

KRISTINA CHYN

CONSERVATION BIOLOGIST

CONTACT

☎ 512 809 7557

✉ kristina.chyn@gmail.com

🌐 /in/kristina-chyn/

▾ Austin, Texas

SKILLS

// TECHNICAL

R language

GIS (ArcGIS, QGIS)

Ecological modeling

Biological methodology

Spatial ecology

Adobe Lightroom

// PROFESSIONAL

Project management

Educational outreach

Strategic planning

Experimental design

International presentation

Grant writing

TRAINING

IUCN RED LIST ASSESSOR 1-DAY TRAINING WORKSHOP
Texas A&M | Nov. 2018

TEACHING ASSISTANT
INSTITUTE CERTIFICATION
TAMU Center for Teaching
Excellence | 2014

EDUCATION

PHD – ECOLOGY & EVOLUTIONARY BIOLOGY

Texas A&M University (TAMU), College Station, TX | Advisor: Lee Fitzgerald
Dissertation title: “*Revelations on Serpents and Devils: Predictive Roadkill Risk Models in Island Systems Informed by Citizen Science*”

December 2019 | GPA: 4.0

BS – SCIENCE OF NATURAL & ENVIRONMENTAL SYSTEMS

Cornell University, Ithaca, NY | Minors: Biology & Natural Resources

May 2014 | GPA: 3.82 – *Magna Cum Laude*

RESEARCH EXPERIENCE

POSTDOCTORAL RESEARCHER TAMU | Nov 2020 - Present

- ◆ Project lead in evaluating the efficacy of exclusion fencing for the federally endangered Houston toad (*Anaxyrus houstonensis*) in construction and road zones.
- ◆ Manages interdisciplinary project team of 12 and project scope, budget, quality, and resources on a strict deliverables schedule.

POSTDOCTORAL RESEARCHER TAMU TRANSPORTATION INS | Jun 2020 – Nov 2020

- ◆ Conducted qualitative analyses on brown pelican (*Pelecanus occidentalis*) local and regional movement with GPS tracking data.

LEAD GRANT WRITER TAMU | Feb 2020 – Mar 2020

- ◆ Led proposal planning and writing for a Texas Department of Transportation Research and Technology Implementation project grant concerning mitigation of the federally endangered Houston toad (*Anaxyrus houstonensis*).
- ◆ Managed interdisciplinary team of researchers and industry professionals in project scheduling, experimental design, budgeting, and writing.
- ◆ Awarded research project totaling \$471,664.00 in proposed funding to begin the following fiscal year (September 2020).

ENDEAVOUR RESEARCH FELLOW Australia | Nov 2017 – May 2018

- ◆ Collaborated with researchers at the Univ. of Melbourne to innovate novel predictive roadkill risk modeling methodology (*Chyn et al. 2020*).
- ◆ Presented modeling methods to industry and government transportation stakeholders and at 2018 Australasian Network for Ecology and Transportation meeting and was awarded best presentation.

O U T R E A C H

OUTREACH VOLUNTEER
Texas Memorial Museum
Sep 2018 – Mar 2020

OUTREACH PODCAST
INTERVIEW
“Great Taiwanese Snake Hunt
(episodes 1-6).” *Ear to the
Ground*, Radio Taiwan
International | 2017

CONFERENCE VOLUNTEER
Annual Conference of the
Society for Risk Analysis
Australia & New Zealand
November 2017

OUTREACH VOLUNTEER
Brazos Valley Museum of
Natural History
2014 -2015

COMMUNITY ORGANIZER
Texas Campaign for the
Environment
Summer 2012

I N T E R E S T S

- ◆ Rock climbing
- ◆ Hiking with my dogs
- ◆ Camping
- ◆ Team sports (lacrosse, ultimate frisbee)
- ◆ Languages (Mandarin, Cantonese, German)

U.S. FULBRIGHT PROGRAM RESEARCH FELLOW Taiwan | Sep 2016 – Jun 2017

- ◆ Designed and executed research: selected sites and procured equipment, managed project team, and coordinated and conducted fieldwork.
- ◆ Mentored local post-graduate and graduate field assistants.
- ◆ Collaborated with zoologists at the Endemic Species Research Institute to develop citizen science program for systemic roadkill observation.

