

## **Professional Curriculum Vitae Peter M. Buston**

### **Fields of Interest**

Evolutionary Ecology, Animal Behavior, Marine Ecology, Biological Oceanography

### **Current Position**

Associate Professor. Boston University, Department of Biology and Marine Program.

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United States of America

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### **Education History**

1994 - 2002 Ph.D. Neurobiology and Behavior, Cornell University, Ithaca, NY, USA.

1990 - 1993 B.A. Honors. Zoology, Oxford University, Oxford, UK.

### **Employment Record**

2019 - Director of the Boston University Marine Program, Boston, USA.

2017 - Chair of the Dive Control Board, Boston University, Health and Safety, Boston, USA.

2017 - 2019 Director of Graduate Studies, Boston University, Department of Biology, Boston, USA.

2016 - 2019 Associate Director of the Boston University, Marine Program, Boston, USA.

2016 - Associate Professor, Boston University, Department of Biology, Boston, USA.

2013 - 2016 Chair of Graduate Committee, Boston University, Department of Biology, Boston, USA.

2010 - 2016 Assistant Professor, Boston University, Department of Biology, Boston, USA.

2006 - 2009 Ramón y Cajal Research Fellow, Estación Biológica de Doñana, Sevilla, Spain.

2002 - 2005 NCEAS Postdoctoral Fellow, NCEAS, Santa Barbara, CA, USA.

### **Honors & Awards**

2020 Invited Plenary Speaker.  
Larval Fish Conference 44, Mystic, Connecticut, USA.

2015 Dean's Award for Excellence in Graduate Education.  
College of Arts and Sciences, Boston University, USA.

2005 Ramón y Cajal Research Fellowship to conduct independent research.  
Ministerio de Educación y Ciencia, Spain.

2002 NCEAS Postdoctoral Fellowship to conduct independent research.  
National Science Foundation and University of California, USA.

2001 Whittaker Award for the best graduate student paper.  
Department of Ecology and Evolutionary Biology, Cornell University, USA.

2000 Excellence Fellowship in recognition of outstanding graduate work.  
College of Agriculture and Life Sciences, Cornell University, USA.

2000 Clark Distinguished Teaching Award.  
College of Arts and Sciences, Cornell University, USA.

1999 Outstanding Graduate Teaching Assistant Award.  
Department of Neurobiology and Behavior, Cornell University, USA.

1995 Doctoral Dissertation Improvement Grant.  
National Science Foundation, USA.

## Research

### Publications in print – Peer-reviewed articles (total = 57; citations = 2650; h-index = 24)

<sup>P</sup> Postdoctoral Associate, <sup>D</sup> Doctoral Student, <sup>M</sup> Masters Student and <sup>U</sup> Undergraduate Student

57. Nickles, K. R.<sup>M</sup>, Hu, Y.<sup>P</sup>, Majoris, J. E.<sup>D</sup>, **Buston, P. M.** & Webb, J. F. (2020) Organization and ontogeny of a complex lateral line system in a goby (*Elacatinus lori*), with a consideration of function and ecology.  
*Copeia* 108: 863-885
56. Barbasch, T.<sup>D</sup>, Rüger, T.<sup>P</sup>, Srinivasan, M., Wong, M. Y. L., Jones, G. & **Buston, P. M.** (2020) Substantial plasticity of reproduction and parental care in response to local resource variability in a wild population of clownfish.  
*Oikos* 129: 1844-1855.
55. Branconi, R.<sup>D</sup>, Barbasch, T.<sup>D</sup>, Francis, R.<sup>D</sup>, Srinivasan, M., Jones, G. & **Buston, P.** (2020) Ecological and social constraints combine to promote the evolution of non-breeding strategies in clownfish.  
*Nature, Communications Biology* 3: 649.
54. Desrochers, L.<sup>M</sup>, Branconi, R.<sup>D</sup>, Schlatter, E.<sup>D</sup>, Dent, B. & **Buston, P.** (2020) Sensory cues underlying competitive growth in the clown anemonefish *Amphiprion percula*.  
*Behavioral Processes* 181: 104276.
53. Barbasch, T.<sup>D</sup>, Alonzo, S. & **Buston, P. M.** (2020) Power and punishment influence negotiations over parental care.  
*Behavioral Ecology* 31: 911-921.
52. Rueger, T.<sup>P</sup>, Harrison, H. B., **Buston, P. M.**, Gardiner N. M., Berumen, M. L. & Jones, G. P. (2020) Natal philopatry increases relatedness within groups of coral reef cardinalfish.  
*Proceedings of Royal Society of London, Series B* 287: 20201133.
51. D'Aloia, C. C., Andres, J. A., Bogdanowicz, S. M., McCune, A. R., Harrison, R. G. & **Buston, P.** (2020) Unraveling hierarchical genetic structure in a marine metapopulation: a comparison of three high-throughput genotyping approaches.  
*Molecular Ecology* 29: 2189-2203.
50. Majoris, J.<sup>D</sup>, Catalano, K.<sup>U</sup>, Scolaro, D.<sup>U</sup>, Atema, J. & **Buston, P.** (2019) Ontogeny of larval swimming abilities in three species of coral reef fishes and a hypothesis for their impact on the spatial scale of dispersal.  
*Marine Biology* 166: 159.
49. Chaput, R.<sup>D</sup>, Majoris, J.<sup>P</sup>, **Buston, P. M.** & Paris, C. (2019) Hydrodynamic and biological constraints on group cohesion of plankton.  
*Journal of Theoretical Biology* 482: 109987.
48. Lesneski, K. C.<sup>D</sup>, D'Aloia, C. C., Fortin, M-J. & **Buston, P. M.** (2019) Disentangling spatial distributions of a sponge-dwelling fish and its host sponge.  
*Marine Biology* 166: 66.
47. Branconi, R.<sup>D</sup>, Wong, M. & **Buston, P.** (2019) Comparison of efficiency of direct observations by SCUBA diver and indirect observations via video camera for measuring reef fish behavior.  
*Journal of Fish Biology* 94: 489-497.
46. Branconi, R.<sup>D</sup>, Garner, J.<sup>M</sup>, **Buston, P. M.** & Wong, M. Y. L. (2019) A new non-invasive technique for temporarily tagging coral reef fishes.  
*Copeia* 107: 85-91.
45. Reed, C.<sup>U</sup>, Branconi, R.<sup>D</sup>, Majoris, J.<sup>P</sup>, Johnson, C. & **Buston, P.** (2019) Competitive growth in a social fish.

- Royal Society, Biology Letters* 15: 20180737.
44. Shaw, A., D'Aloia, C. C. & **Buston, P. M.** (2019) The evolution of marine larval dispersal kernels in spatially structured habitats: analytic models, individual-based simulations, and comparisons with empirical estimates.  
*American Naturalist* 193: 424-435.
43. Hu, Y. <sup>P</sup>, Majoris, J. E. <sup>D</sup>, **Buston, P. M.** & Webb, J. F. (2019) Potential roles of smell and taste in the orientation behavior of coral reef fish larvae: insights from morphology.  
*Journal of Fish Biology* 95: 311-323.
42. D'Aloia, C. C., Xuereb, A., Fortin, M-J., Bogdanowicz, S, M. & **Buston, P. M.** (2018) Limited dispersal explains the spatial distribution of siblings in a reef fish population.  
*Marine Ecology Progress Series* 607: 143-154.
41. Rueger, T. <sup>P</sup>, Barbasch, T. <sup>D</sup>, Wong, M. Y. L., Srinivasan, M., Jones, G. P. & **Buston, P. M.** (2018) Reproductive control via the threat of eviction in the clown anemonefish.  
*Proceedings of the Royal Society of London, Series B* 285: 20181295.
40. Maytin, A. <sup>U</sup>, Davies, S., Smith, G. <sup>U</sup>, Mullen, S., & **Buston, P. M.** (2018) De novo transcriptome assembly of the clownfish *Amphiprion percula*: a new resource to study the evolution of fish color.  
*Frontiers in Marine Science* 5: 284.
39. Seymour, J. <sup>M</sup>, Barbasch, T. <sup>D</sup> & **Buston, P. M.** (2018) Lunar cycles of reproduction in the clown anemonefish *Amphiprion percula*: individual level strategies and population level patterns.  
*Marine Ecology Progress Series* 594: 193-201.
38. Barbasch, T. A. <sup>D</sup> & **Buston, P. M.** (2018) Plasticity and personality of parental care in the clown anemonefish.  
*Animal Behavior* 136: 65-73.
37. Majoris, J. <sup>D</sup>, D'Aloia, C. <sup>D</sup>, Francis, R. <sup>U</sup> & **Buston, P.** (2018) Differential persistence favors habitat preferences that determine the distribution of a reef fish.  
*Behavioral Ecology* 29: 429-439.
36. Majoris, J. E. <sup>D</sup>, Francisco, F. A. <sup>U</sup>, Atema, J. & **Buston, P. M.** (2018) Reproduction, early development, and larval rearing strategies for two sponge-dwelling neon gobies *Elacatinus lori* and *Elacatinus colini*.  
*Aquaculture* 483: 286-295.
35. D'Aloia, C. C. <sup>D</sup>, Bogdanowicz, S. M., Harrison, R. G. & **Buston, P. M.** (2017) Cryptic genetic diversity and spatial patterns of admixture within Belizean marine reserves.  
*Conservation Genetics* 18: 211-223.
34. Schmiede, P. <sup>U</sup>, D'Aloia, C. C. <sup>D</sup> & **Buston, P. M.** (2017) Anemonefish personalities influence the strength of mutualistic interactions with host sea anemones.  
*Marine Biology* 164: 24-
33. Lindo, D. <sup>P</sup>, Curcic, M., Paris C. & **Buston, P. M.** (2016) Description of surface transport in the region of the Belizean Barrier Reef based on observations and alternative high-resolution models  
*Ocean Modeling* 106: 74-89
32. Mattison, S. M., Beheim, B., Chak, B. <sup>U</sup> & **Buston, P. M.** (2016). Offspring sex preferences among matrilineal and patrilineal Mosuo in Southwest China revealed by differences in parity progression.  
*Royal Society, Open Science* 3: 160526
31. Wong, M. Y. L. <sup>P</sup>, Uppaluri, C. <sup>U</sup>, Medina, A. <sup>U</sup>, Seymour, J. <sup>M</sup>. & **Buston, P. M.** (2016) The four elements of within group conflict in animal societies: an experimental test using the clownfish.  
*Behavioral Ecology and Sociobiology* 70: 1467-1475.

