

MARK ERIK TORCHIN

Smithsonian Tropical Research Institute
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torchinm@si.edu

EDUCATION

PhD 2002. University of California Santa Barbara, Ecology, Evolution and Marine Biology
 MS 1994. University of Oregon, Marine Biology
 BA 1991. University of California Santa Barbara, Aquatic Biology (high honors)

PROFESSIONAL EXPERIENCE

2004-present Staff Scientist, Smithsonian Tropical Research Institute, Republic of Panama
 2007-present Adjunct Professor, Department of Biology, McGill University, Montreal, Canada
 2008-present Scientific director of Punta Culebra Nature Center, STRI
 2003-2004 Postdoctoral Fellow, NCEAS, Santa Barbara, California
 2002-2003 Assistant Research Biologist, Marine Science Institute, UCSB
 2002-2003 Postdoctoral Fellow, Smithsonian Institution, SERC
 2004-2006 Invited Working Group Participant, Plant invasions, NCEAS, Santa Barbara, California
 1999-2002 Invited Working Group Participant, Disease ecology, NCEAS, Santa Barbara, California
 1997-2001 Sea Grant Graduate Trainee, University of California, Santa Barbara
 1995-1996 Graduate Research Assistant, University of California, Santa Barbara
 1994 Staff Research Assistant. University of California, Santa Barbara

TEACHING EXPERIENCE

2007-present Invited Lecturer, McGill University, Tropical Biology and Conservation.
 2012-present Invited Lecturer, Princeton University, Ecology of Parasites and Infectious Disease
 2002 Instructor, University of California, Santa Barbara, Invertebrate Zoology. 2002
 1999 Instructor, College of Creative Studies, UCSB. Marine Biology
 1995-1997 Teaching Assistant, UCSB, Parasitology, Invertebrate Zoology
 1992-1993 Teaching Assistant, University of Oregon, Invertebrate Zoology, Marine Biology

HONORS AND COMPETITIVE AWARDS

2003 Postdoctoral Fellowship, National Center for Ecological Analysis and Synthesis
 2002 Postdoctoral Fellowship, Smithsonian Institution
 2001 Graduate Division Travel Grant, University of California, Santa Barbara
 1998 Mark Dresden Travel Grant, American Society of Parasitologists
 1992 Summer Science Research Fellowship, American Heart Association
 1992 Lerner-Gray Award, American Museum of Natural History

RESEARCH GRANTS

Analysis of Non-indigenous marine species of the Galapagos Islands. Charles Darwin Foundation (PIs: Gregory Ruiz, **Mark Torchin**) \$15,920
 Latitudinal Variation in Recruitment, Community Structure, Predation Intensity, and Invasion Resistance Across Latitude: A Bi-Coastal Analysis. Smithsonian MarineGEO (PIs: **Mark Torchin**, Gregory Ruiz, Andrew Altieri) \$14,600

