

# CURRICULUM VITAE

## MARIA PACHIADAKI

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Biology Department  
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Assistant Scientist  
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### EDUCATION

University of Crete, Greece — Ph.D Chemistry 2006 -2010

University of Athens, Greece — M.Sc Biological Oceanography 2002-2005

University of Athens, Greece — B.Sc Biology 1994-1999

### RESEARCH AND PROFESSIONAL EXPERIENCE

ASSISTANT SCIENTIST, WOODS HOLE OCEANOGRAPHIC INSTITUTION, USA, 2018-present

POSTDOCTORAL INVESTIGATOR, BIGELOW LABORATORY FOR OCEAN SCIENCES, USA, 2015-2018. 1) Dimensions of Biodiversity Collaborative Research: An Integrated Study of Energy Metabolism, Carbon Fixation, and Colonization Mechanisms in Chemosynthetic Microbial Communities at Deep-Sea Vents, 2) Collaborative research: Untangling the Deep Genealogy of Microbial Dark Matter, 3) Ocean's dark energy: Global inventory of chemoautotrophs in the aphotic realm. Dr. Ramunas Stepanauskas. National Science Foundation.

GUEST INVESTIGATOR, WOODS HOLE OCEANOGRAPHIC INSTITUTION (WHOI), USA, 2015-2018. MetaOmics in the Cariaco Basin (subaward).

POSTDOCTORAL INVESTIGATOR, WOODS HOLE OCEANOGRAPHIC INSTITUTION (WHOI), USA, 2014-2015. 1) Collaborative Research: Genetic and Metabolic Signatures of Marine Microorganisms in Oxygen Depleted and Varying Geochemical Seascapes. Dr. Virginia Edgcomb, Dr. Craig Taylor and Prof. Gordon Taylor. National Science Foundation. 2) Co-PI, Exploring the ecological role(s) of marine Fungi. Center for Dark Energy Biosphere Investigations (C-DEBI).

POSTDOCTORAL SCHOLAR, WHOI, USA, 2012-2014. 1) Pickled Protists or Community Uniquely Adapted to Hypersalinity? 2) SID/ISMS, An Autonomous Instrument for Combined *In Situ* Tracer Incubation Studies and Preservation of Microbial Samples for Genomic, Transcriptomic and Proteomic Analysis. Drs. Virginia Edgcomb and Craig Taylor. National Science Foundation.

POSTDOCTORAL RESEARCH ASSOCIATE, UNIVERSITY OF KAISERSLAUTERN, GERMANY, 2011-2012. EUROCORES DEEP C program: A (meta)genomic investigation of deep-sea primary production and ecosystem functioning. Dr. Michail Yakimov and Prof. Thorsten Stoeck. European Science Foundation and Deutsche Forschungsgemeinschaft (DFG).

RESEARCH ASSISTANT, UNIVERSITY OF THESSALY, GREECE, 2010-2011. Seventh Framework Program (FP7) HERMIONE; Hotspot Ecosystem Research and Man's Impact on European Seas. Prof. Konstantinos Kormas. European Commission.

RESEARCH ASSISTANT, UNIVERSITY OF CRETE, GREECE, 2006-2010. PhD thesis 'Molecular and biogeochemical characterization of the microorganisms involved in the Anaerobic Oxidation of Methane and Methanogenesis in gas hydrate sediments of the Eastern

Mediterranean Sea'. Prof. Euripides Stephanou and Prof. Konstantinos Kormas. General Secretariat of Research and Technology, Greece.

RESEARCH CONSULTANT, UNIVERSITY OF THESSALY, GREECE, 2007. MunServNet, INTERREG III C. 'Improving Sustainability of Municipal Service Provision in the Field of Water and Wastewater Management', Prof. Konstantinos Kormas. European Union (European Regional Development Fund).

RESEARCH ASSISTANT, UNIVERSITY OF ATHENS, GREECE, 2001-2002. 'Disorders of erythrocyte proteins in hereditary and acquired hematological diseases in Greek population'. Prof. Isidora Papisideri. General Secretariat of Research and Technology, Greece.

