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Juanita Pardo Sanchez

Ann Arbor, MI | jpardos@umich.edu | juanita-ps.github.io

Education

PhD in Ecology and Evolutionary Biology, University of Michigan

2021-Current

Ann Arbor, Michigan Advisor: Elizabeth Tibbetts

M. S. in Ecology and Evolutionary Biology, University of Michigan

2021

Frontiers Program Ann Arbor, Michigan Advisor: Elizabeth Tibbetts

B. S. in Biology, Georgia Institute of Technology (Georgia Tech), Atlanta, Georgia 2019

Minor in Health and Medical Sciences

Awards and Fellowships

| NIH Genetics Training Program Fellow | 2022-2024 |
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| NSF Graduate Research Fellowship – Honorable Mention | 2021 |
| Rackham Merit Fellowship | 2019-2021 |
| Zell Miller Scholarship | 2015-2019 |
| Dean's List | 2015-2019 |
| ACC Academic Honor Roll | 2015-2018 |

Grants

Dr. Nancy Williams Walls Award for Field Research (\$1546)

Dr. Nancy Williams Walls Award for Field Research (\$1578)

Dr. Nancy Williams Walls Award for Field Research (\$1074)

Evolution and Human Adaptation Program Research Grant (\$1000)

Dr. Nancy Williams Walls Award for Field Research (\$1692)

President's Undergraduate Research Award Conference Travel Grant (\$500)

Student Government Association Conference Travel Grant (\$250)

College of Sciences Conference Travel Grant (\$250)

Teaching Experience

Graduate Student Instructor – Animal Behavior, University of Michigan Winter 2022

Graduate Student Mentor – Supervised Teaching, University of Michigan Fall 2020

Graduate Student Instructor – General Biology Lab, University of Michigan Fall 2020

Graduate Student Instructor – General Biology Lab, University of Michigan Winter 2020

Graduate Student Instructor – General Biology Lab, University of Michigan Fall 2019

Research Experience

University of Michigan, Ecology and Evolutionary Biology

2019-Present

PI: Dr. Elizabeth Tibbetts

- Investigating the development and evolution of cognition in Polistes fuscatus
- Investigating the causes and consequences of variation in holistic processing in *Polistes* fuscatus

Georgia Institute of Technology, School of Biological Sciences

5/2018-2019

PI: Dr. Emily Weigel

Investigated the effects of social context in learning outcomes

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Analyzed the testing behaviors of students enrolled in an introductory biology class

Georgia Institute of Technology, School of Biological Sciences

5/2018-2019

PI: Dr. Joe Mendelson III Atlanta, Georgia, USA

- Investigated the cognitive abilities of *Terrapene carolina carolina*
- Analyzed the cognitive skills and spatial use of Crotalus cerastes

Georgia Institute of Technology & Zoo Atlanta

1/2018-4/2018

PI: Dr. Joe Mendelson III & Dr. Emily Weigel Atlanta. Georgia. USA

- Investigated social learning within adult meerkats from different social groups
- Presented meerkats with puzzle feeders and timed how long the meerkats would take to solve the puzzles before and after watching another individual

Georgia Institute of Technology, School of Biological Sciences

8/2016-5/2017

PI: Dr. Young Jang Atlanta, Georgia, USA

> Studied the effects of protein degradation on SOD2/GAPDH in mice muscle with a focus towards its effects on aging and muscular dystrophy in a team of two other undergraduates