30. D'Aloia, C. C. <sup>D</sup>, Bogdanowicz, S. M., Francis, R. K. <sup>U</sup>, Majoris, J. <sup>D</sup>, Harrison, R. G. & **Buston, P.** (2015) Patterns, causes and consequences of marine larval dispersal. *Proceedings of the National Academy of Sciences, USA* 112: 13940-13945.
29. Rickborn, A. J. <sup>M</sup> & **Buston, P.** (2015) Life history transitions of the coral reef fish *Elacatinus lori*. *Journal of Fish Biology* 86: 637-650.
28. D'Aloia, C. C. <sup>D</sup>, Bogdanowicz, S. M., Harrison, R. G. & **Buston, P. M.** (2014) Seascape continuity plays an important role in determining spatial genetic structure in a coral reef fish. *Molecular Ecology* 23: 2902-2913.
27. Wong, M. Y. L. <sup>P</sup> & **Buston P. M.** (2013) Social systems of habitat specialist reef fishes: tests of key concepts in evolutionary ecology. *BioScience* 63: 453-463.
26. Wong, M. Y. L. <sup>P</sup>, Medina, A. <sup>U</sup>, Uppaluri, C. <sup>U</sup>, Arnold, S. <sup>U</sup>, Seymour, J. <sup>M</sup>, & **Buston, P. M.** (2013) Consistent behavioral traits and behavioral syndromes in pairs of the false clown anemonefish. *Journal of Fish Biology* 83: 207-213.
25. D'Aloia, C. C. <sup>D</sup>, Bogdanowicz, S. M., Majoris, J. E. <sup>D</sup>, Harrison, R. G. & **Buston, P. M.** (2013) Self-recruitment in a Caribbean reef fish: a new method for approximating dispersal kernels. *Molecular Ecology* 22: 2563-2572
24. Wong, M. Y. L. <sup>P</sup>, Fauvelot, C., Planes, S. & **Buston, P. M.** (2012) Discrete and continuous reproductive tactics in a hermaphroditic society. *Animal Behaviour* 84: 897-906.
23. **Buston, P. M.**, Jones, G. P., Planes, S. & Thorrold, S. (2012) Probability of successful larval dispersal declines fivefold over one kilometer in a coral reef fish. *Proceedings of the Royal Society of London, Series B* 279: 1883-1888 (Cover Photo).
22. D'Aloia, C. C. <sup>D</sup>, Majoris, J. E. <sup>D</sup> & **Buston, P. M.** (2011) Predictors of the distribution and abundance of a tube sponge and its resident goby. *Coral Reefs* 30: 777-786.
21. **Buston, P. M.** & Elith, J. (2011) Determinants of reproductive success in dominant pairs of clownfish: a boosted regression tree analysis. *Journal of Animal Ecology* 80: 528-538.
20. **Buston, P. M.**, Fauvelot, C., Wong, M. Y. L. & Planes, S. (2009) Genetic relatedness in groups of humbug damselfish *Dascyllus aruanus*: small, similarly-sized individuals may be close kin. *Molecular Ecology* 18: 4707-4715. (Cover photo).
19. **Buston, P. M.** & Zink, A. G. (2009) Reproductive skew and the evolution of conflict resolution: a synthesis of transactional and tug-of-war models. *Behavioral Ecology* 20: 672-684. (Cover photo).
18. Fauvelot, C., Smith-Kuene, C., Jerry D. R., **Buston, P. M.** & Planes, S. (2009) Isolation and characterization of 16 microsatellite loci for the humbug damselfish *Dascyllus aruanus*. *Molecular Ecology Resources* 9: 651-653.
17. Wong, M. Y. L., Munday, P. L., **Buston, P. M.** & Jones, G. P. (2008) Fasting or feasting in a fish social hierarchy. *Current Biology* 18: R372-R373.
16. Wong, M. Y. L., Munday, P. L., **Buston, P. M.** & Jones, G. P. (2008) Monogamy when there is the potential for polygyny: tests of multiple hypotheses in a group-living fish. *Behavioral Ecology* 19: 353-361.
15. **Buston, P. M.**, Reeve, H. K., Cant, M. A., Vehrencamp, S. L. & Emlen, S. T. (2007) Reproductive skew and the evolution of group dissolution tactics: a synthesis of concession and restraint models.

*Animal Behaviour* 74: 1643-1654.

14. **Buston, P. M.** & Balshine, S. (2007) Cooperating in the face of uncertainty: a consistent framework for understanding the evolution of cooperation. *Behavioural Processes* 76: 152-159. (Cover photo).
13. **Buston, P. M.**, Bogdanowicz, S. M., Wong, A. & Harrison, R. G. (2007) Are clownfish groups composed of relatives? Analysis of microsatellite DNA variation in *Amphiprion percula*. *Molecular ecology* 16: 3671-3678. (Cover photo).
12. **Buston, P. M.** & García, M. B. (2007) An extraordinary life span estimate for the clown anemonefish. *Journal of Fish Biology* 70: 1710-1719.
11. Wong, M. Y. L., **Buston, P. M.**, Munday, P. L. & Jones, G. P. (2007) The threat of punishment enforces peaceful cooperation and stabilizes queues in a coral reef fish. *Proceedings of the Royal Society of London, Series B* 274: 1093-1099.
10. **Buston, P. M.** & Cant M. A. (2006) A new perspective on size hierarchies in nature: patterns causes and consequences. *Oecologia* 149: 362-372.
9. Munday, P. L., **Buston, P. M.** & Warner, R. R. (2006) Diversity and flexibility of sex change strategies in animals. *Trends in Ecology and Evolution* 21: 89-95.
8. **Buston, P. M.** (2004) Does the presence of non-breeders enhance the fitness of breeders? An experimental analysis in the clown anemonefish *Amphiprion percula*. *Behavioural Ecology and Sociobiology* 57: 23-31.
7. **Buston, P. M.** (2004) Territory inheritance in the clown anemonefish. *Proceedings of the Royal Society of London, Series B* 271: S252-S254.
6. **Buston, P. M.**, Munday, P. L. & Warner, R. R. (2004) Sex change and body size in animals. *Nature* 428: <http://www.nature.com/nature/journal/v428/n6983/full/nature02512.html>
5. **Buston, P. M.** (2003) Mortality is associated with social rank in the clown anemonefish. *Marine Biology* 143: 811-815.
4. **Buston, P. M.** & Emlen, S. T. (2003) Cognitive processes underlying human mate choice: the relationship between self-perception and mate preference in Western society. *Proceedings of the National Academy of Sciences of the USA* 100: 8805-8810.
3. **Buston, P. M.** (2003) Forcible eviction and prevention of recruitment in the clown anemonefish. *Behavioral Ecology* 14: 576-582.
2. **Buston, P. M.** (2003) Size and growth modification in clownfish. *Nature* 424: 145-146.
1. Jenkins, A. P., **Buston, P. M.** & G. R. Allen. (2000) Two new species of freshwater gudgeons (Eleotridae: Mogurnda) from Lake Kutubu, Papua New Guinea. *Ichthyological Exploration of Freshwaters* 11: 47-54.

### **Publications in print – Books, book chapters or book contributions (total = 3)**

3. **Buston, P. M.** (2010) Parentesco en peces de arrecifes coralinos. In: *Aplicaciones de la genética al estudio y conservación de la vida silvestre* (Godoy, J. A. & Martínez-Cruz, B. eds). Consejería de Medio Ambiente, Junta de Andalucía.
2. Balshine, S. & **Buston P. M.** (2008) Cooperation in fishes. In: *Fish Behavior* (C. Magnhagen, V.A. Braithwaite, E. Forsgren & B.G. Kapoor, eds), pp 437-484. Science Publishers, NH.
1. **Buston, P. M.** (2002) Group structure of the clown anemonefish *Amphiprion percula* (Ph.D. dissertation). Ithaca, New York, Cornell University.

**Publications in print – Non-peer-reviewed articles, editorials, reviews (total = 4)**

4. **Buston P. M.** & Wong M. Y. L. <sup>P</sup> (2016) Animales que renuncian la reproducción. *Investigación y Ciencia* Febrero 2016: 76-84.
3. Peck, M. A. & **Buston, P. M.** (2015) Bigger mothers = better chances: the first test of a central hypothesis in marine ecology. *Marine Biology* 162: 1-2.
2. **Buston P. M.** & Wong M. Y. L. <sup>P</sup> (2014) Why some animals forgo reproduction in complex societies. *American Scientist* 102: 290-297.
1. **Buston P. M.** & D'Aloia, C. C. <sup>D</sup> (2013) Marine Ecology: Reaping the benefits of local dispersal. *Current Biology* 23: R351-R353.