## **GRANTS, SCHOLARSHIPS AND AWARDS**

Independent Research & Development Award, Woods Hole Oceanographic Institution: "Microbial Genomes of the Twilight Zone (and below)", 2018

Woods Hole Oceanographic Institution (Subaward NSF OCE-1336081): "Collaborative research: Genetic and Metabolic Signatures of Marine Microorganisms in Oxygen Depleted and Varying Geochemical Seascapes", 2015

Center for Dark Energy Biosphere Investigations Research Grant (co-PI), "Exploring the ecological role(s) of marine fungi in the deep seafloor", 2014

Deep Carbon Observatory Research Grant, "Exploration of fungal activities in the deep seafloor", 2014 - 2015

Woods Hole Oceanographic Institution Postdoctoral Scholarship (USA), 2012-2014

Hellenic Center of Marine Research scholarship for graduate studies (Greece), 2006-2009

State Scholarship Foundation Academic Excellence Award in Biological Oceanography studies (Greece), 2003-2005

ERASMUS fellow, University of Paris VI, Pierre and Marie Curie, France, 1999

State Scholarship Foundation Academic Excellence Award for undergraduate performance (Greece), 1995-1998

State Scholarship Foundation Award for excellence in the National Higher Education Entrance Examinations, 1994

## **PUBLICATIONS (\*DENOTES STUDENT MENTEE)**

Torres-Beltrán M, Mueller A, Scofield M, Pachiadaki M, Taylor C, Tyshchenko K, Michiels C, Lam P, Ulloa O, Jürgens K, Jyun J-H, Edgcomb V P, Crowe S A, Hallam S J (2019). Sampling and processing methods impact microbial community structure and potential activity in a seasonally anoxic fjord: Saanich Inlet, British Columbia. *Frontiers in Marine Sciences* 6: 132

Torres-Beltrán M, Sehein T, **Pachiadaki M**, Hallam SJ, Edgcomb V (2018). Protistan parasites along oxygen gradients in a seasonally anoxic fjord: a network approach to assessing potential host-parasite interactions. *Deep Sea Research II Topical Studies in Oceanography* 156, 97-110

Bergauer K, Fernandez-Guerra A, Garcia JA, Sprenger RR, Stepanauskas R, **Pachiadaki MG**, Jensen ON, Herndl GJ (2018). Organic matter processing by microbial communities through the Atlantic water column as revealed by metaproteomics. *PNAS* 115 (3): 400-408

#Suter EA, #**Pachiadaki MG**, Edgcomb VP, Astor Y, Taylor GT (2018). Free-living chemoautotrophic and particle-attached heterotrophic prokaryotes dominate microbial assemblages along a pelagic redox gradient. *Environmental Microbiology* 20 (2): 693-712