- Community Effects of Competition and Predation across Latitude and Implications for Species Invasion. NSF (PIs: Amy Freestone, Gregory Ruiz, **Mark Torchin**) \$850,000
- Do biotic interactions shape asymmetrical invasion patterns across two tropical oceans Smithsonian Competitive Grants Program for Science (PIs: **Mark Torchin**, Greg Ruiz) \$28,250
- How does mangrove habitat structure influence parasite transmission and predation in tropical estuaries? NSF (PIs/ ICs: James Byers, **Mark Torchin**, Omar Lopez) \$38,577
- Adaptation to parasitism across a co-evolutionary mosaic. Smithsonian Biogenomics and Global Genome Initiative (PIs: Carolyn Tepolt Greg Ruiz, **Mark Torchin**, Whitman Miller, John Darling, April Blakeslee, Amy Fowler) \$22,003
- Reconciling DNA Barcodes and Taxonomic Species Inventories from the Greater Caribbean MarineGEO Sites. Smithsonian Institution Grand Challenges Level One Award (PIs: Rachel Collin, Jon Norenburg, **Mark Torchin**, Greg Ruiz, Valerie Paul) \$19,200
- Understanding Labyrinthulid Diversity and Disease Ecology Associated with Seagrass Hosts Over a Latitudinal Gradient. Smithsonian Institution Grand Challenges Level Two Award (PIs: Greg Ruiz, Katrina Lohan, Emmett Duffy, Valerie Paul, **Mark Torchin**) \$65,000
- Marine Parasitism: Understanding Broad-Scale Diversity, Effects and Processes. Smithsonian Institution Grand Challenges Level Two Award (PIs: Gregory Ruiz, **Mark Torchin**, Robert Fleischer, Ellen Strong, Bjorn Tunberg) \$100,000.
- Estimating diversity of Neotropical monogenean (Platyhelminthes) fish parasites. Smithsonian Institution Consortium for the Barcode of Life (PI's: Fernando Alda, Ruth Reina, Edgar Mendoza-Franco, **Mark Torchin**, Eldredge Bermingham) \$49,588.
- Comparison of demographic performance, parasite transmission and predatory impacts of the invasive lionfish, *Pterois volitans*, across latitudes. Smithsonian Marine Science Network (PIs: **Mark Torchin** and Gregory Ruiz) \$14,500.
- Relative abundance of the North American Harris mud crab, *Rhithropanopeus harrisii*, in the Miraflores Third Lock Lagoons and adjacent Pacific Approach. Grupo Unidos por el Canal. (PIs: **Mark Torchin** and Carmen Schloeder) \$9100.
- Parasites in the mangroves: using the CCRE to compare diversification patterns of snails and trematodes across oceans. Smithsonian Marine Science Network (PIs: **Mark Torchin** and Osamu Miura) \$1950.
- Patterns and processes of biological invasion in the Panama Canal: A comparison of tropical and temperate ecosystems. SI Scholarly Studies (PIs: **Mark Torchin** and Gregory Ruiz) \$87,000.
- The distribution and potential spread of the introduced crab, *Rhithropanopeus harrisii* in the Panama Canal. SENACYT. (PI: **Mark Torchin**) \$7837.
- Current and future role of the Panama Canal in regional and global coastal invasions. SENACYT. (PIs: **Mark Torchin** and Gregory Ruiz) \$47,881.
- Integrating the ecology and evolution of invasions: a predictive framework and collaborative approach. NSF (PIs: Drs. Ruth Hufbauer and **Mark Torchin**) \$500,091.
- Role of the Panama Canal in regional and global marine invasions: A Pilot Project. Smithsonian Marine Science Network (PIs: Gregory Ruiz, **Mark Torchin**, Julio Lorda, Mark Sytsma,) \$10,000
- Tests of ANS risk analysis II: Do changes in population characteristics associated with US Transcoastal invasions limit robust predictions? National Sea Grant. (PIs: Drs. A. Whitman Miller, Gregory M. Ruiz, **Mark E. Torchin**, Jonathan Geller and James Carlton) \$210,000.
- *Larval trematode communities as indicators of wetland ecosystem health. New Hampshire Sea Grant. (P.I: Dr. James Byers). \$135,000. 2002
- *The role of parasites in the invasion success of introduced fish species of Mexico and the United States. UC Mexus-CONACYT (P.I.s: Drs. Armand Kuris and Victor Vidal Martínez). \$25,000. 2000.
- *Biological control of invasive green crabs: a new, rapid and reliable safety test of a proposed control agent. California Sea Grant (P.I.s: Drs. Armand Kuris and Jeffrey Goddard). \$179,313. 1999.
- *The Safety and Efficacy of Green Crab Biological Control. California Sea Grant (P.I. Dr. Kevin Lafferty). \$107,493. 1997.
- (* co-written as PhD student)

PEER REVIEWED PUBLICATIONS (students and postdocs are underlined)

