Mirta Teichberg, PhD

The Ecosystems Center
Marine Biological Laboratory
7 MBL St. Woods Hole, MA USA
Email: mteichberg@mbl.edu
Telephone: 508-289-7292

EDUCATION

2007 PhD in Biology, Boston University Marine Program, Marine Biological Laboratory, Woods Hole, MA, USA

PhD thesis: Macroalgal growth: Local and global comparisons of nutrient limitation and assimilation

2006 MA in Biology, Boston University Marine Program, MBL, Woods Hole, MA, USA

1998 BA in Biology, St. Mary's College of Maryland, USA

BA thesis, *Distinction*: An Investigation of the survivability of *Zostera marina* transplants in the St. Mary's River Estuary: A field and laboratory study

PROFESSIONAL EXPERIENCE

9/21- **Associate Scientist and Program Director, Semester in Environmental Science**
The Ecosystems Center, Marine Biological Laboratory
Woods Hole, MA USA

6/12-8/21 **Jr. Research Group Leader, Head of WG Algae and Seagrass Ecology**
Leibniz-Centre for Tropical Marine Research, Department of Ecology, Bremen, Germany

11/10- 6/12 **Post-doc in ecophysiology**
Leibniz Centre for Tropical Marine Research, Bremen, Germany

9/07- 11/10 **Post-doc in marine botany**
Jointly at University of Bremen and Leibniz Centre for Tropical Marine Research, Bremen, Germany

9/02-6/07 **PhD Research Fellow**
Boston University Marine Program, Marine Biological Laboratory, Woods Hole, MA, USA

9/02-8/05 **Assistant coordinator of NSF Research Experience for Undergraduates Coastal Bays of New England program**
Boston University Marine Program, Marine Biological Laboratory, Woods Hole, MA, USA

1/00-9/01 **Research Assistant in Fish Biology**
Jointly at University of Maryland, Chesapeake Biological Laboratory and NOAA National Marine Fisheries Service Northeast Fisheries Science Center, Woods Hole, MA, USA

10/98-1/00 **Environmental Management Fellow**
Jointly at the U.S. EPA Chesapeake Bay Program Office and Chesapeake Research Consortium, USA

AWARDS AND RECOGNITION

NSF-Doctoral Dissertation Enhancement Program International Fellowship 2006
Palmer McLeod Fellowship 2004
Distinction- St. Mary's College Honors Program, 1998
Maryland Senatorial Scholarship 1995-1998
Brent-Calvert Scholarship 1995-1998
Maryland Distinguished Scholar 1994-1998
MOST-National Park Scholarship 1994

RESEARCH EXPERIENCE

I have over 25 years of experience in the study of marine ecology in temperate and tropical estuarine and coastal ecosystems. I investigate the ecological and physiological response of marine organisms to their environment using field and laboratory-based approaches and have focused on ecological consequences of eutrophication and environmental change, including loss or change in biodiversity and ecosystem function. My research emphasizes marine benthic ecosystems, primarily seagrass and macroalgae, and how these benthic primary producers respond to environmental change using a trait-based approach to link morphological, physiological, and biochemical traits to shifts in community structure, ecosystem function, and service provision. I have led a transdisciplinary research focus area on aquatic resource use and protection and am currenlty developing seagrass biotechnological tools for use in seagrass restoration, including seed-based cultivation and propagation of *Zostera marina*.

RESEARCH GRANTS

2026-	Establishing a Synthetic Biology and Genome Engineering Platform for the Marine Angiosperm *Zostera marina* (Simons Foundation, **Pending**)
2026-	Microbial symbionts of the seagrass *Zostera marina*: Status and function through imaging and genomics using axenic cultures and isolates from wild populations (Gordon and Betty Moore Foundation, LOI **Pending**)
2026-2028	Seagrass research (Anonymous donor)
2026-2028	Evaluating seagrass restoration success-measuring carbon sequestration and green-house gas fluxes in natural, recovering, and restored eelgrass meadows (MassDEP, Lead-PI, **US$ 499,988**)
2025-2028	ResilienSea: Cultivating resilient Zostera plantlets in lab and nursery for seagrass restoration (Anonymous donor)
2023-2028	LTREB Renewal: Nutrients and climate as drivers of carbon sequestration and ecosystem metabolism in a nitrogen-enriched, shallow coastal ecosystem (NSF-LTREB, Co-PI, **US$ 599,729**)
2023-2027	SEAGEN: Development of genome modification tools for seagrasses (OceanKind, Co-PI)
2023-2025	Biotechnology for seagrass seed restoration enhancement (OceanKind, Lead-PI)
2019-2020	Rooting for resilience and carbon sequestration in seagrass restoration (ZMT Internal funds, Lead-PI, **130,000€**)
2019-2020	Seagrass scenarios under thermal and nutrient stress (German Federal Ministry of Education and Research, BMBF, Co-PI, **289,000€**)
2018-2020	Tropical Macroalgae Bio-based Products for Use in Natural Cosmetics (Merck, KGaA, Lead PI, **300,000€**)
2017-2020	Seagrass ecosystem service evaluation using a trait-based approach (ZMT

Internal Funds, Lead-PI, **110,000€**)

2016-2020 Seagrass and macroalgal community dynamics and performance under environmental change (German Research Foundation, DFG, PI, **415,580€**)

2013-2016 SUTAS-Sustainable Use of Tropical Aquatic Ecosystems-Sub-project: Seagrass meadows under conditions of increased eutrophication (Leibniz Association, Project Partner)

2012-2016 ZMT Algae and Seagrass Ecology Jr. Research Group Start-up Project: Impacts of eutrophication and climate change on tropical seagrass and macroalgal ecosystems (ZMT Internal funds, PI **80,000€** + Position)

2012-2016 Coral reef functioning and environmental drivers (German Federal Ministry of Education and Research, BMBF, SPICE III program, Lead-PI, **130,314€)**

2012-2015 Adaptive traits of macrophyte performance and community structure at natural CO_2 vent sites (German Federal Ministry of Education and Research, BMBF, BIOACID II program, Co-PI, **150,000€**)

2009-2012 Competitive success of calcifying and non-calcifying macroalgae under shifting pH regimes in tropical *vs*. temperate regions (German Federal Ministry of Education and Research, BMBF, BIOACID program, Co-PI, **168,000€**)

TEACHING EXPERIENCE

I have 20 years of experience in teaching and mentoring students at multiple levels (high school, undergraduate, graduate) and early career scientists (post-docs, research fellows). I have developed curriculum for intensive lecture, field, and lab-based courses in seagrass ecology, aquatic ecosystems, marine resource use and conservation, and science writing and communication. I have gained significant experience supervising student thesis research at the undergraduate and graduate levels as well as mentoring students carrying out research internships and independent projects in temperate and tropical estuarine and coastal ecosystems worldwide. For the last 5 years, I have been program director of the Semester in Environmental Science Program, a study away undergraduate program at the Marine Biological Laboratory in Woods Hole, MA. In this role, I direct faculty and staff, build and establish relationship with sending academic institutions, and modify and develop new curriculum in the field of environmental and ecosystem science.

