

John P. Wares

wareslab.genetics.uga.edu

University of Georgia – Department of Genetics & Odum School of Ecology

Education

B.S. in Zoology with Honors
Ph.D. in Zoology and Genetics

University of Oklahoma, 1995
Duke University, 2000

Postdoctoral Training

University of New Mexico
University of California, Davis

PI: Tom Turner, 2000-2002
PI: Rick Grosberg, 2002-2004

Academic Positions

Assistant Professor
Associate Professor
Visiting Lecturer

University of Georgia, 2005-2011
University of Georgia, 2011-present
UW - Friday Harbor Labs, summer 2016

Publications (n=90; 76 while at UGA)

n.b. I tend to promote students and junior colleagues via 1st authorship, with senior authorship as last. I also have a philosophical goal in publishing as much in Open Access and low-cost journals as possible.
ξ equal authorship *student

2019 (0)

2018 (2)

Wares, J. P., S. Crickenberger, A. F. Govindarajan, J. L. Hamrick, K. M. Skoczen, D. W. Trapnell, and D. S. Wethey. 2018. The cryptic population biology of *Chthamalus fragilis* Darwin, 1854 on the Atlantic coast of North America. *J. Crustacean Biol.*, DOI: doi.org/10.1093/jcbiol/ruy070.

Ewers-Saucedo, C.* and J. P. **Wares**. 2018. Population connectivity and phylogeography of Crustaceans. In: G. Poore and M. Thiel, eds. *Evolution and Biogeography. The Natural History of the Crustacea*, vol. 8. in press.

2017 (5)

Ewers-Saucedo, C*., B. K. K. Chan, J. D. Zardus, and J. P. **Wares**. 2017. Parallel patterns of host-specific morphology and genetic admixture in sister lineages of a commensal barnacle. *Biol. Bull.* 232:171-185.

Chandler, V. K*. and J. P. **Wares**. 2017. RNA expression and disease tolerance are associated with a “keystone mutation” in the ochre sea star *Pisaster ochraceus*. *PeerJ* 5:e3696; DOI 10.7717/peerj.3696

Govindarajan, A.F., M. R. Carman, M.R. Khaidarov, A. Semenchenko, J.P. **Wares**. 2017. Mitochondrial diversity in *Gonionemus* (Trachylina: Hydrozoa) and its implications

for understanding the origins of clinging jellyfish in the Northwest Atlantic Ocean. *PeerJ* 5:e3205.

Guo B, **Wares** JP. (2017) Large-scale gene flow in the barnacle *Jehlius cirratus* and contrasts with other broadly-distributed taxa along the Chilean coast. *PeerJ* 5:e2971 <https://doi.org/10.7717/peerj.2971>

Pringle, J. M., J. E. Byers, R. He, P. Pappalardo, & J.P. **Wares**. (2017). Ocean currents and competitive strength interact to cluster benthic species range boundaries in the coastal ocean. *Marine Ecology Progress Series* 567:29-40.

2016 (8)

Ewers-Saucedo*, C., R. Hanel, J. P. **Wares**, and D. Brandis. 2016. Phylogenetic and mechanistic insights into the evolution of male copulatory organs in Shame-Faced Crabs (Decapoda: Eubrachyura: Calappidae) De Haan, 1833. *J. Crustacean Biol.* 36:804-814.

Ewers-Saucedo*, C., J. M. Pringle, H. H. Sepúlveda, J. E. Byers, S. A. Navarrete, and J. P. **Wares**. 2016. The oceanic concordance of phylogeography and biogeography: A case study in *Notochthamalus*. *Ecology & Evolution*, DOI: 10.1002/ece3.2205

Ewers-Saucedo*, C., J. Zardus, and J. P. **Wares**. 2016. Microsatellite loci discovery from next-generation sequencing data and loci characterization in the epizoic barnacle *Chelonibia testudinaria* (Linnaeus, 1798). *PeerJ* 4:e2019 <https://doi.org/10.7717/peerj.2019>

Wares, J. P. and L. Schiebelhut*. 2016. What doesn't kill them makes them stronger: An association between elongation factor 1- α overdominance in the sea star *Pisaster ochraceus* and "sea star wasting disease". *PeerJ* 4:e1876 DOI:10.7717/peer1876

Ewers-Saucedo*, C., N. B. Hope, and J. P. **Wares**. 2016. The unexpected mating system of the androdioecious barnacle *Chelonibia testudinaria* (Linnaeus, 1758). *Molecular Ecology* DOI: 10.1111/mec.13593

Pappalardo, P., F. B. Pitombo, P. A. Haye, and J. P. **Wares**. 2016. A rose by any other name: systematics and diversity in the Chilean giant barnacle *Austromegabalanus psittacus*. *J. Crustacean Biology*, DOI: 10.1163/1937240X-00002403.

Wares, J. P. and P. Pappalardo. 2016. Can theory improve the scope of quantitative metazoan metabarcoding? *Diversity*, doi:10.3390/d8010001.