- Sharpe, D.M.T., De León, L.F., Gonzalez, R. and **Torchin, M.E.** (in press). Tropical fish community does not recover 45 years after predator introduction. *Ecology*. doi:10.1002/ecy.1648
- Pagenkopp Lohan, K.M., R.C. Fleischer, **M.E. Torchin**, G.M. Ruiz (accepted). Protistan biogeography: a snapshot across a major shipping corridor spanning two oceans. *Protist*.
- Davidson, T.M., G.M. Ruiz and **M.E. Torchin** (2016). Boring crustaceans shape the land-sea interface in brackish Caribbean mangroves. *Ecosphere* 7(8):e01430. 10.1002/ecs2.1430
- Lucy, F.E. et al. (1 of 40 authors). (2016) INVASIVESNET towards an International Association for Open Knowledge on Invasive Alien Species. *Management of Biological Invasions* 7: 131–139.
- Pagenkopp Lohan, K.M., K.M. Hill, **M.E. Torchin**, L. Aguirre-Macedo, R.C. Fleischer, G.M. Ruiz. (2016). Richness and distribution of tropical oyster parasites in two oceans. *Parasitology* 143: 1119–1132. doi:10.1017/S0031182015001900.
- Torchin, M.E.**, O. Miura, R.F. Hechinger (2015). Parasite species richness and intensity of interspecific interactions increase with latitude in two wide ranging hosts. *Ecology* 96: 3033–3042
- Frankel, V.M., A.P. Hendry, G. Rolshausen, **M.E. Torchin** (2015) Host preference of an introduced parasite for a non-native host. *Journal for International Parasitology* 45(11): 703–709
- Sellers, A.J., G.M. Ruiz, B. Leung, **M.E. Torchin** (2015). Regional variation in parasite species richness and abundance in the introduced range of the invasive lionfish, *Pterois volitans* *PlosOne*, 10(6)
- Pagenkopp Lohan, K.M., K.M. Hill, R.C. Fleischer, **M.E. Torchin**, E.E. Strong, G.M. Ruiz. (2015). Molecular phylogenetics reveals first record and invasion of *Saccostrea* species in the Caribbean. *Marine Biology*, 162:957–968. DOI 10.1007/s00227-015-2637-5
- Kelehear, C., K. Saltonstall, **M.E. Torchin** (2015) An introduced pentastomid parasite (*Raillietiella frenata*) infects native cane toads (*Rhinella marina*) in Panama. *Parasitology*, 142: 675–679.
- Torchin, M.E.** and G.M. Ruiz (2014). Las invasiones marinas a través el pacífico oriental: una revisión desde los trópicos hasta los polos. Low Pfeng, A.M., P.A. Quijón y E. Peters Recagno. 2014. Especies invasoras acuáticas: casos de estudio en ecosistemas de México. (Invited).
- Colautti, R.I., S.J. Franks, R.A. Hufbauer, P.M. Kotanen, **M.E. Torchin**, J.E. Byers, P. Pyšek, O. Bossdorf. (2014). The global garlic mustard field survey (GGMFS): challenges and opportunities of a unique, large-scale collaboration for invasion biology. *Neobiota*, 21:29–47.
- Schlöder, C., J. Canning-Clode, K. Saltonstall, E. Strong, G.M. Ruiz, **M.E. Torchin** (2013). The Pacific bivalve *Anomia peruviana* in the Atlantic: salinity tolerance and its invasion across the Panama Canal. *Aquatic Invasions*, 4: 443–448.
- Freestone, A.L., G.M. Ruiz, **M.E. Torchin** (2013). Stronger biotic resistance in tropics relative to temperate zone: effects of predation on marine invasion dynamics. *Ecology* 94:1370–1377. **
Highlighted in Nature, February 21, 2013
- Parker, J.D., **M.E. Torchin**, R.A. Hufbauer, N.P. Lemoine, C. Alba, D.M. Blumenthal, O. Bossdorf, J.E. Byers, A.M. Dunn, R.W. Heckman, M. Hejda, V. Jarošík, A.R. Kanarek, L.B. Martin, S.E. Perkins, P. Pyšek, K. Schierenbeck, C. Schlöder, R. van Klinken, K.J. Vaughn, W. Williams, L.M. Wolfe (2013). Are invasive species performing better in their new ranges? *Ecology* 94: 985–994.
Recommended by Faculty of 1000.
- Dunn, A.M., **M.E. Torchin**, M.J. Hatcher, P.M. Kotanen, D.M. Blumenthal, J.E. Byers, C.A.C. Coon, V.M. Frankel, R.D. Holt, R.A. Hufbauer, A.R. Kanarek, K.A. Schierenbeck, L.M. Wolfe, and S.E. Perkins (2012). Indirect effects of parasites in invasions. *Functional Ecology*. 26: 1262–1274
- Ogada, D.L., **M.E. Torchin**, M.K. Kinnaird and V.O. Ezenwa (2012). Effects of vulture declines on facultative scavengers and potential implications for mammalian disease transmission. *Conservation Biology* 26: 453–460
- Miura, O., **M.E. Torchin**, E. Bermingham, D.K. Jacobs, R.F. Hechinger (2012). Flying shells: historical dispersal of marine snails across Central America. *Proceedings of the Royal Society of London* 279:1061–1067. doi: 10.1098/rspb.2011.1599

