

**Curriculum Vitae - Dianna K. Padilla**  
**Department of Ecology and Evolution**  
**State University of New York at Stony Brook**  
**Stony Brook, NY 11794-5245**

**PRESENT POSITION**

Professor, Department of Ecology and Evolution, State University of New York at Stony Brook, 2006 - Present, Associate Professor 1998 - 2006  
Affiliated Professor, School of Marine and Atmospheric Sciences, State University of New York at Stony Brook, 2006 - Present, Affiliated Associate Professor 1999 - 2006

**PREVIOUS POSITIONS**

Associate Professor, Department of Zoology, University of Wisconsin-Madison, 1996-1998  
Assistant Professor, Department of Zoology, University of Wisconsin-Madison, September 1989- 1996.  
Member Oceanography and Limnology Graduate Program, University of Wisconsin-Madison, 1989 - 1998.  
Program Director, Integrative Organismal Systems, Biology, National Science Foundation, 2006 - 2007

**EDUCATION**

Postdoctoral 1987-89, Cornell University, Ithaca, NY  
PhD Zoology 1987, The University of Alberta, Edmonton  
MS Zoology 1982 Oregon State University, Corvallis  
BA Zoology 1978 University of Washington, Seattle  
BA Biological Oceanography 1978 University of Washington, Seattle

**AWARDS AND FELLOWSHIPS**

Graduated Cum Laude in Zoology, U. of Washington, 1978  
Graduated Cum Laude in Biol. Ocean., U. of Washington, 1978  
Zoology Graduate Research Grant, Oregon State University  
June 1979, Dec. 1979, April 1980, Nov. 1980  
Sigma Xi Grant-In-Aid of Research, 1980  
President's NSERC Grant, University of Alberta 1982  
Graduate Research Fellowship, Dept. of Zoology, University of Alberta, April 1982-Sept. 1984  
H. H. Parlee Memorial Fellowship 1983-1984  
Smithsonian Tropical Research Institute Short-Term Fellowship 1983  
Bamfield Marine Station Graduate Scholarship 1984, 1986  
Smithsonian Institution Predoctoral Fellowship, 1984-1985  
Sigma Xi Grant-In-Aid of Research 1985  
Alma Mater Fund Travel Award (U. of Alberta) 1985  
NATO Postdoctoral Fellowship 1989 (declined)  
Elise B. Newell Distinguished Lecture, Florida Sea Grant, U. Florida, 1999  
Aldo Leopold Leadership Fellow in Conservation, ESA 2000 - 2002  
Elise B. Newell Distinguished Lecture, Florida Sea Grant, Florida State U. 2001  
Elise B. Newell Distinguished Lecture, Florida Sea Grant, U. Central Florida. 2002  
Bodega Marine Laboratory Distinguished Research Fellow, 2002  
Center Fellowship, National Center for Ecological Analysis and Synthesis, 2005  
Hispanic Heritage Month Latino Faculty Recognition Award, 2009  
American Association for the Advancement of Science Fellow, 2013  
Brentwood Union Free School District Service Award, 2015

**GRANTS**

University of Wisconsin Graduate School Research Award, July 1990 - June 1991, (\$21,625)  
"Evolutionary consequences of radular variability in an herbivorous snail." To: Dianna K. Padilla  
NOAA Sea Grant Institute 1990 (\$10,918) "Monitoring and Disseminating Information on the Spread of Zebra Mussels in the Upper Great Lakes -- Northern Lake Michigan Sites". To A. Miller, D.K. Padilla and S.I. Dodson.

NOAA Sea Grant Institute 1990-1991 (\$38,724) "Monitoring and Disseminating Information on the Spread of Zebra Mussels in the Upper Great Lakes -- Northern Lake Michigan Sites". To A. Miller, D.K. Padilla and S.I. Dodson.

NSF September 1990- September 1992; BSR-9009070 (\$12,000) "RPG: Radular Variability in the Herbivorous Gastropod *Lacuna*". To: Dianna K. Padilla

University of Wisconsin Graduate School Research Award, July 1991 - June 1992, (\$18,888) "Ecological and evolutionary consequences of variable radular morphology in the herbivorous snail *Lacuna*". To: Dianna K. Padilla

NSF 1991 (June 1991 - September 1992; REU Supplement to BSR-9009070, \$10,000) "Ecological and evolutionary consequences of radular variability". To: Dianna K. Padilla

NOAA 1991 - 94 (\$196,530; NA16RG0531-01) "Exotic species invasions: population dynamics and community consequences of the zebra mussel, *Dreissena polymorpha*". To: Dianna K. Padilla

University of Wisconsin Graduate School Research Award, July 1992 - June 1993 (\$17,865) "Radular variability and functional morphology in the herbivorous gastropod *Lacuna*: a phylogenetic approach." To: Dianna K. Padilla

University of Wisconsin Graduate School Research Award, July 1993 - June 1994 (\$18,000) "Radular variability and functional morphology in the herbivorous gastropod *Lacuna*: a phylogenetic approach." To: Dianna K. Padilla

University of Wisconsin Graduate School Research Award, July 1994 - June 1995 (\$17,000) "Exotic species invasions: Ecological consequences and spread of aquatic Invaders across a landscape." To: Dianna K. Padilla

NSF 1994 - 1997 (\$210,000; IBN-9317293) "Functional and evolutionary analysis of an inducible, phenotypically plastic feeding morphology." To: Dianna K. Padilla

NOAA 1994 - 97 (\$169,210; NA46RG0481); "Population and energetic consequences of zebra mussel fouling on native gastropod fauna of Lake Michigan. To: Dianna K. Padilla, J. Ellen Marsden, Daniel Schneider.

NSF 1995 (\$5,000; May 1995 - December 1995; REU Supplement to IBN-9317293) "Functional and evolutionary analysis of an inducible, phenotypically plastic feeding morphology." To: Dianna K. Padilla

University of Wisconsin Graduate School Research Award, July 1995 - June 1996 (\$17,000) "Exotic species invasions: Ecological consequences and spread of aquatic Invaders across a landscape." To: Dianna K. Padilla

NOAA 1995 - 97 (\$108,814; R/LR-65) "Facilitation of exotic species information exchange between North America and the former Soviet Union." To: Dianna K. Padilla

NSERC 1995 - 1998 (\$330,000 Collaborative Project Grant); Evolutionary Ecology of Exotic Species Introductions into the Great Lakes. To: E.G. Boulding, P.D.N. Hebert, P. Yodzis, G. Sprules, J. Havel, and D.K. Padilla).

NSF 1999-02 (\$210,000; DBI-9977377), AMRI: Acquisition of Instrumentation for Research and Training in Functional Ecology. To: D. K. Padilla and M. Lerdau

NSF 1999-02 (\$270,000 + REU supplements \$13,100, IBN-994594), Functional and Evolutionary Ecology Of A Phenotypically Plastic Feeding Morphology. To: Dianna K. Padilla

NOAA/SeaGrant 1999-01 (\$250,000) Research and Outreach to Prevent and Control Aquatic Nuisance Species Invasions: The Role of Larval Growth, Mortality and Transport in Metapopulation Dynamics and Control of the Zebra Mussel in Freshwater and Estuarine Systems. To: D.K. Padilla, D.W. Schneider, R. Sparks, and C. Rehmann

NOAA/Illinois-Indiana Sea Grant College Program 2000-2002 (\$96,371)"Predicting zebra mussel transport in rivers and estuaries" To: C. R. Rehmann, D. K. Padilla, D.W. Schneider

NSF 2000 (\$11,000; IBN-9983235) "WORKSHOP: Increasing Minority Involvement In Integrative and Comparative Biology, to be held at the annual meeting of SICB, Atlanta, Georgia, January 4-8, 2000." To: D.K. Padilla, F. Thomas.

NSF 2000 (\$4,500; IBN-9982794) ASICB Symposium: New Approaches to the Study of Marine Plant-Animal Interactions. To: D.K. Padilla and K.L. VanAlstyne.

NSF 2001 (\$5,950, IBN-0090902; Funding split between IBN and IAB) "World Congress of Malacology Symposium: New Frontiers in Functional Morphology of Molluscs." To: D.K. Padilla and S. Baker.

NOAA/SeaGrant 2002-2004 (\$300,000) Aquatic Nuisance Species. Metapopulation Dynamics and Control of the Zebra Mussel in Freshwater and Estuarine Systems: The Effects of Hydrodynamics, Larval Supply, and Embayments. To: D.K. Padilla, D.W. Schneider, and C. Rehmann

NOAA/SeaGrant 2003-2006 (\$267,318) Aquatic Nuisance Species Research Program: Biological Invasion of Marine Reserves by Aquatic Nuisance Species. To: Terrie Klinger and Dianna Padilla

Nature Conservancy 2004-2005 (\$67,400). Gonad production, condition index and larval production in hard clam spawners sanctuaries. To: Dianna Padilla and Michael Doall

NY Sea Grant 2004-2005 (\$49,655) The effects of brown tide and plankton quality on hard clam larval growth and survivorship. To: Dianna Padilla and Christopher Gobler

Army Corp of Engineers (\$15,000) Modeling aquatic invaders. To: Dianna K. Padilla

Nature Conservancy 2005 (\$12,385). Larval production in hard clam spawners sanctuaries. To: Dianna K. Padilla

NSF 2009 - 2010 (\$15,000). DEB-0909830 DISSERTATION RESEARCH: Incorporating Metagenomics into Experimental Community Ecology: Tests with the Pitcher Plant Model System. To: Dianna K. Padilla, Co-PI Sarah M. Gray

NSF 2009 - 2013 (\$573,096). IOS-0920032 9/11-9/13 Phenotypic Plasticity in Feeding: Ontogenetic Solutions to Scaling Limitations. To: Dianna K. Padilla, Sandra Shumway, J. Evan Ward.