NATIONAL SCIENCE FOUNDATION – EAST ASIA & PACIFIC SUMMER
INSTITUTE – RESOURCE ADVISOR Washington, D.C. | Spring 2016

- ◆ Invited to serve as the Taiwan Resource Advisor for Pre-Departure Orientation
- ◆ Presented experiential advice and cultural guidelines to incoming fellows.

NATIONAL SCIENCE FOUNDATION – EAST ASIA & PACIFIC SUMMER
INSTITUTE FELLOW Taiwan | Summer 2015

- ◆ Designed exploratory field research on effects of roads on endemic species.
- ◆ Mentored local field assistants: one MS student, two undergraduates.

TEXAS A&M AMAZON FIELD SCHOOL TAMU | Peru | Summer 2015

- ◆ Examined complex issues surrounding region’s conservation challenges.
- ◆ Gathered ecological, social, and economic data on wildlife clay lick use.

DANFORTH LAB – LAB ASSISTANT Cornell University | Ithaca, NY | Spring 2013

- ◆ Conducted genetic testing and analysis (PCR and gel electrophoresis) on pathogens for native bee populations.

CORNELL TROPICAL FIELD ECOLOGY & BEHAVIOR COURSE

Cornell University | Kenya | January 2012

- ◆ Performed field research and collected data for projects on ecological interactions.

CORNELL UNIVERSITY INSECT COLLECTION – CURATORIAL ASSISTANT

Ithaca, NY | Aug 2012 - Jun 2014

- ◆ Organized and databased Aphid collection.
 - ◆ Curated and listed Miridae collection.
 - ◆ Performed upkeep and volunteered during public outreach events.
-

T E A C H I N G E X P E R I E N C E

GRADUATE TEACHING ASSISTANT TAMU | College Station, TX | 2014 – 2019

- ◆ Fully managed lab sections, taught undergraduates field identification techniques, created/administered quizzes and tests, and lectured on biodiversity & phylogeny for the following courses:
 - ◆ WFSC 302: Vertebrates (Fall 2014, 2015, 2017, 2019)
 - ◆ WFSC 315: Herpetology (Spring 2015, 2016)

P R O F E S S I O N A L

A F F I L I A T I O N S

CENTRAL TX MYCOLOGICAL SOCIETY
2021 – PRESENT

GULF STATES MYCOLOGICAL SOCIETY
2021 – PRESENT

HERPETOLOGICAL LEAGUE
2017 – 2020

CITIZEN SCIENCE ASSOCIATION
2014 – 2020

TAMU WILDLIFE & FISHERIES SCIENCES GRADUATE GROUP
2014 – 2020

TAMU ECOLOGY & EVOLUTIONARY BIOLOGY STUDENT ORGANIZATION
2014 – 2020

AMERICAN SOCIETY OF ICHTHYOLOGISTS AND HERPETOLOGISTS
2016 – 2018

TEXAS HERPETOLOGICAL SOCIETY
2015 – 2017

CORNELL UNIVERSITY SOCIETY FOR NATURAL RESOURCES CONSERVATION
2012 – 2014

CORNELL UNIVERSITY HERPETOLOGICAL SOCIETY
2011 – 2014

CORNELL UNIVERSITY CHAPTER OF THE WILDLIFE SOCIETY
2011 – 2014

L E A D E R S H I P

PLANNING COMMITTEE, Ecological Integration Symposium | 2018 – 2019

PRESIDENT, TAMU Wildlife & Fisheries Sciences Grad. Group | 2015 – 2016

TREASURER, TAMU Ecology & Evolutionary Bio Student Org. | 2015 – 2016

RETREAT & SEMINAR COMMITTEES, TAMU Applied Biodiversity Sciences program | 2015 – 2017

VICE PRESIDENT, Cornell Society for Natural Resources Cons. | 2012 – 2014

P U B L I C A T I O N S

Chyn, K., Lin, T. E., Wilkinson, D. P., Tracy, J. L., Lawing, A. M., & Fitzgerald, L. A. (2020). Fine-scale roadkill risk models: understanding the intersection of wildlife and roads. *Biodiversity and Conservation*, 1-26.