- Canning-Clode J., Fofonoff P., Riedel G.F., **Torchin M.E.**, Ruiz G.M. (2011). The effects of copper pollution on fouling assemblage diversity: a tropical-temperate comparison. ***PLoS One*** 6: e18026.
- Kam, Y., C. Schlöder, **D.G. Roche**, **M.E. Torchin** (2011) The Iraqi crab, *Elamenopsis kempi* in the Panama Canal: distribution, abundance and interactions with an exotic North American crab. ***Aquatic Invasions*** 6: 439–445.
- Miura, O., V. Frankel and **M.E. Torchin** (2011) Different development strategies in geminate mud snails, *Cerithidea californica* and *C. pliculosa* across the Isthmus of Panama. ***Journal of Molluscan Studies*** 75: 255-258.10.1093/mollus/eyr012
- Freestone, A.L., R.W. Osman, G.M. Ruiz, **M.E. Torchin** (2011). Stronger predation in tropics shapes species richness patterns in marine communities. ***Ecology*** 92: 983-993. Recommended by Faculty of 1000.
- Hechinger RF, KD Lafferty, JP McLaughlin, BL Fredensborg, TC Huspeni, J Lorda, PK Sandhu, JC Shaw, **ME Torchin**, KL Whitney, AM Kuris (2011). Food webs including infectious agents, biomass, body sizes, and life stages, for three estuaries in California and Baja California. ***Ecology*** 92: 791-792.
- Simberloff, D. et al. (one of 141 signatories). 2011. Non-natives: 141 scientists object. ***Nature*** 475:36.
- Torchin, M.E.** and V.J. McKenzie (2010) Introduction of Armand Kuris, recipient of the 2010 Clark P. Read Mentor Award. ***Journal of Parasitology*** 96: 1041-1043.
- Roche, D.G., B. Leung, E.F. **Mendoza Franco**, **M.E. Torchin** (2010). Higher parasite richness, abundance, and impact in native versus introduced cichlid fishes. ***International Journal for Parasitology*** 40:1525–1530
- Torchin M.E.** (2010) Native fish appears to grow faster in the presence of a potential exotic competitor. ***Aquatic Invasions*** 5: 163-167
- Dumbauld, B.R., J.W. Chapman, **M.E. Torchin**, A.M. Kuris (2010) Is the collapse of mud shrimp (*Upogebia pugettensis*) populations along the Pacific coast of North America caused by outbreaks of a previously unknown bopyrid isopod parasite (*Orthione griffenis*)? ***Estuaries and Coasts*** 34:336–350
- Miura, O., **M.E. Torchin**, E. Bermingham. (2010) Molecular phylogenetics reveals differential divergence of coastal snails separated by the Isthmus of Panama. ***Molecular Phylogenetics and Evolution*** 56: 40-48. doi:10.1016/j.ympev.2010.04.012
- Lafferty, K.D., **M.E. Torchin**, A.M. Kuris. (2010) The geography of host parasite invasions. In *The Biogeography of Host-Parasite Interactions*. S. Morand and B. Krasnov, eds. Oxford University Press.
- Blakeslee, A.M.H C.L. Keogh, J.E. Byers, A.M. Kuris, K.D. Lafferty, and **M.E. Torchin** (2009) Differential escape from parasites by two competing introduced crabs. ***Marine Ecology Progress Series*** 393: 83-96.
- Ruiz, G.M., **M.E. Torchin**, K. Grant (2009) Using the Panama Canal to test predictions about tropical marine invasions. ***Smithsonian Contributions to the Marine Sciences*** 38: 73-93.
- Robertson D.R., J. Christy, R. Collin, R. Cooke, L. D’Croze, K. Kaufmann, S. Heckadon, J. Mate, A. O’Dea, **M. E. Torchin** (2009) The Smithsonian Tropical Research Institute: marine research, education and conservation in Panama. ***Smithsonian Contributions to the Marine Sciences*** 38: 73-93.
- Roche, D.G., **M.E. Torchin**, B. Leung, S.A. Binning. (2009) Localized invasion of the North American Harris mud crab, *Rhithropanopeus harrisi*, in the Panama Canal: implications for eradication and spread. ***Biological Invasions*** 11:983–993.
- Mendoza Franco, E.F., R.G. Reina, and **M.E. Torchin** (2009). Dactylogyrids (Monogeneoidea) parasitizing the gills of *Astyanax* spp. (Characidae) from Panama and southeast Mexico, a new species of *Diaphorocleidus* and proposal of *Characithecium* N. Gen. ***Journal of Parasitology*** 95: 46-55.
- Kuris, A.M., R.F. Hechinger, J.C. Shaw, K. Whitney, L. Aguirre M., C. Boch, A.P. Dobson, E.J. Dunham, B.L. Fredensborg, T.C. Huspeni, J. Lorda, L. Mababa, F. Mancini, A. Mora, M. Pickering, N.

