

## GENEVIEVE M. KOZAK

328A Science & Engineering,  
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### ACADEMIC APPOINTMENTS

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- 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

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- 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

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- 2021 Enos AN\*, **Kozak GM**. 2021. Elevated temperature increases reproductive investment in less preferred mates in the invasive European corn borer moth. *Ecology and Evolution* 11:12064-12074.
- 2021 Unbehend M†, **Kozak GM**†, Koutroumpa F†, Coates BS, Dekker T, Groot A, Heckel DG, Dopman EB. *Bric à brac* controls sex pheromone choice by male European corn borer moths. *Nature Communications*. <https://doi.org/10.1038/s41467-021-23026-x>
- 2021 Berdan EL, Fuller RC, **Kozak GM**. 2021 Genomic landscape of reproductive isolation in *Lucania killifish*: The role of sex loci and salinity. *Journal of Evolutionary Biology* 34:157-174. *Special Issue: Speciation in Marine Environments. Editor's Choice*.
- 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](https://doi.org/10.3390/genes9040180)

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### PUBLICATIONS *cont.*

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

- 2017 **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.
- 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*
- 2014 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.
- 2013 **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.
- 2013 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.
- 2012 **Kozak GM**, Boughman JW. Plastic responses to parents and predators lead to divergent shoaling behavior in sticklebacks. *Journal of Evolutionary Biology* 25:759-769.
- 2012 **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*.

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### PUBLICATIONS *cont.*

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

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- 2012 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.*
- 2009 **Kozak GM**, Reiland 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.
- 2008 **Kozak GM**, Boughman JW. Experience influences preference for shoal members in a species pair of sticklebacks. *Behavioral Ecology* 19:667-676.

### FELLOWSHIPS, GRANTS AND AWARDS

#### Grants

- 2021 FWS/USGS Science Support Partnership/Quick Response Program (PI: Toni-Lyn Morelli)
- 2012 National Institute of Mathematical and Biological Synthesis Short Term Visitor
- 2008 National Science Foundation Doctoral Dissertation Improvement Grant  
Learned Social and Mate Recognition in Species Pairs of  
Sticklebacks (IOS-0807469)
- 2004 University Research Grant, University of Wisconsin-Madison

#### Fellowships

- 2009 American Association of University Women Dissertation Fellowship
- 2005 National Science Foundation Predoctoral Graduate Research Fellowship
- 2004 University Fellowship, University of Wisconsin-Madison

### TEACHING EXPERIENCE

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**Conservation Genetics**, *Biology 411/511, UMass-Dartmouth, 2020-2021*

**Biostatistics**, *Biology 430/530, UMass-Dartmouth, 2019-2021*

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

**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*