Wares, J.P. (2016) Population Structure and Gene Flow. In: Kliman, R.M. (ed.), Encyclopedia of Evolutionary Biology. vol. 3, pp. 327–331. Oxford: Academic Press.

2015 (5)

Kemp, D. W., A. Rivers, K. M. Kemp, E. K. Lipp, J. W. Porter, and J. P. **Wares**. 2016. Spatial homogeneity of bacterial communities associated with the surface mucus layer of the reef-building coral *Acropora palmata*. PLoS ONE, DOI: 10.1371/journal.pone.0143790.

Govindarajan, A. F., F. Bukša, *K. Bockrath, J. P. **Wares**, J. Pineda. 2015. Phylogeographic structure and northward range expansion in the barnacle *Chthamalus fragilis*. *PeerJ* 3:e926 <https://dx.doi.org/10.7717/peerj.926>

- Freeman, B. J., A. T. Taylor, K. J. Oswald, J. **Wares**, M. C. Freeman, J. M. Quattro, J. K. Leitner. 2015. Shoal basses: A clade of cryptic identity. *Am. Fish. Soc. Sympos.* 82: 449-466.
- Pappalardo, P., J. M. Pringle, J. P. **Wares**, J. E. Byers. 2015. The location, strength, and mechanisms behind marine biogeographic boundaries of the east coast of North America. *Ecography*, DOI: 10.1111/ecog.01135.
- *Ewers-Saucedo, C., M. Arendt, J. P. **Wares**, D. Rittschof. 2015. Growth, mortality and mating group size of an androdioecious barnacle: implications for the evolution of dwarf males. *J. Crustacean Biology*, DOI: 10.1163/1937240X-00002318.

2014 (5)

- Wares**, J. P. 2014 Mitochondrial cytochrome *b* sequence data are not an improvement for species identification in scleractinian corals. *PeerJ* 2:e564 <http://dx.doi.org/10.7717/peerj.564>
- *Winternitz, J., M. Yabsley, J. P. **Wares**, S. Altizer. 2014. Wild cyclic voles maintain high neutral and MHC diversity independently of parasitism. *Evol. Ecol.* 28: 957-975.
- Popovic, I., P. Marko, J. P. **Wares**, M. Hart. 2014. Selection and demographic history shape the molecular evolution of the gamete compatibility protein bindin in *Pisaster* sea stars. *Ecology and Evolution* 2014; 4(9):1567–1588
- Zakas, C., K. Jones, and J. P. **Wares**. 2014. Homogeneous nuclear background for mitochondrial cline in northern range of *Notochthamalus scabrosus*. *Genes, Genomes, Genetics* 4:225-230.
- Pringle, J. M., J. E. Byers, P. Pappalardo, J. P. **Wares**, D. Marshall. 2014. Circulation constrains the evolution of larval development modes and life histories in the coastal ocean. *Ecology* 95:1022–1032. <http://dx.doi.org/10.1890/13-0970.1>

2013 (8)

- Wares**, J. P. 2013. Mitochondrial evolution across lineages of the vampire barnacle *Notochthamalus scabrosus*. *Mitochondrial DNA*, doi: 10.3109/19401736.2013.825791.
- *Winternitz, J. and J. P. **Wares**. 2013. Duplication and population dynamics shape historic patterns of selection and genetic variation at the MHC in rodents. *Ecology & Evolution*, DOI - 10.1002/ece3.567.
- Altman, S., J. D. Robinson, J. Pringle, J. Byers and J. P. **Wares**. 2013. Edges and overlaps in Northwest Atlantic phylogeography. *Diversity*, 5: 263-275.
- *Robinson, J., D. Hall, and J. P. **Wares**. 2013. Approximate Bayesian estimation of extinction rate in the Finnish *Daphnia magna* metapopulation. *Molecular Ecology*, DOI: 10.1111/mec.12283.
- Wisniewski, J. M., K. D. Bockrath*, J. P. **Wares**, A. K. Fritts, M. J. Hill. 2013. The mussel-fish relationship: a potential new twist in North America? *Trans. American Fisheries Society*, 142:3,642-648.
- *Robinson, J., J. P. **Wares**, and J. Drake. 2013. Extinction hazards in experimental *Daphnia magna* populations: effects of genotype diversity and environmental variation. *Ecology & Evolution*, 3:449.

- *Meyers, M., J. W. Porter and J. P. **Wares**. 2013. Genetic diversity of fluorescent proteins in Caribbean Agariciid corals. *J. Heredity*, doi:10.1093/jhered/est028.
- *Meyers, M., M. S. Pankey, and J. P. **Wares**. 2013. Genealogical approaches to the temporal origins of the Central American gap: Speciation and divergence in Pacific *Chthamalus*. *Revista Biología Tropical*, 61: 75-88.