- Talhok, **M.E. Torchin**, and K.D. Lafferty. (2008) Parasite and free-living biomass in three estuaries implications for ecosystem energetics. *Nature* 454: 515-518
- Torchin M.E.** and K.D. Lafferty. (2008). Escape from parasites. In *Marine Bioinvasions: Ecology, conservation and management perspectives*. G. Rilov, and J. Crooks, eds. Springer-Verlag
- Mendoza Franco, E.F. D.G. Roche and **M.E. Torchin** (2008). New species of *Diplectanum* (Monogeneoidea, Diplectanidae) and proposal of a new genus of Dactylogyridae from the gills of gerrid fishes (Telostei) from Mexico and Panama. *Folia Parasitologica* 55: 171-179.
- Roche, D.M. and **M.E. Torchin** (2007) Established Population of the North American Harris Mud Crab, *Rhithropanopeus harrisii* (Gould 1841) (Crustacea: Brachyura: Xanthidae) in the Panama Canal. *Aquatic Invasions* 2: 155-161.
- Kuris, A.M., Goddard, J.H.R., **M.E. Torchin**, Nicole Murphy, Robert Gurney and K.D. Lafferty (2007) An experimental evaluation of host specificity: the role of encounter and compatibility filters for a rhizocephalan parasite of crabs. *International Journal for Parasitology* 37: 539-545.
- Torchin, M.E.** and J.T Høeg. 2007. Rhizocephalan Barnacles. In *Encyclopedia of Tidepools*. M.W Denny and S.D. Gaines, eds. University of California Press. USA.
- Hufbauer, R.A. and **M.E. Torchin** 2007. Integrating Ecological and Evolutionary Theory of Biological Invasions. In Ecological Studies. In *Biological Invasions*. W. Nentwig ed. Springer-Verlag
- Morris, W.F., R.A. Hufbauer, A.A. Agrawal, J.D. Bever, V.A. Borowicz, G.S. Gilbert, J.L. Maron, C.E. Mitchell, I.M. Parker, A.G. Power, **M.E. Torchin**, D.P. Vázquez (2007) Direct and interactive effects of enemies and mutualists on plant performance: a meta-analysis. *Ecology* 88: 1021-1029.
- Miura, O., **M.E. Torchin**, A.M. Kuris, R.F. Hechinger and S. Chiba (2006) Introduced cryptic species of parasites exhibit different invasion pathways. *Proceedings of the National Academy of Science* 103:19818-19823. Editor's Choice, *Science* 315: 162.
- Miura, O., A. M. Kuris, **M. E. Torchin**, R. F. Hechinger and S. Chiba. (2006). Parasites alter host phenotype and create a new ecological niche for snail hosts. *Proceedings of the Royal Society of London* 273:1323-1328.
