex as binary? with Melissa Wilson) ..... Feb 2024
- The College Futures Initiative: Majors-only courses for First-Year Students/Transfer Students ..... Feb 2024
- SOLS Online Biology MS Program Director ..... Spring 2024—Present
- SOLS BioBanter founder and organizer ..... Fall 2023 – Present
- SOLS Career Track Faculty Advisory Committee ..... Fall 2023 – Present
- ASU Career Track Faculty Association (Organizing committee) ..... Fall 2023 – Present
- Re-imagining SOLS Communication working group ..... Fall 2023
- The College Digital Initiatives Committee ..... Fall 2023
- Peer Teaching Evaluator for Dr. Zack Shaffer (Bio 181) ..... Oct 2023
- Neuroscience, Behavior, and Physiology Undergraduate Program Assessment Committee ..... Oct 2023
- Student Success Workshop -- Integrating Career-Readiness and High Impact Practices into The College's Undergraduate Degree Programs ..... Oct 2023
- Faculty and Academic Professional Search Workshop ..... Sept 2023
- Undergraduate Welcome Panelist ..... Aug 2023

Estrella Mountain Community College, Avondale, AZ _____

- STEM Center of Excellence Director Search Committee ..... Dec 2021
- Microbiology Faculty Hiring Committee ..... Apr 2022 – May 2023
- Honors Faculty Advisory Board Committee ..... Jan 2021 – May 2023
- Education Book Club Founder and Leader ..... Aug 2021 – Dec 2021
- Honors Student Book Club for Fulfillment of Honors Contracts ..... Aug 2020 – Dec 2021
- STEM Center of Excellence Faculty Committee ..... Aug 2020 – Dec 2021
- Maricopa Community College District Sustainability Committee ..... Aug 2020 – Dec 2020

Arizona State University, Tempe, AZ_____

- School of Life Sciences Spring Education Retreat Discussion Leader ..... Jan 2020
- School of Life Sciences Advisory Committee Member ..... Spring 2020
- Student Engagement Lunch and Learn Panelist ..... Nov 2019
- School of Life Sciences Spring Assembly Presenter: “How can we actively engage students in courses?” ..... Spring 2019
- School of Life Sciences Bio 281/282 BioSpine Committee ..... May 2019 – Aug 2020
- Undergraduate biology degree learning outcomes alignment committee ..... Spring 2017
- Research Grant Reviewer, Graduate Student and Professional Association 2016

Public Service and Outreach _____

- **Social Insect Research Group Booth Organizer/Educator**, Arizona State University
  Night of the Open Door (Arizona State University) 2014, 2015, 2017
- **Science is Fun booth educator**, Arizona State University
  March for Science (Phoenix, AZ) 2017
- **Event Educator**, Arizona State University and Tempe Center for the Arts
  Science is Fun Biomimicry Program; Kyrene de la Paloma Elementary School 3rd grade ..... Jan 2017 – Feb 2017
- **Event Supervisor**, Science Olympiad Division B: Ecology (Arizona) 2017
- **Entomology Booth Educator,** San Francisco Bay Area Science Festival ..... Nov 2016
- **Phoenix ComiCon Panelist**, Panels: *Adventures and Disasters in Science* and *Live for the Swarm* *2016*
- **Insect Fossils Booth Educator**, Phoenix Zoo Earth Day Celebration 2016

- **School of Life Sciences Booth Educator/Exhibitor**, ASU Homecoming Block Party..... 2015
- **Volunteer Camp Counselor**, University of Georgia Marine Extension Services
  Marine Science Summer Camps ..... Jul 27 – Jul 31, 2015
- **Phoenix ComiCon Panelist**, Panel: The Science of Ant-Man 2015
- **Student Mentor for after-school science program**
  Graduate Partners in Science Education at Gilliland Middle School (Tempe, AZ) .....2012 – 2014
- **Social Insect Activity Developer and Educator**, Arizona State University
  Best of Engineering, Science, and Technology Program (BEST) for middle school students 2013
- **Educator**, Arizona State University Hands on Science Program for middle school girls..... 2012