2012 (8)

- *Zakas, C. and J. P. **Wares**. 2012. Consequences of a poecilogonous life history for genetic structure in coastal populations of the polychaete *Streblospio benedicti*. *Molecular Ecology*, 21: 5447-5460. DOI: 10.1111/mec.12040.
 - *Cox, C., C. Jones, J. P. **Wares**, K. Castillo, M. McField, J. Bruno. 2012. Genetic testing reveals some fish mislabeling but general compliance with a ban on herbivorous fish harvesting in Belize. *Conservation Letters*, 2:132-140.
 - *Robinson, J. D., C. R. Haag, D. W. Hall, V. I. Pajunen, and J. P. **Wares**. 2012. Genetic estimates of population age in the water flea, *Daphnia magna*. *J. Heredity*, in press.
 - *Laughlin, K., C. Ewers, and J. P. **Wares**. 2012. Mitochondrial lineages in *Notochthamalus scabrosus* as indicators of coastal recruitment and interactions. *Ecology & Evolution*, 3:283, doi:10.1002/ece3.283.
 - *Ewers, C. and J. P. **Wares**. 2012. Examining an outlier: molecular diversity in the Cirripedia. *Integrative & Comparative Biology*. doi:10.1093/icb/ics047
 - *Small, S. T., R. Eytan, K. Bockrath, J. P. **Wares**. 2012. Evaluation of genetic structure across freshwater mussel community (genus *Elliptio*) in the Altamaha River basin. *Conservation Genetics*, DOI 10.1007/s10592-012-0345-y
 - *Zakas, C., N. Schult, D. McHugh, K. Jones, J. P. **Wares**. 2012. Transcriptome analysis and SNP development can resolve population differentiation of *Streblospio benedicti*, a developmentally dimorphic marine annelid. *PLoS ONE*, 7(2): e31613.
- Pennings, S., M. Alber, C. Alexander, M. Booth, A. Burd, W. Cai, C. Craft, C. DePratter, D. Dilorio, J. Hollibaugh, C. Hopkinson, S. Joye, C. Meile, B. Moore, B. Silliman, V. Thompson, and J. P. **Wares**. 2012. South Atlantic Tidal Wetlands. in Batzer, DP and Baldwin, A, eds. *Wetland Habitats of North America: Ecology and Conservation Concerns*. University of California Press, Berkeley, CA.

2011 (4)

- Díaz-Ferguson, E., R. A. Haney, J. P. **Wares**, and B. R. Silliman. 2011. Genetic structure and connectivity patterns of Caribbean rocky intertidal gastropods. *J. Moll. Stud.* doi:10.1093/mollus/eyr050
- Pringle, A., E. Barron, K. Sartor, J. P. **Wares**. 2011. Fungi and the Anthropocene: Biodiversity discovery in an epoch of loss. *Fungal Ecology* 4: 121-123.
- Wares**, J. P. 2011. Insights from population genetics: Are all Crustaceans created equal? *J. Crust. Biol.* 31:339-344.
- *Small, G. E., J. P. **Wares**, and C. Pringle. 2011. Stoichiometric challenges of detritivory for a fast-growing consumer met by adaptations to local food quality. *Limnology & Oceanography* 56: 268-278. doi:10.4319/lo.2011.56.1.0268

2010 (5)

- Díaz-Ferguson, E., R. Haney, **J. P. Wares**, and B. Silliman. 2010. Population genetics of an overexploited species broadens picture of Caribbean Sea connectivity. *PLoS ONE*, 5(9): e12675. doi:10.1371/journal.pone.0012675.
- Ilves, K., J. P. **Wares**, M. J. Hickerson. 2010. Inference of assemblage-level demographic histories of the North Atlantic intertidal. *Molecular Ecology*, DOI: 10.1111/j.1365-294X.2010.04790.x.
- (ε) Richards, C. L., J. P. **Wares**, J. A. Mackie. 2010. Evaluating adaptive processes for conservation and management of estuarine and coastal resources. *Estuaries & Coasts*, DOI 10.1007/s12237-010-9306-1
- *Small, S. T. and J. P. **Wares**. 2010. Phylogeography and Marine Retention. *Journal of Biogeography* 37: 781-784.
- Wares**, J. P. 2010. Natural distributions of sequence diversity support new null hypotheses. *Evolution*, doi:10.1111/j.1558-5646.2009.00870.x

2009 (8)