2026 *Lecturer* Marine Resource Use and Conservation course and *mentor* Independent Study (Semester in Environmental Science, MBL undergraduate program)

2021-2025 *Lecturer and mentor* in Aquatic Ecosystems Analysis course and Independent Study seminar (Semester in Environmental Science, MBL undergraduate courses)

2010-2012 and 2014-2019 *Lecturer* of Seagrass Ecology (2.5-day course within Tropical Coastal Ecosystems, Uni Bremen, ISATEC MSc program)

2018-2020 *Guest lecturer* "Estuaries and Saltmarshes" in Introductory Marine Biology course (Uni Bremen, BSc program)

2017- *Guest lecturer* in Seagrass Biology and Ecology course (IUI, Eilat, Israel)

2015 *Guest lecturer* Monitoring Coral Reef Communities (3-day field course as part of Hasanuddin University, Marine Ecology Special Training course, Makassar, Indonesia)

2009-2013 *Lecturer* Scientific Writing and Communication (5 day course, Uni Bremen, ISATEC MSc program)

2008 *Co-lecturer* Physiology of Aquatic Organisms (Uni Bremen, Marine Biology MSc program)

2008 *Lecturer* Aquatic Flora (Uni Bremen, ISATEC Master's level course)

2008 *Guest lecturer* Ecophysiology of Marine Algae (Hasanuddin University, Marine Ecology Special Training course, Makassar, Indonesia)

2008 *Teaching assistant* Ecophysiology of Marine Algae (10 day field course, Uni Bremen, Marine Biology MSc program)

2007 *Guest lecturer* in Phytoplankton Ecology (Woods Hole Oceanographic Institution, Graduate level seminar)

2002-2006 *Mentor* National Science Foundation Research Experience for Undergraduates program Coastal Bays of New England

2002 *Teaching assistant* Marine Ecology (Boston University Marine Program, Graduate level field course)
2001 *Teaching assistant* Ichthyology (Boston University Marine Program, Graduate level field course)

SUPERVISION

Post-doc supervisor (8 Post-docs + 2 research fellows)
2026-present: Dr. Miranda Roethler
2025-present: Dr. Melanie Hayn
2022-2025: Dr. Agustin Moreira-Saporiti
2019-2020: Dr. Stephanie Helber
2017-2019: Dr. Anna Fricke
2018-2020 and 2013-2015: Dr. E. Fay Belshe
2018-2019: Dr. Felix Bast (3 month NAM fellow)
2017-2018: Dr. Yahu La Nafie (3 month NAM fellow)
2015-2017: Dr. Inés Gonzalez Viana
2015: Dr. Jeremiah Plass-Johnson

PhD Oral dissertation examination board (17 students):
2021 Agustín Moreira-Saporiti. A trait-based approach to seagrass ecology.
2019 *Examiner* for PhD thesis of Sandra Walløe Thorsen, Ecological succession after coastal realignment with special focus on nutrient enrichment. University of Southern Denmark, Department of Biology, Odense, Denmark
2018 *Opponent* for PhD defense of Diana Deyanova. Seagrass productivity from plant to system, Department of Ecology, Environment, and Plant Sciences, Stockholm University
2017 Paul Tompkins. Historical knowledge, variation in community composition, ecotrophic parameterization, and invasive species of macroalgae in the Galapagos archipelago
2017 Lalita Putchim. Coral Bleaching and recovery in the Thai Andaman Sea
2017 Holger Kühnhold. Temperature tolerance of the sea cucumber *Holothuria scabra*: Towards a systematic understanding of multi-level temperature effects
2016 Kristina Koch. On the role of fatty acid composition in photoacclimation of seaweeds
2016 Friedrich Meyer. The physiology of coral reef calcifiers under local and global stressors
2015 Nikolas Vogel. Understanding individual and combined effects of ocean acidification, coastal runoff and warming on marine calcifying organisms on tropical coral reefs
2015 Jeremy Plass-Johnson. The functioning of coral reef communities along environmental gradients
2015 Gaëlle Quéré. Ecology of diseases affecting crustose coralline algae
2012 Verena Witt. Effects of disturbances on microbial community composition and activity of biofilms from the Great Barrier Reef
2012 Tri Dewi Pribadi. Macroalgal ecophysiology in response to high ammonium concentrations and different irradiances
2012 Laurie Hofmann. Macroalgal performance and competition under elevated CO_2
2012 Alexander Wolf. The role of macroalgae and the corallivourous fireworm *Hermodice carunculata* on coral reef resilience in the Caribbean
2011 Anna Fricke. Succession patterns of turf algal communities in a fringing coral reef
2010 Yvonne Savall. Coral resistance to natural and anthropogenic disturbances

PhD committee panel member (16 students):
Yvonne Savall; Anna Fricke; Tri Dewi Pribadi; Esteban Acevedo; Ines Stuhldreier; Jeremy Plass-Johnson; Gaëlle Quéré; Friedrich Meyer; Sara Minarro; Paul Tompkins, Holger Kühnhold; Daniel Saavedra Hortua; Dieuwke Hoeijmakers; Agustín Moreira-Saporiti, Paula Senff, Esther Thomsen

BSc and MSc thesis supervisor (29 students):
2026 Anjali Subramanian. The pathway to restoration: Investigating the Health and Resilience of Lab-Grown seagrasses. B.S. thesis. (co-supervisor)

2023 Abubacarr Kujabie. Seagrass meadow mapping and characterization at Bijol Island, The Gambia. (1st supervisor)
2021 Tatiana Torres. Cultivation methods for tropical marine macroalgae. MSc thesis. (1st supervisor)
2021 Jessica Schiebe. Tropical seagrass and macroalgal community response to climate change. MSc thesis. (1st supervisor)
2021 Nalukwago Sarah Ahmed. Eutrophication index on assessment of water quality and domestic sewage impact on marine ecosystems. MSc thesis. (2nd supervisor)
2020 Omar Haji. Restoration of seagrass meadows through seed propagation and field transplantation: A case study in Zanzibar, Tanzania. MSc thesis. (1st supervisor)
2020 Lara Kalisch. Food selectivity of the key sea urchin species *Tripneustes gratilla* along lagoon Patch Reefs in Mahé, Seychelles. MSc thesis. (1st supervisor)
2020 Bunmi Deborah Falodun. Effect of sediment amendment on the survival and growth of *Thalassia hemprichii* seedlings. MSc thesis. (host and 2nd supervisor)
2019 Finn Opätz. Long-term influence of anthropogenic eutrophication on *Posidonia oceanica* - A comparative study between impacted and non-impacted sites. BSc thesis. (1st supervisor)
2019 Christian Göbel. Seaweed productivity under different cultivation conditions. MSc thesis. (1st supervisor)
2019 Mondy Muhando. The influence of an invasive seaweed *Gracilaria edulis* and seagrass on performance and growth of the sea cucumber *Holothurian Scabra* in Bweleo, Zanzibar Tanzania. MSc thesis. (2nd supervisor)
2018 Ashley Miller. Light use efficiencies and photosynthesis of two coral species under varying temperatures. MSc thesis. (1st supervisor)
2018 Aoife O Sullivan. Investigating the effects of grazing and nutrient enrichment on seagrass and macroalgae community dynamics. MSc thesis. (host supervisor)
2017 Mónica Mariño. Social-economic assessment of seaweed farming in coastal communities and spacial planning for future management in Rote, Indonesia. MSc thesis. (1st supervisor)
2017 Mona Abouhaidar Andskog. Testing the iron limitation hypothesis in benthic algae using hyperspectral imaging, a novel technique. MSc thesis. (2nd supervisor)
2017 Merlin Helle. Fitness and productivity assessment of *Thalassia hemprichii* along an anthropogenic nutrient gradient in Stone Town (Zanzibar). BSc thesis. (host supervisor).
2017 Hugo Duarte Moreno. Impacts of wastewater inputs and seaweed farming on seagrass meadows in the region of Kupang, Indonesia. MSc thesis. (1st supervisor).
2017 Hannah Scarlett Earp. Nutrient induced florescent transient experiments with pulse amplitude modulation to determine the iron limited productivity of benthic reef macroalgae in Moorea, French Polynesia. MSc thesis. (2nd supervisor)
2016 Melanie Schulz. Influences of nutrient enrichment on physiological responses of tropical seagrasses. MSc thesis. (1st supervisor)
2016 Daniel Saavedra Hortua. Physiological response and nutrient uptake of tropical seagrass *Cymodocea serrulata* under varying nutrient conditions. MSc thesis. (1st supervisor)
2016 Agustín Moreira Saporiti. Sea urchin *Tripneustes gratilla* herbivory in seagrass meadows of Prison Island (Zanzibar). MSc thesis. (1st supervisor)
2015 Susann Lüneburg. Combined effects of ocean acidification and UV radiation on the calcifying green alga *Udotea occidentalis*. BSc thesis. (2nd supervisor)
2015 Esther Thomsen. The effects of combined sewage plant effluents and river runoff on seagrass communities, their morphology and physiology, and associated epiphytes in Roatan, Honduras. MSc thesis. (2nd supervisor)
2014 Laura Schmoock. The combined effects of carbon dioxide and ultraviolet light on the physiology and ecology of the calcifying green macroalgae *Halimeda*. BSc thesis. (2nd supervisor)
2014 Laura Larissa Fleur Weiand. Top-down and bottom-up drivers regulating macroalgae physiology and distribution along an eutrophication gradient in Spermonde Archipelago, South Sulawesi (Indonesia). MSc thesis. (1st supervisor)
2014 Florian Roth. Effects of simulated overfishing on the succession of benthic algae and