- Mitchell, C.E., A. Agrawal, J. Bever, G. Gilbert, R.A. Hufbauer, J. Klironomos, J. Maron, W. Morris, I. Parker, A. Power, E. Seabloom, **M.E. Torchin**, D. Vázquez. (2006). Interactions among mutualists, enemies, and competitors in plant invasions. *Ecology Letters* 9: 726-740.
- Torchin, M.E.**, H.F. Hechinger, T.C. Huspeni, K.L. Whitney and K.D. Lafferty. 2005. Ecology of the introduced ribbed mussel (*Geukensia demissa*) in Estero de Punta Banda, Mexico: interactions with the native cord grass, *Spartina foliosa*. *Biological Invasions* 7: 607-614.
- Torchin, M.E.**, J.E. Byers and T.C. Huspeni. 2005. Differential parasitism of native and introduced snails: replacement of a parasite fauna. *Biological Invasions* 7: 885-894.
- Goddard, J.H.R., **M.E. Torchin**, K.D. Lafferty and A.M. Kuris. 2005. Host specificity of *Sacculina carcini*, a potential biological control agent of the introduced European green crab, *Carcinus meanas*. *Biological Invasions* 7: 895-912.
- Miura, O., A. M. Kuris, **M. E. Torchin**, R. F. Hechinger, E. J. Dunham and S. Chiba. 2005. Molecular-genetic analyses reveal cryptic species of trematodes in the intertidal gastropod, *Batillaria cumingi* (Crosse). *International Journal for Parasitology* 35: 793-801.
- Torchin, M.E.** and A.M. Kuris. 2005. Introduced marine parasites. In *Marine Parasitology*: K. Rhode, ed. CSIRO Publishing.
- Lafferty, K.D., K.F. Smith, **M.E. Torchin**, A.P. Dobson, A.M. Kuris. 2005. The role of infectious diseases in natural communities: What introduced species tell us. In *Species Invasions: Insights into Ecology, Evolution and Biogeography*. D.F. Sax and J.J. Stachowicz and S.D. Gaines eds. Sinauer Associates. USA. Reviewed in *Science* 310: 623-624.
- Torchin, M.E.** and C.E. Mitchell. 2004. Parasites, pathogens and invasions by plants and animals. *Frontiers in Ecology and the Environment* 2: 183-190. (Invited)
- Kuris, A.M., **Torchin, M.E.**, K.D. Lafferty 2004. Parasites in the thoracic ganglion of *Pachygrapsus marmoratus* (Brachyura: Grapsidae) from the coast of Portugal. *Parasite* 11: 425-427.
- Torchin, M.E.**, K.D. Lafferty, A.P. Dobson, V.J. McKenzie and A.M. Kuris. 2003. Introduced species and their missing parasites. *Nature* 421: 628-630.