- *Zakas, C., J. Binford†, S. A. Navarette and J. P. **Wares**. 2009. Upwelling-driven community transitions reflected in limited barnacle gene flow. *Marine Ecology Progress Series* 394: 165-177.
- Díaz-Ferguson, E., J. Robinson*, B. Silliman, and J. P. **Wares**. 2009. Comparative Phylogeography of East Coast American Salt Marsh Communities. *Estuaries & Coasts*, DOI 10.1007/s12237-009-9220-6.
- *Robinson, J., E. Díaz-Ferguson, M. Poelchau, D. Bishop, S. Pennings, and J. P. **Wares**. 2009. Spatial variation of genetic and biotic diversity in the salt marsh ecosystem. *Estuaries & Coasts*, DOI 10.1007/s12237-009-9188-2. PMCID: 297827
- Wares**, J. P., M. S. Pankey, F. Pitombo, L. Gómez-Daglio, Y. Achituv. 2009. A shallow phylogeny of shallow barnacles (*Chthamalus*). *PLoS ONE* 4(5):e5567.
- *Scott, C. H., M. Cashner, G. D. Grossman and J. P. **Wares**. 2009. An awkward introduction: Phylogeography and adaptation in *Notropis lutipinnis*. *Ecol. Fresh. Fish*. doi: 10.1111/j.1600-0633.2009.00368.x
- Wares**, J. P. 2009. Evolutionary dynamics of transferrin in *Notropis*. 2009 . *J. Fish Biol.* 73: 1-14.
- *Pankey, M. S. and J. P. **Wares**. 2009. Overdominant maintenance of diversity in seastar *Pisaster ochraceus*. *J. Evolutionary Biology* 22: 80-87
- *Eo, S. H., J. P. **Wares**, and J. P. Carroll. 2009. Subspecies and units for conservation and management of the northern bobwhite in the Eastern United States. *Conservation Genetics*, DOI: 10.1007/s10592-009-9926-9.

2008 (6)

- Wares**, J. P. and J. M. Pringle. 2008. Drift by drift: Effective population size limited by advection. *BMC Evolutionary Biology* 8:235.
- *Eo, S. H., J. P. **Wares**, and J. P. Carroll. 2008. Population divergence in plant species reflects latitudinal biodiversity gradients. *Biol. Lett.* 4: 382-384 doi:10.1098/rsbl.2008.0109
- *Kuo, C.-H., J. P. **Wares**, and J. Kissinger. 2008. The Apicomplexan whole genome phylogeny: An analysis of incongruence among gene trees. *Mol. Biol. Evol.*, doi: 10.1093/molbev/msn213.
- (ξ) Maggs, C. A., R. Castilho, D. Foltz, C. Henzler, T. Jolly, J. Kelly, J. Olsen, K. E. Perez, W. Stam, R. Vainola, F. Viard, and J. P. **Wares**. 2008. Evaluating signatures of glacial refugia for North Atlantic benthic marine taxa. *Ecology* 89: S108-S122.
- Wares**, J. P. 2008. Molecular clock analogs: a relative rates exercise. *Bioscience* 34: 30-35.
- Wares**, J. P. and T. M. Bell. 2008. Isolation. In S. E. Jørgensen and B. D. Fath, The Encyclopedia of Ecology. Elsevier Publishing. 3: 2051-2053.

2007 (5)

- (ξ) Pringle, J. M. and J. P. **Wares**. 2007. The maintenance of alongshore variation in allele frequency in a coastal ocean. *Marine Ecology Progress Series*, 335:69-84.
- Wares**, J. P. and A. M. H. Blakeslee. 2007. AFLP data provide poor solution to the *Littorina littorea* puzzle. *Marine Biology Research* 3: 168-174.
- Wares**, J. P., S. Daley, R. Wetzer, and R. J. Toonen. 2007. An evaluation of cryptic lineages of *Idotea balthica* (Isopoda: Idoteidae): Morphology and microsatellites. *J. Crustacean Biology* 27: 643-648.
- Vellend, M., L. J. Harmon, J. L. Lockwood, M. M. Mayfield, A. R. Hughes, J. P. **Wares**, and D. F. Sax. 2007. Effects of exotic species on evolutionary diversification. *Trends in Ecology and Evolution* 22: 481-488.
- Wares**, J. P. Measurement of genetic variation. 2007. The Encyclopedia of Tidepools and Rocky Shores, M. W. Denny and S. D. Gaines, eds. Univ. Cal. Press. Pp. 249-252.

2006 (2)

- (ξ,*) Harley, C. D., M. S. Pankey, J. P. **Wares** (ξ), M. Wonham, and R. K. Grosberg. 2006. Color polymorphism and genetic structure in the sea star *Pisaster ochraceus*. *Biological Bulletin* 211:248-262.
- Wares**, J. P., P. H. Barber, J. Ross-Ibarra, E. E. Sotka, and R. J. Toonen. 2006. Mitochondrial DNA and Population Size. *Science* 314: 1388-1389.

2005 (5)

- Pringle, A., D.M. Baker, J.L. Platt, J. P. **Wares**, J.P. Latge, and J.W. Taylor. 2005. Cryptic speciation in the cosmopolitan and clonal human pathogenic fungus *Aspergillus fumigatus*. *Evolution* 59: 1886-1899.