- Taylor GT, Suter EA, **Pachiadaki MG**, Astor Y, Edgcomb VP, Scranton MI (2018). Temporal shifts in dominant sulfur-oxidizing chemoautotrophic populations across Cariaco basin's redoxcline. *Deep Sea Research II Topical Studies in Oceanography* 156, 80-96
- Pachiadaki MG**, Sintés E, Bergauer K, Brown JM, Record NR, Swan BK, Mathyer ME, Hallam SJ, Lopez-Garcia P, Takaki Y, Nunoura T, Woyke T, Herndl GJ, Stepanauskas R (2017). Major role of nitrite-oxidizing bacteria in dark ocean carbon fixation. *Science* 358 (6366): 1046-1051
- Stepanauskas R, Fergusson EA, Brown J, Poulton NJ, Tupper B, Labonté JM, Becraft ED, Brown JM, **Pachiadaki MG**, Povilaitis T, Thompson BP, Mascena CJ, Bellows WK, Lubys A (2017). Improved genomic DNA amplification from individual, uncultured microbial cells and viral particles. *Nature Communications* 8: 84.
- Medina LE, Taylor CD, **Pachiadaki MG**, Henríquez-Castillo C, Ulloa O, Edgcomb VP (2017). A review of protist grazing below the photic zone emphasizing studies of oxygen-depleted water columns and recent application of in situ approaches. *Frontiers in Marine Sciences* 4: 105
- Pachiadaki MG**, Rédou V, Beaudoin DJ, Burgaud G, Edgcomb VP (2016). Fungal and prokaryotic activities in the marine subsurface biosphere at Peru Margin and Canterbury Basin inferred from RNA-based analyses and microscopy. *Frontiers in Microbiology* 7: 846
- Edgcomb VP, **Pachiadaki MG**, Mara P, Kormas KA, Leadbetter ER (2016). Gene expression profiling of microbial activities and interactions in sediments under haloclines of E. Mediterranean deep hypersaline anoxic basins. *The ISME Journal* 10: 2643-2657
- Edgcomb V, Taylor C, **Pachiadaki MG**, Honjo S, Engstrom I, Yakimov M (2016) Comparison of Niskin vs. in situ approaches for analysis of gene expression in deep Mediterranean Sea water samples. *Deep-Sea Research II* 129: 213-222
- Pachiadaki MG**, Taylor C, Oikonomou A, Yakimov M, Stoeck T, Edgcomb V (2016). *In situ* grazing experiments apply new technology to gain insights into deep-sea microbial food webs. *Deep-Sea Research II* 129: 223-231
- Bernhard JM, Morrison CR, Pape E, Beaudoin DJ, Todaro A, **Pachiadaki MG**, Kormas KA, Edgcomb VP (2015). Metazoans of redoxcline sediments in Mediterranean deep-sea hypersaline anoxic basins. *BMC biology* 13(1): 1
- Kormas KA, **Pachiadaki MG**, Karayanni H, Leadbetter ER, Bernhard JM, Edgcomb VP (2015). Inter-comparison of the potentially active prokaryotic communities in the halocline sediments of Mediterranean deep-sea hypersaline basins. *Extremophiles* 19(5), 949-960
- \*Duret M, **Pachiadaki MG**, Stewart FJ, Sarode N, Christaki U, Monchy S, Edgcomb VP (2015). Size-fractionated diversity of eukaryotic microbial communities in the Eastern Tropical North Pacific oxygen minimum zone. *FEMS Microbiology Ecology* 91 (5), fiv037
- \*#Rocke E, #**Pachiadaki MG**, Cobban A, Kujawinski EB, Edgcomb V (2015). Protist community grazing on prokaryotic prey in deep ocean water masses. *PLOS One* 10 (4), e0124505
- Gong J, Shi F, Ma B, Dong J, **Pachiadaki M**, Zhang X, Edgcomb VP (2015) Depth dictates  $\alpha$ - and  $\beta$ -diversities of microbial eukaryotes in near-surface sediments of a coastal ecosystem. *Environmental Microbiology* 17 (10): 3722-3737
- Taylor CD, Edgcomb VP, Doherty KW, Engstrom I, Shanahan T, **Pachiadaki MG**, Molyneux SJ, Honjo S (2015). Fixation Filter, device for the rapid *in situ* preservation of particulate samples. *Deep-Sea Research I* 96: 69-79
- Pánek T, Táborský P, **Pachiadaki MG**, Hroudová M, Vlček C, Edgcomb VP, Čepička I (2015). Combined Culture-Based and Culture-Independent Approaches Provide Insights into Diversity of Jakobids, an Extremely Plesiomorphic Eukaryotic Lineage. *Frontiers in Microbiology* 6: 1288