- Kuris, A.M., **M.E. Torchin** and K.D. Lafferty. 2002. *Fecampia erythrocephala* rediscovered: prevalence and distribution of a parasitoid of the European shore crab, *Carcinus maenas*. **Journal of the Marine Biological Association, UK** 82: 955-960.
- Torchin, M.E.**, K.D. Lafferty and A.M. Kuris. 2002. Parasites and marine invasions. **Parasitology** 124: S137-S151.
- Torchin, M.E.**, K.D. Lafferty and A.M. Kuris. 2001. Release from parasites as natural enemies: increased performance of a globally introduced marine crab. **Biological Invasions** 3: 333-345.
- Torchin, M.E.**, K.D. Lafferty and A.M. Kuris. 1996. Infestation of an introduced host, the European green crab, *Carcinus maenas*, by a native symbiotic nemertean egg predator, *Carcinonemertes epialti*. **Journal of Parasitology** 83: 449-453.

ACADEMIC AND INSTITUTIONAL SERVICE

- Thesis and Postdoctoral Advisor. Victor Frankel (PhD, McGill), Dominique Roche (MSc, McGill), Andrew Sellers (PhD, MSc, McGill), Osamu Miura (Postdoctoral fellow, STRI), Amy Freestone (Postdoctoral Fellow, SERC, co-advisor*), Edgar Mendoza (Postdoctoral fellow, STRI), João Canning Clode (Postdoctoral Fellow, SERC, co-advisor*), Darcy Ogada (Postdoctoral fellow, at Mpala), Tim Davidson (Postdoctoral fellow, STRI), Crystal Kelehear (Postdoctoral fellow, STRI) Diana Sharpe (Postdoctoral fellow, STRI)
- STRI-McGill NEO Coordination Committee. 2006-present
- STRI Academic Board. 2006-2013
- STRI Academic Council. 2012- present
- STRI Safety Committee 2005-present
- STRI Scientific director of Punta Culebra Nature Center (2008- present) and Naos Marine Lab (2007-2009)
- STRI Marine Oversight Committee member (2007-present)
- SI Scientific Diving Board Member (2008- present)
- Participating Scientist. Kids do Ecology. NCEAS, Santa Barbara, CA. 2004.
- Graduate mentor. Academic Research Consortium, University of California, Santa Barbara. 2001.
- Research mentor. Research Mentorship Program, University of California, Santa Barbara. 1999.

PUBLIC AND PROFESSIONAL SERVICE

- Reviewer for journals: *Proceedings of the National Academy of Sciences, American Naturalist, Trends in Ecology and Evolution, Proceedings of the Royal Society B, Ecology, Ecological Monographs, Ecological Applications, Ecology Letters, Oikos, Animal Conservation, Aquatic Conservation, Biological Invasions, Biological Conservation, Frontiers in Ecology and the Environment, Diversity and Distributions, Journal of Parasitology, Hydrobiologia, New Zealand Journal of Marine and Freshwater Research, Marine Ecology Progress Series, Ecological Entomology, Coral Reefs, Israel Journal of Ecology and Evolution, Estuarine, Coastal and Shelf Science, Journal of Biogeography, Trends in Parasitology, Journal of Animal Ecology, Parasitology, Diseases of Aquatic Organisms, PLoS One, Aquatic Invasions, Marine Biology Research, Invertebrate Biology, BioScience.*
- Reviewer for proposals: UK Natural Environmental Research Council, National Sea Grant, Israel Science Foundation, Environmental Protection Agency, National Science Foundation, Royal Society of New Zealand, Marsden Fund, Indo-US Science and Technology Forum/ India Science & Technology Partnership, Oregon Sea Grant, National Geographic Society.
- Editorial Boards: *Frontiers in Ecology and the Environment* (2015- present), Smithsonian Institution Scholarly Press, *Marine Sciences* (2013-present)
- Chair: American Society of Parasitologists Ashton Cuckler New Investigator Award Committee 2012-14.

