# Stephanie Y. Chia

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## Education

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| Expected 2026 | **Ph.D. Candidate in Ecology and Evolution**, University of Maryland (UMD) |
| 2017 | **M.S. Sustainable Business and Innovation**, Utrecht University, Netherlands |
| 2015 | **B.S. Life Science**, National Taiwan University, Taiwan<br>Study abroad, University of British Columbia, Canada (2013) |

## Fellowships

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| 2024-2026 | Taiwan Ministry of Education Study Abroad Scholarship ($32,000) |
| 2024 | Smithsonian National Zoo and Conservation Biology Institute Fellowship ($3,750) |
| 2022 | National Science Foundation Global STEWARDS Fellowship at UMD |
| 2021-2022 | University of Maryland Dean's Fellowship ($5,000) |

## Research and professional experience

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| 2021- | **Doctoral research, University of Maryland**, USA<br>Advisor: Bill Fagan<br>Projects: bird macroecology and macroevolution, cropland optimization for water saving |
| 2019-2021 | **Research Assistant, Biodiversity Research Center, Academia Sinica**, Taiwan<br>Advisor: Mao-Ning Tuanmu<br>Projects: moth community ecology, bird macroecology |
| 2017-2019 | **Assistant Engineer, SGS Ltd.**, Taiwan<br>Climate Change Innovative Actions Team<br>Projects: climate change risk assessment, flood prediction and response, urban cooling |
| 2015-2017 | **Master's research, Utrecht University**, Netherlands<br>Advisor: Agni Kalfagianni<br>Thesis: Reducing food waste through waste monitoring and consumption forecast |
| 2014 | **Undergrad research, National Taiwan University**, Taiwan<br>Project: Climate-adaptive strategies of organic tea farming<br>Project: Real-time analysis of per-second groundwater level records |

## Publications

***Peer-reviewed journals***

Fagan WF, Krishnan AG, Fleming CH, Sharkey E, Chia SY, Swain A, … 150+ authors. (in press). Wild canids and felids differ in their reliance on travel routes with implications for encounter dynamics. *Proceedings of the National Academy of Sciences.*

Chia SY, Wu S, Lu Y-J, Jang Y-S, Huang C-C, Shen S-F, Chen I-C, Tuanmu M-N. (2024). Mechanistic understanding of how temperature and its variability shape body size composition in moth communities. *Functional Ecology, 38*(1), 206-218. (shortlisted for Haldane Prize)

Chia SY, Fang Y-T, Su Y-T, Tsai P-Y, Hsieh C, Tsao S-H, Juang J-Y, Hung C-M, Tuanmu M-N. (2023). A global dataset of bird nest traits. *Scientific Data, 10*, 923.

Tsai P-Y, Ko C-J, Chia SY, Lu Y-J, Tuanmu M-N. (2021). New insights into the patterns and drivers of avian altitudinal migration from a growing crowdsourcing data source. *Ecography, 44*(1), 75-86.

***Upcoming***

Chia SY, Tsai-Chen Y, Tuanmu M-N, Fagan WF. Predation, climate, and life-history traits shape macroecological patterns of enclosed bird nests. (in revision)

Chia SY, Swain A, Josephs N, Lin L, Fagan WF. Birds that don't exist: niche pre-emption as a constraint on morphological evolution in the Passeroidea. (submitted)

## Presentations

***Talks***

2025 Ecological Society of America, Baltimore, MD, USA.

2024 Mathematical Biology Seminar, Department of Mathematics, UMD.

2023 American Society of Agronomy, Crop Science Society of America and Soil Science Society of America, St. Louis, MO, USA.

2023 American Ornithological Society and Society of Canadian Ornithologists, London, ON, Canada.

2022 Belmont Forum Climate Environment and Health Early Career Researcher Workshop, virtual.

2021 Congress of Animal Behavior and Ecology, Taiwan, virtual.

***Posters***

2024 American Ornithological Society, Estes Park, CO, USA.

2021 Ecological Society of America, virtual.

2020 British Ecological Society, virtual.

## Teaching experience

HNUH 258C Nature at Risk: Extinction, Consequences, and Strategies, UMD
Teaching assistant (Fall 2025)
Course material development (from Fall 2024 to Summer 2025)

BSCI 462 / BIOL 708R Population Ecology, UMD
Guest lecturer (Spring 2025)
Teaching assistant (Spring 2024), funded by UMD Teaching and Learning Grant to integrate global change into undergrad biology curriculum

BSCI 201 Human Anatomy and Physiology, UMD
Teaching assistant (Spring 2022, Fall 2022, Spring 2023, Fall 2023)

## Awards and grants

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| 2024 | UMD Behavior, Ecology, Evolution, and Systematics Best Graduate Research Talk |
| 2024 | Jacob K. Goldhaber Travel Grant, UMD ($400) |
| 2024 | Biological Sciences Graduate Program Travel Award, UMD ($500) |
| 2024 | Department of Biology Travel Award, UMD ($750) |
| 2023 | UMD Outstanding Graduate Teaching Assistant Award |
| 2023 | Global STEWARDS Travel Grant, UMD ($1,500) |
| 2023 | Jacob K. Goldhaber Travel Grant, UMD ($600) |
| 2023 | International Conference Student Support Award, UMD ($500) |
| 2023 | American Ornithological Society Travel Award ($560) |
| 2021 | Ecological Society of America Registration Grant |

## Service and outreach

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| 2022-2025 | Multiple graduate student committees, BEES program, UMD |
| 2022 | Seminar committee, Global STEWARDS program, UMD |
| 2019-2020 | Public educational materials development for open house events, Academia Sinica |
| 2018 | Social housing resource integration platform policy proposal, Taiwan |
| 2017 | Polylactic acid (PLA) cups recycling initiative, Netherlands |
| 2015 | Nuclear waste management legislation team, Taiwan |

## Skills

***Programming languages and software***
R, Python, HTML & CSS, Git, QGIS, Gurobi

***Ecological and computational skills***
High-performance computing, Topological data analysis, Linear programming, Phylogenetic comparative methods, Ancestral state reconstruction, Spatial data analysis, Biodiversity measurement, GPS animal movement data analysis

***Languages*** Mandarin Chinese, English

***Others*** WMA wilderness first responder, PADI advanced open water diver, NCMW adult mental health first aid certification