

# Noah M. Reid

noah.reid@uconn.edu  
Tel: (617) 448 6964  
Twitter: @NM\_Reid  
Web: NREID.GITHUB.IO/ABOUT/

75 N. Eagleville Rd, U-3125  
University of Connecticut  
Storrs, CT 06269 USA

## Current Position

ASSISTANT RESEARCH PROFESSOR 2016 - PRESENT  
Department of Molecular and Cell Biology  
University of Connecticut

## Education

PH.D. Louisiana State University 2013  
Mentor: Bryan Carstens

M.S. University of Idaho 2008  
Mentor: Jack Sullivan

B.A. Boston University Cum Laude 2003  
Mentors: Polly Campbell/Thomas Kunz

Post-doctoral Research  
University of California, Davis 2013 - 2016  
Mentor: Andrew Whitehead

**Research Interests:** Ecological and evolutionary genomics, systematics, comparative phylogeography, speciation.

## Peer-Reviewed Publications (H-index=14; Citations=1423)

Miller JT, Reid NM, Nacci D, Whitehead A. 2019. Developing a high-quality linkage map for the fish *Fundulus heteroclitus*. *Submitted to G3*.

Oziolor EM, Reid NM, Yair S, Lee KM, Guberman Verploeg S, Bruns PC, Shaw JR, Whitehead A, Matson CW. 2019. Adaptive introgression enables evolutionary rescue from extreme environmental pollution. *Science*. *In press*.

Reid NM, Jackson CE, Gilbert D, Minx P, Montague MJ, Hampton TH, Helfrich LW, King BL, Nacci DE, Aluru N, Karchner SI, Colbourne JK, Hahn ME, Shaw JR, Oleksiak MF, Crawford DL, Warren WC, and A Whitehead. 2017. The landscape of extreme genomic variation in the highly adaptable Atlantic killifish. *Genome Biology and Evolution*, 9(3):659-676.

Rodgers R, Roach J, Reid NM, Whitehead A, and DD Duvernell. 2017. Phylogenomic analysis of Fundulidae (Teleostei: Cyprinodontiformes) using RNA-sequencing Data. *Molecular Phylogenetics and Evolution*, 121:150-157.

Whitehead A, Clark BW, Reid NM, Hahn ME, and D Nacci. 2017. When evolution is the solution

to pollution: Key principles, and lessons from rapid repeated adaptation of killifish (*Fundulus heteroclitus*) populations. *Evolutionary Applications*, 2017:1-22.

Holland EB, Goldstone JV, Pessah IN, Whitehead A, Reid NM, Karchner SI, Hahn ME, Nacci DE, Clark BW, and JJ Stegeman. 2017. Ryanodine receptor and FK506 binding protein 1 in the Atlantic killifish (*Fundulus heteroclitus*): A phylogenetic and population-based comparison. *Aquatic Toxicology*, 192:105-115.

Reid NM, Proestou DA, Clark BW, Warren WC, Colbourne JK, Shaw JR, Karchner SI, Hahn ME, Nacci D, Oleksiak MF, Crawford DL, and A Whitehead. 2016. The genomic landscape of rapid repeated evolutionary adaptation to toxic pollution in wild fish. *Science*, 354(6317):1305-1308.

Carstens BC, Gruenstaeudl M, and NM Reid. 2016. Community trees: Identifying codiversification in the Paramo dipteran community. *Evolution*, 70(5): 1080-0193.

Gruenstaeudl M, Reid NM, Wheeler GL, and BC Carstens. 2015. Posterior Predictive Checks of Coalescent Models: P2C2M, an R package. *Molecular Ecology Resources* 16(1): 193:205

Sullivan J, Demboski JR, Bell KC, Hird S, Sarver B, Reid N, and JM Good. 2014. Divergence with gene flow within the recent chipmunk radiation (*Tamias*). *Heredity*. 113:185-194.

Reid NM, Hird SM, Brown JM, McVay JD, Pelletier TA and BC Carstens. 2013. Poor fit to the multispecies coalescent is widely detectable in empirical data. *Systematic Biology*. 63(3):322-333.

Carstens BC, Pelletier TA, Satler JD, and NM Reid. 2013. How to fail at species delimitation. *Molecular Ecology*. 22(17):4369-4383.

Reid NM, and BC Carstens. 2012. Phylogenetic estimation error can decrease the accuracy of species delimitation: a Bayesian implementation of the general mixed Yule-coalescent model. *BMC Evolutionary Biology*. 12:196.

\*HIGHLY ACCESSED

Reid NM, Demboski JR and J Sullivan. 2012. Phylogeny estimation of the radiation of western North American chipmunks (*Tamias*) in the face of introgression using reproductive protein genes. *Systematic Biology*. 61(1):44-62.

Hird S, Reid NM, Demboski JR, and J Sullivan 2010. Analysis of differentially aged hybrid zones in red-tailed chipmunks. *Genetica*. 138(8):869-883.

Reid NM, Hird S, Schulte-Hostedde AS, and J Sullivan. 2010. Examination of nuclear loci across a zone of mitochondrial introgression between *Tamias ruficaudus* and *T. amoenus* (Sciuridae: *Tamias*). *Journal of Mammalogy*. 91(6):1389-1400.

Carstens BC, H Stoute, and NM Reid. 2009. An information theoretic approach to phylogeography. *Molecular Ecology*. 18:4270-4282.

Good JM, Hird S, Reid NM, Demboski JR, Stepan SJ, Martin-Nims TR, and J Sullivan. 2008. Ancient hybridization and mitochondrial capture between two species of chipmunks. *Molecular Ecology*. 17:1313-1327.