- Wares**, J. P. and C. W. Cunningham. 2005. Isolation before glaciation in *Balanus glandula*. *Biological Bulletin* 208: 60-68.
- Wares**, J. P. and A. E. Castañeda*. 2005. Geographic range in *Chthamalus* along the west coast of North America. *Journal of the Marine Biological Association of the U.K.* 85: 327- 331.
- Wares**, J. P., A. R. Hughes, and R. K. Grosberg. 2005. Invasive species and evolutionary processes. Pp. 229-257 in D. Sax, J. Stachowicz, and S. D. Gaines, eds. *Species Invasions: Insights into Ecology, Evolution and Biogeography*. Sinauer Publishing.
- Wares**, J. P. 2005. The Aliens Have Come. *Ecology* 86: 807-808.

2004 and earlier (pre-UGA; 14)

- Baker, M. L., J. P. **Wares**, G. A. Harrison and R. D. Miller. 2004. Relationships among the families and orders of marsupials and the major mammalian lineages based on recombination activating gene-1. *Journal of Mammalian Evolution*, 11: 1-16.
- Sotka, E. E., J. P. **Wares**, J. A. Barth, R. K. Grosberg, S. N. Palumbi. 2004. Strong genetic clines in the rocky intertidal barnacle *Balanus glandula* describe geographic variation in gene flow. *Molecular Ecology* 13: 2143-2156.
- Wares**, J. P., D. Alò, and T. F. Turner. 2004. Successful implementation of recovery goals for endangered southwestern trout: a genetic perspective. *Canadian Journal of Fisheries and Aquatic Science* 61: 1890-1899.
- Sanford, E., M. S. Roth, G. C. Johns, J. P. **Wares**, and G. N. Somero. 2003. Local selection and latitudinal variation in a marine predator-prey interaction. *Science* 300: 1135-1137.
- Sotka, E. E., J. P. **Wares**, and M. E. Hay. 2003. Geographic and genetic variation in feeding preferences for chemically-defended seaweeds. *Evolution* 57 (10): 2262-2276.
- Wares**, J.P. and T. F. Turner. 2003. Phylogeography and diversification in aquatic mollusks. In C. F. Lydeard and D. R. Lindberg, eds. *Molecular Systematics and Phylogeography of Mollusks*. Smithsonian Press. Pp 229-269.
- Wares**, J. P., D. S. Goldwater, B. Y. Kong, and C. W. Cunningham. 2002. Refuting a controversial case of a human-mediated marine species introduction. *Ecology Letters* 5: 577- 584.
- Turner, T. F., J. P. **Wares**, and J. R. Gold. 2002. Genetic effective size is three orders of magnitude smaller than adult census size in an abundant, estuarine-dependent marine fish (*Sciaenops ocellatus*). *Genetics* 162: 1329-1339.
- Wares**, J. P. 2002. Community genetics in the northwestern Atlantic intertidal. *Molecular Ecology* 11: 1131-1144.
- Wares**, J.P, S.D. Gaines and C.W. Cunningham. 2001. A comparative study of asymmetric migration events across a marine biogeographic boundary. *Evolution* 55 (2):295-306.
- Wares**, J.P. 2001. Intraspecific variation and geographic isolation in *Idotea balthica* (Isopoda: Valvifera). *Journal of Crustacean Biology* 21(4): 1007-1013.
- Wares**, J.P. 2001. Biogeography of *Asterias*: North Atlantic climate change and speciation. *Biological Bulletin*, 201(1): 95-103.

- Wares**, J.P. and C. W. Cunningham. 2001. Comparative phylogeography and historical ecology of the North Atlantic intertidal. *Evolution* 55 (12): 2455-2469.
- Wares**, J.P. 2001. Patterns of speciation inferred from mitochondrial DNA in North American *Chthamalus* (Cirripedia: Balanomorpha: Chthamaloidea). *Molecular Phylogenetics and Evolution* 18(1): 104-116. **My first publication!**

Unrefereed

- Wares, John; Abrams, A. J.; Cunningham, C. W. (2018): Tests for shifts in allelic variation during El Niño and at different tidal heights in *Balanus glandula*. figshare. Paper. <https://doi.org/10.6084/m9.figshare.6106712.v1>
- Wares JP. (2014) Why not do phylogeography on every chthamalid barnacle? The case of *Jehlius cirratus*. *PeerJ PrePrints* 2:e596v2
- Wares, John (2014): Diversity in *Testudinalia testudinalis*. **figshare**. <http://dx.doi.org/10.6084/m9.figshare.1036348>
- Wares, John; Turner, Thomas F. (2014): Mitochondrial diversity in rainbow trout and close relatives. **figshare**. <http://dx.doi.org/10.6084/m9.figshare.1162875>
- *Small, S. T. and J. P. **Wares**. 2009. Integrative genetic assessment of threatened species of mussels (Unionidae) in the Altamaha River drainage, Georgia. Report to Georgia Dept. Natural Resources, April 1 2009.
- Wares**, J. P. and 14 student authors. 2007. Genetic assessment of Spring Street (Athens, Georgia) crayfish population. Report to Georgia Dept. Natural Resources, December 10 2007.