**Publications in review**

- Barbasch, T. <sup>D</sup>, Branconi, R., Francis, R., Pacaro, M., Srinivasan, M., Jones, G. P. & **Buston, P. M.** (202X) Negotiations over parental care: a test of alternative hypotheses in the clown anemonefish. TARGET: *Proceedings of the Royal Society of London, Series B*
- Foretich, M. <sup>D</sup>, Majoris, J. E. <sup>D</sup>, Chaput, R. <sup>D</sup>, Di Persia C. L. <sup>U</sup>, Schlatter, E. <sup>D</sup>, Webb, J., **Buston, P. M.** & Paris, C. B. (202X) Larval fish orientation behavior in environmental context. TARGET: *Marine Ecology Progress Series*
- Majoris, J. E. <sup>D</sup>, Foretich, M. <sup>D</sup>, Hu, Y. <sup>P</sup>, Nickles, K. <sup>U</sup>, Di Persia C. L. <sup>U</sup>, Schlatter, E. <sup>M</sup>, Chaput, R. <sup>D</sup>, Webb, J., Paris, C. & **Buston, P. M.** (202X) An integrative investigation of sensory organ development and orientation behavior in the larvae of a coral reef fish. TARGET: *Scientific Reports*
- Rueger, T., **Buston, P. M.**, Bogdanowicz, S., & Wong, M. Y. L. (202X) Genetic relatedness in social groups of the emerald coral goby *Paragobiodon xanthosomus* creates potential for weak kin selection. TARGET: *Molecular Ecology*
- Schlatter, E. L. <sup>D</sup>, Webb, C. T. W. & **Buston, P. M.** (202X). A potentially sustainable harvest strategy for the clown anemonefish *Amphiprion percula*. TARGET: *Fish & Fisheries*
- Vaz, A. C., Faillettaz, R., **Buston, P. M.** & Paris, C. B. (202X) Wayfinder larvae shape marine population connectivity patterns. TARGET: *Environmental Modeling and Software*

**Grants and Fellowships Awarded to Peter Buston – US\$ equivalents at time of acquisition**

2020 - 2023	Mullen, S.*, Kristiansen, E. & <b>Buston, P.</b> How do density dependent dynamics influence the efficacy of mimetic signaling? (* Denotes lead role; \$46,246 allocated to work in Buston Lab) <i>NSF – DEB – Evolutionary Processes</i>	\$844,195
2017 - 2019	Barbasch, T. A. & <b>Buston, P. M.</b> DISSERTATION RESEARCH: Negotiations over offspring care: a test of alternative hypotheses using the clown anemonefish. <i>NSF – IOS – Behavioral Systems</i>	\$16,374
2015 - 2017	Majoris, J. E. & <b>Buston, P. M.</b> DISSERTATION RESEARCH: Testing alternative hypotheses for goal orientation by reef fish larvae throughout development. <i>NSF – IOS – Behavioral Systems</i>	\$16,898
2015 - 2019	<b>Buston, P. M.*</b> , Atema, J., Paris, C. & Webb, J. COLLABORATIVE RESEARCH: The role of larval orientation behavior in determining population connectivity. (* Denotes lead role; \$612,355 allocated to work at BU, remainder to collaborators) <i>NSF, Ocean Sciences, Biological Oceanography</i>	\$1,231,459
2013 - 2019	<b>Buston, P. M.*</b> , Harrison, R. G., Paris, C., Warner, R. & Webb, C. An integrative investigation of population connectivity using a coral reef fish. (* Denotes lead role; \$562,218 allocated to work at BU, remainder to subawards) <i>NSF, Ocean Sciences, Biological Oceanography</i>	\$1,439,000
2006 - 2011	<b>Buston, P. M.</b> A test of alternate models of reproductive skew in the humbug damselfish <i>Ministerio de Educación y Ciencia, España</i>	\$200,000
2002 - 2005	<b>Buston, P. M.</b> A synthesis of reproductive skew theory and sex allocation theory <i>National Science Foundation and the University of California</i>	\$150,000
1994 - 2002	<b>Buston, P. M.</b> An investigation of cooperative breeding in the clown anemonefish <i>National Science Foundation, Dissertation Improvement Grant (1)</i>	\$10,000
	<i>Christensen Fund, Christensen Research Fellowship (3)</i>	\$19,230
	<i>Cornell University, Departmental Summer Research Support (7)</i>	\$11,500
	<i>Cornell University, Research Travel Grant (2)</i>	\$3,000
	<i>Andrew W. Mellon, Student Research Grant (2)</i>	\$2,100
	<i>Cornell Chapter of Sigma Xi, Grants in Aid of Research (6)</i>	\$2,100
	<i>Cornell University, Graduate Conference Travel Grant (3)</i>	\$1,125
	<i>AMNH, Lerner Gray Fund for Marine Research (1)</i>	\$1,050
	<i>Percy Sladen Memorial Fund, Small Grant (1)</i>	\$750
	<i>Sigma Xi, Grants-in-Aid of Research (1)</i>	\$500
	<i>International Women's Fishing Association (1)</i>	\$500
1997	Jenkins A. & <b>Buston, P.</b> Ecology of the fishes of Lake Kutubu, Papua New Guinea. <i>World Wide Fund for Nature, Research Grant.</i>	\$15,000
1992	Anderson, J. et al. Ecology of black-and-rufous elephant-shrews, Tanzania. <i>Grants from multiple sources, as part of Njule 1992 expedition.</i>	\$16,000
1991	Hooker S. et al. Ecology of nocturnal arboreal ship rats, New Zealand. <i>Grants from multiple sources, as part of Kokako 1991 expedition.</i>	\$15,000

**Grant Proposals in review**

2021	<b>Buston, P. M.</b> Mid-Scale RI-1 (M1:DP): Preparing US Investigators to be Competitive in Anemonefish Research — A New Model System for Integrative Marine Science <i>NSF – Mid-Scale Research Infrastructure (M1:DP)</i>	\$3,195,757
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## Teaching

### Assistant/Associate Professor (Sole Instructor)

2020, 2018, 2015, 2013, 2011, 2010	BI519 – Theoretical Evolutionary Ecology
2019	BI594 – Metapopulation Ecology
2019, 2013, 2012	BI579 – Progress in Ecology, Evolution and Behavior
2018, 2017, 2015, 2014, 2012	BI671 – Survey of Ecology, Evolution and Behavior
2016, 2015, 2014, 2013, 2012, 2011	BI260 – Marine Biology

### Guest Lecturer

2020, 2015, 2014, 2013, 2012, 2010	ES144 – Oceanography (R. W. Fulweiler, Instructor).
2018, 2014, 2012, 2011	BI225 – Behavioral Biology (J. Traniello, Instructor).
2018, 2017, 2010	BI260 – Marine Biology (J. Atema & R. Rotjan, Instructors).
2018, 2016, 2015	BI303 – Evolutionary Ecology (N. Stewart & R. Rotjan).
2014, 2013	ES423 – Marine Biogeochemistry (R. W. Fulweiler, Instructor).
2012	BI679 – Professional Development (K. Spiliotis, Instructor).
2012	BI614 – Phenotypic Plasticity (K. Warkentin, Instructor).
2010	BI532 – Ichthyology (P. Lobel, Instructor).
2001	Biology of Fishes, at Cornell University (A. McCune).

### Instructor

2001	Evolutionary Biology, Writing in the Majors, at Cornell University.
1999	Animal Behavior, Writing in the Majors, at Cornell University.

### Head Teaching Assistant

2002	Macroevolution, at Cornell University.
2001	Writing in the Arts and Sciences, at Cornell University.
1999	Modeling Behavioral Evolution, at Cornell University.
1999, 1998	Animal Behavior, at Cornell University.

### Teaching Assistant

2002, 2001, 1998, 1996	Internship in Education, at Cornell University.
1996, 1995, 1994	Introductory Biology, at Cornell University.
1998, 1996	Animal Behavior, at Cornell University.
1998	Evolutionary Biology, at Cornell University.

### SCUBA Instructor

2001, 1999, 1998, 1996	SCUBA: PADI Open Water, Advanced Open Water, and Rescue Diver.
2010, 2013	SCUBA: NAUI Advanced Diver & Dive Rescue.