- Pachiadaki MG**, Leadbetter E, Yakimov M, LaCono V, Edgcomb V (2014) Unveiling microbial activities along the halocline of Thetis, a deep-sea hypersaline anoxic basin. *The ISME Journal* 8: 2478–2489
- \*Redou V, Ciobanu MC, Dufresne A, Vandenkoornhuysen P, **Pachiadaki MG**, Edgcomb V, Alain K, Barbier G, Burgaud G (2014). In-depth analyses of deep subsurface sediments using 454-pyrosequencing revealed a reservoir of buried fungal communities *FEMS Microbiology Ecology* 90 (3), 908-921
- Bernhard JM, Kormas K, **Pachiadaki MG**, Rocke E, Beaudoin DJ, Morrison C, Visscher PT, Cobban A, Starczak VR, Edgcomb VP. Benthic protists and fungi of Mediterranean deep hypersaline anoxic basin redoxcline sediments. *Frontiers in Extreme Microbiology* 5: 605
- Edgcomb V and **Pachiadaki M** (2014) Ciliates along oxyclines of permanently stratified marine water columns. *Journal of Eukaryotic Microbiology* 61(4): 434-445
- \*Oikomonou A, **Pachiadaki M**, Stoeck T (2014). Protistan grazing in a meromictic freshwater lake with anoxic bottom water. *FEMS Microbiology Ecology* 87(3): 691-703
- Stoeck T, Filker S, Edgcomb V, Orsi W, Yakimov M, **Pachiadaki M**, Breiner H-W, LaCono V, Stock A (2014). Living at the limits: Evidence for microbial eukaryotes thriving under pressure in deep anoxic, hypersaline habitats. *Advances in Ecology* 2014 (dx.doi.org/10.1155/2014/532687)
- Pachiadaki MG** & Kormas KA (2013) Interconnectivity vs. isolation of prokaryotic communities in European deep-sea mud volcanoes. *Biogeosciences* 10 (5): 2821-2831
- Vlahos N, Kormas KA, **Pachiadaki MG**, Meziti A, Hotos GN, Mente E (2013) Changes of bacterioplankton apparent species richness in two ornamental fish aquaria. *SpringerPlus* 2 (1): 66
- Lamprinou V, Hernandez-Marine M, **Pachiadaki MG**, Kormas KA, Economou-Amilli A, Pantazidou A (2012). New findings on the true-branched monotypic genus *Iphone* (Cyanobacteria) from geographically isolated caves (Greece). *Fottea* 13: 15-23
- Akoumianaki I, Nomaki H, **Pachiadaki MG**, Kormas KA, Kitazato H, Tokuyama H (2012). Low bacterial diversity and high labile organic matter concentrations in the sediments of the Medee deep-sea hypersaline anoxic basin. *Microbes and Environment* 27: 504-508
- Stock A, Breiner HW, **Pachiadaki MG**, Edgcomb V, Filker S, La Cono V, Yakimov MM, Stoeck T (2012) Microbial eukaryote life in the new hypersaline deep-sea basin Thetis. *Extremophiles* 16: 21-34
- Pachiadaki MG**, Kallionaki A, Dählmann A, De Lange GJ, Kormas KA (2011) Diversity and spatial distribution of prokaryotic communities along a sediment vertical profile of a deep-sea mud volcano. *Microbial Ecology* 62: 655-668
- Pachiadaki MG**, Lykousis V, Stefanou EG, Kormas KA (2010) Prokaryotic community structure and diversity in the sediments of an active submarine mud volcano (Kazan mud volcano, East Mediterranean Sea). *FEMS Microbiology Ecology* 72: 429-444
- Kormas KA, Neophytou C, **Pachiadaki M**, Koufostathi E. (2010) Changes of the bacterial assemblages throughout an urban drinking water distribution system. *Environmental Monitoring and Assessment* 165: 27-38
- Vanreusel A, Andersen A, Boetius A, Connelly D, Cunha MR, Decker C, Heeschen K, Hilario A, Kormas AK, Maignien L, Olu K, **Pachiadaki M**, Ritt B, Rodrigues C, Sarrazin J, Tyler P, Van Gaever S and Vanneste H. (2009) Biodiversity of cold seep ecosystems along the European margins. *Oceanography* 22 (1): 110-127

(#shared first author position)

## INVITED TALKS

- 2017 WHOI Seminar, USA, Biology Department. The dark side of the ocean: understanding the microbiome of the ocean's aphotic realm.
- 2016 NIOZ Seminar, Texel, The Netherlands. Elucidating the dark ocean microbiome, one cell at a time.  
Soehngen Institute of Anaerobic Microbiology (SIAM) summer school, Texel, The Netherlands. Reading nature's genomic tales, one cell at a time.
- 2015 Gordon Research Symposium, Marine Molecular Ecology, Hong-Kong. From -omics to marine microbial stories: tools and challenges.
- 2013 WHOI Seminar, USA, Geology and Geophysics Department. Lessons learned from oxygen-depleted marine systems.
- 2012 Aristotle University of Thessaloniki, Greece, Biology Department. Next generation sequencing technologies; Fascinating stories from our microbial world.