Teaching

Lecture Courses (past 5 years, not counting undergrad/grad research)

**developed course or substantial new course material*

2017-2018

BIOL 1104* Biology for Non-Majors (Fall 2017)

GENE 8420 Molecular Ecology (Spring 2018)

2016-2017

GENE 8840* Coalescent Theory (Fall 2016)

ECOL 8000* Intro Grad Ecology (Fall 2016)

2015-2016

FYOS 1001* "Monsters are Useful" (Fall 2015)

GENE 3000H* Honors Evolution (Fall 2015)

GENE 8420* Molecular Ecology (Spring 2016)

2014-2015

GENE 4840/BIOL 4910* Evolution/Climate Change in the Ocean (Spring 2015)

2013-2014

GRSC 7770 Teaching Methods (Fall 2013)

GENE 3000* Intro Evolution (Fall 2013)

2012-2013

GENE 8160* Advanced Evolutionary Genetics (Spring 2013)

GENE 3000 (Fall 2012)

GENE 3000H* Honors Evolution (Fall 2012)

prior: Invasion Biology (GENE 8840), Biodiversity Genetics (GENE 8840), Molecular Ecology (GENE 8420), Evolutionary Genetics (GENE 8160), Intro. Evolution (GENE 3000), Genetics Grad Intro (GENE 8000), Coalescent Theory (GENE 8840)

Lab/Workshop Courses (past 5 years, not counting undergrad/grad research)

2016-2017

FHL 568A* Evolution/Climate Change in the Ocean (Summer 2016)

prior: Evolutionary Genetics GENE 4230L (5 times, course creator); Conservation/Biodiversity Genetics - Organization for Tropical Studies; Phylogenetics Workshops - University of Hawaii, Universidad Católica del Norte (Coquimbo, Chile)

Teaching Improvement

Sustainability in the Curriculum workshop participant, UGA CTL, May 2013

CTL Writing Fellow, 2014-2015

Service: University of Georgia

Franklin College Faculty Senate, 2005-2008

Interdisciplinary Life Sciences (EEO) Graduate Admissions Committee, 2009

Georgia Genomics Facility, Asst. Research Scientist Search Committee, 2009

ILS Curriculum Committee, 2012-3

University Council, 2017

Department of Genetics

Search Committee, Molecular Evolution, 2005-6

Faculty Mentor, Genetics Grad Student Association, 2009-2011

Executive Committee, 2009-2010

ESD-EPA Departmental Lead, 2009-2010

Sustainability Coordinator, 2010-2016

Search Committee, Plant Geneticist, 2010-2011

Graduate Affairs Committee, 2006-2016

Co-Director, NIH Training Grant, 2009-2012

Tenure-Track Evaluation Committee, Melissa Davis, 2012

Third-year review committee, Tessa Andrews, 2016
Graduate Coordinator, 2011-2016

Odum School of Ecology

Search Committees, Population *and* Evolutionary Ecologists, 2007
Search Committee, Extraordinary Ecologist, 2012-2013
Promotion & Tenure Committee, 2015-2018
Diversity Committee, 2015-2016
Facilities Committee, 2017-
Chair, Lecturer Positions Search Committee, 2017

Genetics & Ecology

Search Committee Co-Chair, Molecular Ecologist, 2013-2014

Service: Peer Review and Professional Societies

Journals

Peer reviewer for over 25 international journals; documentation available.
Associate Editor, *Evolution*, 2011-2013
Editorial Board, *The Biological Bulletin*, 2017-2022

Funding Agencies

ad hoc reviews for National Science Foundation; Georgia Sea Grant; Leverhulme Trust;
Portuguese Science Foundation, FONDECYT (Chile); KAUST
Review Panel, NSF Biological Oceanography, November 2012

Service: Synergistic Activities

Undergraduate Training

REU Mentor - Georgia Coastal Ecosystems LTER, 2006; Fungal Genomics &
Computational Biology, 2007-2008; SUNFIG Mentor, 2009
NSF "Undergraduate Mentoring in Environmental Biology" SSE (2004-2006)
Sustainability in the Curriculum workshop participant, UGA CTL, May 2013
CTL Writing Fellow, 2014-2015
UGA Honors Program Lunchbox, 2016
STaRS career fair, Georgia Gwinnett College, April 2013
"About Graduate School" Panelist, 2015 SEEC Conference, Athens, GA, March 2015

International Outreach

Marine Phylogeography Workshop, Universidad Catolica del Norte, Coquimbo, Chile,
November 2011

UC-MEXUS advisor (2004-2005)

Judge, AAAS Workshop “Empowering Minority Engineers & Scientists to Reach for Graduate Education” (2005); Western Society of Naturalists Student Presentations (2005); Benthic Ecology Meeting (2010)

Organizational

Symposium Organizer, International Biogeographic Society (2007)

Steering Committee for Biodiversity Science and Education Initiative (2005-2007)

NSF Biological Oceanography ECCO Marine Adaptation Workshop (2010)