## Broader Impacts – Dissemination of Results

### Conference Presentations

- 2021 D'Aloia, C., Bogdanowicz, S., Andrés, J. & **Buston, P.** Using population assignment tests to uncover rare long-distance larval dispersal.  
*International Coral Reef Symposium, Bremen, Germany.*
- 2021 D'Aloia, C., Xuereb, A., Fortin, M.J., Bogdanowicz, S. & **Buston P.** Limited dispersal explains the spatial distribution of siblings in a reef fish population  
*International Coral Reef Symposium, Bremen, Germany.*
- 2021 Majoris, J. <sup>P</sup>, Foretich, M. <sup>D</sup>, Hu, Y. <sup>P</sup>, Nickles, K. <sup>M</sup>, Di Persia, C. <sup>U</sup>, Chaput, R. <sup>D</sup>, Schlatter, E. <sup>M</sup>, Webb, J., Paris, C. & **Buston, P.** Neon goby larvae have sufficiently developed sensory systems and swimming abilities to orient directionally beginning shortly after hatching.  
*International Coral Reef Symposium, Bremen, Germany.*
- 2021 Paris, C., Curcic, M., D'Aloia, C., Foretich, M., Majoris, J., Miron, P., Vaz, A. & **Buston, P.** An integrative empirical and modeling approach to understanding larval dispersal and population connectivity.  
*International Coral Reef Symposium, Bremen, Germany.*
- 2021 Rueger, T., Harrison, H., **Buston, P.**, Gardiner, N., Berumen, M., Jones, G. Self-recruitment and kin group formation in local populations of a coral reef cardinalfish.  
*International Coral Reef Symposium, Bremen, Germany.*
- 2021 Scavo Lord, K., Lesneski, K., Bengtsson, Z., Kuhn, K., Madin, J., Kaufman, L., Cheung, B., Ewa, R., Taylor, J., Morey, J., Burmester, E., Davies, S., **Buston, P.**, D'Aloia, C., Finnerty, J. Population dynamics of a reef coral in non-reef habitat.  
*International Coral Reef Symposium, Bremen, Germany.*
- 2021 Schlatter, E. <sup>D</sup>, Klawon, C. <sup>U</sup>, Majoris, J., Webb, C. & **Buston, P.** Heritability of larval size and swimming speed in the clown anemonefish *Amphiprion percula*  
*International Coral Reef Symposium, Bremen, Germany.*
- 2021 Barbasch, T. <sup>P</sup>, Branconi, R. <sup>D</sup>, Francis, R. <sup>D</sup>, Pacaro, M., Srinivasan, M., Jones, G. & **Buston, P.** Negotiations over parental care: a test of alternative hypotheses in the clown anemonefish.  
*Society for Integrative and Comparative Biology, Virtual Conference.*
- 2021 Francis, R. <sup>D</sup>, Catalano, K., Majoris, J., <sup>D</sup>, D'Aloia C., Bogdanowicz, S., Rueger, T. & **Buston, P.** Genetic mating system and determinants of mating success in the neon goby *Elacatinus lori*  
*Society for Integrative and Comparative Biology, Virtual Conference.*
- 2021 Rueger, T. <sup>P</sup>, Bhardwaj, A. <sup>M</sup>, Turner, E. <sup>U</sup> & **Buston, P.** Vertebrate growth plasticity in response to variation in a mutualistic interaction.  
*Society for Integrative and Comparative Biology, Virtual Conference.*
- 2020 Barbasch, T. <sup>D</sup>, Branconi, R. <sup>D</sup>, Francis, R. <sup>D</sup>, Pacaro, M., Srinivasan, M., Jones, G. & **Buston, P.** Negotiations over parental care: a test of alternative hypotheses in the clown anemonefish.  
*Marine Evolution (EvolMar), First Italian Congress, Virtual Conference, Italy.*
- 2020 Branconi, R. <sup>D</sup>, Barbasch, T. <sup>D</sup>, Francis, R. <sup>D</sup>, Srinivasan, M., Jones, G. & **Buston, P. M.** Ecological and social constraints combine to promote the evolution of non-breeding strategies in clownfish.  
*Marine Evolution (EvolMar), First Italian Congress, Virtual Conference, Italy.*
- 2020 Branconi, R. <sup>D</sup>, Reed, C. <sup>U</sup>, Desrochers, L. <sup>M</sup> & **Buston, P.** Competitive growth in a social fish.  
*Marine Evolution (EvolMar), First Italian Congress, Virtual Conference, Italy.*
- 2020 Pacaro, M. <sup>U</sup>, Rogers, M. <sup>U</sup>, Chavez Andonie, J. <sup>U</sup>, Barbasch, T. <sup>D</sup>, Majoris, J. & **Buston, P. M.** Nocturnal parental care in the clown anemonefish *Amphiprion percula*.

- Australian Society for the Study of Animal Behaviour, Virtual Conference, Australia.*
- 2020 Rueger, T. <sup>P</sup>, Barbasch, T. <sup>D</sup>, Wong, M. Y. L., Srinivasan, M., Jones, G. P. & **Buston, P. M.** Reproductive control via the threat of eviction in the clown anemonefish.  
*Australian Society for the Study of Animal Behaviour, Virtual Conference, Australia.*
- 2020 Barbasch, T. <sup>D</sup>, Alonzo, S. & **Buston, P. M.** Power and punishment influence negotiations over parental care.  
*Animal Behavior Society, Tennessee, USA.*
- 2020 Branconi, R. <sup>D</sup>, Barbasch, T. <sup>D</sup>, Francis, R. <sup>D</sup>, Srinivasan, M., Jones, G. & **Buston, P. M.** Ecological and social constraints combine to promote the evolution of non-breeding strategies in clownfish.  
*Animal Behavior Society, Tennessee, USA.*
- 2020 Pacaro, M. <sup>U</sup>, Rogers, M. <sup>U</sup>, Chavez Andonie, J. <sup>U</sup>, Barbasch, T. <sup>D</sup>, Majoris, J. & **Buston, P. M.** Nocturnal parental care in the clown anemonefish *Amphiprion percula*.  
*Animal Behavior Society, Tennessee, USA.*
- 2020 Rueger, T. <sup>P</sup>, Barbasch, T. <sup>D</sup>, Wong, M. Y. L., Srinivasan, M., Jones, G. P. & **Buston, P. M.** Reproductive control via the threat of eviction in the clown anemonefish.  
*Animal Behavior Society, Tennessee, USA.*
- 2020 D'Aloia, C., Xuereb, A., Fortin, M.J., Bogdanowicz, S. & **Buston P.** Limited dispersal explains the spatial distribution of siblings in a reef fish population  
*Larval Fish Conference 44, Mystic Connecticut*
- 2020 Rueger, T., Harrison, H. B., **Buston, P. M.**, Gardiner N. M., Berumen, M. L. & Jones, G. P. Natal philopatry increases relatedness within groups of coral reef cardinalfish.  
*Larval Fish Conference 44, Mystic Connecticut*
- 2020 D'Aloia, C., Bogdanowicz, S., Andrés, J. & **Buston, P.** Quantifying marine larval dispersal across spatial scales.  
*International Association for Landscape Ecology Word Congress, Toronto, Canada.*
- 2020 Majoris, J. <sup>P</sup>, Foretich, M., Hu, Y., Nickles, K., DiPersia, C., Chaput, R., Schlatter, E., Webb, J., Paris, C. & **Buston, P.** Larval orientation behavior begins shortly after hatching and may contribute to restricted dispersal in a coral reef fish.  
*Society for Integrative and Comparative Biology Annual Meeting, Austin, Texas, USA.*
- 2019 Barbasch, T. <sup>D</sup>, Rüger, T. <sup>P</sup>, Srinivasan, M., Thompson, S. <sup>U</sup>, Majoris, J. <sup>P</sup>, Johnson, C., Sinclair-Taylor, T., Harrison, H., Berumen, M., Wong, M., Jones, G. & **Buston, P.** Local environment influences reproduction, parental care and larval traits in the clownfish *Amphiprion percula*.  
*Animal Behavior Society, Chicago, USA.*
- 2019 Barbasch, T. <sup>D</sup>, Rüger, T. <sup>P</sup>, Srinivasan, M., Thompson, S. <sup>U</sup>, Majoris, J. <sup>P</sup>, Johnson, C., Sinclair-Taylor, T., Harrison, H., Berumen, M., Wong, M., Jones, G. & **Buston, P.** Local environment influences reproduction, parental care and larval traits in the clownfish *Amphiprion percula*.  
*Evolution, Providence, RI, USA.*
- 2019 Branconi, R. <sup>D</sup>, Barbasch, T. <sup>D</sup>, Francis, R. <sup>D</sup>, Srinivasan, M., Jones, G. & **Buston, P.** Ecological and social constraints combine to promote social evolution in clownfish.  
*Societa Italiana Etologia, Florence, Italy.*
- 2019 Branconi, R. <sup>D</sup>, Barbasch, T. <sup>D</sup>, Francis, R. <sup>D</sup>, Srinivasan, M., Jones, G. & **Buston, P.** Ecological and social constraints combine to promote social evolution in clownfish.  
*European Society for Evolutionary Biology, Turku, Finland.*
- 2019 Rueger, T. <sup>P</sup>, Barbasch, T. <sup>D</sup>, Wong, M., Srinivasan, M., Jones, G. & **Buston P.** Reproductive control via the threat of eviction in the clown anemonefish.  
*Animal Behavior Society, Chicago, USA.*