invertebrates in upwelling-influenced coral reefs of Pacific Costa Rica. MSc thesis. (2nd supervisor)

2013 Jasmin Heiden. Benthic recruitment patterns in response to nutrient availability and grazing pressure in coral reefs of Spermonde Archipelago, Indonesia. MSc thesis. (1st supervisor)

2011 Jasmin Heiden. Impacts of an altered CO2 and nutrient regime on the physiological performance of the green calcifying macroalga *Halimeda opuntia*. BSc thesis. (2nd supervisor)

2010 Maricela Rodriguez. Abiotic and biotic factors controlling the distribution and biomass of macroalgae in *Rhizophora mangle* roots in the Caeté estuary, Braganca (PA), Brazil. MSc thesis. (1st supervisor)

Post-bac and undergraduate mentor (21 students):

2026 Holyn Hahn, Assessing the Impact of Nursery Cultivation Techniques on Seagrass Growth and Health, FAU internship program

2026 Charlisse Clark, Benthic primary producers as indicators of status and change in estuary conditions, MBL REU program

2026 Abigail Skena, Maxwell Hanrahan Fellowship for post-bac internship on seagrass ecology and restoration

2025 Evelyn Mei Cowle, Effects of substrate type on relative abundance, growth, and settlement of non-native ascidians in Cape Cod, MA, SES independent research project.

2025 Rafael Beaudoin, Green crab metabolism and behavior under heatwave-like conditions, SES independent research project.

2025 Anjali Subramanian, Seagrass seedling development in a nursery for restoration, U Chicago Metcalf internship

2025 Nathaniel Williams, Seagrass epibionts in West Falmouth Harbor, MBL REU program

2025 Konoka Uematsu, Method development for in vitro culturing and callus induction of Z. marina, SEAGEN Project internship

2025 Marcus Mekhail, Maxwell Hanrahan Fellowship

2024 Emma Johnston. Diets of Longfin squid in relation to size, geographic location and time, SES independent research project

2024 Bryan Miranda. Friend or Foe: Investigating the impact of pea crab presence on scallop respiration, behavior, and condition, SES independent research project

2023 Jessalin Nguyen. Sargassum growth, photosynthesis, and biochemical response to temperature increase, SES independent research project.

2023 Calliope Saban. Effects of elevated temperature on epiphytic communities of Zostera marina, SES independent research project.

2023 AJ Paprocki, Interactions between crabs and the seagrass Zostera marina in West Falmouth Harbor, SES independent research project

2023 Abigail Kauke. The effects of blue and green crab grazing on eelgrass transplants in Sage Lot Pond, Waquoit Bay. MBL REU program.

2022 Eleanor Meng. Variability of *Zostera marina* traits across a wastewater pollution nutrient gradient. SES independent research project.

2022 Kristen Beach. Effects of environmental stressors on *Sargassum.* SES independent research project.

2022 A. Jordan. Little Pond sediment cores: A primary productivity peer through time. SES independent research project.

2021 Alex Hochroth. Sediment limitation for seagrasses and possible solutions for restoration. SES independent research project.

2021 Elizabeth Greebon. Potential dietary overlap between native blue crabs and invasive green crabs. SES independent research project.

2021 Gwyneth Crossman. Nitrogen up the food chain: examining the effects of nitrogen loading on dietary nitrogen of *Branta canadensis*. SES independent research project.

High school research project mentor (6 students):

2026 James Rodriguez, Hannah Audette

2024 Gayathri Chaturvedi, Sam Olken, Karun Kulamavalavan

2023 Ayaka Ammons

EDITORIAL ACTIVITIES, MEMBERSHIPS, AND COORDINATION

Workshop Organizer: 11/25, How can plant biotechnology advance seagrass conservation, MBL, Woods Hole, MA
Grant reviewer: National Science Foundation, DFG-German Research Foundation, Dutch Research Council
Guest Editor for Research Topic "Current Advances in Seagrass Research" in Frontiers of Plant Science *(Starting March 2022)*
Guest Editor for Research Topic "Seagrasses Under Times of Change" in Frontiers of Plant Science *(Starting December 2019)*
Contributing Editor: Marine Ecology Progress Series (2019-2026)
Associate Editor: Estuarine, Coastal, and Shelf Science (June 2014-2017)
Subject Editor: Marine Biology Research (2011-2016)
Peer reviewer: over 12 international journals including Nature, Estuarine, Coastal and Shelf Science, Marine Ecological Progress Series, Estuaries and Coasts, Aquatic Biology, Aquatic Ecology, Journal of Marine Biology, Harmful Algae, Aquatic Conservation Marine and Freshwater Ecosystems, Journal of Ecology, Marine Biology Research, Marine Biology, Frontiers of Marine Science, Frontiers of Plant Science, Science of the Total Environment
Scientific memberships: Estuarine Coastal Sciences Association (ECSA); Coastal and Estuarine Research Federation (CERF); Association of Limnology and Oceanography (ASLO)
Euromarine Network General Assembly representative for the Leibniz Centre for Tropical Marine Research 2017-2020
Scientific coordinator: ZMT interdisciplinary Research focus area *Marine Bioeconomy: Sustainable Innovative Aquatic Production*
Scientific coordinator: ZMT Networking Event Marine Bioeconomy: Science meets Business (17-18.05.18)
Speaker: ZMT Program Area: Aquatic Resource Use and Protection