Publications

- 1. Tibbetts, E. A., Weise, C., **Pardo-Sanchez, J.** & Vi, A. N. Viewpoint-independent face recognition via extrapolation in paper wasps. *Journal of Experimental Biology* **227**, jeb247661 (2024).
- 2. Cooper, T. L., **Pardo-Sanchez, J.**, Sosnowski, M. J., Tello Rodriguez, S., Spencer, M. S., Brosnan, S. F., and Mendelson, J. R. III. How to Tell More is More: Quantity Discrimination in Eastern Box Turtles (Emydidae: Terrapene carolina). *hpet* **58**, 1–15 (2024).
- 3. **Pardo-Sanchez, J.**, Taylor, A., Weigel, E. G. & Mendelson, J. R. A study of individual differences in spatial use of captive sidewinder rattlesnakes Crotalus cerastes. *HB* 13–17 (2023) doi:10.33256/hb164.1317.
- 4. **Pardo-Sanchez, J.**, Kou, N. & Tibbetts, E. A. Type and amount of social experience influences individual face learning in paper wasps. *Behav Ecol Sociobiol* **76**, 148 (2022).
- Pardo-Sanchez, J. & Tibbetts, E. A. Social experience drives the development of holistic face processing in paper wasps. *Anim Cogn* (2022) doi: 10.1007/s10071-022-01666-w.
- Tibbetts, E. A., Pardo-Sanchez, J. & Weise, C. The establishment and maintenance of dominance hierarchies. *Philosophical Transactions of the Royal Society B: Biological Sciences* 377, 20200450 (2022).
- 7. Tibbetts, E. A., **Pardo-Sanchez, J.**, Ramirez-Matias, J. & Avarguès-Weber, A. Individual recognition is associated with holistic face processing in Polistes paper wasps in a species-specific way. *Proceedings. Biological sciences* **288**, 20203010–20203010 (2021).
- 8. Cooper, T. L., Zabinski, C. L., Adams, E. J., Berry, S. M., **Pardo-Sanchez, J.**, Reinhardt, E. M., Roberts, K. M., Watzek, J., Brosnan, S. F., Hill, R. L., Weigel, E. G., & Mendelson, J. R.. Long-term Memory of a Complex Foraging Task in Monitor Lizards (Reptilia: Squamata: Varanidae). Journal of Herpetology 54, 378–383 (2020).

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Presentations

1. Pardo-Sanchez, J. & Tibbetts, E. A. (2023). Social complexity affects social cognition in Polistes fuscatus wasp populations. Animal Behavior Society Conference. Talk. 07/2023.

- 2. **Pardo-Sanchez, J.** & Tibbetts, E.A. (2022). Familiarity and Social Experience Influence Holistic Face Processing in Paper Wasps. Animal Behavior Society Conference. Poster. 07/2022.
- 3. **Pardo-Sanchez, J.** & Tibbetts, E.A. (2021). Development of Holistic Face Processing in Paper Wasps. Animal Behavior Society Conference. Virtual Talk. 07/2021.
- 4. **Pardo-Sanchez, J.** & Tibbetts, E.A. (2021). Development of Holistic Face Processing in Paper Wasps. Comparative Cognition Conference. Virtual Talk. 03/2021.
- Pardo-Sanchez, J., Kuo, N., Tibbetts, E.A. (2020). Social Experience Influences the Development of Individual Recognition in *Polistes fuscatus* Wasps. Animal Behavior Society Conference. Virtual Talk. 07/2020.
- 6. **Pardo-Sanchez**, J. & Weigel, E. (2018). Performance, Prediction, and Preparedness: Do Biology-Major-Specific Courses Provide An Advantage. National Association of Biology Teachers Conference. Poster Presentation. San Diego, California. 11/2018.
- 7. **Pardo-Sanchez, J.**, Cooper, T., Berry, S., & Mendelson III, J., (2018). Investigating the Quantitative and Numerical Discrimination Cognitive Abilities of Eastern Box Turtles. REU Poster Symposium. Poster Presentation. Atlanta, Georgia. 7/2018.
- 8. **Pardo-Sanchez, J.**, Gollnick, H., Collins, K. & Stewart. R. (2018). Absence of Social Learning of Foraging Behavior Amongst the Meerkat Community at Zoo Atlanta. Senior Research Symposium. Poster Presentation. Atlanta, Georgia. 4/2018.

Professional Societies

SACNAS – Society for Advancement of Chicanos/Hispanics and Native Americans in Science ABS – Animal Behavior Society

CCS – Comparative Cognition Society

Service and Outreach

ECBAL – Exploring Careers Outside of Academia (and Lunch)

- Coordinate monthly workshops to connect with UM EEB alumni that have pursued careers outside of academia
- These events attract undergraduate students, graduate students, postdocs, and staff

FEMMES (Women+ Excelling More in Math, Engineering, and the Sciences)

- Grants Manager
- Apply for grants to run three different programs for elementary, middle, and high school students for free twice a year
- Programs include hands-on science activities, meeting different scientists, and help applying to colleges

MI DNA Day

Teach high schoolers about DNA through a forensic science lesson

Feria de Ciencias

Teach about DNA to kindergarten to middle school students in Spanish