Chyn, K., et al. (2019). The magnitude of roadkill in Taiwan: Patterns and consequences revealed by citizen science. *Biological Conservation*, 237, 317-326. doi: <https://doi.org/10.1016/j.biocon.2019.07.014>

Fitzgerald, L., Walkup, D., **Chyn, K.**, et al. (2018). The Future for Reptiles: Advances and Challenges in the Anthropocene. *Encyclopedia of the Anthropocene*, 162-174.

Chyn, K. Motivations for International Conservation Research: bridging ecology and culture on a personal level. 2017. Applied Biodiversity Perspectives Series. 7:27-32.

Angeli, N.F., **Chyn, K.**, and Faunce, K. Ameiva exsul (Puerto Rican ground lizard) REPRODUCTION. *Herpetological Review* 46.2 (2015): 249-50.

P R E S E N T A T I O N S

"Predictive roadkill models on native and endemic herpetofauna informed by community (citizen) science," International Herpetological Symposium, Rodeo, NM, July 23, 2021

"Fine-scale roadkill risk models: understanding the intersection of wildlife and roads," International Association for Landscape Ecology – North America 2021 Annual Meeting, Virtual, April 13, 2021

"Species distribution models and their applications in conservation: R workshop," Wildlife Habitat Conservation Workshop, National Chung Hsing University, Taichung, Taiwan, December 14, 2019

"The magnitude of roadkill in Taiwan: Patterns and consequences revealed by citizen science," 2019 Joint Meeting of Ichthyologists and Herpetologists, Snowbird Ski & Summer Resort, Snowbird, UT, July 25, 2019

"Modeling Roadkill Risk for Endemic & Native Island Herpetofauna," 2018 Joint Meeting of Ichthyologists and Herpetologists, Joseph A. Floreano Rochester Riverside Convention Center, Rochester, NY, July 12, 2018

SCHOLARSHIPS & SMALL GRANTS

MARLENE K EL ZIK MEMORIAL
SCHOLARSHIP
\$1500 | 2018

FRIENDS OF SUNSET ZOO
CONSERVATION SCHOLARSHIP
\$2000 | 2017

TAMU ECOLOGY & EVOL. BIO
RESEARCH GRANT
\$1500 | 2016

CHARLES H AND FRANCES
FLEMING SCHOLARSHIP
\$1000 | 2016

INTL HERPETOLOGICAL
SOCIETY SCHOLARSHIP
\$500 | 2016

TAMU WILDLIFE & FISHERIES
SCIENCES – SMALL GRANT
\$100 | 2016

EAST TEXAS HERPETOLOGICAL
SOCIETY – DR. JAMES R.
DIXON GRANT
\$500 | 2015

TAIWAN MINISTRY OF
SCIENCE & TECHNOLOGY
\$1500 | 2015

RICHARD BALDAUF
SCHOLARSHIP
\$1000 | 2015

PATTI & WELDON KRUGER '53
SCHOLARSHIP
\$1000 | 2015

TAMU AGRICULTURE & LIFE
SCIENCES SCHOLARSHIP
\$550 | 2015

TAMU APPLIED BIODIVERSITY
SCIENCES GRANT
\$1000 | 2015

"Modeling Wildlife Roadkill Risk Using Citizen Science Data," 2018 Road Ecology and Data Analysis Conference (invited speaker), Academia Sinica, Taipei, Taiwan, June 20, 2018

"Modeling Wildlife Roadkill Risk Using Citizen Science Data," Australasian Network for Ecology and Transportation, RACV Goldfield Resort, Creswick, Australia, May 2, 2018

"Modeling Wildlife Roadkill Risk Using Citizen Science Data – lightening talk," Victorian Biodiversity Conference, La Trobe University, Melbourne, Australia, 7 February 2018

"Endeavour Fellowship Project Goals," QAEco, University of Melbourne, Melbourne, Australia, November 16, 2017

Variations on "Effects of Roads on Taiwan Reptiles & Amphibians":
Fulbright Final Presentation, Taiwan Endemic Species Research Institute, Jiji, Taiwan, June 15, 2017.
Fulbright Midyear Conference, Taipei, Taiwan, January 24, 2016.
Fulbright Research Fellows Meeting, Taipei, Taiwan, October 5, 2016.
Fulbright Orientation, Taipei, Taiwan, September 9, 2016

"Fulbright Project: Ecological Effects of Roads on Native Reptiles & Amphibians," TaiRON Citizen Science Meeting, Jiji, Taiwan, March 25, 2017.