Nature Conservancy 2010 (\$2,651). Predation Rates on Hard Clams by Channeled and Knobbed Whelk. To: Dianna K. Padilla

NSF 2012 - 2016 (\$134,008). IOS-1243801 8/12 - 7/16 A Workshop to Address the Grand Challenge: How Organisms Walk the Tightrope Between Stability and Change. To: Dianna K. Padilla

Suffolk County NY 2015-2016 (\$125,000). Scientists & Student Stewards Assessing potential Nitrogen Loading mitigation in Freshwater and Salt Marsh Communities in Suffolk County, NY. To: Dianna K Padilla and Rebecca Grella

NOAA/Sea Grant 2016-2019 (\$185,435). Flexing mussels: Does *Mytilus edulis* have the capacity to overcome effects of Ocean Acidification? To: Dianna K Padilla, Co-PIs Lisa Milke, NOAA, Shannon Meseck, NOAA

NSF 2017-2019 (\$24,877) DEB-17231233. Developing a strategic plan for a global change research and education at Flax Pond Marine Lab. To Janet Nye and Dianna K Padilla

NSF 2018-2025 (\$500,000). IOS-1754949 RCN: Building an Organismal Systems-type Modeling Network - OSyM. PI Dianna K Padilla, CoPI Kendra Greenlee, North Dakota State University

NY State 2018-2019 Title II, Part B Mathematics and Science Partnerships Program (\$250,000). Bridging the Gap: STEP-UP! A New Professional Development (PD) opportunity for Brentwood Union Free School District Teachers and Building Leaders. PI Rebecca Grella, Brentwood High School, Dianna K Padilla and Ross Nehm Collaborators

NOAA OAP 2021-2024 (\$521,802) Wild scallop population resilience: Using multigenerational studies to estimate robustness and adaptive potential to rapidly changing ocean acidification. PI Shannon Meseck, CoPIs Katherine McFarland, Dianna K Padilla

NSF 2021-2022 (\$749,688) OIA - 2137745 NSF Convergence Accelerator Track E: Reconfiguring Urban Shorelines for Resilience: Convergence Research Meshing Ecology, Engineering and Architecture. PI Dianna K Padilla

NYSED Competitive Grant Program-Smart Start 2021-2026 (\$244,251 annually; \$1,221,255 total) Scientists and Teachers Engaging in Professional Development with University 1 Personnel, STEP-UP: Spotlight Technology for the Future. PI Rebecca Grella, Brentwood High School, Dianna K Padilla and Ross Nehm Collaborators

## REVIEWED PUBLICATIONS

1. Dianna K. Padilla 1984. The importance of form: differences in competitive ability, resistance to consumers and environmental stress in an assemblage of coralline algae. *J. Exp. Mar. Biol. Ecol.* 79: 105-127.
2. Dianna K. Padilla 1985. Structural resistance of algae to herbivores. A biomechanical approach. *Marine Biology* 90: 103-109.
3. John F. Addicott, J. M. Aho, Michael Antolin, Dianna K. Padilla, John S. Richardson, and Daniel A. Soluk 1987. Ecological neighborhoods: scaling environmental patterns. *Oikos* 49: 340-346.

4. Dianna K. Padilla 1989. Algal structural defenses: form and calcification in resistance to tropical limpets. *Ecology* 70: 835-842.
5. C. Drew Harvell and Dianna K. Padilla 1990. Inducible morphology, heterochrony and size hierarchies in a colonial invertebrate monoculture. *Proc. Natl. Acad. Sci. U.S.A.* 87: 508-512.
6. Charles W. Ramcharan, Dianna K. Padilla, and Stanley I. Dodson. 1992. A multivariate model for predicting population fluctuations of *Dreissena polymorpha* in North American lakes. *Can. J. Fish. Aquat. Sci.* 49(1): 150-158.
7. Charles W. Ramcharan, Dianna K. Padilla, and Stanley I. Dodson 1992. Models to predict potential occurrence and density of the zebra mussel, *Dreissena polymorpha*. *Can. J. Fish. Aquat. Sci.* 49(12): 2611-2620.
8. Dianna K. Padilla 1993. Rip stop in marine algae: minimizing the consequences of herbivore damage. *Evolutionary Ecology* 7: 634-644.
9. Michael A. Koutnik and Dianna K. Padilla 1994. Predicting the spatial distribution of *Dreissena polymorpha* (zebra mussel) among inland lakes of Wisconsin: modeling with a GIS. *Can. J. Fish. Aquat. Sci.* 51:1189-1196.
10. Dianna K. Padilla, Stephen C. Adolph, Kathryn L. Cottingham, and Daniel W. Schneider 1996. Predicting the consequences of dreissenid mussels on a pelagic food web. *Ecological Modelling* 85:129-144.
11. Dianna K. Padilla and Stephen C. Adolph 1996. Plastic inducible morphologies are not always adaptive: the importance of time delays in a stochastic environment. *Evolutionary Ecology* 10:105-117.
12. Dianna K. Padilla, C. Drew Harvell, Jessica Marks, and Brian Helmuth 1996. Inducible aggression and intraspecific competition for space in a marine bryozoan, *Membranipora membranacea*. *Limnology and Oceanography* 41:505-512.
13. Dianna K. Padilla, Dawn E. Dittman, Jeffery Franz and Rebecca Sladek 1996. Radular production rates in two species of *Lacuna* Turton (Gastropoda:Littorinidae). *Journal of Molluscan Studies* 62: 275-280.
14. Ladd E. Johnson and Dianna K. Padilla 1996. Geographic spread of exotic species: ecological lessons and opportunities from the invasion of the zebra mussel, *Dreissena polymorpha*. *Biological Conservation* 78:23-33.
15. Brenda Young, Dianna K. Padilla, Daniel Schneider, and Steve Hewett 1996. The importance of size-frequency relationships for predicting ecological impact of zebra mussel populations. *Hydrobiologia* 332:151-158.
16. Dianna K. Padilla, M. A. Chotkowski and Lucy A. J. Buchan 1996. Predicting the spread of zebra mussels (*Dreissena polymorpha*) to inland waters using boater movement patterns. *Global Ecology and Biogeography Letters* 5:353-359.
17. Alexander Y. Karatayev, Lyubov E. Burlakova, and Dianna K. Padilla 1997. The effects of *Dreissena polymorpha* (Pallas) invasion on aquatic communities in eastern Europe. *Journal of Shellfish Research* 16: 187-203.
18. Dianna K. Padilla 1998. Inducible phenotypic plasticity of the radula in *Lacuna* (Gastropoda: Littorinidae). *The Veliger* 41:201-204.
19. Alexander Y. Karatayev, Lyubov E. Burlakova, and Dianna K. Padilla 1998. Physical factors that limit the distribution and abundance of *Dreissena polymorpha* (Pall.). *Journal of Shellfish Research* 17:1219-1235.
20. Curt L. Elderkin, Daniel W. Schneider, James A. Stoeckel, and Dianna K. Padilla 1998. A method for measuring in situ oxygen consumption rates of freshwater gastropods. *Journal of the North American Benthological Society*, 17: (3) 338-347.
21. Lucy A. J. Buchan and Dianna K. Padilla 1999. Estimating the probability of long-distance overland dispersal of invading aquatic species. *Ecological Applications* 9:254-265.
22. Dianna K. Padilla and Bengt J. Allen. 2000. Paradigm lost: Reconsidering functional form and group hypotheses in marine ecology. *Journal of Experimental Marine Biology and Ecology*. 250:207-221.
23. Lucy A. J. Buchan and Dianna K. Padilla. 2000. Predicting the likelihood of Eurasian watermilfoil presence in lakes, macrophyte monitoring tool. *Ecological Applications*. 10: 1442-1455.