- 2019 Majoris, J. <sup>P</sup>, Foretich, M., Hu, Y., Nickles, K., DiPersia, C., Chaput, R., Schlatter, E., Webb, J., Paris, C. & **Buston, P.** Larval orientation behavior begins shortly after hatching and may contribute to restricted dispersal in a coral reef fish.  
*Larval Fish Conference*, Palma, Mallorca, Spain.
- 2018 Majoris, J. <sup>D</sup>, D'Aloia, C., Francis, R. & **Buston, P.** Differential persistence favors habitat preferences that determine the distribution of a coral reef fish.  
*Larval Fish Conference*, Victoria, BC, Canada.
- 2018 Majoris, J. <sup>D</sup>, Foretich, M., Chaput, R., Schlatter, E., Di Persia, C., Paris, C. & **Buston, P.** Larval orientation behavior begins shortly after hatching in a coral reef fish.  
*Larval Fish Conference*, Victoria, BC, Canada.
- 2018 Hu, Y. <sup>P</sup>, Majoris, J. <sup>D</sup>, **Buston, P.** & Webb, J. Ontogeny of the ear in the pelagic larvae of coral reef fishes (Gobiidae, Pomacentridae, Apogonidae)  
*American Society of Ichthyologists and Herpetologists*, Rochester, NY, USA.
- 2018 Majoris, J. E. <sup>D</sup>, D'Aloia, C. C., Francis, R. K. <sup>D</sup> & **Buston, P. M.** Differential persistence favors habitat preferences that determine the distribution of a reef fish.  
*Society for Integrative and Comparative Biology Annual Meeting*, San Francisco, CA, USA.
- 2018 Nickles, K. R. <sup>M</sup>, Hu, Y. <sup>P</sup>, Majoris, J. E. <sup>D</sup>, **Buston, P. M.** & Webb, J. F. Pre- and post-settlement ontogeny of the lateral line system of a Caribbean reef goby, *Elacatinus lori*.  
*Society for Integrative and Comparative Biology Annual Meeting*, San Francisco, CA, USA
- 2018 Shaw, A. K., D'Aloia, C. C. & **Buston, P.** The evolution of marine larval dispersal kernels in spatially structured habitats.  
*American Society of Naturalists Meeting*, Asilomar, CA, USA.
- 2018 Webb, J.F., Hu, Y., Nickles, K. R., Majoris, J. E. & **Buston, P. M.** How do Coral Reef Fish Larvae Find A Home?: Insights From Sensory Organ Ontogeny  
*Larval Fish Conference*, Victoria, BC, Canada.
- 2017 D'Aloia, C. C. <sup>D</sup>, Bogdanowicz, S, M., Francis, R. <sup>U</sup>, Majoris, J. <sup>D</sup>, Harrison, R. G. & **Buston, P.** Patterns, causes and consequences of marine larval dispersal  
*IndoPacific Fish Conference, Tahiti*
- 2017 Majoris, J. <sup>D</sup>, Catalano, K. <sup>U</sup>, Scolaro, D. <sup>U</sup>, Atema, J. & **Buston, P.** Ontogeny of swimming abilities of larval reef fishes, and a hypothesis for their impact on the spatial scale of dispersal  
*IndoPacific Fish Conference, Tahiti*
- 2017 Nickles, K. <sup>M</sup>, Hu, Y. <sup>P</sup>, Majoris, J. <sup>D</sup>, **Buston, P.** & Webb, J. Ontogeny of the lateral line system in a Caribbean Reef Goby, *Elacatinus lori*.  
*American Society of Ichthyologists and Herpetologists*, Austin, Texas, USA.
- 2017 Schlatter, E., Webb, CTW & **Buston, PM.** Modeling population dynamics for sustainable harvest of orange clownfish.  
*IndoPacific Fish Conference, Tahiti*
- 2016 Barbasch, T. <sup>D</sup> & **Buston, P.** Plasticity and personality of parental care in the clown anemonefish.  
*International Society for Behavioral Ecology*, Exeter, UK.
- 2016 Branconi, R. <sup>D</sup>, Wong, M. Y. L. & **Buston, P.** Does the presence of a SCUBA diver influence fish behavior: a case study using the humbug damselfish *Dascyllus aruanus*.  
*International Society for Behavioral Ecology*, Exeter, UK.
- 2016 D'Aloia, C. C. <sup>D</sup>, Bogdanowicz, S, M., Francis, R. <sup>U</sup>, Majoris, J. <sup>D</sup>, Harrison, R. G. & **Buston, P.** Patterns, causes and consequences of marine larval dispersal  
*International Coral Reef Symposium*, Hawaii, USA.

- 2016 Majoris, J. E. <sup>D</sup>, Catalano, C. <sup>U</sup>, Atema, J. & **Buston, P. M.** The tortoise and the hare: development of swimming abilities in larvae of two coral reef fishes with short distance dispersal. *Society for Integrative and Comparative Biology*
- 2016 Shaw, A. K., D'Aloia, C. C. & **Buston, P.** The evolution of marine larval dispersal kernels in spatially structured habitats. *International Coral Reef Symposium, Hawaii, USA.*
- 2016 Wong, M. Y. L. <sup>P</sup>, Uppaluri, C. <sup>U</sup>, Medina, A. <sup>U</sup>, Seymour, J. & **Buston, P.** The four elements of within-group conflict in an animal society. *International Society for Behavioral Ecology, Exeter, UK.*
- 2015 D'Aloia, C. C. <sup>D</sup>, Bogdanowicz, S. M., Francis, R. <sup>U</sup>, Majoris, J. <sup>D</sup>, Harrison, R. G. & **Buston, P.** A complete marine larval dispersal kernel. *Larval Fish Conference, Vienna, Austria.*
- 2015 D'Aloia, C. C. <sup>D</sup>, Bogdanowicz, S. M., Harrison, R. G. & **Buston, P. M.** Fine-scale spatial genetic structure in a coral reef fish metapopulation. *Larval Fish Conference, Vienna, Austria.*
- 2015 Lindo, D. <sup>P</sup>, Curcic, M., Paris C. & **Buston, P. M.** Evaluating surface transport predictions of alternative ocean-atmosphere models using surface drifters in the Belizean Barrier Reef. *Larval Fish Conference, Vienna, Austria.*
- 2015 D'Aloia, C. C. <sup>D</sup>, Bogdanowicz, S. M., Francis, R. <sup>U</sup>, Majoris, J. <sup>D</sup>, Harrison, R. G. & **Buston, P.** A complete marine larval dispersal kernel. *International Association for Landscape Ecology Word Congress, Portland, Oregon, USA.*
- 2015 D'Aloia, C. C. <sup>D</sup>, Bogdanowicz, S. M., Harrison, R. G. & **Buston, P. M.** Fine-scale spatial genetic structure in a coral reef fish metapopulation. *International Association for Landscape Ecology Word Congress, Portland, Oregon, USA.*
- 2015 Majoris, J. E. <sup>D</sup>, Francisco, F. <sup>U</sup>, Burns, C. <sup>U</sup>, Atema, J. & **Buston, P. M.** Hatching plasticity in a coral reef fish: patterns, causes and consequences. *Society for Integrative and Comparative Biology, Fort Lauderdale, FL.*
- 2014 Barbasch, T. <sup>D</sup>. & **Buston, P. M.** Negotiations over parental effort: proximate causes of variation in reproductive effort in a social fish. *International Society for Behavioral Ecology, New York.*
- 2014 **Buston, P. M.**, Fauvelot, C., Wong, M. Y. L. <sup>P</sup> & Planes, S. Genetic relatedness in groups of the humbug damselfish *Dascyllus aruanus*: small, similarly-sized individuals may be close kin. *International Society for Behavioral Ecology, New York.*
- 2014 **Buston, P. M.** An integrative investigation of population connectivity using a coral reef fish. *Ecological Society of America Annual Meeting, Sacramento, CA.*
- 2014 D'Aloia, C. C. <sup>D</sup>, Bogdanowicz, S. M., Harrison, R. G. & **Buston, P. M.** Toward the complete dispersal curve of a coral reef fish. *Ecological Society of America Annual Meeting, Sacramento, CA.*
- 2014 Lindo-Atichati, D. <sup>P</sup>, Curcic, M., **Buston, P. M.** & Paris, C. B. On the physical connectivity along the Belize Barrier Reef: an atmospheric-hydrodynamic model to study population connectivity. *Ocean Sciences Meeting, Honolulu, Hawaii.*
- 2014 Majoris, J. M. <sup>D</sup>, D'Aloia C. C. <sup>D</sup> & **Buston, P. M.** Settler preferences and post-settlement processes combine to explain the distribution of the sponge goby *Elacatinus lori*. *Society for Integrative and Comparative Biology, Austin, Texas.*
- 2014 Majoris, J. M. <sup>D</sup>, D'Aloia C. C. <sup>D</sup> & **Buston, P. M.** Settler preferences and post-settlement processes combine to explain the distribution of the sponge goby *Elacatinus lori*.

- International Society for Behavioral Ecology*, New York.
- 2014 Schmiege, P. <sup>U</sup> & **Buston, P. M.** Behavioral traits of anemonefish affect the anemone-anemonefish mutualism.  
*Ecological Society of America Annual Meeting*, Sacramento, CA.
- 2012 **Buston, P. M.**, Jones, G. P., Planes, S. & Thorrold, S. Probability of successful larval dispersal declines fivefold over one kilometer in a coral reef fish.  
*International Coral Reef Symposium*, Cairns, Australia.
- 2012 **Buston, P. M.**, Fauvelot, C., Wong, M. Y. L. <sup>P</sup> & Planes, S. Genetic relatedness in groups of the humbug damselfish *Dascyllus aruanus*: small, similarly-sized individuals may be close kin.  
*Animal Behavior Society*, Albuquerque, New Mexico.
- 2012 Wong, M. Y. L. <sup>P</sup>, Fauvelot, C., Planes, S. & **Buston, P. M.** Reproductive sharing in the humbug damselfish *Dascyllus aruanus*.  
*Animal Behavior Society*, Albuquerque, New Mexico.
- 2012 Medina, A. <sup>U</sup>, Uppaluri, C. <sup>U</sup>, Arnold, S. <sup>U</sup>, Wong, M. Y. L. <sup>P</sup> & **Buston, P. M.** Behavioral consistency and personality variation in the clownfish *Amphiprion ocellaris*.  
*Animal Behavior Society*, Albuquerque, New Mexico.
- 2008 **Buston, P. M.** The ecology and evolution of hermaphroditism.  
*Analogies in Evolution of Sexual Strategies in Animals and Plants*, Neuhausen, Germany.
- 2008 **Buston, P. M.**, Cant, M. A., Emlen, S. T., Reeve, H. K., Vehrencamp, S. L. & Zink, A. Reproductive skew and the evolution of conflict resolution.  
*International Behavioral Ecology Congress*, Ithaca, NY, USA.
- 2006 **Buston, P. M.** & Emlen, S. T. Cognitive processes underlying human mate choice.  
*International Behavioral Ecology Congress*, Paris, France.
- 2002 **Buston, P. M.** Resolution of potential evolutionary conflict over group membership in clownfish.  
*International Behavioral Ecology Congress*. Montreal, Canada.
- 2000 **Buston, P. M.** Forcible eviction and prevention of recruitment in the clownfish.  
*International Behavioral Ecology Congress*. Zurich, Switzerland
- 1998 **Buston, P. M.** Ecology, Mating Systems, and the Evolution of Hermaphroditism.  
*Ecological and Evolutionary Ethology of Fishes Conference*. Seattle, WA USA.