TRAINING COURSES AND SKILLS

Participation in Plant transformation workshop: 5/26, Lab training for maize transformation and tissue culture, Rutgers University
Supervision training course: 10/19, Supervision of doctoral candidates, Sabine Lerch, Science
Leadership training course: 09/19, Leadership skills: How to initiate and facilitate constructive communication, collaboration, and innovation, Monika Maria Thiel
Leadership training course: 01/13, CoachingColleg Berlin, Thomas Knappe
Diving: Padi Advanced Diver scuba certification
Participation in research cruises: NOAA Northeast Fisheries Science Center Bottom-Trawl Survey 2000, Northeast Fisheries Science Center 2001 Monkfish Research Survey
Languages: English (native speaker); Spanish (advanced); German (basic)

PUBLICATIONS (students or post-docs supervised indicated by *)

2026
In prep/submitted
Teichberg M, Moreira-Saporiti A, Viana I, Fricke A, Jiddawi N. In prep. Relative influence of eutrophication on tropical Indo-pacific seagrass abundance and community structure
Merolla S, Moreira-Saporiti A, Dixon G, Lopez Peredo E, **Teichberg M**. In prep. *Zostera marina* in vitro cultivation techniques as a novel approach to seagrass propagation for restoration
Moreira-Saporiti A, Rodriguez F, Merolla S, **Teichberg M**, Lopez Peredo E. In prep. Flowering

genes in *Zostera marina* and their environmental trigger

Moreira-Saporiti A, O'Sullivan A, Viana IG, Jiddawi N, **Teichberg M**. Submitted. Early responses of tropical seagrass ecosystems to nutrient enrichment and macrofauna exclusion differ from long-term outcomes. MEPS

2025

Pieraccini R, Dixon G, Dolch T, Koedam N, Merolla S, Picatto L, Petrucci F, Teichberg M, Van der Stocken T and Vanreusel A. 2026. Gibberellic acid priming enhances *Zostera marina* seed germination: implications for restoration. Front. Mar. Sci. 13:1688637. doi: 10.3389/fmars.2026.1688637

2024

Senff P*, Lavik G, **Teichberg M**, Kunzmann A. 2024. Nutrient removal and nitrogen recovery from aquaculture effluents by the edible halophyte Sesuvium portulacastrum (L.) in hydroponics and in sand substrate. Marine Biology Research. DOI: 10.1080/17451000.2024.2418662

Beca-Carretero P*, Meister M*, **Teichberg M**, Moreira-Saporiti A*, Schneekloth F, Reuter H. 2024. Methodological insights into implementing cellular automata models for simulating seagrass dynamics: Responses to global change effects. MethodsX 13: 102936 DOI 10.1016/j.mex.2024

Fricke A, Bast F, Moreira-Saporiti A, Bussanello GV, Msuya F, **Teichberg M**. 2024. Tropical bloom-forming mesoalgae *Cladophoropsis* sp. and *Laurencia* sp.-responses to ammonium enrichment and a simulated heatwave. J. Phycol. DOI: 10.1111/jpy.13435

Beca-Carretero P*, Winters G, **Teichberg M**, Procaccini G, Schneekloth F, Zambrano RH, Chiquillo K, Reuter H. 2024. Climate change and the presence of invasive species will threaten the persistence of the Mediterranean seagrass community. Sci Total Environ. DOI: 10.1016/j.scitotenv.2023.16875

2023

Moreira-Saporiti A*, **Teichberg M**, Garnier E, Cornelissen JHC, Alcoverro T, Björk M, Boström C, Dattolo E, Eklöf JS, Hasler-Sheetal H, Marbà N, Marin-Guirao L, Meysick L, Olive I, Reusch TBH, Ruocco M, Silva J, Sousa AI, Procaccini G, Santos R. 2023. A trait-based framework for seagrass ecology: Trends and prospects. Front Plant Sci 14:1088643. doi: 10.3389/fpls.2023.1088643

Moreira-Saporiti A*, Hoeijmakers D, Reuter H, Msuya FE, Gese K, **Teichberg M**. 2023. Bottom-up and top-down control of seagrass overgrazing by the sea urchin *Tripneustes gratilla*. Mar Ecol doi: 10.1111/maec.12734

Papenbrock J, **Teichberg M**. 2023. Editorial: Current advances in seagrass research. Front Plant Sci 14:1196437. doi: 10.3389/fpls.2023.1196437

Viana IG*, Artika SR*, Moreira-Saporiti A*, **Teichberg M**. 2023. Limited trait responses of a tropical seagrass to the combination of increasing pCO_2 and warming. J Exp Bot 74:472-488, doi:10.1093/jxb/erac425

2022

Beca-Carretero P*, Azcarate-Garcia T, **Teichberg M**, Patra P, Feroze F, Gonzalez M, Medina I, Winters G. 2022. Predicted warming intensifies the negative effects of nutrient increase on tropical seagass: A physiological and fatty acid approach. Ecol Indicators 142, 109184.

Thomsen E*, Herbeck L, **Teichberg M**, Wang DR, Chen SQ, Jennerjahn TC. 2022. Species-specific phenotypic plasticity of two tropical seagrass species in response to in situ fertilization under different trophic conditions. Estuar Coast Shelf Sci 270, 107837

Nguyen XV, Hang Phan TT, Cao VL, Nhat NTN, Nguyen TH, Nguyen XY, Lau VK, Hoang CT, Nguyen-Thi MN, Nguyen HM, Dao VH, **Teichberg M**, Papenbrock J. 2022. Current advances in seagrass research: A review from Viet Nam. Front Plant Sci doi.org/10.3389/fpls.2022.991865

Winters G, **Teichberg M**, Reuter H, Viana IG, Willette DA. 2022. Seagrasses under times of change. Front Plant Sci doi.org/10.3389/fpls.2022.870478

2021

Moreno HD*, Reuter H, Kase A, **Teichberg M**. 2021. Impacts of off-bottom seaweed farming and wastewater on seagrass meadows in the region of Rote Island, Indonesia. Estuar Coast Shelf Sci. doi.org/10.1016/j.ecss.2021.107635

Moreira-Saporiti A*, Bejarano S, Viana I*, Belshe F*, Mtolera M, **Teichberg M**. 2021 Local victory: Assessing interspecific competition in seagrass from a trait-based perspective. Front Plant Sci. doi.org/10.3389/fpls.2021.709257

Helber SB*, Procaccini G, Belshe EF, Santillan AR, Cardini U, Bröhl S, Schmid M, Reuter H, **Teichberg M**. 2021. Unusually warm summer temperatures exacerbate population and plant level response of *Posidonia oceanica* to anthropogenic nutrient stress. Front Plant Sci. https://doi.org/10.3389/fpls.2021.662682

Helber SB*, Winters G, Stuhr M, Belshe EF, Bröhl S, Schmid M, Reuter H, **Teichberg M**. 2021. Nutrient history affects the response and resilience of the tropical seagrass *Halophila stipulacea* to further enrichment in its native habitat. Front Plant Sci https://doi.org/10.3389/fpls.2021.678341

Fricke A*, Nguyen XV, Stuhr M, Hoang TD, Tran MD, Pham TS, Le HC, Le MH, Pham QL, Schmidt, M, Kunzmann A, Gärdes A, von Hagen J, **Teichberg M**. 2021. Subtidal macrophyte diversity and potentials in the Nha Trang Bay - baseline data for the monitoring of a rising natural resource. *Estuar Coast Shelf Sci* 259:107460

Artika SR*, Ambo-Rappe R, **Teichberg M**, Samawi MF, Saporiti AM*, Viana IG*. 2021. Morphological and physiological responses of *Enhalus acoroides* seedlings under experimental climate change conditions. Appl Sci 11: 2730. https://doi.org/10.3390/app11062730

Reuter H, Breckwoldt A, Dohna T, Ferse S, Gärdes A,Glaser M, Huyghe F, Kegler H, Knittweis-Mifsud L, Kochzius M,Kraemer WE, Leins J, Lukman M, Madduppa H, Nuryanto A, Hui M, Miñarro S, Forero GN,Plass-Johnson J, Ratsimbazafy HA, Richter C, Sawall Y, Schwerdtner-Máñez K, **Teichberg M**, Timm J, van der Ven R, Jompa J. *In press.* Coral reef social-ecological systems under pressure in Southern Sulawesi. In: Jennerjahn T & Rixen T (eds.), Science for the Protection of Indonesian Coastal Ecosystems, Elsevier.