24. Tara Reed-Anderson, Steven Carpenter, Dianna K. Padilla, and Richard Lathrop. 2000. Predicted impact of zebra mussel (*Dreissena polymorpha*) invasion on water clarity in Lake Mendota. *Canadian Journal of Fisheries and Aquatic Science*. 58:1617-1628.
25. Lyubov E. Burlakova, Alexander Y. Karatayev, and Dianna K. Padilla. 2000. The impact of *Dreissena polymorpha* (Pallas) invasion on unionid bivalves. *International Journal of Hydrobiology*. 85:529-541.
26. Dianna K. Padilla. 2001. Food and environmental cues trigger an inducible offense. *Evolutionary Ecology Research*. 3:15-25.
27. Dawn E. Dittman, Susan E. Ford and Dianna K. Padilla. 2001 Effects of *Perkinsus marinus* on Reproduction and Condition of the Eastern Oyster, *Crassostrea virginica*, depend on timing. *Journal of Shellfish Research* 20 (3):1025-1034
28. Clifford E. Kraft, Patrick J. Sullivan, Alexander Y. Karatayev, Lyubov E. Burlakova, Jeffrey C. Nekola, Ladd E. Johnson, and Dianna K. Padilla. 2002. Landscape patterns of an aquatic invader: assessing dispersal extent from spatial distributions. *Ecological Applications* 12:749-759.
29. Alexander Y. Karatayev, Lyubov E. Burlakova, Dianna K. Padilla. 2002. The impact of zebra mussels on aquatic communities and their role as ecosystem engineers. IN: *Invasive aquatic species of Europe: distributions, impacts and management*. Eds: Erkki Leppäkoski (Finland), Sergej Olenin (Lithuania) and Stephan Gollasch (Germany), Kluwer Scientific Publishers.
30. Daniel W. Schneider, James A. Stoeckel, Chris R. Rehmann, K. Douglas Blodgett, Richard E. Sparks, Dianna K. Padilla. 2003. A developmental bottleneck in dispersing larvae: implications for spatial population dynamics *Ecology Letters* 6: 352-360.
31. Alexander Y. Karatayev, Lyubov E. Burlakova, Dianna K. Padilla, and Ladd E. Johnson. 2003. Patterns of spread of the zebra mussel (*Dreissena polymorpha* (Pallas)): the continuing invasion of Belarussian lakes. *Biological Invasions*. 5:213-221.
32. Alexander Y. Karatayev, Lyubov E. Burlakova, Thomas Kesterson, and Dianna K. Padilla. 2003. Dominance of the asiatic clam, *Corbicula fluminea* (Müller), in the benthic community of a reservoir. *Journal of Shellfish Research*. 22:487-493.
33. Dianna K. Padilla and Susan L. Williams. 2004. Beyond ballast water: aquarium and ornamental trades as sources of invasive species in aquatic ecosystems. *Frontiers in Ecology and the Environment*. 2:131-138.
34. Dianna K. Padilla 2004. Form and function of radular teeth of herbivorous molluscs: Focus on the future. *American Malacological Bulletin* 18: 163-168
35. Shirley M. Baker, Dianna K. Padilla. 2004. New Frontiers in the functional morphology of molluscs - A tribute to Drs. Vera Fretter and Ruth Turner. *American Malacological Bulletin* 18: 121-127
36. J.A. Stoeckel, C.R. Rehmann, D.W. Schnieder, D.K. Padilla. 2004. Retention and supply of zebra mussel larvae in a large river system: importance of an upstream lake. *Freshwater Biology* 49:919-930.
37. Jessica Gurevitch and Dianna K. Padilla. 2004 Are invasions a major cause of extinctions? *Trends in Ecology and Evolution*. 19:470-474
38. Jessica Gurevitch and Dianna K. Padilla. 2004 Response to Ricciardi. Assessing species invasions as a cause of extinction. *Trends in Ecology and Evolution*. 19:620
39. M.L. Carr, C.R. Rehmann, J.A. Stoeckel, D.K. Padilla, and D.W. Schneider. 2004. Measurements and consequences of retention in a side embayment in a tidal river. *J. Marine Systems* 49: 41-53.
40. James A. Stoeckel, Dianna K. Padilla, Daniel W. Schnieder, Christopher R. Rehmann. 2004. Laboratory culture of *Dreissena polymorpha* (Pallas, 1771) larvae: spawning success, adult fecundity, and larval mortality patterns. *Canadian Journal of Zoology* 82: 1436-1443
41. Dianna K. Padilla. 2005. The potential of zebra mussels as a model for invasion ecology. *American Malacological Bulletin*. 20: 123-131
42. Alexander Y. Karatayev, Lyubov E. Burlakova, and D. K. Padilla. 2005. Contrasting distribution and impacts of two freshwater exotic suspension feeders, *Dreissena polymorpha* and *Corbicula fluminea*. In: R. Dame and S. Olenin (eds.) *The Comparative Roles of Suspension Feeders in Ecosystems*. NATO Science Series: IV - Earth and Environmental Sciences. Springer, pp 239-262.
43. Burlakova, L. E., A.Y. Karatayev, and D. K. Padilla. 2005. Functional changes in benthic freshwater communities after *Dreissena polymorpha* (Pallas) invasion and consequences for filtration. In: R. Dame and S. Olenin (eds.) *The Comparative Roles of Suspension Feeders in Ecosystems*. NATO Science Series: IV - Earth and Environmental Sciences. Springer, pp 263-275.

44. Miner BG, Sultan SE, Morgan SG, Padilla DK, Relyea RA 2005 Ecological consequences of phenotypic plasticity. *Trends in Ecology & Evolution* 20: 685-692
45. Burlakova, L. E., D. K. Padilla, A.Y. Karatayev, and D. Minchin. 2006. Prevalence of *Dreissena polymorpha* endosymbionts in the Shannon River, Ireland. *Journal of Molluscan Studies*. 72: 207-210.
46. Alexander Y. Karatayev, Lyubov E. Burlakova, and D. K. Padilla. 2006. Growth rate and longevity of *Dreissena polymorpha* (Pallas): a review and recommendations for future study. *Journal of Shellfish Research*. 25(1): 23-32.
47. Terrie Klinger, Dianna K. Padilla and Kevin Britton-Simmons. 2006. Two invaders achieve higher densities in marine reserves. *Aquatic Conservation - Marine and Freshwater Ecosystems* 16 (3): 301-311
48. Dianna K. Padilla and Benjamin G. Miner 2006 Legacies in life histories. *Integrative and Comparative Biology* 46: 217-223
49. Padilla, D. K. 2006. Zebra Mussel, *Dreissena polymorpha*. In: *Invasive Species in the Pacific Northwest*. Edited by PD Boersma, SE Reichard and AN Van Buren, University of Washington Press, 285 pp
50. Dianna K. Padilla, Michael H. Doall, Christopher J. Gobler, Amanda Hartson and Kim O'Boyle. 2006. Brown tide alga, *Aureococcus anophagefferens*, can affect growth but not survivorship of *Mercenaria mercenaria* larvae. *Harmful Algae* 5: 736-748
51. Lyubov E. Burlakova, Alexander Y. Karatayev, and Dianna K. Padilla. 2006. Changes in the distribution and abundance of *Dreissena polymorpha* within lakes through time. *Hydrobiologia*. 571:133-146.
52. Alexander Y. Karatayev, Dianna K. Padilla, Dan Minchin, Demetry Boltovskoy, and Lyubov E. Burlakova. 2007. Changes in global economies and trade: the potential spread of exotic freshwater bivalves. *Biological Invasions*. 9:161-180.
53. Alexander Y. Karatayev, Demetri Botolovskoy, Dianna K. Padilla, and Lyubov E. Burlakova 2007 The invasive bivalves *Dreissena polymorpha* and *Limnoperna fortunei*: parallels, contrasts, potential spread and invasion impacts. *Journal of Shellfish Research*. 26: 205-213.
54. Michael H. Doall, Dianna K. Padilla, Carl P. Lobue, Christopher Clapp, Anna R. Webb and Jesse Hornstein. 2008. Evaluating northern quahog (hard clam, *Mercenaria mercenaria* L.) restoration: are transplanted clams spawning and reconditioning? *Journal of Shellfish Research* 27:1069-1080
55. Laurie L. Perino, Dianna K. Padilla and Michael H. Doall. 2008. Testing the accuracy of morphological identification of northern quahog larvae. *Journal of Shellfish Research* 27:1081-1085
56. Rachel Przeslawski, Paul E. Bourdeau, Michael H. Doall, Jironimo Pan, Laurie Perino and Dianna K. Padilla. 2008. The effects of a harmful alga on bivalve larval lipid stores. *Harmful Algae* 7:802-807
57. Alexander Y. Karatayev, Lyubov E. Burlakova, Vadim A. Karatayev and Dianna K. Padilla. 2009. Introduction, distribution, spread, and impacts of exotic freshwater gastropods in Texas. *Hydrobiologia* 619:181-194
58. Lyubov E. Burlakova, Alexander Y. Karatayev, Dianna K. Padilla, Leah D. Cartwright and David N. Hollas. 2009. Wetland restoration and invasive species: apple snail (*Pomacea insularum*) feeding on native and invasive aquatic plants. *Restoration Ecology* 17: 433-440.
59. Alexander Y. Karatayev, Lyubov E. Burlakova and Dianna K. Padilla. 2010. *Dreissena polymorpha* in Belarus: history of spread, population biology, and ecosystem impacts. In: *The Zebra Mussels in Europe* (G. van der Velde, S. Rajagopal and A. bij de Vaate, eds.). Margraf Publishers, Netherlands.
60. Kurt Schwenk, Dianna K. Padilla, George S. Bakken and Robert J. Full (shared first authorship). 2009. Grand Challenges in organismal biology. *Integrative and Comparative Biology*. 49:7-14
61. Alexander Y. Karatayev, Lyubov E. Burlakova, Dianna K. Padilla, Sergey E Mastitsky and Sergej Olenin. 2009. Invaders are not a random selection of species. *Biological Invasions* 11 SI: 2009-2019.
62. Michael H. Doall, Dianna K. Padilla, and Carl P. Lobue. 2009. Factors impacting condition and spawning of the northern quahog (*Mercenaria mercenaria*): implications for restoration. *Journal of Shellfish Research* 28:693-693 (2nd most downloaded paper in 2009)
63. Lyubov E. Burlakova, Dianna K. Padilla, Alexander Y. Karatayev, David N. Hollas, Leah D. Cartwright and Kevin D. Nichol. 2010. Differences in population dynamics and potential impacts of a freshwater invader driven by temporal habitat stability. *Biological Invasions* 12: 927-941.