### Symposium Participation

- 2021 Co-chair for mini-symposium entitled “Patterns, causes and consequences of intraspecific variation in marine larval dispersal and population connectivity”.  
*International Coral Reef Symposium, Bremen, Germany*.
- 2020 Co-chair for session entitled “Population connectivity in aquatic ecosystems”.  
*Ocean Sciences Meeting, San Diego, California, USA*.
- 2017 Invited participant in the symposium entitled “Matching biophysical larval dispersal models to empirical data (genetic data) in studies of population connectivity”.  
*Indo Pacific Fish Conference, Tahiti*
- 2016 Co-chair for mini-symposium entitled “Connectivity among coral reef populations”.  
*International Coral Reef Symposium, Hawaii, USA*.
- 2015 Invited participant in the symposium entitled “Larval Dispersal and Population Connectivity”.  
*Larval Fish Conference, Vienna, Austria*.
- 2015 Invited participant in the symposium entitled “Waterscape Genetics – Applications of Landscape Genetic Approaches to Freshwater and Marine Settings”.  
*International Association of Landscape Ecologists, Portland, Oregon, USA*.

- 2014 Invited participant in the symposium entitled “Integrating Dispersal Into Life Histories: Empirical and Theoretical Approaches in Aquatic and Terrestrial Systems”.  
*Ecological Society of America Annual Meeting, Sacramento, California, USA.*
- 2013 Invited participant in the “Shermania” symposium, to celebrate retirement of P. W. Sherman.  
*Department of Neurobiology and Behavior, Cornell University, NY, USA.*
- 2012 Co-chair for mini-symposium entitled “The Ecological Importance of Larval Dispersal”.  
*International Coral Reef Symposium, Cairns, Australia.*
- 2011 Invited moderator for session entitled “Reproductive Conflict”.  
*Ethology Investigates: Cooperation (online conference on cooperation).*
- 2006 – 2008 Participant in workshop entitled “Machine Learning for the Environment” (4 meetings).  
*National Center for Ecological Analysis and Synthesis.*
- 2002 – 2008 Participant in workshop entitled Reproductive Skew: a Critical Assessment (4 meetings).  
*Department of Neurobiology and Behavior, Cornell University.*

### Invited Seminars

- 2020 Department of Biology, Université de Québec à Rimouski, Quebec, Canada.
- 2020 Laboratoire d’Ethologie Expérimentale et Comparée, Université Sorbonne, Paris, France.
- 2020 School of Environmental and Biological Sciences, Rutgers University, NJ, USA.
- 2020 Department of Marine Biology and Ecology, University of Miami, FL, USA. (COVID).
- 2019 Department of Ecology, Evolution and Behavior, University of Minnesota, Minnesota, USA.
- 2019 King Abdullah University of Science and Technology, Thuwal, Saudi Arabia.
- 2019 School of Natural Sciences and Psychology, Liverpool John Moores University, Liverpool, UK.
- 2018 Okinawa Institute of Science and Technology, Okinawa, Japan.
- 2018 Department of Biology, Bowdoin College, Brunswick, Maine, USA.
- 2018 King Abdullah University of Science and Technology, Thuwal, Saudi Arabia.
- 2018 Richard Gilder Graduate School, American Museum of Natural History, New York, NY, USA.
- 2017 Program in Ecology, Evolution and Conservation Biology, University of Illinois, Urbana, USA.
- 2017 College of Life and Environmental Sciences, University of Exeter, Exeter, UK.
- 2016 Department of Psychology, McMaster University, Hamilton, Ontario, Canada.
- 2016 Corning School of Ocean Studies, Maine Maritime Academy, Castine, Maine, USA.
- 2015 School of Biological Sciences, University of East Anglia, UK.
- 2015 Department of Biological Sciences, Dartmouth College, USA.
- 2015 Department of Biology, Boston University, Boston, USA.
- 2015 Department of Marine and Environmental Sciences, Northeastern University, Boston, USA.
- 2014 Lizard Island Research Station, Australian Museum, Queensland, Australia.
- 2014 School of Marine Biology and Aquaculture, James Cook University, Queensland, Australia.
- 2014 Department of Biological Sciences, Macquarie University, Sydney, Australia.
- 2014 School of Biological Sciences, University of New South Wales, Sydney, Australia.
- 2014 School of Biological Sciences, University of Wollongong, Wollongong, Australia.

- 2014 Department of Evolution, Ecology and Organismal Biology, Ohio State University, USA.
- 2013 Department of Biology, Boston University, Boston, USA.
- 2013 Department of Biological Sciences, University of Pittsburgh, Pittsburgh, USA.
- 2013 Biology Department, U Mass Amherst, Amherst, USA.
- 2013 School of Environmental and Biological Sciences, Rutgers University, NJ, USA.
- 2012 Department of Biological Science, University of Rhode Island, Rhode Island, USA.
- 2012 Darwin Festival Speaker, Salem State University, Massachusetts, USA.
- 2011 Department of Ecology and Evolutionary Biology, Yale University, Connecticut, USA.
- 2010 Biology department, U Mass Dartmouth, Massachusetts, USA.
- 2010 Woods Hole Oceanographic Institution, Massachusetts, USA.
- 2009 Department of Biology, Colorado State University, Fort Collins, CO, USA.
- 2009 School of Biological Sciences, University of Exeter, Exeter, UK.
- 2009 Department of Biology & Boston University Marine Program, Boston, MA, USA.
- 2008 Center for Ecology and Conservation, University of Exeter, Cornwall, UK.
- 2007 University of the South Pacific, Suva, Fiji.
- 2006 Centre de Biologie et d'Ecologie Tropicale et Mediterraneenne, University of Perpignan, France.
- 2005 Department of Anthropology, University of California, Davis, CA, USA.
- 2005 Center for Population Biology, University of California, Davis, CA, USA.
- 2005 Department of Zoology, University of Cambridge, Cambridge, UK.
- 2005 School of Marine Biology and Aquaculture, James Cook University, Queensland, Australia.
- 2004 Department of Zoology, University of Cambridge, Cambridge, UK.
- 2004 Department of Behavioural Ecology, Zoological Institute, University of Bern, Switzerland.
- 2004 Estación Biológica de Doñana, CSIC, Sevilla, Spain.
- 2004 Bamfield Marine Science Center, University of British Columbia, Bamfield, Canada.
- 2004 Department of Biology, New Mexico State University, Las Cruces, New Mexico, USA.
- 2002 Department of Ecology, Evolution, and Marine Biology, UC Santa Barbara, CA, USA.
- 2002 Department of Ecology and Evolutionary Biology, Princeton University, Princeton, NJ, USA.
- 2001 Department of Psychology, McMaster University, Hamilton, Ontario, Canada.
- 2001 Division of Life Sciences, University of Toronto, Scarborough, Ontario, Canada.
- 2001 Department of Biology, McGill University, Montreal, Quebec, Canada.
- 2000 Museum of Vertebrate Zoology, Department of Integrative Biology, UC Berkeley, CA, USA.

**Professional coverage (selected)**

- 2017 Evolutionary Ecology of Marine Invertebrate Larvae, chapter on Genetic Analysis of Dispersal  
Marko, PB & Hart MW. In chapter 12, pp 164-183.
- 2015 AAAS, Eureka Alert  
Marine reserves will need stepping stones to help fishes disperse between them.
- 2014 Ecology, Textbook, chapter on Life History  
Cain M. et al. Nemo grows up: a case study. In chapter 7, pp 160-161 & 179-180.
- 2012 An Introduction to Behavioral Ecology, Textbook, chapter on Living in Groups  
Davies, N. et al. Queuing by size in groups of coral reef fish. In chapter 6, pp 168-169.
- 2012 Trends in Ecology and Evolution, Article  
Raihani, N. et al. Punishment and cooperation in nature. TREE 27: 288-295.
- 2011 Journal of Animal Ecology, Highlights  
Associate Editors. Papers we liked.
- 2010 Proceedings of the Royal Society of London, Article  
Cant, M. The role of threats in animal cooperation. PRSL
- 2007 Evolutionary Ecology Research, Article  
Safran, R. et al. Group breeding in vertebrates. EER 9: 1163-1185.
- 2007 Faculty of 1000 Biology, Commentary  
Bshary, R. The threat of punishment enforces peaceful cooperation
- 2005 Science, Perspectives  
de Jong, G. Is invariance across animal species just an illusion? Science 309: 1193-5
- 2004 Science, Editor's Choice  
Sugden, A. Waiting for Nemo. Science 303: 1439-1441.
- 2004 Trends in Ecology and Evolution, Update  
Borgerhoff Mulder, M. Are men and women really so different? TREE 19: 3-6.
- 2003 Animal Behavior Society, News  
Hauber, M. Scientists find Nemo's sexual secret.
- 2003 Animal Behavior Society, News  
Mateo, J. Opposites do not attract in mating game.
- 2002 Nature, News  
Whitfield, J. Clownfish know their place.