Moreira-Saporiti A*, Hoeijmakers D*, Msuya F, Reuter H, **Teichberg M**. 2021. Seagrass and benthic macroalgae response to shading and trampling under seaweed farming pressure. Reg Environ Change. doi.org/10.1007/s10113-020-01742-2

2020

Beca-Carretero P*, **Teichberg M**, Winters G, Procaccini G, Reuter H. 2020. Projected habitat expansion of subtropical seagrass species in the Mediterranean Sea as climate change progresses. Front Plant Sci. 16 November 2020 https://doi.org/10.3389/fpls.2020.555376

Viana I*, Moreira-Saporiti A*, **Teichberg M**. 2020. Species-specific trait responses of three tropical seagrasses to multiple stressors: the case of increasing temperature and nutrient enrichment. Front Plant Sci, 05 November 2020 https://doi.org/10.3389/fpls.2020.571363

Artika SR*, Ambo-Rappe R, **Teichberg M**, Saporiti AM*, Viana IG*. 2020. Morphological and physiological responses of *Enhalus acoroides* seedlings under varying temperature and nutrient treatment. Front Mar Sci, 15 May 2020 https://doi.org/10.3389/fmars.2020.00325

2019

Marino M*, Breckwoldt A, **Teichberg M**, Kase A, Reuter H. 2019. Livelihood aspects of seaweed farming in Rote Island, Indonesia. Marine Policy 107:103600

Viana IG*, Arturo Saavedra Hortua D*, Mtolera M, **Teichberg M**. 2019. Different strategies of nitrogen acquisition in two tropical seagrasses under nitrogen enrichment. New Phytologist. http://doi.org/10.1111/nph.15885

2018

Belshe EF*, Hoeijmakers D*, Herran N, Mtolera M, and **Teichberg M**. 2018. Seagrass community- level controls over organic carbon storage are constrained by geophysical

attributes within meadows of Zanzibar, Tanzania. Biogeosciences 15: 4609-4626. https://doi.org/10.5194/bg-15-4609-2018

Teichberg M, Wild C, Bednarz VN, Kegler H, Lukman M, Gärdes A, Heiden J*, Weiand L*, Abu N, Nasir A, Minarro S, Ferse SCA, Reuter H, Plass-Johnson J*. 2018. Spatio-temporal patterns in coral reef communities of the Spermonde Archipelago, 2012-2014, I: Comprehensive reef monitoring of water and benthic indicators reflect changes in reef health. Front Mar Sci 5:33. doi: 10.3389/fmars.2018.00033

Plass-Johnson JG*, **Teichberg M**, Bednarz VN, Gärdes A, Heiden J*, Lukman M, Minarro S, Kegler H, Weiand L*, Wild C, Reuter H, and Ferse SCA. 2018. Spatio-temporal patterns in coral reef communities of the Spermonde Archipelago, 2012-2014, II: Fish assemblages display structured variation related to benthic condition. Front Mar Sci 5:36. doi: 10.3389/fmars.2018.00036

Plass-Johnson JG*, Bednarz VN, Hill JM, Jompa J, Ferse SCA, **Teichberg M**. 2018. Contrasting responses in the niches of two coral reef herbivores along a gradient of habitat disturbance in the Spermonde Archipelago, Indonesia. Front Mar Sci 5:32. doi: 10.3389/fmars.2018.00032

Glaser M, Ferse S, Neil M, Plass-Johnson J*, Satari DY, **Teichberg M,** Reuter H. 2018. Breaking Resilience for a Sustainable Future: Thoughts for the Anthropocene. Front Mar Sci 5:34. doi: 10.3389/fmars.2018.00034

Fricke A*, Titlyanova TV, **Teichberg M**, Nugues MM, Bischof K. 2018. The Chlorophytes of Curaçao (Caribbean) – a revised checklist for the South-west coast. Bot Mar 61:33–46

2017

Belshe EF*, Mateo MA, Gillis L, Zimmer M, **Teichberg M.** 2017. Muddy waters: unintentional consequences of blue carbon research obscure organic carbon dynamics in seagrass ecosystems. Front Mar Sci doi: 10.3389/fmars.2017.00125

Kegler H, Lukman M, **Teichberg M**, Plass-Johnson J*, Wild C, Gärdes A. 2017. Coastal eutrophication controls the bacterial community composition in different reef habitats of the Spermonde Archipelago, Indonesia. Front Microbiol doi: 10.3389/fmicb.2017.00662

2016

Meyer FW*, Schubert N, Diele K, **Teichberg M**, Wild C and Enríquez S. 2016. Effect of inorganic and organic carbon enrichments (DIC and DOC) on the photosynthesis and calcification rates of two calcifying green algae from a Caribbean Reef Lagoon. PLoS ONE DOI: 10.1371/journal.pone.0160268

Plass-Johnson JG*, Heiden J, Abu N, Lukman M, **Teichberg M.** 2016. Experimental analysis of the effects of consumer exclusion on recruitment and succession of a coral reef system along a water quality gradient in the Spermonde Archipelago, Indonesia. Coral Reefs 35, 229-243

Plass-Johnson JG*, Taylor MH, Husain AAA, **Teichberg M**, Ferse SCA. 2016. Non-random variability in functional composition of coral reef fish communities along an environmental gradient. PLoS ONE 11, e0154014

2015

Meyer FW*, Vogel N, **Teichberg M**, Uthicke S, and Wild C. 2015. The physiological response of two calcifying green algae from the Great Barrier Reef towards high dissolved inorganic and organic carbon (DIC and DOC) availability. PLoS ONE 10(8):e0133596. doi:10.1371/journal.pone0133596

Plass-Johnson JG*, Schwieder H, Heiden J*, Weiand L*, Wild C, Jompa J, Ferse S, **Teichberg M.** 2015. *Acanthaster planci* outbreak in the Spermonde Archipelago, Indonesia. Reg Environ Change: 15:1157-1162

Plass-Johnson JG*, Ferse SCA, Jompa J, Wild C, and **Teichberg M.** 2015. Fish herbivory as key ecological function in a heavily degraded coral reef system. Limnol Oceanogr 60:1382-1391

Hofmann LC*, Bischof K, Baggini C, Johnson A., and **Teichberg M.** 2015. CO_2 and inorganic nutrients effect the performance of a calcifying alga and its noncalcifying epiphyte Oecologia: 177:1157-1169

Jessen C, Bednarz VN, Rix L, **Teichberg M.**, and Wild C. 2015. Marine Eutrophication. In:

R.H. Armon and O. Hänninen (eds.), Environmental Indicators DOI 10.1007/978-94-017-9499-2_11

