

Carl Boettiger

Center for Stock Assessment Research
110 Shaffer Rd
Santa Cruz, CA 95050, USA

cboettig@soe.ucsc.edu
cboettig@gmail.com
<http://carlboettiger.info>

Employment 2012-13 CSTAR Postdoctoral Scholar, University of California, Santa Cruz

Education 2012 **Ph.D. Population Biology** University of California, Davis
2007 **A.B. Physics**, Princeton University
with Honors and Certificates in Biophysics and Applied Mathematics

Publications

1. Boettiger, C., Hastings, A. (2013) "Tipping points: From patterns to predictions." *Nature*. 493, 157-158. doi:[10.1038/493157a](https://doi.org/10.1038/493157a)
2. Boettiger, C., Hastings, A. (2012) "Early Warning Signals and the Prosecutor's Fallacy." *Proceedings of the Royal Society B*. 279(1748) 4734-4739. doi: [10.1098/rspb.2012.2085](https://doi.org/10.1098/rspb.2012.2085)
3. Boettiger, C., Temple-Lang, D., Wainwright, P.C. (2012) "rfishbase: exploring, manipulating and visualizing FishBase data from R" *Journal of Fish Biology*. 81(6) 2030-2039. doi: [10.1111/j.1095-8649.2012.03464.x](https://doi.org/10.1111/j.1095-8649.2012.03464.x)
4. Boettiger, C., Temple-Lang, D. (2012) "Programmatic access to TreeBASE phylogenies in R." *Methods in Ecology and Evolution* doi: [10.1111/j.2041-210X.2012.00247.x](https://doi.org/10.1111/j.2041-210X.2012.00247.x)
5. Boettiger, C. Hastings, A (2012) "Quantifying limits to detection of early warning for critical transitions." *Journal of The Royal Society Interface*, 9(75), 2527-2539. doi: [10.1098/rsif.2012.0125](https://doi.org/10.1098/rsif.2012.0125).
6. Beaulieu, J.M., Jhwueng, D., Boettiger, C., O'Meara, B. (2012) "Modeling Stabilizing Selection: Expanding the Ornstein-Uhlenbeck Model of Adaptive Evolution," *Evolution*. 66(8) 2369-2383. doi: [10.1111/j.1558-5646.2012.01619.x](https://doi.org/10.1111/j.1558-5646.2012.01619.x))
7. Boettiger, C., Coop, G., Ralph, P. (2012) "Is your phylogeny informative? Measuring the power of comparative methods." *Evolution*. 66(7) 2240-51. doi: [10.1111/j.1558-5646.2012.01574.x](https://doi.org/10.1111/j.1558-5646.2012.01574.x)
8. Boettiger, C., Dushoff, J., Weitz, J. S. (2010) "Variation in the phenotypic dynamics of evolving populations," *Theoretical Population Biology* 77, 6-13. doi: [10.1016/j.tpb.2009.10.003](https://doi.org/10.1016/j.tpb.2009.10.003)
9. Wray, J., Bahcall, N., Bode, P., Boettiger, C., Hopkins, P. (2006) "The Shape, Multiplicity, and Evolution of Superclusters in Λ CDM Cosmology." *Astrophysical Journal* 652, 907. doi: [10.1086/508600](https://doi.org/10.1086/508600)

Presentations 2012: ESA; Portland, Oregon. *Evolution*; Ottawa, CAN. **invited**. *iEvoBio*; Ottawa, CAN. *Computational Science*; Washington DC.
2011: *Ecological Society of America*; Austin, TX. *Evolution*; Norman, OK. *iEvoBio*; Norman, OK. *Science Online*; Durham, NC. *Society for Integrative and Comparative Biology*. Salt Lake City, UT.
2010: *iEvoBio*; Portland, OR. *Evolution*; Portland OR.
2009: *University of Tennessee*, Knoxville, TN. *IIASA*, Vienna; Austria.

Grants 2013-15 NSF Mathematical Biology Postdoctoral Scholar, \$138,000
2012 Short-term visitor grant to NIMBioS
2012 NERSC Supercomputing, DOE Grant No. DE-AC02-05CH11231, 50,000 hrs
2009 National Academy of Sciences, NSF Grant No. OISE-0738129, \$8,000
2008-12 Computational Science Graduate Fellowship \$144,000

Honors & Awards 2011 *Volterra Award* (Best student talk, ESA Theory Section)
Elected to Membership in the Society of *Sigma Xi*
Allen G. Shenstone Prize in Physics, Princeton
The Class of 1870 Old English Prize, Princeton

Service **Reviewer for:** *Theoretical Ecology*, *Journal of Mathematical Biology*, *Ecological Modelling*, *Evolution*, *Methods in Ecology and Evolution*, *Ecosphere*, *Proceedings of the Royal Society B*, *Journal of Theoretical Biology*, *PLoS ONE*, *Ecology*, *Conservation Letters*, *Ecology Letters*

Teaching Experience 2012 Mentor for Google Summer of Code, R-Project
2011 Instructor, Bodega Phylogenetics Workshop
2008 Student Mentor, CLIMB program
2008 Teaching Assistant: Introductory Zoology