64. Dianna K. Padilla. 2010. Context-dependent impacts of a non-native ecosystem engineer, the Pacific oyster *Crassostrea gigas*. *Integrative and Comparative Biology* 50: 213-225.
65. Gene Robinson\*, Jody Banks\*, Dianna K Padilla\* (\*shared first author), Warren W. Burggren, C. Sarah Cohen, Charles F Delwiche, Vicki Funk, Hopi E Hoekstra, Erich D Jarvis, Loretta Johnson, Mark Q Martindale, Carlos Martinez del Rio CM (del Rio, Monica, David E Salt, Saurabh Sinha, Chelsea Specht, Kevin Strange, Joan E Strassmann, Billie J Swalla, Lars Tomanek. 2010. Empowering 21st Century Biology. *Bioscience* 60: 923-930
66. Brian Tsukimura, Hanna V Carey, Dianna K Padilla. 2010. Workshop on the Implementation of the Grand Challenges. *Integrative And Comparative Biology* 50: 945-947
67. Jonathon H. Stillman, Mark Denny, Dianna K. Padilla, Marvalee H. Wake, Sheila Patek and Brian Tsukimura. 2011. Grand Opportunities: Strategies for addressing grand challenges in organismal animal biology. *Integrative and Comparative Biology* 51:7-13
68. Alexander Y. Karatayev, Sergey E. Mastitsky, Dianna K. Padilla, Lyubov E. Burlakova and Marissa M. Hajduk. 2011. Differences in growth and survivorship of zebra and quagga mussels: size matters. *Hydrobiologia* 668:183-194.
69. Alexander Y. Karatayev, Lyubov E. Burlakova, Sergey E. Mastitsky, Dianna K. Padilla and Edward L. Mills 2011. Contrasting rates of spread of two congeners, *Dreissena polymorpha* and *Dreissena rostriformis bugensis*, at different spatial scales. *Journal Of Shellfish Research* 30:923-931.
70. Dianna K Padilla, Michael J McCann, Sandra E. Shumway 2011 Marine invaders and bivalve aquaculture: sources, impacts and consequences. In: *Shellfish Aquaculture and the Environment*, SE Shumway, editor. Wiley Blackwell
71. Alexander Y. Karatayev, Lyubov E. Burlakova and Dianna K. Padilla 2012. General overview of zebra and quagga mussels: what we know and do not know. In T. F. Nalepa and D. W. Schloesser [eds] *Quagga and Zebra Mussels: Biology, Impacts, and Control*. 2nd Edition. CRC Press, Boca Raton, FL..
72. Islay D. Marsden, Sandra E. Shumway and Dianna K. Padilla 2012. Does size matter? The effects of body size and declining oxygen tension on oxygen uptake in gastropods. *Journal of the Marine Biological Association of the United Kingdom* 92: 1603-1617.
73. Rachel Przeslawski, Laurie L. Perino, Dianna K. Padilla. 2012. Effects of larval density and food rations on the larval development of an ecologically important bivalve (*Mercenaria mercenaria*). *Molluscan Research* 32: 27-35.
74. Dana H. Geary, Erik Hoffmann, Imre Magyar, James Freiheit, and Dianna K. Padilla 2012. Body size, longevity, and growth rate in Lake Pannon Melanopsid gastropods and their predecessors. *Paleobiology* 38:554-568
75. Alexander Y. Karatayev, Lyubov E. Burlakova, M. Jake Vander Zanden, Richard C. Lathrop and Dianna K. Padilla 2013. Change in a lake benthic community over a century: evidence for alternative community states. *Hydrobiologia* 700:287-300
76. Dianna K. Padilla and Monique Savedo 2013. A systematic review of phenotypic plasticity in marine invertebrate and plant systems. *Advances in Marine Biology* 65:67-94.
77. Vadim A. Karatayev, Alexander Y. Karatayev, Lyubov E. Burlakova, and Dianna K. Padilla 2013. Lakewide dominance does not predict the potential for spread of dreissenids. *Journal of Great Lakes Research* 39:622-629.
78. Kit Yu Karen Chan, Houshuo Jiang, Dianna K. Padilla 2013. Swimming speed of larval snail does not correlate with size and ciliary beat frequency. *PLOS ONE* 8: e82764.
79. Francesca Gherardi and Dianna K. Padilla 2014. Climate-induced changes in human behavior and range expansion of freshwater species. *Ethology, Ecology and Evolution* 26:86-90.
80. Dianna K. Padilla and Brian Tsukimura 2014. A new organismal systems biology: how animals walk the tightrope between stability and change. *Integrative and Comparative Biology* 54:218-222.
81. Daniel Grünbaum and Dianna K. Padilla 2014. An integrated modeling approach to assessing linkages between environment, organism, and phenotypic plasticity. *Integrative and Comparative Biology* 54:323-335.
82. Sandra E. Shumway, J. Evan Ward, Eric Heupel, Bridget A. Holohan, Johann Heupel, Tamara Heupel and Dianna K. Padilla 2014. Observations of feeding in the common Atlantic slipper snail *Crepidula fornicata* L., with special reference to the "mucus net". *Journal of Shellfish Research* 33:279-291.
83. Sarah M. Gray, Daniel E. Dykhuizen and Dianna K. Padilla 2014. The effects of species properties

- and community context on establishment success. *Oikos* 124: 355-363. doi: 10.1111/oik.01550
84. Alexandra P. Hooks and Dianna K. Padilla 2014. Prey responses to the presence of a native and nonnative predator. *Journal of Experimental Marine Biology and Ecology* 461:209-215.
  85. Dianna K. Padilla, Michael McCann, Mica McCarty-Glenn, Alexandra Hooks, Sandra E. Shumway. 2014. Effect of food on time to metamorphic competence in the model system, *Crepidula fornicata*. *Biological Bulletin*. 227: 242-251.
  86. Dianna K. Padilla, Thomas L. Daniel, Patsy S. Dickinson, Daniel Grünbaum, Cheryl Hayashi, Donal T. Manahan, James H. Marden, Billie J. Swalla and Brian Tsukimura. 2014. Addressing grand challenges in organismal biology - the need for synthesis. *BioScience* 64: 1178-1187.
  87. Heather Tallis, et al. 2014. A call for inclusive conservation. *Nature* 515: 27-28.
  88. Alexander Y. Karatayev, Lyubov E. Burlakova and Dianna K. Padilla. 2015. Zebra versus quagga mussels: a review of their spread, population dynamics, and ecosystem impacts. *Hydrobiologia* 746: 97-112.
  89. Alexander Y. Karatayev, Lyubov E. Burlakova, Sergey E. Mastitsky, and Dianna K. Padilla 2015. Predicting the spread of aquatic invaders: insight from 200 years of invasion by zebra mussels. *Ecological Applications* 25: 430-440.
  90. Alexander Y. Karatayev, Demetrio Boltovskoy, Lyubov Burlakova and Dianna K. Padilla 2015. Parallels and contrasts between *Limnoperna fortunei* and species of *Dreissena*. In: *Limnoperna fortunei*: the ecology, distribution and control of a swiftly spreading invasive fouling mussel, Demetrio Boltovskoy, Editor. Springer.
  91. Michael J McCann and Dianna K Padilla 2015. Effects of a patchy food environment across life history stages. *Journal of Experimental Marine Biology and Ecology* 472: 135-141.
  92. Alison Yee and Dianna K Padilla 2015. Allometric scaling of the radula in the Atlantic slippersnail, *Crepidula fornicata*. *Journal of Shellfish Research* 34: 903-907.
  93. Alexander Y. Karatayev, Lyubov E. Burlakova and Dianna K. Padilla 2018. Can introduced species replace lost biodiversity? A test with freshwater molluscs. *Hydrobiologia* 810: 45-56, DOI 10.1007/s10750-017-3135-1
  94. Katheryn Van Alstyne and Dianna K Padilla 2018. Chemical ecology of seagrasses. In: *Chemical Ecology: The Ecological Impacts of Marine Natural Products*, Eds: Puglisi MP, Becerro MA, Paul VJ, CRC Press. pp 1655-192
  95. Dianna K Padilla, David Charifson, Alyssa Liguori, Mica MacCarthy-Glenn, Maria Rosa, and Allison Rugila 2018. Factors affecting gastropod larval development and performance: A systematic review. *J. Shellfish Research* 37: 851-867
  96. Arvind K Shantharam, Dianna K. Padilla, Bradley J. Peterson, Michael Doall, Carl LoBue, Anna Webb 2019. Macrofaunal community structure following the restocking of northern quahog (*Mercenaria mercenaria*) to Great South Bay, Long Island, NY. *Journal of Shellfish Research* 38(2):259-270
  97. Paul E. Bourdeau and Dianna K. Padilla 2019. Cue specificity of predator-induced phenotype in a marine snail: is a crab just a crab? *Marine Biology*, 166(7), 84. doi.org/10.1007/s00227-019-3526-0
  98. Ivan Chase, Raphael Douady and Dianna K. Padilla. 2019. A comparison of wealth inequality in humans and non-humans. *Physica A Statistical Mechanics and its Applications* 122962 (Press coverage New York Times <https://www.nytimes.com/2019/12/13/science/hermit-crabs-wealth-inequality.html>)
  99. Maria Rosa and Dianna K Padilla 2020. Changes in food selection through ontogeny in *Crassostrea gigas* larvae. *Biological Bulletin* 238:54-63
  100. Alexandra P Hooks and Dianna K Padilla 2021. Introduced predator elicits population-specific responses from prey. *Biological Invasions* 23(21):1-477-490
  101. DM Charifson, PE Bourdeau, DK Padilla 2022. Shell remodeling in response to increased risk of predation in a marine snail. *Marine Ecology Progress Series* 688, 57-67
  102. Maria Rosa and Dianna K Padilla 2022. Determinants of food selection by bivalve larvae. *Invertebrate Biology*, 141:e12366.
  103. Dianna K Padilla and Daniel Grünbaum 2024. Preparing the Next Generation of Integrative Organismal Biologists. *Integrative and Comparative Biology* DOI: 10.1093/icb/icae098
  104. Samuel J. Gurr, Katherine McFarland, Genevieve Bernatchez, Mark S. Dixon, Lisa Guy, Lisa M. Milke, Matthew E. Poach, Deborah Hart, Louis V. Plough, Dylan H. Redman, George Sennefelder, Sheila Stiles, Gary H. Wikfors, Dianna K. Padilla, Shannon L. Meseck. 2024. Effects



