GENEVIEVE M. KOZAK

328A Science & Engineering, 285 Old Westport Road Dartmouth, MA 02747 email: gkozak@umassd.edu website: kozaklab@weebly.com

ACADEMIC APPOINTMENTS

2018-present Assistant Professor of Biology, University of Massachusetts-Dartmouth

2013-2018 Postdoctoral Researcher, Tufts University

Mentor: Erik Dopman

2010-2013 Postdoctoral Researcher, University of Illinois

Mentor: Becky Fuller

EDUCATION

Ph.D. **2010, Zoology, University of Wisconsin-Madison**

Speciation: The role of learning in social behavior, mate recognition, and sexual isolation in species pairs of threespine sticklebacks

Dissertation Supervisor: Jenny Boughman

B.S. 2004, Biological Sciences, Cornell University

Summa cum laude with Distinction in Research

PUBLICATIONS

† indicates co-first authors; * undergraduate co-authors

- 2019 **Kozak GM**, Wadsworth CB, Kahne SC*, Bogdanowicz SM, Harrison RG, Coates BS, Dopman EB. Genomic basis of circannual rhythm in the European corn borer moth. *Current Biology* 29:3501-3509.
- 2019 Coates BS, **Kozak GM**, Kim KS, Sun J, Wang Y, Fleischer SJ, Dopman EB, TW Sappington. Influence of host plant, geography and pheromone strain on genomic differentiation in sympatric populations of *Ostrinia nubilalis*. *Molecular Ecology* 28: 4439-4452.
- 2018 Levy RC†, **Kozak GM**†, Dopman EB. Non-pleiotropic coupling of daily and seasonal temporal isolation in the European corn borer. *Genes* 9:180. *Special Issue: Evolutionary Genetics of Reproductive Isolation*. doi:10.3390/genes9040180
- **Kozak GM**, Wadsworth CB, Kahne SC*, Bogdanowicz SM, Harrison RG, Coates BS, Dopman EB. A combination of sexual and ecological divergence contributes to rearrangement spread during initial stages of speciation. *Molecular Ecology* 26:2331-2347.
- 2015 Gilman RT, **Kozak GM**. Learning to speciate: the biased learning of mate preferences promotes adaptive radiation. *Evolution* 69:3004-3012. 2015
- 2015 **Kozak GM**, Roland G*, Rankhorn C*, Falater A*, Berdan EL, Fuller RC. Behavioral isolation due to cascade reinforcement in *Lucania* killifish. *American Naturalist* 185:491-506.

GENEVIEVE M. KOZAK

328A Science & Engineering, 285 Old Westport Road Dartmouth, MA 02747 email: gkozak@umassd.edu

website: kozaklab@weebly.com

PUBLICATIONS cont.