2014

Fricke A*, **Teichberg M**, Nugues M, Beilfuss S, and Bischof K. 2014. Effects of depth and ultraviolet radiation on coral reef turf algae. J Exp Mar Biol Ecol 461:73-84

Brodie J, Williamson C, Smale D, Kamenos N, Mieszkowska N, Santos R, Cunliffe M, Steinke M, Yesson C, Anderson K, Asnaghi V, Brownlee C, Burdett H, Burrows M, Collins S, Donohue P, Harvey B, Foggo A, Noisette F, Nunes J, Ragazzola F., Raven JA, Schmidt D, Suggett D, **Teichberg M**, Hall-Spencer J. 2014. The future of the NE Atlantic benthic flora in a high CO_2 world. Ecol and Evol: 13:2787-98

Hofmann LC*, Heiden JP*, Bischof K, and **Teichberg M**. 2014. Nutrient availability affects the response of the calcifying chlorophyte *Halimeda opuntia* (L.) J.V. Lamouroux to elevated pH. Planta 239:231-242

2013

Teichberg M, Fricke A, and Bischof K 2013. Increased physiological performance of *Halimeda opuntia* in response to experimental nutrient enrichment. Aquat Bot 104:25-33

2012

Fox SE, **Teichberg M**, Heffner L, and Valiela I. 2012. The relative role of nutrients, grazing, and predation as controls on macroalgal growth in a temperate estuary. Estuaries Coasts 35:1193-1204

Teichberg M, Martinetto P, and Fox S. 2012. Bottom-up and top-down controls of macroalgal blooms. *In:* C. Wiencke and K. Bischof (eds.), Seaweed Biology, Ecological Studies 219, DOI 10.1007/978-3-642-28451-9_21, # Springer-Verlag Berlin Heidelberg

2011

Sawall Y*, **Teichberg M**, Seemann J, Litaay M, Jompa J, and Richter C. 2011. Nutritional status and metabolism of the coral *Stylophora subseriata* along a eutrophication gradient in Spermonde Archipelago (Indonesia). Coral Reefs 30:841-853

Martinetto P, **Teichberg M,** Valiela I, Montemayor D, and Iribarne O. 2011. Top-down and bottom-up controls in a high nutrient-high herbivory coastal environment. Mar Ecol Prog Ser 432:69-82

Fricke A*, **Teichberg M**, Beilfuss S, and Bischof K. 2011. Succession patterns in algal turf vegetation on a Caribbean coral reef. Bot Mar 54:111-12

Olsen YS, Fox SE, **Teichberg M**, Otter M, and Valiela I. 2011. $\delta^{15}N$ and $\delta^{13}C$ reveal dietary shifts of consumers in response to changes in the relative abundance of macroalgae and eelgrass. Mar Ecol Prog Ser 421:83-96

2010

Teichberg M, Fox SE, Olsen YS, Valiela I, Martinetto P, Iribarne O, Muto EY, Petti MAV, Corbisier TN, Soto-Jimenez M., Paez-Osuna F, Castro P, Freitas H, Zitelli A, Cardinaletti M, and Tagliapietra D. 2010. Eutrophication and macroalgal blooms in temperate and tropical coastal waters: Nutrient experiments with *Ulva* spp. Global Change Biology 16: 2624-2637

Olsen YS, Kinney EL, Fox SE, **Teichberg M,** Valiela I. 2010. Differences in coastal urbanization and the degree of marine influence reflected in $\delta^{13}C$ and $\delta^{15}N$ of producers and consumers in seagrass habitats of Puerto Rico. Mar Environ Res 69: 198-206

Fox SE, Olsen YS, **Teichberg M**, Valiela I. 2010. Controls acting on benthic macrophyte communities in a temperate and a tropical estuary. In: *Coastal Lagoons: Critical Habitats of Environmental Change* (eds Kennish, M. and Paerl, H.)

2009

Fox SE, **Teichberg M**, Olsen Y, Heffner L, and Valiela I. 2009. Restructuring of benthic communities in eutrophic estuaries: Lower abundance of prey leads to trophic shifts from omnivory to grazing. Mar Ecol Prog Ser 380: 43-57

2008

Teichberg M, Fox S, Aguila C, Olsen Y, and Valiela I. 2008. Macroalgal response to experimental nutrient enrichment in shallow coastal waters: Growth, internal nutrient pools, and isotopic signatures. Mar Ecol Prog Ser 368: 117-126

2007

Teichberg M, Heffner L, Fox S, and Valiela I. 2007. Nitrate reductase and glutamine synthetase activity, internal N pools, and growth of *Ulva lactuca*: Responses to long and short-term N supply. Mar Biol 151: 1249-1259

2006

Martinetto P, **Teichberg M**, and Valiela I. 2006. Coupling of estuarine benthic and pelagic food webs to land-derived nitrogen sources in Waquoit Bay, Massachusetts. Mar Ecol Prog Ser 307: 37-48

2003

Aguiar, A. B., Morgan, J. A., **Teichberg, M.**, Fox, S. and Valiela., I. 2003. Transplantation and isotopic evidence of the relative effects of ambient and internal nutrient supply on the growth of *Ulva lactuca*. Biol Bull 205: 250-251

Morgan, J. A., Aguiar, A. B., Fox, S., **Teichberg, M.**, and Valiela, I. 2003. Relative influence of grazing and nutrient supply on growth of the green macroalga *Ulva lactuca* in estuaries of Waquoit Bay, Massachusetts. Biol Bull 205: 252-253

2002

Millman, M., **Teichberg, M.**, Martinetto, P., and Valiela, I. 2002. Response of shrimp populations to land-derived nitrogen in Waquoit Bay, MA. Biol Bull 203: 263-264

Other publications

Teichberg M. 2017. Die Seewiesen von Sansibar. *In* Hempel, Gotthilf; Hempel, Irmtraud; Hornidge, Anna-Katharina, Hrsg. *Klüger nutzen - besser schützen. Bremer Forschung an tropischen Küsten*. 1. Auflage, Edition Falkenberg, Bremen 2017, 160 Seiten, 109 farb. Abb., ISBN 978-3-95494-134-6

Valiela, I. and **Teichberg, M.** 2007. Waqouit Bay, MA: Increased nitrogen load leads to increased eutrophic symptoms. *In Bricker et al.* Effects of nutrient enrichment in the nation's estuaries: A decade of change. NOAA Coastal Ocean Program Decision Analysis Series No. 26. National Centers for Coastal Ocean Science, Silver Spring, MD. 322pp

Batiuk and Others. 2000. Chesapeake Bay Submerged Aquatic Vegetation Water Quality and Habitat-Based Requirements and Restoration Targets: A Second Technical Synthesis. EPA Chesapeake Bay Program.

