# Charlotte H. Chang (August, 2019)

Pomona College Environmental Analysis & Biology Seeley Mudd Rm. 105 | 640 N. College Ave. Claremont, CA, 91711 **\C**: +1 (909) 607-2108 **\C**: 0000-0002-1274-7721 **\C**: chchang@pomona.edu **\C**: charlottehchang.github.io

Academic Appointments Research Assistant Professor (2019-2020) David H. Smith Conservation Research Fellow

Pomona College

Postdoctoral Fellow (2017-2019)

National Institute for Mathematical and Biological Synthesis

University of Tennessee, Knoxville

**EDUCATION** 

**Princeton University** (2012-2017)

Ph.D., Ecology and Evolutionary Biology Advisors: Simon A. Levin & David Wilcove

Committee members: Stephen W. Pacala, Margaret T. Frye, and Andrew P. Dobson

University of Cambridge (2010-2011)

M.Phil, Zoology

**Pomona College** (2006-2010)

B.A. in Biology (cum laude) | minor in Mathematics

#### **Publications**

- [10] **Chang**, **Charlotte H**, Sophie J Williams, Rui-Chang Quan, Mingxia Zhang, Simon A Levin, and David S Wilcove. 2019. Perceived entertainment and recreational value motivate illegal hunting in Southwest China. *Biological Conservation*, 234, 100–106.
- [9] **Chang**, **Charlotte H**, Maarten JLF Cruyff, and Xingli Giam. 2018. Examining conservation compliance with randomized response technique analyses. *Conservation Biology*, 32, 1448–1456.
- [8] **Chang**, **Charlotte H** and Sarah E Drohan. 2018. Should I shoot or should I go? Simple rules for prey selection in multi-species hunting systems. *Ecological Applications*, 28, 1940–1947.
- [7] **Chang**, **Charlotte H**, Krithi K Karanth, and Paul Robbins. 2018. Birds and beans: Comparing avian richness and endemism in *arabica* and *robusta* agroforests in India's Western Ghats. *Scientific Reports*, 8(1), 3143.
- [6] **Chang**, **Charlotte H**, Michele L Barnes, Margaret Frye, Mingxia Zhang, Rui-Chang Quan, Leah M G Reisman, Simon A Levin, and David S Wilcove. 2017. The pleasure of pursuit: recreational hunters in rural Southwest China exhibit low exit rates in response to declining catch. *Ecology and Society*, 22(1), 43.
- [5] Ochoa-Quintero, Jose Manuel, **Charlotte H Chang**, Toby A Gardner, Mariluce Rezende Messias, William J Sutherland, and Fernanda AC Delben. 2017. Habitat Loss on Rondon's Marmoset Potential Distribution. *Land*, 6(1), 8.

- [4] Zhang, Mingxia, **Charlotte Chang**, and Ruichang Quan. 2017. Natural forest at landscape scale is most important for bird conservation in rubber plantation. *Biological Conservation*, 210, 243–252.
- [3] Morgens, David W, **Charlotte H Chang**, and Andre RO Cavalcanti. 2013. Ambushing the ambush hypothesis: predicting and evaluating off-frame codon frequencies in Prokaryotic Genomes. *BMC Genomics*, 14(1), 418.
- [2] Sutherland, William J, Jose A Alves, Tatsuya Amano, **Charlotte H Chang**, Nicholas C Davidson, C Max Finlayson, Jennifer A Gill, Robert E Gill Jr, Patricia M González, Tómas Grétar Gunnarsson, et al. 2012. A horizon scanning assessment of current and potential future threats to migratory shorebirds. *Ibis*, 154(4), 663–679.
- [1] Kaspari, Michael, **Charlotte Chang**, and Johanna Weaver. 2010. Salted roads and sodium limitation in a northern forest ant community. *Ecological Entomology*, 35(5), 543–548.

# **CURRENT PROJECTS**

- [5] Albers, H J, Charlotte H Chang, K Kroetz, Sahan Dissanayake, Kate Helmstedt, Leticia Ochoa, and Gwen Spencer. 2019. Avoiding conservation loss in paper parks. *In preparation*.
- [4] Chang, Charlotte H, Matthew G Burgess, and Xingli Giam. 2019. Drivers of tropical hunting prevalence and mammalian body-size limits. *In preparation*.
- [3] Chang, Charlotte H and Douglas W Yu. 2019. Testing a method to evaluate snapshot data from hunters in Manu Biosphere Reserve for hunting sustainability. *In preparation*.
- [2] De Angeli\*, Kevin Igna, Eeman Abbasi\*, Alan Gan\*, X Giam, and Charlotte H Chang. 2019. Modeling hunting and harvesting interactions between plants and their seed dispersers. *In preparation*.
- [1] Li\*, Yun-Yun, Simon Asher Levin, and Charlotte H Chang. 2019. Community support for forest conservation under differing levels of economic and socio-cultural capital. *In preparation*.

