

# DAJIA (KRISA) YE, PH.D

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Department of Biology  
Stanford University

## POSTDOC EXPERIENCE

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Stanford University; Department of Biology  
Palo Alto, CA 2024 – Present

## EDUCATION

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**Ph. D** University of Pennsylvania; Department of Biology  
Philadelphia, PA 2018 – 2024  
GPA: 3.80

**B. S.** University of Illinois at Urbana-Champaign; Integrative Biology  
Urbana and Champaign, IL 2015 – 2017  
GPA: 3.87; *Cum Laude* with High Distinction

China Agricultural University; Biological Science (Bio Honor) 2012 – 2015

## PUBLICATIONS

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Ye, D., Walsh, J. T., Junker, I., & Ding, Y. (2024). Changes in the cellular makeup of motor patterning circuits drive courtship song evolution in *Drosophila*. *Current Biology*, 34(11).

Ye, D., Gibson, J. C., & Suarez, A. V. (2020). Effects of abdominal rotation on jump performance in the ant *Gigantiops destructor* (Hymenoptera, Formicidae). *Integrative Organismal Biology*, 2(1), obz033.

Coto, Z. N., Ye, D., Arganda, S., Harrison, J. & Traniello, J. F. A. (2024). Neurometabolic scaling and selfishness in a social insect brain. In preparation.

Liénard, M. A., Bernard, G. D., Allen, A., Lassance, J. M., Song, S., Childers, R. R., Yu, N., Ye, D., ... & Pierce, N. E. (2021). The evolution of red color vision is linked to coordinated rhodopsin tuning in lycaenid butterflies. *Proceedings of the National Academy of Sciences*, 118(6).

## POSTERS AND PRESENTATIONS

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### Posters

“Evolution of homologous neurons mediates the natural variation of courtship song types in *Drosophila*” (2023) Genetics Society of America (GSA) Annual *Drosophila* Research Conference

“Diet, nutritional stress, and brain metabolism in ants”. (2018) Entomological Society of America (ESA) Annual Meeting.

“Jump mechanics in the ant *Gigantiops destructor*”. (2017) Society for Integrative and Comparative Biology (SICB) Annual Meeting.

### Oral Presentations

“*doublesex* modifies wing circuits in the evolution of courtship song types in *Drosophila*”. (2024) Genetics Society of America (GSA) The Allied Genetics Conference (TAGC)

“The neural mechanisms of courtship song variation in *Drosophila*”. (2021) Graduate Research in Ecology, Behaviour, and Evolution (GREBE) Conference

“Nurse specialization in pharaoh ants, *Monomorium pharaonis*”. (2018) The Columbia-Rutgers-Princeton-Penn-Yale Annual EEB Grad Student Symposium

“The effect of abdominal rotation on jump performance and stability in the ant *Gigantiops destructor* (Hymenoptera: Formicidae)”. (2017) Entomological Society of America (ESA) Annual Meeting.

## HONORS, AWARDS, AND GRANTS

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SASGov Travel Grant (University of Pennsylvania)	2018, 2023,2024
First Place of Paper Competition for the President’s Prize (Entomological Society of America)	2017
Charles H. Turner Award (Animal Behavior Society)	2017
iBio Summer Internship Award (University of Illinois at Urbana-Champaign)	2016

## RESEARCH EXPERIENCE

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**Laboratories of Dr. Deborah Gordon** 8/2024 – Present

Stanford University

*Joined as a postdoctoral researcher studying the neurophysiology of the ant behavior in a changing environment. Currently working on the genetic and neural mechanisms of how dopamine level affects the foraging decision of harvester ants in the desert.*

**Laboratories of Dr. Yun Ding** 11/2020 – 8/2024

University of Pennsylvania

*Joined as a PhD candidate studying the molecular and neural mechanisms of the evolution of courtship songs in fruit flies (*Drosophila* spp.). Worked on my thesis project about the neural mechanism of natural sine song variation in multiple *Drosophila* species.*

**Laboratories of Dr. Timothy Linksvayer** 5/2019 – 11/2020

University of Pennsylvania

*Joined as a PhD student studying the social behavior of Pharaoh ants (*Monomorium pharaonis*). Worked on my independent project about the mechanism of how the liquid food shared between different castes of ants affects the phenotypes of the food recipients. Changed the lab when the professor left the university.*

**Laboratories of Dr. Naomi Pierce** 7/2017 – 7/2018

Harvard University

*Worked as a research assistant studying the molecular mechanism of the evolution of long wavelength opsin genes in moths and butterflies and helping in the Museum of Comparative Zoology with the ant specimen identification, collection, and loan database entry.*

**Laboratories of Dr. James Traniello** 6/2017 – 7/2018

Boston University

*Worked as a visiting researcher studying the neural mechanism of the ant social brain and doing an independent project about how different protein/carbohydrate ratios in the diet affect the brain metabolism, activity and social behavior of the pavement ant *Tetramorium immigrans*.*

**Laboratories of Dr. Andrew Suarez** 1/2016 – 6/2017

University of Illinois at Urbana-Champaign

*Worked as an undergrad research assistant and did my undergrad independent project studying the jumping mechanics of the ant *Gigantiops destructor*. Recognized as Graduate with High Distinction because of this project.*

## TEACHING AND MENTORING EXPERIENCE

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### Teaching Assistant

Biol 102 Introduction to Biology B (*University of Pennsylvania*) Spring 2020  
Biol 231 Evolution of Behavior (*University of Pennsylvania*) Fall 2019

### Mentor

#### Rotation PhD student

Keehyun Kate Park Fall 2023

#### Master Student

Megha Nambiar Fall 2022

#### Undergraduate Students

Leah Van Dyke Fall 2019 – Fall 2020  
Nneka Okoli Fall 2019 – Fall 2020

## ACADEMIC MEMBERSHIP

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Member of Genetics Society of America (GSA) 2021 - 2024  
Member of Entomology Society of America (ESA) 2017 – 2019, 2023  
Member of International Union for the Study of Social Insects (IUSI) 2018 – 2024  
Member of Animal Behavior Society (ABS) 2016, 2017, 2019 - 2024  
Member of the Society of Integrative & Comparative Biology (SICB) 2016  
Member of Society for the Study of Evolution (SSE) 2019

## ACADEMIC SERVICING EXPERIENCE

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### Conference Organizer

Graduate Research in Ecology, Behaviour, and Evolution Conference (GREBE) 2021, 2023  
Evolution in Philadelphia Conference (EPC) 2019, 2023, 2024

### Journal Reviewer

Ecological Entomology 2024

## OUTREACH

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**President of Biology Graduate Student Association at UPenn** 8/2021 – 8/2022

*Organized the departmental graduate student association ensuring improved and sustained academic, emotional, professional, and social wellbeing of the graduate student community.*

**Member of Committee on Leidy Artwork**, University of Pennsylvania 7/2020 – 5/2022

*Planned and executed the replacement of portraits in the biology building with diverse, Penn-affiliated scientists.*

**Volunteer**, Philadelphia Zoo 1/2019 – 1/2020

*An Environmental Education and Animal Behavior Internship gaining experience in animal observation and monitoring, zoo-wide interpretation about animal conservation to visitors and assisting with zookeepers.*

## REFEREES

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**Dr. Deborah Gordon**

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Gilbert Biological Science Building  
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**Dr. Timothy A. Linksvayer**

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Life Science Center  
Tempe, AZ 85281  
timothy.linksvayer@asu.edu

**Dr. Yun Ding**

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Leidy Laboratories  
Philadelphia PA19104.  
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