Popular media interviews:

Discovery News- Parasites and behavior modification (2015)
Smithsonian Magazine- Nicaragua Canal (2015)
Yale e360- Nicaragua Canal (2015)
Science magazine- Flying shells (2011)
New York Times- Flying shells (2011)
Smithsonian Magazine- Flying shells (2011)
La Estrella- Invasive species and the Panama Canal (2010)
La Prensa- Invasive species and the Panama Canal (2009)
The Scientist magazine interview- crab invasion in the Panama Canal (2007)
 Spotlight on Science at the Smithsonian- parasite invasion pathways (2007)
 Science Daily interview about parasite invasion pathways (2006)
Discover magazine interview about parasites and introduced species (2003)
 ScienCentral television interview at 2003 AAAS meeting aired on ABC stations (2003)
 NPR interview about parasites and introduced species (2003)
 Oregon Public Radio interview about parasites and introduced species (2003)
 Florida Public Radio interview about parasites and introduced species (2003)
 BBC interview about European green crab parasites (1999)
 Several newspaper interviews about introduced species, parasites and green crabs

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Ecological Society of America
 American Society of Parasitologists

INVITED TALKS PRESENTED AT SYMPOSIA AND INSTITUTIONS

UC Santa Barbara, California, 2016
 Smithsonian Tropical Research Institute, Panama City, Panama. 2016.
 Charles Darwin Foundation, Galapagos, Ecuador, 2015
 Smithsonian Environmental Research Center, Maryland, 2014
 Portland State University, Portland Oregon, 2013
 Estacion Costera de Investigaciones Marinas, Las Cruces, Universidad Catolica, Chile. 2012.
 British Ecological Society, Sheffield, UK, 2011 (Keynote)
 Ecological Society of Japan, Sapporo, Japan, 2011
 The Marine Laboratory, University of Guam, Mangilao, Guam 2010
 American Society of Parasitologists, Student Symposium, Knoxville, Tennessee 2009
 Universidad del Mar, Puerto Angel, Mexico, 2009 (in Spanish)
 Universidad del Mar, Puerto Escondido, Mexico, 2009 (in Spanish)
 Smithsonian Talk of the Month XXVII, Colon, Panama, 2009 (in Spanish)
 Instituto Tecnológico de Boca del Río, Mexico, 2008 (in Spanish)
 Symposium on Biological Invasions, University of Kentucky, Lexington Kentucky, 2008
 Smithsonian Marine Science Network Symposium. Washington D.C. 2008
 McGill University, Department of Biology. Montreal, Canada. 2007
 Estacion Costera de Investigaciones Marinas, Las Cruces, Universidad Catolica, Chile. 2006.
 Ecological Society of America. Portland, Oregon. 2004.
 Oregon Institute of Marine Biology, University of Oregon, 2004
 American Association for the Advancement of Science. Denver, Colorado. 2003
 Smithsonian Tropical Research Institute, Panama City, Panama. 2003.
 American Fisheries Society. Phoenix, Arizona. 2001
 National Marine Fisheries Service, Alaska Fisheries Science Center, Seattle, Washington. 2001.
 Estacion Costera de Investigaciones Marinas, Las Cruces, Universidad Catolica, Chile. 2001.
 Kristineberg Marine Research Station, Royal Swedish Academy of Sciences, Sweden. 1995.
 Institute of Zoology, University of Copenhagen, Denmark. 1995.

PRESENTATIONS AT SCIENTIFIC MEETINGS

- Torchin, M.E.** How can parasites help us understand the latitudinal diversity gradient? 2016. British Society of Parasitologists. London, England (PLENARY KEYNOTE).
- Torchin, M.E.** Asymmetry of marine invasions across latitude and oceans: exploring the mechanisms. 2015. Network for Neotropical Biogeography. Panama City, Panama (INVITED KEYNOTE).
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