Organizer, Union of Athens Scientists (2017)

Steering Committee, RCN-Evolution in Changing Seas (2018-)

Online

contributor, *EEB & Flow* science blog (evol-eco.blogspot.com) in 2010

contributor, *TheSeaMonster.net* ocean science blog

<http://theseamonitor.net/2012/11/evolution-in-the-changing-oceans/>

<http://theseamonitor.net/2013/01/turbulence/>

Community

LemonAid Volunteer, 2011 (<http://lemonaid.uga.edu/>) – explaining coral disease and diversity research to local 4th grade students at Fowler Drive Elementary

Funded Biological Illustration BS student Melissa Merrill to do first illustration of *Notochthamalus scabrosus* since Darwin’s 1854 monograph

President, Friends of the Georgia Museum of Natural History, 2017-2020

Funding & Awards

Pending

Current

Collaborative Research: Selection and genetic succession in the intertidal - population genomics of **Pisaster ochraceus** during a wasting disease outbreak and aftermath. National Science Foundation, 2017-2020, \$184,233

Prior

Provost Research Award, Population genetics and aquaculture of *Mytilus chilensis*, 2014-2015

Whiteley Center Fellow, Friday Harbor Laboratories, Summer 2014

FONDECYT (Chile) collaborator with Dr. Pilar Haye and Dr. Cris Gallardo-Escartin on aquacultural genetics and diversity in coastal Chile

National Institute of Health Kirchstein T-32 training grant for UGA Genetics, May 2011. Co-director and proposal writer, stepped down to be Graduate Coordinator.

National Science Foundation *Collaborative Research: Evaluating marine clines to predict larval retention*; PI, OCE Panel, February 2010 (NCE)

National Science Foundation *Collaborative Research: Ecology of a Reverse Zoonosis: Human-Environment Interactions in the Transmission, Persistence, and Virulence of White Pox Disease in Elkhorn Coral*; co-PI, EID Panel, December 2009, with NCE ends 2015

National Science Foundation *Collaborative Research: A mechanistic understanding of biogeographic patterns and life histories in advective environments*; Biological Oceanography panel, August 2009

US Department of Interior USFW *Genetic monitoring throughout the South Atlantic Ecosystem*; partnership with Greg Moyer, September 2011, **\$133,480**

National Geographic Society *Coastal salt marshes and phylo-oceanography: Supply lines for a high productivity ecosystem*; 2008-2011, **\$18,500 (PI)**

UGA Research Foundation *Evaluating the Evolutionary Stability of a Species*; 2009-10, **\$9,455 (PI)**

National Science Foundation *Georgia Coastal Ecosystems LTER II*; NSF-OCE-0620959, 2006-2012, **\$4,919,998 to team**

My role in this LTER has been population and landscape genetics in the GCE system of 8-10 invertebrate and some plant species, as well as ongoing population genetic analysis of other marsh herbivores.

U.S.-Israel Binational Science Foundation *Global Phylogeny of the Barnacle Genus Chthamalus*; BSF 2004/239, 2005-2009, **\$125,000 (co-PI)**

Georgia Department of Natural Resources State Wildlife Grant *Integrative Assessment of Threatened Species of Mussels (Unionidae) in the Altamaha River Drainage, Georgia*; 2007-2009, **\$25,932 (PI)**

UGA Research Foundation *Population Genetics of the Coastal Salt Marsh Community*; 2007-2008, **\$7,220 (PI)**

UGA Research Foundation *Using Local Species Introductions to Explore Species Invasions*; 2006-7, **\$7,000 (PI)**

UGA Research Foundation *Speciation in Tropical Intertidal Barnacles*; 2004-5, **\$6,000 (PI)**

Awards

American Genetics Association Special Events Award Funding for Workshop in Conservation and Biodiversity Genetics, **\$12,500**

International Geosphere-Biosphere Programme Funding for International Biogeography Symposium on Marine Biodiversity, 2006, **\$4,000**

Most Reproductively Accurate Costume, Friday Harbor Laboratories Invertebrates Ball, 1996, 2016.

Mentoring

Postdoctoral Study

Edgardo Diaz-Ferguson, 2007-2009 (**URM researcher** funded by NSF-OCE-0620959)

Ron Eytan, 2010-2011 (funded by NSF-EID-1015342)

Safra Altman, 2011-2013 (NSF-OCE)

Christina Zakas, 2012 (funded by NSF-OCE-Chile)

Paula Pappalardo, 2013-2014 (funded by NSF-OCE)

Dusty Kemp, 2014 (NSF-EID)

Ph.D. committee

Chair or Co-Chair, Department of Genetics unless noted otherwise

Tina Bell (Ph.D. 2009) – now faculty at Brevard College

Scott Small (Ph.D. 2009) – currently postdoc at Case Western

John Robinson (Ph.D. 2011) – scientist with SC DNR

Christina Zakas (Ph.D. 2011) – postdoc at NYU

Meredith Meyers (Ecology, Ph.D. 2013) – NGO, UCSD

Christine Ewers (Ph.D. 2015) – Zoological Museum, Kiel, Germany

Katie Bockrath (Ph.D. 2015) – Whitney Lab, USFW

Mary Rougeau Browning (MS 2015) – Nursing school

Karen Bobier (2015-)

