

Katie Scranton

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Experience

Software Engineering Lead, Elsevier	2020 - present
Senior Data Scientist, Elsevier	2018 - present
<i>Advanced Clinical Decision Support</i>	
Lecturer, University of California, Los Angeles	2018
<i>Life Sciences</i>	
Postdoctoral Fellow, University of California, Los Angeles	2016 - 2018
<i>Department of Ecology and Evolutionary Biology</i>	
Postdoctoral Fellow, Yale University	2012 - 2015
<i>Department of Ecology and Evolutionary Biology</i>	

Education

Ph.D., University of California, Berkeley	2006 - 2012
<i>Department of Environmental Science, Policy, and Management</i>	
B.Sc., McGill University	2000 - 2005
<i>Major in Biology, Minor in Mathematics and Statistics</i>	

Publications

1. A. Morozov, K. Abbott, K. Cuddington, T. Francis, G. Gellner, A. Hastings, Y.C. Lai, , S. Petrovskii, **K. Scranton**, M.L. Zeeman, 2020. Long transients in ecology: Theory and applications. *Physics of Life Reviews*. doi: 10.1016/j.plrev.2019.09.004
2. A. Hastings, K. Abbott, K. Cuddington, T. Francis, G. Gellner, Y.C. Lai, A. Morozov, S. Petrovskii, **K. Scranton**, M.L. Zeeman, 2018. Transient phenomena in ecology. *Science*. doi: 10.1126/science.aat6412
3. Littrell, K.A., S.R. Gephard, A.D. MacDonald, E.P. Palkovacs, **K. Scranton**, and D.M. Post, 2018. Pre-zygotic isolation and potential for pre-zygotic isolation and hybridization between landlocked and anadromous alewife (*Alosa pseudoharengus*) following secondary contact. *Evolutionary Applications*. DOI: 10.1111/eva.12645
4. **Scranton, K.**, P. Amarasekare, 2017. Predicting phenological shifts in a changing climate. *PNAS*. doi: 10.1073/pnas.1711221114
5. **Scranton, K.**, V. Lummaa, S.C. Stearns, 2016. The importance of the timescale of the fitness metric for estimates of selection on phenotypic traits during a period of demographic change. *Ecology Letters*. **19**: 854-861.
6. **Scranton, K.**, D.A. Vasseur, 2016. Coexistence and emergent neutrality generate synchrony among competitors in fluctuating environments. *Theoretical Ecology*. **9(3)**:353-363.
7. de Valpine P., **K. Scranton**, J. Knappe, K. Ram, and N.J. Mills, 2014. The importance of individual developmental variation in stage-structured population modeling. *Ecology Letters*. **17(8)**:1026-1038

8. **Scranton, K.**, J. Knape, and P. de Valpine, 2014. An approximate Bayesian computation approach to parameter estimation in a stochastic stage-structured population model. *Ecology*. **95**(5):1418-1428
9. **Scranton, K.**, M. Stavriniades, N. J. Mills, and P. de Valpine, 2013. Small-scale intraspecific life history variation in herbivorous spider mites (*Tetranychus pacificus*) is associated with host plant cultivar. *PLoS ONE* **8**:e72980.
10. de Valpine, P., **K. Scranton**, and C. P. Ohmart, 2010. Synchrony of population dynamics of two vineyard arthropods occurs at multiple spatial and temporal scales. *Ecological Applications*. **20**:1926–1935.

Invited Talks

Women in Statistics and Data Science Conference, American Statistical Association <i>WSDS R-Ladies Panel: Improving Gender Diversity in a Male Dominated Community</i>	October 2017
Louisiana State University <i>Department of Oceanography and Coastal Sciences</i>	May 2017
Rutgers, the State University of New Jersey <i>Department of Ecology, Evolution, and Natural Resources</i>	April 2017
University of California, Riverside <i>Department of Biology</i>	October 2016
University of Sheffield, United Kingdom <i>Department of Animal and Plant Sciences</i>	April 2015
Haverford College, Pennsylvania <i>Department of Mathematics and Statistics</i>	November 2014

Teaching

Lecturer, University of California, Los Angeles Introduction to Collaborative Learning Theory & Practice	Spring Quarter 2018
Lecturer, University of California, Los Angeles Mathematics for Life Scientists	Winter Quarter 2018

Last Updated December 28, 2020