**Popular coverage (selected)**

- 2017 Dive Magazine.  
Murray, L. The Best Exotic Marine Life Hotel.
- 2017 Elle Magazine.  
Jean, E. Can I make myself want the good guy?
- 2017 International Business Times  
Radhakrishnan, S. Some clownfish species are boring.
- 2017 Reef to Rainforest Media  
Goby breeding research — Free access sponsored by MASNA
- 2017 The Guardian  
Rushby, K. Cousteau country: SCUBA diving in Papua New Guinea.
- 2016 New Scientist, News.  
Kemeny, R. Compare the meerkat: animals size each other up in race to the top.
- 2015 The UCSB Current  
Cohen, J. Connecting marine reserves
- 2012 Bostonia Magazine.  
Barlow, R. Terrible swimmer, great personality.
- 2011 BU Today, Headline News.  
Barlow, R. Terrible swimmer, great personality.
- 2011 The Naked Scientist, Critter of the Month.  
Scales, H. Gender bending critter reveals what live is like as a male and then female.
- 2010 Nasty, Brutish and Short: The Quirks & Quarks Guide to Animal Sex and Other Weird Behavior  
Pat Sorenson. Clownfish Sex, pp 237-240.
- 2009 San Francisco State News.  
Bible, E. Clownfish provide clues to animal conflicts.
- 2007 National Geographic, Daily News.  
Norris, S. Coral reef fish starve themselves to maintain social order.
- 2003 CNN, Science and Space.  
Kellan, A. Nemo puts clownfish in spotlight.
- 2003 New Scientist, News.  
Vince, G. Clownfish turn transsexual to get on in life.
- 2003 New York Times, Science.  
Fountain, H. Clownfish social register.
- 2003 CNN, Science and Space.  
Scientists: Opposites don't attract.
- 2003 New Scientist, News.  
Zandonella, C. Opposites do not attract in mating game.
- 2003 New York Times, Science.  
Angier N. Opposites attract? Not in real life.
- 2003 National Public Radio, Talk of the Nation.
- 2003 Canadian Broadcasting Company, Quirks and Quarks.

## **Service Within the Department of Biology at Boston University**

### **Miscellaneous Service**

2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011	Undergraduate Advising
2020	Biology APT Committee
2020	Behavioral Biology Virtual Reception
2020	Biology First Generation Student Virtual Reception
2019, 2018, 2017	Director of Graduate Studies
2016, 2015, 2014, 2013	Chair of Graduate Committee
2015, 2014, 2013, 2012	Facilitator of Progress in Ecology, Evolution and Behavior
2014, 2013, 2010	Open House Lab Tours
2014	Assessment in Departments and Programs workshop
2014	BioBugs Lunch Round Table
2013, 2012, 2011	Ecology, Evolution and Behavior Seminar Organizer
2012	Member of Microbial Ecology Search Committee
2012	Member of Graduate Committee
2010	BioMixer

### **Hosted Seminars**

2019	Dr. Allison Shaw, University of Minnesota, USA.
2018	Dr. Malin Pinsky, Rutgers University, USA.
2014	Dr. Sasha Dall, Exeter University, UK.
2012	Dr. Geoff Jones, James Cook University, Australia.
2012	Dr. Maya Srinivasan, James Cook University, Australia.
2012	Dr. Patricia Brennan, University of Massachusetts at Amherst, USA.
2012	Dr. Dustin Rubenstein, Columbia University, USA.
2012	Dr. Jacqueline Webb, University of Rhode Island, USA.
2012	Dr. Peter Sale, Windsor University, Canada.
2011	Dr. Suzanne Alonzo, Yale University, USA.
2011	Dr. Claire Paris, University of Miami, USA.
2011	Dr. Maydianne Andrade, University of Toronto, Canada.
2010	Dr. Andrew Russell, University of Sheffield, UK.

**Research Assistant Professor mentor**

2014 – 2015 Siobhan Mattison, Department of Biology, Boston University, USA.  
*Assistant Professor of Anthropology at University of New Mexico.*

**Postdoctoral mentor**

2020 – 2022 Tina Barbasch, Department of Biology, Boston University, USA.  
 2019 – 2022 Theresa Rueger, Department of Biology, Boston University, USA.  
*Postdoc, Center for Ecology and Conservation, University of Exeter, UK.*  
 2017 – 2018 John Majoris, Department of Biology, Boston University, USA.  
*Postdoc, Biological and Environmental Science Division, KAUST, Saudi Arabia.*  
 2011 – 2012 Marian Wong, Department of Biology, Boston University, USA.  
*Senior Lecturer, School of Biological Sciences, University of Wollongong, Australia.*

**Ph.D. advisor / co-advisor**

2018 – 2024 E Schlatter, Department of Biology, Boston University, USA.  
 2016 – 2022 Robin Francis, Department of Biology, Boston University, USA.  
 2014 – 2021 Rebecca Branconi, Department of Biology, Boston University, USA.  
 2013 – 2020 Tina Barbasch, Department of Biology, Boston University, USA.  
*Postdoc in the Department of Biology, Boston University, USA.*  
 2010 – 2017 John Majoris, Department of Biology, Boston University, USA.  
*Postdoc in the Department of Biology, Boston University, USA.*  
*Postdoc in the Biological and Environmental Science Division, KAUST, Saudi Arabia.*  
 2010 – 2015 Cassidy D'Aloia, Department of Biology, Boston University, USA.  
*Postdoc in the Department of Ecology and Evolution, University of Toronto, Canada.*  
*Postdoc in the Department of Biology, WHOI, USA.*  
*Assistant Professor, Department of Biology, University of New Brunswick*

**Masters advisor / co-advisor**

2020 – 2021 Madison Pacaro, Department of Biology, Boston University, USA.  
 2019 – 2020 Anjali Bhardwaj, Department of Biology, Boston University, USA.  
 2018 – 2020 Leah Desrochers, Department of Biology, Boston University, USA.  
 2012 – 2017 Jeremiah Seymour, Department of Biology, Boston University, USA.  
*Supervisor at Children's Aquarium at Fair Park, Dallas, Texas.*  
 2011 – 2014 Alissa Rickborn, Department of Biology, Boston University, USA.  
*Ph.D. student in the Department of Integrative Biology, Oregon State University.*

**Undergraduate honors advisor**

2019 – 2020 Madison Pacaro  
 2015 – 2016 Christina Menniti  
 2013 – 2014 Philip Schmiede

**Ph.D. committee member**

- 2018 – 2025 James Fifer, Department of Biology, Boston University, USA.  
2018 – 2025 Hannah Aichelman, Department of Biology, Boston University, USA.  
2018 – 2025 Daniel Wuitchik, Department of Biology, Boston University, USA.  
2017 – 2023 Brandon Guell, Department of Biology, Boston University, USA (Chair).  
2017 – 2023 Nicola Kriefall, Department of Biology, Boston University, USA (Chair).  
2016 – 2022 Isabella Muratore, Department of Biology, Boston University, USA (Chair).  
2015 – 2021 Javier Mendez, Department of Biology, Boston University, USA (Chair).  
2015 – 2021 Julie Jung, Department of Biology, Boston University, USA.  
2015 – 2021 Nick Ray, Department of Biology, Boston University, USA.  
2014 – 2020 Karina Scavo, Department of Biology, Boston University, USA. (Chair)  
2014 – 2020 Sasha Viveló, Department of Biology, Boston University, USA.  
2014 – 2020 Will Caffry, Department of Biology, Boston University, USA.  
2014 – 2019 Evan Kristiansen, Department of Biology, Boston University, USA. (Chair)  
2013 – 2020 Katey Lesneski, Department of Biology, Boston University, USA. (Chair)  
2011 – 2018 Jesse Delia, Department of Biology, Boston University, USA. (Second Reader)  
2010 – 2017 Kristina Cohen, Department of Biology, Boston University, USA.  
2010 – 2017 Elizabeth Burmester, Department of Biology, Boston University, USA.  
2009 – 2014 Aryn Wilder, Department of Biology, Boston University, USA.

**Masters committee member**

- 2014 – 2017 James Garner, Department of Biology, Boston University, USA.  
2013 – 2017 Andrew Hoadley, Department of Biology, Boston University, USA.  
2011 – 2014 Julie Nicol, Department of Biology, Boston University, USA.  
2010 – 2014 Sarah Pilzer, Department of Biology, Boston University, USA.  
2009 – 2012 Eli Romero, Department of Biology, Boston University, USA.  
2009 – 2011 Tejashree Modak, Department of Biology, Boston University, USA.