## ABSTRACTS (LAST THREE YEARS)

- Pachiadaki M**, Brown JM, Brown JM, Berube P, Biller S, Chisholm S, Stepanauskas R. Global ocean reference genomes (GORG) Database. ASLO/Ocean Sciences Meeting, Portland, Oregon, USA, 2018
- Chen ML, Becraft ED, **Pachiadaki M**, Stepanauskas R. Hiding in plain sight: the globally distributed bacterial candidate phylum "Profundimicrobia". ASLO/Ocean Sciences Meeting, Portland, Oregon, USA, 2018
- Stepanauskas R, Sintes E, **Pachiadaki M**, Poulton N, Bergauer K, Orcutt B Herndl GJ. Integrated single-cell genomics and cell-specific rate measurements for improved ecosystem modeling. ASLO/Ocean Sciences Meeting, Portland, Oregon, USA, 2018
- Scranton MI, Bruchert V, Edgcomb V, **Pachiadaki M**, Suter E, Taylor GT. Cryptic sulfur cycling in the Cariaco Basin. ASLO/Ocean Sciences Meeting, Portland, Oregon, USA, 2018
- Suter EA, **Pachiadaki M**, Edgcomb V, Scranton MI, Taylor GT. Particle-associated microbes contribute to cryptic cycling of sulfur and nitrogen. ASLO 2017, Honolulu, Hawaii, USA, 2014
- Holman JM, **Pachiadaki M**, Becraft ED, Stepanauskas R. The ecology and evolution of a recently discovered, highly diverse, and globally distributed microbial dark matter archaeal phylum—Woesearchaeota. ASLO 2017, Honolulu, Hawaii, USA, 2014
- Pachiadaki MG**, Sintes E, Bergauer K, Herndl G, Stepanauskas R. Revisiting the role of Nitrite-Oxidizing Bacteria. 16<sup>th</sup> International Society of Microbial Ecology, Montreal, 2016
- Pachiadaki MG**, Mc Nichol J, Labonté J, Sievert S, Stepanauskas R. Single Cell Genomics of Chemoautotrophs from diffuse flow Hydrothermal Vents. National Science Foundation Dimensions of Biodiversity Meeting, Arlington, 2016
- Pachiadaki MG**, Edgcomb VP, Taylor GT, Suter EA. Chemoautotrophy: Discerning the Key Players from the Cariaco Redoxcline Crime Scene Lineup of Suspects. ASLO/Ocean Sciences Meeting, New Orleans, 2016
- Suter EA, **Pachiadaki MG**, Edgcomb VP, Scranton MI, Taylor GT. Redox Conditions and Microbial Particle Association: A Multi-Year Study in the Cariaco Basin. ASLO/Ocean Sciences Meeting, New Orleans, 2016
- Pachiadaki MG**, Mc Nichol J, Labonté J, Sievert S, Stepanauskas R. Single Cell Genomics of Chemoautotrophs from diffuse flow Hydrothermal Vents. Gordon Research Conference: Marine Molecular Ecology, Hong Kong, 2015
- Beinard R, **Pachiadaki MG**, Bernhard JM, Leadbetter ER, Edgcomb VP. Insights into the metabolic functioning of a multi-partner ciliate symbiosis from oxygen-depleted

sediments. Gordon Research Conference: Animal-Microbe Symbioses, Waterville Valley, 2015

**Pachiadaki MG**, Suter EA, Taylor C, Montes E, Taylor GT, Edgcomb VP. Polyphasic approach to microbial processes and interactions along a stable marine reoxcline. ASLO, Granada, 2015.

Beinard R, **Pachiadaki MG**, Bernhard JM, Leadbetter ER, Edgcomb VP. Insights into the metabolic functioning of a multi-partner ciliate symbiosis from oxygen-depleted sediments. ASLO, Granada, 2015

Suter EA, Montes E, **Pachiadaki M**, Edgcomb VP, Taylor GT. Assessing nitrogen loss from the Cariaco basin using  $^{15}\text{N}$  isotopic pairing and gene expression approaches. ASLO, Granada, 2015

Edgcomb VP, **Pachiadaki MG**, Kormas KA, Taylor C, Bernhard JM. Cross-domain microbial interactions and processes in deep hypersaline anoxic basin water columns and sediments. ASLO, Granada, 2015