- of food supply on northern bay scallops *Argopecten irradians* (L.) reared under two  $p\text{CO}_2$  conditions. Marine Ecology Progress Series 740:61-78
105. Dianna K Padilla, Lisa Milke, Morodoluwa Akin-Fajiyee, Maria Rosa, Dylan Redman, Alyssa Liguori, Allison Rugilla, David Veilleux, Mark Dixon, David Charifson, Shannon L. Meseck. 2024. Local differences in robustness to ocean acidification. Biology Open 13 (8)
106. Kendra J. Greenlee and Dianna K. Padilla. 2024. Modeling Organismal Responses to Changing Environments. Integrative And Comparative Biology DOI: 10.1093/icb/icae131

#### In Revision

- Nicolas S. Anderson and Dianna K Padilla. 2024 Settlement and metamorphosis of the ribbed mussel, *Geukensia demissa*, in response to environmental cues. In Revision. Biological Bulletin
- Thomas M. Grothues, Dianna K. Padilla, A. Sulan Kolatan, Christina M. K. Kaunzinger, Philip Parker, Steven N. Handel. 2024. Life as a design element of hardened urban shorelines. In Revision Estuaries and Coasts Special Issue on Living Shorelines

#### OTHER REVIEWED PUBLICATIONS:

1. Dianna K. Padilla. 2004. Cleaning the tanks. Conservation In Practice 5:46 (Invited)
2. Dianna K. Padilla, Lyubov Burlakova, and Alexander Karatayev 2005. Reaching around the globe: international collaboration and studies of aquatic invaders. In: Principles of Conservation Biology. 3rd Edition. MJ Groom, GK Meffe and CR Carroll, Sinauer Associates (Invited)
3. Dianna K. Padilla. 2006. The Zebra Mussel. IN: Boersma, P. D., S. E. Reichard, and A. N. Van Buren. Invasive Species in the Pacific Northwest. Seattle and London: University of Washington Press
4. Dianna K. Padilla 2012. Brooklyn Bridge Park: A win-win for the people of Brooklyn and the environment. Ecological Restoration 30:78 (Invited)

#### TEACHING EXPERIENCE:

University of Wisconsin - Madison (Dept Avg Teaching 1.5 courses/yr)

Invertebrate Zoology (4 credits, Lecture and Lab). Developed Spring 1990. Spring 1991, Fall 1991, 1992.

Invertebrate Zoology (3 credits Lecture, lab required). Developed Fall 1993, Fall 1994, 1995, 1996.

Invertebrate Zoology Lab (2 credits, lecture required). Developed Fall 1993, Fall 1994, 1995, 1996.

Field Ecology of Baja, Mexico. Undergraduate special course with Ed Beals. Field trip to marine and desert communities, 16 students, 12 days of field trip (2 credits), Spring 1991.

Problems In Oceanography (3 cr, 16 students; with J. Kitchell, T. Frost, T. Green, C. Bowser, R. Dott). 2 hr lecture/ week, one week research trip to University of Georgia Marine Lab at Sapelo Island. Students conduct group and individual research projects. Fall 1989, 1991, 1993, 1995, 1997.

Marine Biology and Ecology (3 cr, lecture and lab). Developed as new course Spring 1992, Spring 1994, 1996.

Stony Brook University (Dept Avg Teaching 1.5 courses/yr)

Marine Ecology (3 cr. Lecture, 15 students). Developed new course Spring 1999.

Principles of Ecology (4 cr, graduate, 15-22 students) Developed Spring 2000, Fall 2000, 2001, 2002, 2003, 2004, 2005, 2006.

Organisms to Ecosystems (4 credits, lecture lab, 375-450 students). Developed Fall 1999, Fall 2000, 2001, 2002. Lab Coordinator 2000, 2001. Course Coordinator 2001.

General Ecology for Non-Majors (3 cr, 175-195 students) Developed 1/3 new Spring 2002, Developed new - 100% Spring 2003, 2004, 75% 2007, 50% 2008, 2009, 2010, 100% - 2011, 2013, 2015

Invertebrate Zoology (4 credits, lecture and Lab, 32 students). Developed Fall 2008, Taught 100% 2008, 2009, 2010, 2011, 2012, 2014, 2015, 2016, 2017

Advanced Ecology: Community Ecology (2 cr, graduate, 10 students). Developed Spring 2017

Invertebrate Zoology Lecture (3 credits, 32 students). Taught 100% 2018, 2019, 2022, 2023, 2024

Invertebrate Zoology Lab (2 credits, 32 students). Taught 100% 2018, 2019, 2022, 2023, 2024

Friday Harbor Laboratories, University of Washington

Advanced Invertebrate Biology (9 credits, lecture, lab, field; 17 students, co-taught with Dr. Michael

LaBarbera, University of Chicago) Summer 2014

Graduate Seminar Courses: Evolution of Diversity, (1 credit, with D. Geary) Fall 1990; Current Topics in Ecology and Evolution, (1 cr, with T. Ives) Fall 1991, Spring 1992, Fall 1992; Experimental Design and Analysis (1 credit), Spring 1993, Spring 1995, Oceanography and Limnology Topics (1 credit, with D. Armstrong) Spring 1995; Phenotypes, (1 credit, with S.I. Dodson) Spring 1996; Sea Level Rise: Causes and Consequences (1 credit, with C. Bently, Geology) Fall 1996; How to write a paper for publication (1 credit) Spring 1997; Functional Ecology (1 credit) Fall 1999; The role of Phenotypic Plasticity in Invasion Biology (1 credit) Spring 2001; Experimental Design and Analysis for Biologists (2 credits) Fall 2003, Fall 2008, Communicating Science Fall 2010, Spring 2016, Fall 2023; Ecology and Evolution of Marine Invertebrate Larvae (2 credits) Spring 2019.

### **NATIONAL SERVICE**

Panel Member, NSF Minority Postdoc Awards, 1995, 1996, 1997

Panel Member, NSF Ecological and Evolutionary Physiology, 2001

Panel Member, NSF Integrative Organismal Systems, Organism Environment Interactions 2010, 2011

Panel Member, EPA Star Grants in Biopollution, 2000

Panel Member, NSF EPSCOR Remote Site Visit, 2020

Madison Ecology Group (group of all campus faculty in ecology), Executive Board 1996, 1997; Chair Activities Committee Chair 1995, 1996, 1997; Organized campus symposium on Ecology 1996.

Sigma Xi Madison Chapter Board Member, 1994-1997; Treasurer 1995-96; President Elect 1996-97.

Chair, Ecology and Evolution Division, Society for Comparative and Integrative Biology, Member Executive Committee, 1997 - 1999

Chair, Division of Invertebrate Zoology, Society for Comparative and Integrative Biology, Member Executive Committee, 2009-2012

Member at Large, Executive Committee Society for Integrative and Comparative Biology, 2001-2004

Committee to Increase Diversity in Integrative and Comparative Biology, 2000 - 2004

Editorial Board, (American Zoologist) Integrative and Comparative Biology 2000 - 2012

Vice President, American Malacological Society 2002-2003

President Elect, American Malacological Society 2003-2004

President, American Malacological Society 2004-2005

Executive Council, American Malacological Society 2003 - 2007

Editorial Board American Malacological Bulletin 2004 - present.