PRESENTATIONS/CONFERENCES

2025 *Oral presentation*, Association for the Sciences of Limnology and Oceanography-Aquatic Sciences Meeting, Charlotte, North Carolina; High occurrence and biomass of *Sargassum filipendula* in beach wrack along Cape Cod, Ma

2025 *Oral presentation*, Global Seagrass Nursery Network; Biotechnology for seagrass seed restoration enhancement

2024 *Oral presentation*, 33rd Zosterapalooza Meeting, *Zostera marina* reproduction and use of seeds to develop axenic cultures for plant propagation

2024 *Oral presentation*, World Seagrass Conference, Naples, Italy; Development of axenic cultures of *Zostera marina* from seeds and their potential use to propagate new plants through somatic embryogenesis

2019 *Oral presentation*, Coastal and Estuarine Research Federation Conference, Mobile, Alabama; Seagrasses under pressure from intensive seaweed farming in Rote Island, Indonesia

2019 *Invited talk*, Alfred Wegener Institute, Sylt Station, Germany-Linking seagrass traits to community dynamics and ecosystem function under environmental change
2019 *Invited talk*, Virginia Institute of Marine Science, USA-Structure, traits, and feedbacks of tropical seagrass ecosystems under environmental change
2019 *Invited talk* Biology department, Southern Denmark University, Denmark-Structure and function of tropical coastal ecosystems
2018 *Oral presentation* Euromarine Workshop TRAITGRASS, Naples, Italy-Seagrass trait associations with ecosystem functions and services
2018 *Oral presentation* ECSA 57 conference, Perth, Western Australia-Tropical seagrass community dynamics reveal the role of biological feedbacks in influencing system resilience
2018 *Invited talk*, Biology department, Aarhus University-Macrophytes in a changing environment
2016 *Poster presentation* International Seaweed Biology Workshop, Wales-Understanding links between seagrass species traits and carbon storage in sediments
2016 *Oral presentation* Final workshop Sustainable Use of Tropical Aquatic Systems (SUTAS), Zanzibar
2016 *Oral presentation*- Final Workshop Science for the Protection of Indonesian Coastal Ecosystems (SPICE), Bali, Indonesia- Controls of benthic algae in a disturbed coral reef, Spermonde Archipelago
2016 *Invited talk* Euromarine Workshop Linking biodiversity, ecosystem functioning and ecosystem services: a comparison between temperate and tropical seagrass meadows, Sete, France
2016 *Poster presentation* International Seaweed Symposium, Copenhagen, Denmark - Seaweed farming effects on seagrass meadows of Chwaka Bay (Zanzibar)
2015 *Oral presentation* Coastal and Estuarine Research Federation, Portland, Oregon, Conference – Controls of benthic algae in a disturbed coral reef, Spermonde Archipelago
2015 *Oral presentation* American Society of Limnology and Oceanography, Granada, Spain- The effect of elevated CO_2 and inorganic nutrients on competition between the calcifying chlorophyte *Halimeda opuntia* and its noncalcifying epiphyte *Dictyota* sp.
2015- *Oral presentation* SIRTRE, Makassar, Indonesia-Linkages between water quality and coral reef benthic and pelagic communities along a nearshore to offshore gradient in the Spermonde Archipelago, Indonesia
2009 *Oral presentation* Coastal and Estuarine Research Federation, Portland, Oregon, Conference - Macroalgal blooms in temperate and tropical coastal waters: Nutrient enrichment, grazing, and ecophysiological field experiments
2009 *Oral presentation* Botanikertagung, Leipzig, Germany- Physiological responses of tropical reef macroalgae to nutrient enrichment along a reef slope
2007 *Invited speaker* Center for Tropical Marine Ecology, Bremen, Germany- Local and global comparisons of macroalgal response to nutrient enrichment
2007 *Invited speaker* Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA-Local and global comparisons of macroalgal response to nutrient enrichment
2007 *Oral presentation* on American Society of Limnology and Oceanography, Aquatic Science Meeting, Santa Fe, New Mexico- Response of *Ulva lactuca* and *Gracilaria tikvahiae* to nitrate and ammonium enrichment in Waquoit Bay, Massachusetts
2005 *Research seminar* University of Coimbra, Portugal-Controls of macroalgal growth: the relative influence of nutrient supply, grazing and predation
2005 *Oral presentation* American Society of Limnology and Oceanography, Santiago de Compostela, Summer Conference- Responses of the bloom-forming macroalga *Ulva lactuca* to nutrient supply: growth, enzyme activity, nutrient content, and isotopic signatures
2005 *Oral presentation* Estuarine Research Federation, Norfolk, Conference- Experimental and comparative study on macroalgal response to nutrient enrichment and grazing in a tropical mangrove and seagrass ecosystem
2005 *Research seminar* Boston University Marine Program -Bottom-up control of macroalgal blooms: A geographic comparison of the response of *Ulva lactuca* to nutrient supply
2004 *Research seminar* Boston University Marine Program - Evidence of internal and

external nutrient control on growth of the macroalgae *Ulva lactuca* and *Gracilaria tikvahiae*

2003 *Research seminar* Boston University Marine Program -Coupling of benthic and pelagic food webs to terrestrial nitrogen

2001 *Oral presentation* Atlantic Fisheries Society, Southern New England Chapter Conference-Density-dependent growth and reproduction of Chesapeake Bay Striped Bass

1999 *Poster presentation* Atlantic Estuarine Research Society Conference- An Investigation of the survivability of *Zostera marina* transplants in the St. Mary's River Estuary: A field and laboratory study

1998 *Oral presentation* St. Mary's College Honors Program Ceremony - An Investigation of the survivability of *Zostera marina* transplants in the St. Mary's River Estuary: A field and laboratory study

1997 *Oral presentation* Project Research Investigations at St. Mary's - A comparative study on the allocation of phenols in the seagrasses *Zostera marina* and *Ruppia maritima* in the St. Mary's River estuary

As co-author:

2026 NEERS 2026 meeting, *Zostera marina* in vitro cultivation techniques as a novel approach to seagrass restoration

2026 NEERS 2026 meeting, Optimizing Early Establishment of *Zostera marina* Seedlings: In Vitro vs. Ambient Conditions for Seed-Based Seagrass Restoration

2025 Botany 2025 Conference, Palm Springs, CA; Integrating environmental drivers, phenology, and gene expression to understand flowering and seed production in *Zostera marina*

2025 Botany 2025 Conference, Palm Springs, CA; A biotechnological framework for scaling up *Zostera marina* restoration through *in vitro* propagation and regeneration

2025 Association for the Sciences of Limnology and Oceanography-Aquatic Sciences Meeting, Charlotte, North Carolina; Developing callus induction methods for *Zostera marina*: a biotechnical approach to seagrass restoration

2025 Association for the Sciences of Limnology and Oceanography-Aquatic Sciences Meeting, Charlotte, North Carolina; *Zostera marina* in vitro cultivation techniques as a novel approach to seagrass restoration

2025 Association for the Sciences of Limnology and Oceanography-Aquatic Sciences Meeting, Charlotte, North Carolina; *Sargassum* (*S. filipendula*) growth, photosynthesis, and biochemical response to temperature increase

2024 Botany 2024 Conference, Grand Rapids, Michigan; Culturing media is a key factor affecting germination rate of the seagrass *Zostera marina*

2024 Botany 2024 Conference, Grand Rapids, Michigan; Analysis of flowering patterns in *Zostera marina* using environmental variables, phenology, and gene expression

2024 World Seagrass Conference, Naples, Italy; A comprehensive assessment of flowering in *Zostera marina*: linking environment, phenology, and gene expression

2024 World Seagrass Conference, Naples, Italy; Effects of seagrass (*Zostera marina*) on oyster (*Crassostrea gigas*) calcification in ambient and ocean acidification conditions

2019 Coastal and Estuarine Research Federation Conference, Mobile, Alabama; From traits to plasticity: How will seagrass look in a changing world?