† indicates co-first authors; * undergraduate co-authors

- 2015 Levy RC†, **Kozak GM**†, Wadsworth CB, Coates BS, Dopman EB. Explaining the sawtooth: latitudinal periodicity in a circadian gene correlates with shifts in generation number. *Journal of Evolutionary Biology* 28:40-53.
- 2015 **Kozak GM**, Boughman JW. Predator experience overrides learned aversion to heterospecifics in stickleback species pairs. *Proceedings of the Royal Society B: Biological Sciences* 282:20143066.
- 2014 **Kozak GM**, Brennan RS, Berdan EL, Fuller RC, Whitehead AD. Functional and population genomic divergence within and between two species of killifish adapted to different osmotic niches. *Evolution* 68:63-80. *Special Section: Adaptation to environmental stress and change*
- Berdan EL†, **Kozak GM**†, Ming R, Rayburn AL, Kiehart R*, Fuller RC. Insight into genomic changes accompanying divergence: genetic linkage maps and synteny of *Lucania goodei* and *L. parva* reveal a Robertsonian fusion. *G3: Genes, Genomes, Genetics* 4:1363-1372.
- **Kozak GM**, Head ML, Lackey ACR, Boughman JW. Sequential mate choice and sexual isolation in threespine stickleback species. *Journal of Evolutionary Biology* 26:130-140.
- Head ML, **Kozak GM**, Boughman JW. Female mate preferences for male body size and shape promote sexual isolation in threespine sticklebacks. *Ecology and Evolution* 3:2183-2196.
- **Kozak GM**, Boughman JW. Plastic responses to parents and predators lead to divergent shoaling behavior in sticklebacks. *Journal of Evolutionary Biology* 25:759-769.
- **Kozak GM**, Rudolph AB*, Colon BL*, Fuller RC. Postzygotic isolation evolves before prezygotic isolation between fresh and saltwater populations of the rainwater killifish, *Lucania parva. International Journal of Evolutionary Biology Mechanisms of Speciation.*
- Verzijden MN, Servedio MR, ten Cate C, **Kozak GM**, Boughman JW, Svensson E. The impact of learning on sexual selection and speciation. *Trends in Ecology & Evolution* 27:511-519. *Highly cited paper (top 1%), Web of Science, 93 citations.*
- 2012 Gregorio O*, Berdan EL, **Kozak GM**, Fuller RC. Reinforcement of male mate preferences in sympatric killifish species *Lucania goodei* and *L. parva. Behavioral Ecology & Sociobiology* 66:1429-1436.
- 2011 Kozak GM, Head ML, Boughman JW. Sexual imprinting on ecologically divergent traits leads to sexual isolation in sticklebacks. *Proceedings of the Royal Society B: Biological Sciences* 278: 2604-2610. Featured on Science Now, Faculty of 1000, and Science News.

GENEVIEVE M. KOZAK

328A Science & Engineering, 285 Old Westport Road Dartmouth, MA 02747 email: gkozak@umassd.edu website: kozaklab@weebly.com

PUBLICATIONS cont.

† indicates co-first authors; * undergraduate co-authors

- 2009 **Kozak GM**, Reisland MA, Boughman JW. Sex differences in mate recognition and conspecific preference in species with mutual mate choice. *Evolution* 63:353-365.
- 2009 **Kozak GM**, Boughman JW. Learned conspecific mate preference in a species pair of sticklebacks. *Behavioral Ecology* 20:1282-1288.
- **Kozak GM**, Boughman JW. Experience influences preference for shoal members in a species pair of sticklebacks. *Behavioral Ecology* 19:667-676.

TEACHING EXPERIENCE

Biostatistics, Biology 430/530, UMass-Dartmouth, 2019-2020

Introductory Biology Laboratory, Biology 131, UMass-Dartmouth, 2018-2019

Introduction to Arts and Sciences, CAS 101, UMass-Dartmouth, 2019

Other

Co-Instructor, "Seminar in Molecular Evolution: Genomic Analysis" Biology 196, Tufts University, 2014

Marsico Visiting Lecturer, "Animal Behavior" Biology 3410, University of Denver, 2015 Guest Lecturer, "Evolution" Biology 143, Tufts University, 2014-2017

Guest Lecturer, "Evolution" Integrative Biology 302, University of Illinois, 2013

Teaching Assistant, "Introductory Biology", Zoology 151, University of Wisconsin, 2007-09

Teaching Assistant, "Evolution of Behavior", Zoology 425, University of Wisconsin, 2006

FELLOWSHIPS, GRANTS AND AWARDS

Grants		
2012	National Institute of Mathematical and Biological Synthesis Short Term Visitor	\$2,500
2008	National Science Foundation Doctoral Dissertation Improvement Grant Learned Social and Mate Recognition in Species Pairs of Sticklebacks (IOS-0807469)	\$12,000
2004	University Research Grant, University of Wisconsin-Madison	\$4,000
Fellowships		
2009	American Association of University Women Dissertation Fellowship	\$20,000
2005	National Science Foundation Predoctoral Graduate Research Fellowship	\$90,000
2004	University Fellowship, University of Wisconsin-Madison	\$18,000