"Using ecological niche models to project reptile and amphibian roadkill risk in Taiwan," Wildlife & Fisheries Sciences Dept. Seminar, April 29, 2016.

"Effects of Marcellus Shale Gas Infrastructure on Amphibians and Reptiles of Northeast Forests," Cornell University Dept. of Natural Resources Undergraduate Symposium, 10 December 2013.

P O S T E R S

"Using ecological niche models to project reptile and amphibian roadkill risk in Taiwan," Joint Meeting of Ichthyologists and Herpetologists, July 2016.

"Indirect Effects of Roads on Endemic Island Herpetofauna," International Conference on Ecology and Transportation (ICOET), September 2015.

"Indirect Effects of Roads on Endemic Island Herpetofauna," Summer Institute in Taiwan (SIT), National Tsing Hua University, Taiwan, 22 August 2015.

H O N O R S & A W A R D S

INTERNATIONAL HERPETOLOGICAL SYMPOSIUM – PORRAS CONSERVATION
AWARD Rodeo, NM | July 2021

Presentation: "Predictive roadkill models on native and endemic herpetofauna informed by community (citizen) science"

M E N T O R S H I P

UNDERGRADUATE

Pei-Tsen Liao (2015-2016)
Yu-Chen Hung (2015-2016)
Andrea Quitugua (2021)
Cole Madrona (2021)

POSTGRADUATE

Yi-Lun Lin (2016-2017)
Chris McDaniels (2021)
Sarah Ebert (2021)

MASTER'S STUDENT

Pei-Chen Lin (2015-2017)
Wendy Wright (2021)

PROFESSIONAL

Anna Capri Perez (2021)

TAMU OFFICE OF GRADUATE & PROFESSIONAL STUDIES – DISSERTATION

WRITING FELLOWSHIP College Station, TX | Aug 2018 – Aug 2019

\$19200 | 12-month research fellowship

HENRI SEIBERT CONSERVATION AWARD – HONORABLE MENTION

Rochester, NY | July 2018

Presentation: "Modeling Roadkill Risk for Endemic & Native Island Wildlife"

AUSTRALASIAN NETWORK FOR ECOLOGY & TRANSPORTATION – BEST

STUDENT PRESENTATION Creswick, AUS | May 2018

Presentation: "Modeling Wildlife Roadkill Risk Using Citizen Science Data"

ENDEAVOUR RESEARCH FELLOWSHIP Melbourne, AUS | Nov 2017 – May 2018

~\$20000 | six-month research fellowship

FULBRIGHT RESEARCH FELLOWSHIP Taipei, TW | Sep 2016 – Jun 2017

~\$13500 | 10-month research fellowship

U.S. NATIONAL SCIENCE FOUNDATION EAST ASIA & PACIFIC SUMMER

INSTITUTE – RESEARCH FELLOWSHIP Taipei, TW | 2015

\$5070 | summer research fellowship

S E R V I C E

PEER REVIEWER: *Herpetological Review*, *J. of Environmental Management*,
Ecology Letters, *Biodiversity and Conservation*, *Nature Communications*
Biology

POSTDOCTORAL COMMITTEE MEMBER: TAMU Dept. of Entomology Diversity, Equity
and Inclusion/Climate Committee | 2021 - Present

R E F E R E N C E S

Dr. Robert Coulson, Professor, Texas A&M University
Postdoc supervisor: r-coulson@tamu.edu; (979) 777-7064

Dr. Lee Fitzgerald, Professor, Texas A&M University
PhD advisor: lfitzgerald@tamu.edu; (979) 255-6959

Dr. Pamela Owen, Assistant Director, Texas Memorial Museum
Outreach supervisor: p.owen@austin.utexas.edu; (512) 232-5511

Dr. James Tracy, Postdoctoral Researcher, Texas A&M University
Collaborator: jamesltracy@tamu.edu; (979) 845-9736

Dr. David Wilkinson, Postdoctoral Researcher, University of Melbourne
Collaborator: d.wilkinson2@student.unimelb.edu.au

Dr. Michelle Lawing, Assistant Professor, Texas A&M University
PhD committee member: alawing@tamu.edu