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[ResearchGate](#), [LinkedIn](#), [Google Scholar](#)

PROFESSIONAL WORK

NSF Postdoctoral Research Fellow in Biology — June 2020 to present
-- University of Illinois at Urbana-Champaign and Purdue University
-- Supervised by Dr. Katy D. Heath and Dr. Gordon G. McNickle
Postdoctoral Researcher at Purdue University — September 2019 to June 2020

EDUCATION

Ph.D., University of Illinois at Chicago, 2019
B.Sc., University of Illinois at Chicago, 2012

PUBLICATIONS

Halloway, A.H., M.A. Malone, and J.S. Brown. 2020. Unstable population dynamics in obligate co-operators. *Theoretical Population Biology* **136**:1-11
<https://doi.org/10.1016/j.tpb.2020.09.002>

Malone, M.A., **A.H. Halloway**, and J.S. Brown. The ecology of fear and inverted biomass pyramids. *Oikos* **00**:1-12 <https://doi.org/10.1111/oik.06948>

Ale, S.B., **A. Halloway**, W.A. Mitchell, and C.J. Whelan. 2019. Does God roll dice? Neutrality and determinism in evolutionary ecology. *Biology and Philosophy* **34**:3
<https://doi.org/10.1007/s10539-018-9657>

Cressman, R., **A. Halloway**, G.G. McNickle, J. Apaloo, J.S. Brown, and T.L. Vincent. 2017. Unlimited niche packing in a Lotka-Volterra competition game. *Theoretical Population Biology* **116**:1-17 <https://doi.org/10.1016/j.tpb.2017.04.003>

Manuscripts in Submission

Halloway, A.H., J.S. Brown, C.J. Whelan, and C.H. Şekercioğlu. Using biogeography to assess key adaptations in two bird families. *Evolutionary Ecology Research*

Manuscripts in Preparation

Halloway, A.H., P. Soroye, C.J. Whelan, and J.S. Brown. The hummingbird and the hawkmoth: species diversity, competition and niche partitioning across the United States

Halloway, A.H., K. Staňková, and J.S. Brown. Non-equilibrial dynamics in undersaturated communities.

Halloway, A.H. and J.S. Brown. Intraspecific competition can promote ecological specialization.

Halloway, A.H., and G.G. McNickle. Incorporating functional traits into modern coexistence theory of annual plants

SELECTED PRESENTATIONS

Individual Presentations

Halloway, A.H. and J.S. Brown. Intraspecific Competition Can Promote Ecological Specialization. Virtual Asilomar 2021, Virtual. January 9-11, 2021. Oral

Halloway, A.H., K. Staňková, J.S. Brown. Non-Equilibrium Dynamics in Undersaturated Communities. eSMB 2020, Virtual. August 17-21, 2020. Poster

Halloway, A., K. Staňková, J.S. Brown. Non-Equilibrium Dynamics in Undersaturated Communities. CSEE-ESC-AES 2019, Fredericton. August 18-21, 2019. Oral

Halloway, A., M.A. Malone, and J.S. Brown. Funky dynamics: the effects of optimal vigilance on predator-prey relationships. ISBE 2018, Minneapolis. August 11-16, 2018. Oral

Halloway, A., M.A. Malone, and J.S. Brown. The conservation implications of the inherently unstable population dynamics of cooperative species. NACCB 2018, Toronto. July 21-26, 2018. Oral

Halloway, A. The use of evolutionary game theory to explore co-evolution at three scales. CSEE 2018, University of Guelph. July 19-21, 2018. Oral

Cressman, R., **A. Halloway**, G.G. McNickle, J. Apaloo, J.S. Brown and T.L. Vincent. Understanding the dynamics of infinite niche packing through simulations. AMMCS-CAIMS, Wilfrid Laurier University. June 7-12, 2015. Oral

Cressman, R., **A. Halloway**, G.G. McNickle, J. Apaloo, J.S. Brown, and T.L. Vincent. Understanding the dynamics of infinite niche packing through simulations. Workshop on Evolutionary Game Theory at the Mathematical Biosciences Institute, The Ohio State University. April 27-May 1, 2015. Poster

Halloway, A.H., J.S. Brown, and C.J. Whelan. The hummingbird and the hawkmoth: species diversity, competition and niche partitioning across the United States, Meeting of the Ecological Society of America, Minneapolis. August 4-9, 2013, Oral

Organized Symposia

The Future of Evolutionary Game Theory. Joint Meeting of the Canadian Society of Ecology and Evolution, Entomological Society of Canada, and Acadian Entomological Society, Fredericton. August 18-21, 2019.

Invited Talks

Ecological and Evolutionary Dynamics across Multiple Scales: A Theoretical Exploration of How Competitive Interactions Drive and Shape Diversity (and Vice-versa). Department of Biological Sciences EcoLunch, Purdue University. August 23, 2017

AWARDS AND FELLOWSHIPS

National Science Foundation Postdoctoral Research Fellowship in Biology (2020)
-- \$138,000 USD
Elmer Hadley Graduate Research Award (2015)
-- \$1500 USD
National Science Foundation Graduate Research Fellowship (2013)
-- \$136,000 USD
Abraham Lincoln Graduate Fellowship (2012)
-- \$44,000 USD

MEMBERSHIPS

The Canadian Society of Ecology and Evolution (2017 to Present)
Society of Mathematical Biology (2020 to Present)
Society for the Study of Evolution (2020 to Present)
American Society of Naturalists (2020 to Present)

TEACHING ROLES

Purdue University

Guest Lecturer for Survey of Mathematical Biology – BTNY 561 (Fall 2019)

University of Illinois at Chicago

Guest Lecturer for Ecology and Evolution – BIOS 230 (Fall 2018)
Guest Lecturer for Population Ecology – BIOS 530 (Fall 2015)
Teaching Assistant for Developmental Biology – BIOS 320 (Spring 2017, 2018, 2019)
Teaching Assistant for Ecology and Evolution – BIOS 230 (Fall 2018)
Teaching Assistant for Microbiology – BIOS 350 (Fall 2016, 2017)

REVIEWER FOR

Chaos: An Interdisciplinary Journal of Nonlinear Science
Scientific Reports
The American Naturalist

HONORS

Elmer Hadley Undergraduate Award (2011)
Member of the Phi Kappa Phi Society
Undergraduate (2009)
Graduate (2017)
Member of the Phi Beta Kappa Society
Undergraduate (2012)

OTHER WORK

Writer and editor at *The Science Café* (2016 to 2019)
Organizer for ComSciCon-Chicago
Workshops (2017)
Treasurer and Co-President (2018)
Speaker at Science Speaks Chicago (2018)
Presenter at the UIC Undergraduate Math Club (2018)
Treasurer for Purdue Postdoctoral Association (2019 to 2020)
SMB Mentoring Program (2020)
CSEE BIPOC Spotlight Library Microgrant (2020)
Participant of NIMBioS Quantitative Education in Life Science Graduate Programs (2020)