#### Conference Presentations

- [4] Albers, H J, Charlotte H Chang, K Kroetz, Sahan Dissanayake, Kate Helmstedt, Leticia Ochoa, and Gwen Spencer. 2018. "Reserve Site Selection with Enforcement Costs and Illegal Harvest". In: 6<sup>th</sup> World Congress of Environmental and Resource Economists. Gothenburg, Sweden.
- [3] Chang, Charlotte H, Krithi K Karanth, and Mingxia Zhang. 2018. "Ecological impacts and institutional differences between agroforests in tropical Asia (Western Ghats, India and Xishuangbanna, China)". In: *Ecological Society of America*. New Orleans, USA.
- [2] Chang, Charlotte H. 2017. "Harvest pressure shadows set body size limits under harvest". In: *Association for Tropical Biology and Conservation*. Mérida, Mexico.
- [1] 2016. "The threat of recreational hunting in tropical forests". In: Association for Tropical Biology and Conservation and Society for Conservation Biology. Singapore.

<sup>\*</sup> denotes undergraduate authors

TEACHING AND PEDAGOGICAL TRAINING

Ecology & Evolutionary Biology, University of Tennessee, Knoxville

Instructor, EEB 504-002: Scientific Computing for Biologists, 2018

**Howard Hughes Medical Institute Mobile Summer Institutes** 

Completed training on backward design, scientific pedagogy, inclusive teaching, and active learning, 2019

**Software Carpentry Instructor Training** 

Developed effective teaching strategies for scientific computing, 2019

Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences

Course Developer, Introduction to R and RStudio, 2018

Princeton University McGraw Center Teaching Transcript Program Completed interactive modules focused on learner-based design, 2017

**Environmental Studies, Princeton University** 

Teaching Assistant, ENV 201: Introduction to Environmental Sciences, 2014

AWARDS AND David H. Smith Conservation Research Fellowship

FELLOWSHIPS 2019-2021

> National Institute for Mathematical and Biological Synthesis Postdoctoral Fellowship University of Tennessee Knoxville, 2017-2019

NSF Graduate Research Fellowship Princeton University, 2012-2015

Fulbright Fellowship

Fudan University, Shanghai, China, 2011-2012

Downing Scholarship

Downing College, University of Cambridge, 2010-2011

Grants	2018-2019	National Science Foundation (NSF) Extreme Science and Engineering Dis-
		covery Environment (XSEDE) Start-Up Allocation
	2016-2018	IUCN Critical Ecosystem Partnership Fund
	2015-2016	NSF GROW with USAID research fellowship
	2015	Fish and Wildlife Foundation Women Scientists in Conservation Biology
		The Explorers Club Exploration Fund Grant
	2014-2016	NSF Doctoral Dissertation Improvement Grant
	2014	Princeton University Center for Health and Wellbeing Research Grant
		NSF East Asia Pacific Summer Institute grant (declined)
	2013-2015	Burnand-Partridge Foundation Research Grant

INVITED 2019

SEMINARS Department of Forest and Wildlife Ecology, University of Wisconsin, Madison

Environmental Studies Program, University of Colorado, Boulder

Department of Biology and Environmental Analysis Program, Pomona College

2018

Department of Forestry, Wildlife, and Fisheries, University of Tennessee, Knoxville

## Service to the College and the Profession

• SACNAS Career Mentor, 2019

- Pipeline for Vols in STEM mentor, University of Tennessee Knoxville, 2017-2019
- ReMatch Graduate Student Mentor, Princeton University, 2016-2017
- Association for Tropical Biology and Conservation & Society for Conservation Biology (Asia Section), Symposium Co-organizer, 2015
- Reviewer for Biological Conservation, Conservation Biology, Conservation Letters, Ibis, Frontiers in Ecology & Evolution, Natural Resource Modeling, People and Nature
- Member of the Ecological Society of America, Society for Conservation Biology, Association for Tropical Biology and Conservation

## Advising

- National Institute for Mathematical and Biological Synthesis
  - Eeman Abbasi, Research Experience for Undergraduates Mentee, 2018
  - Kevin Ignacio de Angeli, REU Mentee, 2018
  - Alan Gan, REU Mentee, 2018
- Princeton University
  - 2016-2017, Undergraduate thesis mentor in Ecology & Evolutionary Biology, Yun-Yun Li
  - 2015-2016, Research mentor in Ecology & Evolutionary Biology, Alana Reynolds, Fida Newaj, Wendy Zhao, and Lucas Lee
- Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences
  - 2015-2017, Research mentor for Masters students Liping Zhou, Huan Li, and Guo Wei

LANGUAGES English (native), Chinese (advanced), French (limited)
AND SKILLS Programming / Markup Languages: R, python, LETEX

Geospatial analysis: QGIS, ArcGIS, sf/rgdal/raster, fiona/shapely