Friday Harbor Laboratories Academic Advisory Board 2002 - 2015

Ecological Society of America Rapid Response Team, Marine Ecology 2005 - 2017

Editorial Board Journal of Shellfish Research 2018 - present

President Elect American Microscopical Society 2021 - 2024

President American Microscopical Society 2024 - 2026

### **INVITED PRESENTATIONS:**

1985 American Malacological Union, Kingston, RI Symposium: Form and function of the molluscan radula. Experimental approaches to the function of the docoglossan radula.

1988 Western Society of Malacologists, Petaluma, CA Symposium: Molluscan herbivore and plant interactions. Radular type, mode of feeding and potential structural defenses of algae.

1989 University of New Hampshire, Durham, NH Structural defenses of marine algae.

1989 University of Delaware, Newark, DE Marine plant-herbivore interactions: Reducing the consequences of herbivore damage.

- 1989 University of the Virgin Islands, St. Thomas, V.I. Herbivore mode of feeding and structural defenses of marine algae.
- 1990 University of Chicago, Chicago, IL Structural defenses of algae and the importance of mode of feeding of herbivores.
- 1990 Friday Harbor Laboratory, Friday Harbor, WA, Working with stolon data: inducible morphologies in competitive interactions in a marine bryozoa.
- 1990 International Zebra Mussel Research Conference, Columbus, OH. Population dynamics of *Dreissena polymorpha* in the Great Lakes: Predictions based on the European experience. Presented by Charles Ramcharan.
- 1990 Western Society of Naturalists, Monterey CA Symposium: Invertebrate and Fish Herbivores in Marine Benthic Systems. The role of mode of feeding and structural defenses of in invertebrate plant herbivore interactions.
- 1991 University of Wisconsin- Madison, WI, Department of Botany, Structural defenses of algae: rip-stop and reducing herbivore damage.
- 1991 Friday Harbor Laboratories, University of Washington The Cutting Edge of Plant-Herbivore Interactions: Radular Variability in Lacuna.
- 1991 University of Florida, Department of Zoology, Gainesville, Structural defenses of marine algae and the importance of mode of feeding and structure of the feeding apparatus of herbivores.
- 1992 American Society of Limnology and Oceanography, Santa Fe, NM. Symposium: Inducible Phenotypes: Responses to a Biologically Variable Environment. The ecological consequences of inducible stolons in a marine bryozoan.
- 1992 Friday Harbor Laboratories, University of Washington. Predicting the ecological consequences of a novel ecological type in an aquatic ecosystem.
- 1993 University of Chicago, Department of Organismal Biology. Ecology and evolution of a phenotypically plastic trait.
- 1994 University of Washington, Department of Zoology, Special Symposium commemorating the 100th anniversary of Invertebrate Zoology.
- 1994 Harvey Mudd College, Department of Biology. Ecology and evolution of a phenotypically plastic morphology.
- 1994 Bellarussian Academy of Science, Minsk, Belarus. Invasion of exotic aquatic organisms: can the process be predicted or controlled?
- 1994 Hopkins Marine Station, Stanford University. Ecology and evolution of phenotypically plastic feeding morphology in a mollusc.
- 1995 University of Charleston, Charleston, SC. Phenotypic plasticity in a feeding morphology.
- 1996 California State University, Northridge, CA Phenotypic plasticity in a gastropod.
- 1998 Florida State University, Gainesville, FL. Elsie B. Newell Distinguished Lecture, Florida Sea Grant Invasion and ecological impacts of an exotic aquatic species, the zebra mussel, *Dreissena polymorpha*.
- 1999 University of New Hampshire. Ecology and Evolution of a Phenotypically plastic feeding morphology
- 1999 University of South Alabama. Ecology and Evolution of a Phenotypically plastic feeding morphology
- 2001 Florida State University. Department of Biology - Phenotypic plasticity of feeding morphologies.
- 2001 Florida State University . Elsie B. Newell Distinguished Lecture, Florida Sea Grant. Population ecology and impacts of the spread of the zebra mussel.
- 2001 Bodega Marine Laboratory - Ecology and Evolution of a Phenotypically plastic feeding morphology
- 2002 University of Central Florida - Elsie B. Newell Distinguished Lecture, Florida Sea Grant -
- 2002 University of Colorado. Metapopulation dynamics in the zebra mussel.

- 2002 University of Rhode Island. Inducible offenses: phenotypic plasticity in littorinid snails
- 2003 Cornell University. Inducible offenses: phenotypic plasticity in littorinid snails
- 2003 Swarthmore College. Senior Seminar: Adaptive plasticity of a feeding morphology: timing is everything.
- 2003 Hopkins Marine Station, Stanford University. Inducible offenses: phenotypic plasticity in littorinid snails
- 2004 University of Connecticut-Avery Point. Hydrodynamics and population dynamics of the zebra mussel.
- 2005 University of Kansas. Ecological impacts of aquatic invaders. Phenotypic plasticity and inducible offenses in marine snails.
- 2005 Bodega Marine Laboratory - Phenotypic plasticity in gastropods.
- 2005 Bodega Marine Laboratory - Invasive species in marine reserves.
- 2006 University of California, Santa Barbara - Phenotypic plasticity and inducible offenses in marine snails.
- 2006 Pepperdine University - Invasive species in marine reserves.
- 2007 University of Central Florida – Impacts of introduced aquatic ecosystem engineers
- 2009 Buffalo State College - Invasive species in marine reserves.
- 2010 Manhattan College - Invasion consequences of ecosystem engineers
- 2011 SUNY Buffalo - - Invasion consequences of ecosystem engineers
- 2012 Long Island University, CW Post – Invasion consequences of ecosystem engineers
- 2016 Mount Holyoke College - Endangered and introduced molluscs: can we replace lost biodiversity?
- 2018 SUNY Buffalo - Location, location, location: population differences in response to ocean acidification in blue mussels
- 2018 Friday Harbor Laboratories, University of Washington. Location, location, location: population differences in response to ocean acidification
- 2019 Werth Center for Coastal and Marine Studies at Southern Connecticut State University, New Haven, CT. Impacts of climate change: population differences in response to ocean acidification in blue mussels
- 2022 Queens College Biology Department Colloquium. Lessons learned from the ongoing invasion of the zebra mussel, *Dreissena polymorpha*. (Zoom)
- 2023 San Francisco State University The Science Career Panel (Zoom)
- 2023 EOS Center, Women in Science and Engineering, San Francisco State University, Marine Invertebrate Responses to Changing Environments
- 2023 Living World, Stony Brook University, Promoting Biodiversity by Reimagining Urban Shorelines.

## **TALKS AT NATIONAL/INTERNATIONAL MEETINGS**

### **SPECIAL INVITED SYMPOSIUM TALKS:**

- 1985 American Malacological Union, Kingston, RI Symposium: Form and function of the molluscan radula. Experimental approaches to the function of the docoglossan radula.
- 1988 Western Society of Malacologists, Petaluma, CA Symposium: Molluscan herbivore and plant interactions. Radular type, mode of feeding and potential structural defenses of algae.
- 1990 First International Conference on Zebra Mussels, Columbus, OH. Population dynamics of *Dreissena polymorpha* in European lakes and predictions for North America. Presented by Charles Ramcharan.
- 1991 Western Society of Naturalists, Monterey CA Symposium: Invertebrate and Fish Herbivores in Marine Benthic Systems. The role of mode of feeding and structural