2019 Coastal and Estuarine Research Federation Conference, Mobile, Alabama; Understanding below-ground feedbacks on seagrass seed-based restoration outcomes

2018 ECSA 57 conference, Perth, Western Australia-The influence of environmental factors on seagrass response traits, functional traits and their relationship to ecosystem function

2016 International Seaweed Biology Workshop, Wales-Feeding behavior of the sea urchin *Tripneustes gratilla* in relation to a seagrass overgrazing event in Zanzibar Archipelago, Tanzania

2016 International Seaweed Biology Workshop, Wales- Nitrate reductase and glutamine synthetase activity of Cymodocea serrulata (R.Brown), under varying concentrations and sources of nitrogen

2016 International Seaweed Biology Workshop, Wales-Nitrogen uptake, transport and

allocation in tropical seagrasses under different nitrogen sources
2016 Estuarine Coastal Sciences Association (ECSA 56), Bremen, Germany-Do nutrients affect seagrasses of the heavily populated western-coast of Zanzibar?
2016 Estuarine Coastal Sciences Association (ECSA 56), Bremen, Germany-Nutrient uptake and enzymatic activity of *Cymodocea serrulata* (R. Brown), under varying concentrations and sources of nitrogen and phosphorus
2015 Association for the Sciences of Limnology and Oceanography (ASLO), Granada, Spain-Variability in community functioning: the impact of coral reef habitat degradation on fish communities
2015 Association for the Sciences of Limnology and Oceanography, Granada, Spain-Linking carbon sink capacity to community composition within highly diverse seagrass meadows of the Indo-Pacific
2009 Coastal and Estuarine Research Federation, Portland, Oregon, Conference-Macroalgae, the "Good" Side: Part 1. The relative roles of seagrass and macroalgae as habitat and food in estuaries with different nutrient loading rates
2009 Botanikertagung, Leipzig, Germany- Succession patterns of turf algal communities in a Caribbean coral reef
2007 Association for the Sciences of Limnology and Oceanography, Aquatic Science Meeting, Santa Fe, New Mexico- Effects of hypoxia on consumer communities and trophic food webs
2006 Estuarine and Coastal Sciences Association, Venice, Italy-Macroalgal blooms: Control mechanisms in Venice Lagoon and the coasts of the world
2005 Association for the Sciences of Limnology and Oceanography, Santiago de Compostela, Summer Conference:
-Eutrophication and macroalgal blooms: current understanding of controls and role of macroalgae in community dynamics and coastal services
-Indicators of aquatic ecosystem change: A review of purposes and attributes
-Macroalgal blooms: The relative influence of nutrient supply, grazing, and predation in Waquoit Bay
-Coupling of estuarine benthic and pelagic food webs to land-derived nitrogen sources in Waquoit Bay
2005 Estuarine Research Federation, Norfolk, Conference-Watershed-estuary coupling: Biological, chemical, and isotopic evidence
1999 Estuarine Research Federation, New Orleans, Conference-Revised habitat requirements, restoration goals, and accompanying diagnostic tools for Chesapeake Bay submersed aquatic vegetation

PUBLIC OUTREACH

I believe it is essential to communicate science with stakeholders, including environmental managers, policy-makers, and the public, in order to help conserve and protect natural coastal habitats. As a scientist, I am driven by environmental challenges and new research questions with the goal of providing solutions that can be applied to coastal management and protection. Throughout my education and scientific career, I have been actively involved in public outreach and education through various activities including outdoor education programs for different school ages as well as a citizen water quality and seagrass monitoring program within the Chesapeake Bay region. These earlier experiences helped shape my perspective on public service outreach and extension which continued to develop throughout my PhD, post-doctoral, and research group activities.

Specific activities
2026 *Invited talk:* Cultivating **resilien**t Zostera plantlets in lab and nursery for **sea**grass restoration, NRCS Critical Habitat Restoration Training Waquoit Bay NERR, MA
2026 *Invited talk*: Ecology of West Falmouth Harbor, West Falmouth Library, MA
2026 *Guest talk* on seagrass ecology and restoration, Woods Hole Science School
2026 Woods Hole Science Stroll, table on seagrass and seaweed morphology
2026 *Invited talk:* Shared solutions for stronger coasts and communities: Testing seed-based

methods for plant propagation to overcome challenges in seagrass recovery and restoration in West Falmouth Harbor, 2026 Cape Coastal Conference, Hyannis, MA
2025 Woods Hole Science Stroll, table on seagrass and seaweed morphology
2025 *Interviewed in* Pulitzers Center, Short Film, *Troubled Waters: New England Fisheries under Threat*
2025 *Interviewed in* WBUR National Public Radio, *Saving eelgrass, the most important plant you've likely never heard of* https://www.wbur.org/news/2025/01/16/massachusetts-eelgrass-seagrass-climate-change-new-england-carbon
2024 *Invited guest* Waquoit Bay Benthic Mapping Workshop, July 17
2024 *Invited guest* The Nature Conservancy (TNC) California Seagrass Restoration—May 23-24 Workshop
2024 Woods Hole Science Stroll, table on seagrass and seaweed morphology
2023 *Invited speaker*, Highfield Hall, Falmouth, *Challenges and opportunities for seagrass recovery and restoration around Cape Cod*
2023 Woods Hole Science School visit to MBL, seagrass ecology presentation to 10th grade level students
2023 Waquoit Bay Science School presentation to 5-6th grade summer course on seagrasses and seaweeds
2023 Lawrence School 7th grade class presentation on seagrasses and seaweeds
2019 "Seagrass for Life" stakeholder workshop and education event in Zanzibar, Tanzania 16th November, 2018. https://www.leibniz-zmt.de/en/news-at-zmt/news/overview/seagrass-for-life-workshop-in-zanzibar.html
2018 Research on use of algae featured in newspaper article "Schätze des Meeres" in Weser Kurier, 25th May, 2018, Bremen.
2018 Scientific coordination of Marine Bioeconomy Networking Event-Science meets Business
2016 Participation in stakeholder workshop, Final Symposium, Sustainable Use of Aquatic Systems, Zanzibar, Tanzania
2016 Participation in stakeholder workshop, Final Conference, Science for the Protection of the Indonesia Coastal Ecosystem (SPICE), Bali, Indonesia
2015 Coordinated science day program on coral reefs of Spermonde Archipelago for the local children on Barrang Lompo Island, SPICE, Makassar, Indonesia http://spice.zmt-bremen.com/bbcms/site5.php?id=114&pid=380&lng=1#
2015 Participation in stakeholder workshop, Sustainable Marine Areas Between resource use and conservation, the example Savu Sea, SPICE, Kupang, Indonesia
2009 Short Film, Deutsche Welle, Tomorrow Today, Brilliant Minds http://www.dw.com/en/mirta-teichberg-usa/a-3810541
2007 Eutrophication Status Workshop for U.S. NOAA NERR estuaries leading to the development of synthesis for NOAA Coastal Ocean Program Decision Analysis Series
1998-2000 EPA Chesapeake Bay Program (MD, USA)-coordinated meetings among scientists, managers, and policy-makers on issues concerning conservation of living resources and contributed to technical synthesis on habitat requirements of submerged aquatic vegetation in the Chesapeake Bay
1998 Environmental education program, Solomons Environmental and Archaeological Research Consortium, MD, USA
1998 Environmental education program, Bright Futures College Simulation, MD, USA
1998 Seagrass transplantation restoration project, St. Mary's River, MD, USA
1997-1998 Volunteer in Water Quality Citizen Monitoring Program, St. Mary's City, MD, USA
1995 Volunteer as Interpreter, Great Falls National Park, VA, USA
1994 Environmental education program, Jr Ranger Program, Great Falls National Park, VA, USA
1993 Volunteer Meadowside Nature Center, MD, USA