Kelly Petersen (Ecology, 2016-)

Paige Duffin (2018-)

Margot Popecki [?] (2019-)

Graduate Committee (finishing date)

Judith Mank (Ph.D. 2006), Jessica Skyfield (Forestry - M.S. 2006), Chih-Horng Kuo (Ph.D. 2007), Reed Cartwright (Ph.D. 2006), Jodie Linder (Ph.D. 2009), Monica Poelchau (Ph.D. 2009), Eleanor Kuntz (Ph.D. 2011), Soo Hyung Eo (Forestry - Ph.D. 2008), Scott Cornman (Ph.D. 2006), Jeremy DeBarry (Ph.D. 2008), Ken Leonard (Ecology Ph.D. 2010), Rachel Mahan (Warnell M.S. 2012), Anna McKee (Warnell Ph.D. 2012), Jamie Winternitz (Ph.D. Ecology 2012), Tyler Kartzinel (Ecology, Ph.D 2012), Chip Small (Ecology, Ph.D. 2013), Rachel Katz (Ph.D. Ecology, 2014), Jared Lee (Genetics, Ph.D. 2014), Louisa Carter (Genetics, Ph.D. 2014), Cheryl Pinzone (Genetics, Ph.D. 2014), Ling Dong (Plant Biology, Ph.D. 2013), Becky Shirk (Plant Biology, Ph.D.2013), Jessica Joyner (Ecology Ph.D 2014), Marcus Zokan (Ecology PhD 2015), Jenna Hamlin (Genetics PhD 2015), Sarah Sander (Genetics Ph.D. 2015), Keri Kemp (Ecology PhD 2017)

Cara Love (Ecology), Anja Brown (Ecology), Sara Heisel (Ecology), Amanda Shaver (Genetics), Kelly Petersen (Ecology), Paul Ginsberg (Genetics), Jeff Beauvais (Ecology), Rachel Perez-Udell (Plant Biology), Mason McNair (Plant Biology), Samantha Bock [?] (Ecology)

Undergraduate Research

Collin Closek (B.S. 2005), Nicole Umberger (B.S. 2007), John Binford (B.S. Honors 2007), Clare Scott (B.S. Honors 2007), Mary Pierce Zirkle (B.S. 2007), Laura Paynter (B.S. 2008), Martha Lane (B.S. 2009), Adam Smitherman (B.S. 2009), Dhara Patel (B.S. 2011), Kelly Laughlin (B.S. 2011), Bekah Lee (2012-2013), Kerem Kiliç (B.S. 2013), Danielle Heubel (B.S. 2015), Leah Besch (B.S. 2015), Tim Makinde (B.S. 2016), Neva Hope (B.S. 2016), Emma Pistole (B.S. 2016), Katelyn Chandler (posthumous B.S.), Kat Clancy, Katie Skoczen (B.S. 2018), Kat Christie

Summer Research Experience for Undergraduates (REU)

Madeline Cozad (NSF LTER REU, B.S. 2006), Becky Miller (NSF Fungal Genomics),
Jesyka Meléndez (**SUNFIG**, University of Puerto Rico)

Public Service

Athens-Clarke County State Court Juror, May 1 2006
Neighborhood Traffic Management Advisory Board, Athens-Clarke County, Jan. '07-'08
BikeAthens Board of Directors, June 2007-2008
Southern Off-Road Bicycle Association (SORBA), Secretary (2011), service 2010-2015
Founder, Union of Athens Scientists, Science Athens, 2017

Invited Research Presentations

University of Maryland Baltimore County, May 2018
University of Tennessee, November 2017
CEID-UGA, July 2017
Friday Harbor Labs, June 2017
College of Charleston - September 2016
Skidaway Institute of Oceanography - April 2016
Auburn University - March 2012
Universidad Católica del Norte (Chile) - October 2011
Wrigley Institute of Environmental Sciences - May 2010
University of North Carolina at Asheville - February 2010
Crustacean Society International Meeting, invited symposium speaker, Tokyo - 2009
Emory University – January 2009
Pontificia Universidad Católica de Chile – April 2008
University of North Carolina – April 2008
University of Georgia, Odum School of Ecology – October 2007
University of Tennessee – September 2007
Penn State University – May 2007, BGSA Sponsored Speaker
Clemson University – October 2006
UGA-American Fisheries Society – 2006
Hawai'i Institute of Marine Biology – August 2005
University of South Carolina – February 2005
Ecological Society of America, invited symposium speaker – August 2004
NCEAS – Invasive Species Working Group – March 2004, October 2005
UC Berkeley - September 2003
Scripps Institute of Oceanography - October 2002