- defenses of in invertebrate plant herbivore interactions.
- 1992 American Society of Limnology and Oceanography, Santa Fe, NM. Symposium: Inducible Phenotypes: Responses to a Biologically Variable Environment. The ecological consequences of inducible stolons in a marine bryozoan.
- 1994 University of Washington, Department of Zoology, Special Symposium commemorating the 100th anniversary of Invertebrate Zoology. Phenotypic plasticity in the molluscan radula.
- 1994 Bellarussian Academy of Science, Minsk, Belarus. VII-th Zoological Conference on the problem "Preservation, Investigation and Usage of Biological Diversity of the Belarussian Animal World". Invasion of exotic aquatic organisms: can the process be predicted or controlled?
- 1996 International Littorina Symposium, Cork, Ireland. Phenotypic plasticity of the gastropod radula: Is it adaptive?.
- 1997 Society for Conservation Biology, Victoria, BC, Canada. The ecological impacts of an aquatic invading species, *Dreissena polymorpha*.
- 1999 Society for Integrative and Comparative Biology, Atlanta, New Frontiers in Marine Plant Animal Interactions - Marine Plant-Grazer interactions and the role of morphology. Symposium Organizer
- 2001 World Congress of Malacology, Vienna Austria, New Frontiers in Functional Morphology of Molluscs - Consequences of Form and Function of Radular Teeth of Herbivorous Gastropods. Symposium Organizer
- 2002 Western Society of Malacologists, Asilomar, CA, Ecology of Intertidal Molluscs - Inducible offenses: phenotypic plasticity in feeding structures, food preferences, and dispersal potential in *Lacuna*, Family Littorinidae.
- 2003 American Malacological Society, Ann Arbor, MI, Non-marine invasive Molluscs.
- 2004 World Aquaculture Meeting 2004, Honolulu HI, Aquaculture and Invasive Species. Invited Session Organizer
- 2004 Ecological Society of America, Portland OR, Ecological importance of phenotypic plasticity.
- 2005 Society for Integrative and Comparative Biology, San Diego CA, Complex Life Histories in Marine Invertebrates
- 2005 National Shellfisheries Association, Philadelphia, PA, Introduced Species. Invited session organizer
- 2005 American Malacological Society and Western Society Of Malacology Joint Meeting, Asilomar, CA, Phenotypic plasticity in molluscs.
- 2006 National Shellfisheries Association, Introduced Species. Invited session organizer
- 2006 International Aquatic Invasive Species Conference, Key Biscayne FL
- 2007 International Aquatic Invasive Species Conference, Nijmegen, The Netherlands
- 2008 National Shellfisheries Association, Introduced Species. Invited session organizer
- 2009 Ecological Society of America, San Jose CA, Introduced aquatic invaders.
- 2009 Society for Coasts and Estuaries, Providence RI – Impacts of introduced oysters on coastal ecosystems.
- 2010 SICB Grand Challenges in Organismal Biology
- 2010 SICB Direct and indirect consequences of an introduced aquaculture species
- 2014 SICB A New Organismal Systems Biology - How Organisms Walk The Tightrope Between Stability and Change (Symposium Organizer)
- 2015 Biodiversity, Ecology and Conservation of Marine Ecosystems (BECOME 2015), Hong Kong University, Hong Kong
- 2024 SICB Modeling Organismal Responses to Changing Environments.
- 2024 SICB Preparing The Next Generation Of Integrative Organismal Biologists
- 2024 National Shellfisheries Association, Plenary Address, Gastropods - the other shellfish

Other Contributed Papers With Abstracts:

- 1984 Society for the Study of Evolution, Crested Butte, CO
- 1984 Smithsonian Trop. Res. Inst., Panama City, Panama
- 1985 Institute for Animal Resource Ecology, Vancouver, BC
- 1985 Western Society of Naturalists, Monterey, CA
- 1986 Pacific Ecology Conference, Vancouver, BC
- 1986 Ecological Society of America, Syracuse, NY
- 1987 Ecological Society of America, Columbus, OH
- 1988 Benthic Meetings, Portland, ME
- 1988 American Society of Zoologists/WSN, San Francisco, CA
- 1989 Benthic Meetings, Solomons, MD
- 1990 North American Benthological Society, Blacksburg, VA
- 1990 Ecological Society of America, Snowbird, UT
- 1990 International Symposium on Plant Animal Interactions in the Marine Benthos, University of Liverpool, Liverpool, UK
- 1991 American Society of Limnology and Oceanography, Halifax, Nova Scotia, presented by Charles Ramcharan.
- 1991 American Malacological Union and the Western Society of Malacologists, Berkeley, CA
- 1991 Zebra Mussel Research '91, Rochester, NY, presented by Charles Ramcharan.
- 1992 Ecological Society of America, Honolulu, Hawaii
- 1992 American Society of Zoology, Vancouver, BC
- 1993 Third International Zebra Mussel Conference, Toronto, Ontario
- 1993 Ecological Society of America, Madison, WI
- 1993 American Society of Zoology, Los Angeles, CA
- 1994 Western Society of Naturalists, Monterey, CA
- 1994 American Society of Zoologist, St. Louis, MO
- 1996 Western Society of Naturalists, Port Townsend, WA
- 1996 American Malacological Union, Chicago, IL
- 1998 Society for Integrative and Comparative Biology, Boston
- 2000 Society for Integrative and Comparative Biology, Atlanta
- 2001 Society for Integrative and Comparative Biology, Chicago
- 2002 11th International Aquatic Invasive Species Conference, Arlington, VA
- 2002 Western Society of Malacologists, Asilomar, CA
- 2003 Society for Integrative and Comparative Biology, Toronto, Canada
- 2004 Society for Integrative and Comparative Biology, New Orleans, LA
- 2004 13th International Aquatic Invasive Species Conference, Ennes Ireland
- 2004 International Shellfish Restoration Conference, Charleston, SC
- 2005 International Aquatic Invasive Species Conference, Florida
- 2006 Society for Integrative and Comparative Biology, Orlando FL
- 2006 International Aquatic Invasive species Conference, Netherlands
- 2006 Coastal and Estuaries Research Society Providence RI
- 2006 Benthic ecology meeting, Providence RI
- 2006 NSA Providence RI
- 2006 American Malacological Society, Seattle WA
- 2007 Society for Integrative and Comparative Biology, Phoenix AZ
- 2008 Society for Integrative and Comparative Biology, San Antonio TX
- 2009 Society for Integrative and Comparative Biology, Boston MA
- 2010 Society for Integrative and Comparative Biology, Seattle WA
- 2011 Society for Integrative and Comparative Biology, Salt Lake City UT
- 2011 National Shellfisheries Association, Providence RI

2012 Society for Integrative and Comparative Biology, Charleston SC  
2012 National Shellfisheries Association, Seattle, WA  
2013 Society for Integrative and Comparative Biology, San Francisco CA  
2013 Benthic Ecology Meetings, Savannah GA  
2014 Benthic Ecology Meetings, Jacksonville FL  
2014 National Shellfisheries Association, Jacksonville FL  
2015 National Shellfisheries Association, Monterey CA  
2016 Society for Integrative and Comparative Biology, Portland, OR  
2017 Society for Integrative and Comparative Biology, New Orleans, LA  
2017 National Shellfisheries Association, Knoxville, TN  
2017 Ecological Society of America, Portland, OR  
2018 Society for Integrative and Comparative Biology, San Francisco, CA  
2018 National Shellfisheries Association, Seattle, WA  
2018 Milford Aquaculture Seminar, Milford, CT  
2019 Society for Integrative and Comparative Biology, Tampa, FL  
2019 Northeast Aquaculture Conference & Exposition, Boston MA  
2019 Benthic Ecology Meetings, St John's, Newfoundland, Canada  
2022 Society for Integrative and Comparative Biology, Phoenix, AZ  
2023 National Shellfisheries Association, Baltimore, MD  
2024 Society for Integrative and Comparative Biology, Seattle, WA  
2024 National Shellfisheries Association, Charlotte, NC

#### **SYNERGISTIC ACTIVITIES**

Lead initiative to broaden participation and diversity in the Society for Integrative and Comparative Biology, and established first society-wide committee to broaden participation.

Established the Functional Ecology Research and Training Laboratory (FERTL) with Dr. Manuel Lerda, Department of Ecology and Evolution, SUNY Stony Brook, supported by an NSF Major Instrumentation grant. This lab provides research and training opportunities for students and faculty in Functional Ecology of both terrestrial and aquatic organisms, plants as well as animals.

Aldo Leopold Leadership Fellow in Conservation, ESA 2000. Fellows are trained to communicate science to non-scientists, including the press and policy makers. I remain an active fellow and am on the Ecological Society of America Rapid Response Team for Marine Ecology to enhance the Society's ability to address major policy issues (2005 - 2017), responding to short-term requests from policy makers and the press.

Toyota Tapestry Large Grant Collaborator with PI Rebecca Grella and M. Morris, Brentwood High School to assess larval recruitment in salt marsh ecosystems. This grant supported primarily minority high school students to conduct research in marine ecology.

Research mentor for over 60 undergraduate and over 30 high school research students, the majority of which have been women and over 27 of which have been students underrepresented in STEM fields. Many of her high school students have received national and international awards, including Samantha Garvey, a high school student who made national news because she was an Intel Semi-Finalist and homeless. I have mentored one Intel Semifinalist, one Regeneron Semifinalist, 13 Siemens Competition Semi-Finalists, and 2 ISWEEP Silver Medalists

Training middle school teachers at Brentwood School District in Next Generation Science Standards, and incorporating salt marsh ecology into their science curriculum.

Collaborate with Dr Rebecca Grella, Brentwood school district, which is one of the largest in New York and one of the poorest school districts on Long Island, and is a majority minority school, and the majority of students are considered "at risk". We teach high

school students, grade school and middle school teachers about salt marsh ecosystems, and the use of Next Generation Sciences Standards and New York State Science and Learning Standards in the classroom.

Scientific advisor for community group, Save Mattituck Inlet, developing a plan and responses to a proposed development and destruction of native forest, impact threatened species, impact shoreline marshland, and coastal resources, and respond to the the lack of an adequate environmental impact statement

Developed, led and participated in a series of workshops and white papers to identify the Grand Challenges of Organismal Biology, including leading national workshops to develop a research plan for addressing one of the Grand Challenge, "How organisms walk the tightrope between stability and change".

### **UNDERGRADUATE SENIOR THESES AND HONORS THESES**

Gwynneth Jones - Fall 1991 - Effects of pollutants on green micro-algal growth.