**Undergraduate honors committee member**

- 2018 – 2019 Emma Martin

**Undergraduate mentor**

- 2019 – 2022 Duaa Ahmed, Department of Biology, Boston University
- 2019 – 2022 Diane Hwangpo, Department of Biology, Boston University
- 2019 – 2022 Genevieve Tostevin, Department of Biology, Boston University
- 2019 – 2021 Emily Turner, Department of Biology, Boston University (UROP)
- 2018 – 2021 Kurt Castro, Department of Biology, Boston University
- 2018 – 2020 Michaela Rogers, Department of Biology, Boston University
- 2017 – 2020 Caitlynn Klawon, Department of Biology, Boston University (UROP)
- 2017 – 2020 Madison Pacaro, Department of Biology, Boston University (UROP)
- 2016 – 2019 Daniel Chavez Andonie, Department of Biology, Boston University (UROP)
- 2016 – 2019 Sadie Thompson, Department of Biology, Boston University (UROP, SURF)
- 2016 – 2017 Zachary Milot, Department of Biology, Boston University
- 2018 Mikaela Schniedewind, Department of Biology, Boston University
- 2016 Braiam Rosado, Department of Biology, Boston University (SURF)
- 2015 – 2018 Alexander Maytin, Department of Biology, Boston University (UROP).
- 2015 – 2018 Cymone Reed, Department of Biology, Boston University (UROP, SURF).
- 2015 – 2017 Gabriella Smith, Department of Biology, Boston University (UROP).
- 2014 – 2017 Alex Ascher, Department of Biology, Boston University (UROP).
- 2014 – 2017 Spencer Showalter, Department of Biology, Boston University.
- 2015 – 2016 Christina Menniti, Department of Biology, Boston University.
- 2014 – 2016 Jarrod Moore, Department of Biology, Boston University (UROP, SURF).
- 2014 – 2016 Linda Wong, Department of Biology, Boston University (UROP).
- 2013 – 2016 Katrina Catalano, Department of Biology, Boston University (UROP).
- 2013 – 2016 Andrew Lacqua, Department of Biology, Boston University (UROP).
- 2013 – 2015 Athbah Almuhairi, Department of Biology, Boston University (UROP).
- 2013 – 2015 Cara Martone, Department of Biology, Boston University (UROP).
- 2012 – 2015 James Ferritto, Department of Biology, Boston University (UROP).
- 2012 – 2014 Philip Schmiedege, Department of Biology, Boston University (UROP).
- 2012 – 2014 Derek Scolaro, Department of Biology, Boston University (UROP).
- 2011 – 2014 Diana Acosta, Department of Biology, Boston University (UROP, SURF).
- 2012 – 2013 Samantha Andrews, Department of Biology, Boston University.
- 2011 – 2013 Corinne Burns, Department of Biology, Boston University (UROP).
- 2011 – 2013 Arianna Medina, Department of Biology, Boston University (UROP, SURF).
- 2011 – 2013 Curran Uppaluri, Department of Biology, Boston University (UROP).
- 2011 Stacy Arnold, Department of Biology, Boston University (SURF).

## **Service Beyond the Department of Biology at Boston University**

### **Ph.D. committee member**

2017 – 2024 John Foster, Department of Earth and Environment, Boston University, USA.

### **Undergraduate honors advisor**

2019 – 2020 Caitlynn Klawon (Marine Science)

2019 – 2020 Michaela Rogers (Marine Science)

2018 – 2019 Sadie Thompson (Marine Science)

2016 – 2017 Alex Ascher (Marine Science)

2015 – 2016 Katrina Catalano (Marine Science)

2013 – 2014 Derek Scolaro (Marine Science)

### **Undergraduate honors committee member**

2019 – 2020 Gretchen McCarthy (Marine Science)

2016 – 2017 Spencer Showalter (Marine Science)

2014 – 2015 Matthew Talbot (Marine Science)

2014 – 2015 Paul Riley (Marine Science)

2012 – 2013 Samantha Andrews (Marine Science)

2012 – 2013 Corinne Burns (Marine Science)

2012 – 2013 Mary-Kate Rogener (Marine Science)

### **Miscellaneous Service**

2019	Member of the Goldwater Scholarship Nomination Committee
2019	Member of the Trustee Scholars Selection Committee
2020, 2019	Director of Boston University Marine Program
2020, 2019, 2018, 2017	Chair of Dive Control Board, Environmental Health and Safety
2019, 2018, 2017	Member of Graduate Academic Affairs Committee
2019, 2018, 2017, 2016, 2015	Associate Director of Boston University Marine Program
2017	Member of the Dive Safety Officer Search Committee
2017, 2012	Presentation to student Marine Science Association
2016, 2015, 2014, 2013	Member of Dive Control Board, Environmental Health and Safety
2015, 2014, 2013	Member of UROP Faculty Advisory Committee.
2014, 2012	Facilitator, Responsible Conduct of Research Program, Workshop I
2014, 2012	Facilitator, Responsible Conduct of Research Program, Workshop II
2014	Facilitator, Responsible Conduct of Research Program, Workshop III
2014	Facilitator, Responsible Conduct of Research Program, Workshop IV
2013, 2012	Representative for Marine Science at the Academic Departmental Expo
2013	Member of BUMP working group to develop a Student Learning Outcomes Assessment.
2012	Instructor, Skin Diving for Marine Semester, Boston University Marine Program.

## Service Outside of Boston University

### Consultant – Scientific Expert

- 2017            BBC Blue Planet II: Coral Reefs: Cooperative Clownfish  
 2015            NOAA: Status Review Report: Orange Clownfish *Amphiprion percula*.

### Reviews – Associate Editor

- 2021 – 2023    Behavioral Ecology  
 2014 – 2020    Frontiers in Ecology and Evolution  
 2010 – 2013    Behavioral Ecology and Sociobiology

### Reviews – Panelist

- 2013            NSF Biological Oceanography Program  
 2012            Animal Behavior – Student Awards  
 2011            Animal Behavior – Student Awards

### Reviews – Grant Proposals

- 2009 – 2017    National Science Foundation (10)  
                   National Geographic (1)

### Reviews – Scientific Manuscripts

- |             |                               |                                                |
|-------------|-------------------------------|------------------------------------------------|
| 2003 – 2018 | American Naturalist (3)       | Animal Behaviour (2)                           |
|             | Behavioral Ecology (5)        | Behavioral Ecology and Sociobiology (3)        |
|             | Biological Bulletin (1)       | Biological Reviews (2)                         |
|             | Biology Letters (3)           | BioMed Central Biology (1)                     |
|             | Copeia (1)                    | Coral Reefs (2)                                |
|             | Current Biology (1)           | Canadian Journal of Zoology (1)                |
|             | Ecology (1)                   | Ecology Letters (1)                            |
|             | Ethology (4)                  | Environmental Biology of Fishes (2)            |
|             | Evolution (1)                 | Evolutionary Ecology (2)                       |
|             | Journal of Animal Ecology (3) | Journal of Fish Biology (5)                    |
|             | Marine Biology (4)            | Journal of Theoretical Biology (1)             |
|             | Molecular Ecology (6)         | Marine Ecology Progress Series (1)             |
|             | Nature (4)                    | Marine and Freshwater Research (1)             |
|             | Oecologia (1)                 | Nature Ecology & Evolution (1)                 |
|             | Oikos (1)                     | PLOS One (1)                                   |
|             | PNAS (1)                      | Proceedings of the Royal Society, Series B (7) |
|             | Science (2)                   | Royal Society Open Science (1)                 |
|             |                               | Trends in Ecology and Evolution (1)            |
|             |                               | Molecular Ecology Resources (1)                |

### Reviews – Undergraduate Programs

- 2018            University of Belize – Bachelors of Science in Marine Biology

**Postdoctoral mentor / co-mentor**

2013 – 2016 David Lindo, University of Miami, USA.  
*Assistant Professor of Engineering and Science at City University of New York.*

**Ph.D. committee member**

2015 – 2018 Romain Chaput, University of Miami, USA.  
2012 – 2017 Matt Foretich, University of Miami, USA.  
2008 – 2012 Letizia Campioni, Estación Biológica de Doñana, Sevilla, Spain.  
2004 – 2007 Marian Wong, James Cook University, Townsville, Australia.

**Ph.D. external examiner**

2016 Faye Thompson, University of Exeter, Falmouth, UK.

**Masters advisor / co-advisor**

2015 – 2018 E. Schlatter, Department of Biology, Colorado State University, CO, USA.

**Masters committee member**

2010 – 2012 Nicole Rodstrom, Department of Biology, UMass Dartmouth, MA, USA.

**Undergraduate mentor**

2013 – 2015 Robin Francis (Volunteer), Department of Ecology and Evolution, UCSB, USA.  
1997 Claire Norris (Volunteer), Department of Zoology, Oxford University, UK.  
1996 Michael Black (Volunteer), Dept of Neurobiology & Behavior, Cornell University, USA.

**High School Student mentoring**

2018 Workshop participant, Hyde Square Task Force, Looking Ahead Panel of Professionals.  
2018 Thomas Grainger, Cambridge Rindge and Latin School  
2016 Sydney Cicero, Cambridge Rindge and Latin School  
2016 Alli Micozzi, Cambridge Rindge and Latin School  
2015 Anastasia Carney, Cambridge Rindge and Latin School.  
2014 – 2016 Jameelah Julien, Science Club For Girls.  
2013 Gabriella Smith, Andover High School.  
2012 – 2013 Josephine Eugene, Cambridge Rindge and Latin School.  
2012 – 2013 Netaya Strothers, Science Club For Girls.  
2012 – 2013 Zainab Salejwala, Science Club For Girls.