Campbell P, Reid NM, Zubaid A, Adnan, AM, and TH Kunz. 2006. Comparative roosting ecology of *Cynopterus* (Chiroptera:Pteropodidae) fruit bats in peninsular Malaysia. *Biotropica*. 38: 725-734.

## Posters and Presentations

- Reid NM. 2017. The genomics of adaptation in killifishes (*Fundulus*). Invited seminar. Marine Biology Seminar Series at University of Connecticut, Avery Point.
- Reid NM. 2017. Comparative functional genomics of osmotic physiology in 16 species of killifish. *Evolution* 2017. Portland, Oregon. USA.
- Reid NM, and JA Whitehead. 2014. Parallelism and Divergence in the rapid evolution of a dramatic tolerance to hydrocarbon pollution in the Atlantic Killifish (*Fundulus heteroclitus*). Poster. Bay Area Population Genomics Conference. U.C. Davis.
- Reid NM, and JA Whitehead. 2014. Parallelism and Divergence in the rapid evolution of a dramatic tolerance to hydrocarbon pollution in the Atlantic Killifish (*Fundulus heteroclitus*). Poster. Ecological Genomics Symposium. Kansas City.
- Reid NM, and JA Whitehead. 2014. Parallelism and Divergence in the rapid evolution of a dramatic tolerance to hydrocarbon pollution in the Atlantic Killifish (*Fundulus heteroclitus*). Talk. Center for Population Biology seminar series. U.C. Davis.
- Reid NM, and BC Carstens. 2013. What can we learn from sequence-based species discovery? An example using sky-island fly communities. Talk. *Evolution* 2013. Snowbird, Utah. USA.
- Reid NM, Hird SM, Satler J, Pelletier TA, McVay JD, Brown J, and BC Carstens. 2012. Do multispecies coalescent models fit empirical data? Society of Systematic Biology invited symposium talk. *Evolution* 2012. Ottawa, Ontario. Canada.
- Reid NM, and BC Carstens. 2011. A Bayesian implementation of the mixed Yule-coalescent model for species delimitation. Talk. *Evolution* 2011. Norman, Oklahoma. USA.
- Reid NM, Koopman MM, Zellmer AJ, and BC Carstens. 2011. Integrating over taxonomic and phylogenetic uncertainty in analyses of phylogenetic community structure in the fluid of the pale pitcher plant (*Sarracenia alata*). Talk. Ecological Society of America Annual Meeting. Austin, Texas. USA.
- Reid NM, JR Demboski and J Sullivan. 2009. Species tree estimation and hybridization in the western chipmunks (*Sciuridae:Tamias*). Talk. *Evolution* 2009. Moscow, ID. USA.
- Reid NM and J Sullivan. 2006. Integrating morphological and molecular data in the study of hybrid zones. Poster. *Evolution* 2006. Stonybrook, New York. USA.

## Teaching Experience

- Instructor: Environmental Genomics at Mount Desert Island Biological Laboratory.  
2018: Gave lectures on my research and population genetic methods.
- Instructor. University of Connecticut.  
2019: MCB1201. Virus Hunting: Applied Bioinformatics  
2018: MCB5896. The footprints of natural selection in the genome.  
2017: MCB5896. The footprints of natural selection in the genome.
- Instructor. ForBio Species Tree Phylogenetics Course. Gothenburg, Sweden.  
2014: Gave Lectures on Bayesian Statistics in phylogenetics. Helped develop student projects.
- Graduate Teaching Assistant. Louisiana State University.

2012: Introductory Biology  
2013: Genetics

Graduate Teaching Assistant. University of Idaho.

2005: Introductory Biology  
2006: Introductory Biology, Ecology  
2007: Ecology, Mammalogy

Teaching Assistant. Boston University.

2003: Tropical Ecology Program in Ecuador.

## **Funding and Awards**

Louisiana Board of Regents Graduate Fellowship. 2008. \$100,000

American Alpine Club Fund. 2010. \$300

Society of Systematic Biologists Grant. 2010. \$1800

Louisiana State University Biograds Research Awards 2009, 2010, 2011. \$900 total

## **Computational Experience**

Published Software:

R package: bGMYP. Reid NM and BC Carstens 2012.

R package: MCPoPS. Reid NM et al. 2013.

R package: P2C2M. Gruenstaeudl et al. 2015.

Programming: R, Bash, Python

## **Field Experience**

Dissertation Research. 2009. General collection of Diptera. Costa Rica.

Thesis Research. 2006-2007. Small mammal trapping. Idaho, Montana, British Columbia.

Field Research Assistant. 2005. Bird bander. Manomet Center for Conservation Science.  
Manomet, MA. USA.

Field Research Assistant. 2004. Determinants of Amazonian leaf litter ant community structure.  
Ecuador. With Amy Mertl, James Traniello. Boston University.

Field Research Assistant. 2004. Mate choice in *Manacus vitellinus* (Aves:Pipridae). Panama.  
With Adam Stein, Al Uy, Syracuse University.

National Science Foundation "Research Experience for Undergraduates". 2002. Ecology of  
Southeast Asian *Cynopterus* (Mammalia:Pteropodidae). Malaysia. With Polly Campbell,  
Thomas H. Kunz. Boston University.

## **Professional Memberships**

Society for the Study of Evolution, Society of Systematic Biologists

## **Outreach and Service**

**PEER REVIEW:** Evolution, Heredity, Molecular Ecology, Proceedings of the Royal Society B., Systematic Biology, Bioinformatics, Evolutionary Applications, Methods in Ecology and Evolution, Molecular Ecology Resources

Founding contributor to the group blog *Nothing in Biology Makes Sense!* ([nothinginbiology.org](http://nothinginbiology.org)). It has covered topics in evolution and ecology for a general audience since September 2011.

LSU Biograds Social Coordinator – 2009-2010