Rebecca Sladek - Spring 1992 - Differentiation of two species of littorinid snails, *Lacuna vincta* and *Lacuna variagata*

Katie Busse, University of Illinois, Champaign Urbana - Spring 1994- Supervised Senior Thesis Research conducted in Madison. Student was awarded Honors and Distinction for this work.

Karen Fear, Harvey Mudd College, Claremont, California - Summer 1994- Supervised Honors Senior Thesis Research at Friday Harbor Laboratories.

Jeffrey Franz - Spring 1995 - Rates of tooth replacement in two species of snail, *Lacuna vincta* and *Lacuna variagata*

Jennifer Fliegel - Spring 1995 - Effects of zebra mussel fouling on growth, feeding rate and reproduction in the snail *Elimia livescens*

Daniel Ginsberg - Spring 1996 - Community consequences of species invasions through the Suez Canal.

Jennifer VanderPhlym - Fall 1996 - Substrate preferences for settlement of larval zebra mussels.

Tammie Visintainer - Spring 1998 - Effects of food density, food quality, and larval density on growth and time to metamorphosis in *Lacuna vincta* and *Lacuna variagata*.

Jennifer Finnegan - Fall 2000 - Are littorinid snails susceptible to predation by an invasive *Hemigrapsus* crab?

Amanda Hartson - Fall 2004 - Spring 2005 - The effects of brown tide on hard clam larvae.

Marie Rivara, Fall 2007-Spring 2010 - Are invasive oysters thermal refuges for intertidal zone limpets?

Benjamin Kammerman Fall 2010-Spring 2011 Optimal foraging and prey size selection in two species of predatory whelk.

Sasha Seroy Fall 2010 - Spring 2012 Predator induced phenotypic plasticity in juvenile marine bivalves

Andrew Bellanger Fall 2010 - Spring 2012 Metabolic scaling in a suspension feeding gastropod

Kaitlin Zamborsky Spring 2011 - Spring 2012 Community diversity and population variation in rocky shore and eelgrass bed communities through time

Lily Sarrafha Spring 2012- Spring 2013 Scaling of clearance rates with body size in a suspension feeding gastropod

Allison Yee Spring 2011 - 2014 Radular scaling with body size in marine gastropods

Rebecca Werner Spring 2014-2015 Population variation in marine gastropods through time.

Joohuie Kim Spring 2013-2015 Scaling of the ctenidium in a suspension feeding gastropod

Isabella Marchitelli 2024-2025 Honors WISE program



## **STUDENTS SUPERVISED WHO EARNED GRADUATE DEGREES**

Minor Advisor For:

Gary Gianniny, Ph.D. Geology, Minor Zoology, 1995 UW

Laurie Anderson, Ph.D. Geology, Minor Zoology, 1996 UW

Mike Koutnik, MSc 1994

Nathan Eckrich, MSc 1996

Suzanne Peyer, MSc 1997

Cathy Needham, MSc 1997

Lucy Buchan, PhD, 1997

Dawn Dittman, PhD, 1998

Sara Gower, MSc 2000

Laura Oremland, MSc 2001

Justine Tietgen, MA 2002

Rob DiGiovanni, MA 2002

Ayelet Weissmann, MA 2003

Laurie Perino, MSc 2006

Paul Bourdeau, PhD 2010

Sarah Gray, PhD 2011

James Browne, PhD 2011

Arvind Sharantharm, MA 2012

Alexandra Hooks, MSc 2013

Theresa Miranda, MA 2014

Michael McCann, PhD 2015

Mica McCarty-Glenn, PhD 2017

Allison Rugila, MA 2017

Chassidy Fruedenberg, MA 2019

## **SERVICE ON GRADUATE COMMITTEES**

Wisconsin - Graduated: 12 Ph.D. Students in Zoology, Oceanography and Limnology, and Geology

13 MSc. Students in Zoology, Oceanography and Limnology, Geology

Stony Brook: 25 PhD Students in Ecology and Evolution

## **POSTDOCTORAL ASSOCIATES SUPERVISED**

Ken Perijko, 1990, University of Wisconsin-Stout

Charles Ramcharan, 1990-91, Louisiana State University

Kathy Van Alstyne, 1990-91, Shannon Point Marine Station, Western Washington University

Brenda Young, 1992-93, Daemen College

Michael Chotkowski, 1993-94, California Fish and Game

Laura Torrentera, 1999 - 2004

Larua Gonzales, 2002-2004, University of Texas Austin

Rachel Przeslawski, 2006-2007, Geoscience Australia

Maria Rosa, NSF Postdoctoral Fellow, 2016-2018; Connecticut College, New London CT

## **SERVICE**

Panel Member, NSF Minority Postdoc Awards, 1995, 1996, 1997

Panel Member, NSF Ecological and Evolutionary Physiology, 2001

Panel Member, EPA Star Grants in Biopollution, 2000

Madison Ecology Group (group of all campus faculty in ecology), Executive Board 1996, 1997;

Chair Activities Committee Chair 1995, 1996, 1997; Organized campus symposium on Ecology 1996.

Sigma Xi Madison Chapter

Board Member, 1994-1997; Treasurer 1995-96; President Elect 1996-97.

Chair, Division of Ecology and Evolution, Society for Comparative and Integrative Biology,  
Member Executive Committee, 1997 - 1999

Member at Large, Society for Integrative and Comparative Biology, 2001-2004

Chair, Division of Invertebrate Zoology, Society for Comparative and Integrative Biology,  
Member Executive Committee, 2010-2013

Committee to Increase Diversity in Integrative and Comparative Biology, Chair 2000, 2000 -  
2007

Editorial Board, Integrative and Comparative Biology 2004-2012

Editorial Board, American Malacological Bulletin 2004-present

Editorial Board Journal of Shellfish Research 2018 - present

Vice President, American Malacological Society 2002-2003

President Elect, American Malacological Society 2003-2004

President, American Malacological Society 2004-2005

Executive Council, American Malacological Society 2002 - 2008

Friday Harbor Laboratories Academic Advisory Board 2002 - 2015

Workshop Member - The Nature Conservancy Shellfish Restoration and Ecosystem Based  
Management 2005

Ecological Society of America Rapid Response Team - Marine Ecology 2005 - present

President Elect, American Microscopical Society 2021 - 2024

President, American Microscopical Society 2024-2026

## **REVIEWER OF JOURNAL ARTICLES**

The American Naturalist, American Malacological Bulletin, Australian Journal of Malacology,  
The Biological Bulletin, Canadian Journal of Fisheries and Aquatic Science, Coral Reefs,  
Ecology, Ecological Applications, Ecology Letters, Ecosystems, Evolution, Evolutionary  
Ecology, Hydrobiologia, Invertebrate Biology, Journal of Experimental Biology, Journal of  
Experimental Biology, Journal of Molluscan Studies, Journal of Phycology, Journal of  
Experimental Marine Biology and Ecology, Journal of Morphology, Journal of Shellfish  
Research, Journal of Theoretical Biology, Landscape Ecology, Limnology and Oceanography,  
Malacologica, Marine Biology, Marine Ecology Progress Series, Oecologia, Proceedings of the  
National Academy of Sciences, Quarterly Review of Biology, The Marine Biological Association  
of the UK, The Veliger, Academic Editor, PLoS Biology, Guest Editor, Quarterly Review of  
Biology, Guest Editor Ecological Restoration

## **GRANTS REVIEWED**

Research Grant Review Panels: Minority Postdoctoral Fellowships, NSF; Ecological and  
Evolutionary Physiology, NSF; Organism Environment Interactions, NSF; EPA STAR -  
Biopollution, EPA, New Jersey Sea Grant

Regular NSF reviewer for: Population Biology, Ecology/Ecosystems, Ecological and  
Evolutionary Physiology, Organism Environment Interactions, Physiological and  
Structural Systems, Biological Oceanography, International Programs; Special  
competitions including: Biocomplexity, CAREER and Advance, Visiting Professorships  
for Women, Funding for Field Stations, Technology Development.

Regular Reviewer of Grants for: NOAA, National Sea Grant - Ocean Systems/HydroLab,  
Biotechnology, Aquatic Nuisance Species; Sea Grant College Program - Florida (Pre-  
proposals and full proposals), Maryland, Virginia; Canadian National Science and  
Engineering Council (NSERC); National Geographic Society Research Awards;  
Graduate Women in Science

### **POSTDOCTORAL RESEARCH**

Cornell University, Entomology and Ecology and Systematics, Dr. S. Via, 1988-89. Ecological Genetics.

Cornell University, Ecology and Systematics, Dr. C. D. Harvell, 1987. Examined the role of inducible stolons in intraspecific interactions in the bryozoan, *Membranipora membranacea*.

### **GRADUATE RESEARCH**

PhD Dissertation Title: Relationships among algal calcification, thallus form, and herbivore mode of feeding in marine plant-herbivore interactions. Supervisor A. R. Palmer, 1981-1987.

MS Thesis Title: Selective agents that influence the morphology of coralline algae. Supervisors J. Lubchenco and B. Menge, 1978-1981.