**Pachiadaki MG**, Burgaud G, Edgcomb VP. Exploring the ecological role(s) of marine fungi in the deep seafloor. C-DEBI Annual Meeting, Monterey, October 2014

## PROFESSIONAL AFFILIATIONS

International Society for Microbial Ecology

Association for the Sciences of Limnology and Oceanography

American Geophysical Union

American Society of Microbiology

## PROFESSIONAL ACTIVITIES

Associate Member, Science Scientific Committee on Oceanic Research (SCOR) Working Group on Microbial Community Responses to Ocean Deoxygenation (2014-2019)

Review Editor, *Frontiers in Microbiology* (Sections Extreme Microbiology; and Evolutionary and Genomics Microbiology)

Manuscript Reviewer (*The ISME Journal*, *Microbial Ecology*, *Frontiers in Microbiology*, *Environmental Microbiology*, *Environmental Microbiology Reports*, *Journal of Eukaryotic Microbiology*, *Marine Pollution Bulletin*, *Geobiology*)

Session co-organizer, AGU Fall Meeting 2015, "Follow the Fluids: Integrating Multidisciplinary Observations of Deep-Sea Hydrothermal Systems"

## TEACHING EXPERIENCE

Teaching assistant, Workshop on Genomics, Cesky Krumlov, Czech Republic, January 2017

Teaching assistant, Colby College, Changing Oceans, Fall Semester 2016

Substitute teacher, Falmouth Academy, 7<sup>th</sup> Grade Science, April 2015

Teaching assistant, summer molecular microbiology workshop, WHOI, July 2013, and 2014. Three-day intensive workshop at WHOI for high school students hosted by the Advanced Biotechnology Institute, Roxbury Latin School, Boston, MA

Teaching assistant, University of Thessaly, Greece, 2007-2010. Microbiology and Microbial Ecology

Teaching assistant, University of Athens, Greece, 2002-2005. Biological Oceanography, Introduction to Biological Oceanography (graduate level) and Marine Ecophysiology (graduate level)

Tutor for high school students, Athens, Greece, 2001-2005. Biology, Chemistry, Life Sciences, Physics and Mathematics

### **STUDENT CO-SUPERVISION**

Michael Chen, REU Summer Student, Bigelow Laboratory for Ocean Sciences, 2017  
Johanna Holman, REU Summer Student, Bigelow Laboratory for Ocean Sciences, 2016  
Andreas Oikonomou, PhD Thesis, University of Kaiserslautern, Germany, 2011-2015  
Elizabeth Suter, part of PhD Thesis, Stony Brook University and WHOI, USA, 2014  
Manon Duret, Master Thesis, L'Université du Littoral Côte D'Opale, France and WHOI, USA, 2014  
Vanessa Redou, part of PhD Thesis, Université de Bretagne Occidentale, France and WHOI, USA, 2014  
Alec Cobban, High school student Intern from Falmouth Academy, Falmouth MA, 2013-2015  
Emma Rocke, WHOI, USA, 2013  
Petridou Euanthia, Undergraduate and Master Thesis, University of Thessaly, Greece, 2009-2010  
Ioannis Gougas, Undergraduate and Master Thesis, University of Thessaly, Greece, 2008-2009

### **NEW TECHNOLOGY DEVELOPMENT**

Contributed to development and testing of new technology for *in situ* studies in marine microbial ecology, the Microbial Sampler – *In Situ* Incubation Device (MS-SID) together with Craig Taylor (WHOI Biology), Virginia Edgcomb (WHOI Geology&Geophysics) and McLane Research Laboratories, E. Falmouth, MA.

### **WORKSHOPS AND TRAINING COURSES**

2013 Marine Omics, Joint EU-US Theoretical and Practical Training Course on Marine Bioinformatics, Delaware Biotechnology Institute in Newark, Delaware, USA  
2012 STAMPS (Strategies and Techniques for Analyzing Microbial Population Structure) Course, Marine Biological Laboratory, Woods Hole, USA  
8th Marine Ecological & Evolutionary Genomics Summer Course, Roscoff, France  
2010 MicrobeGR Workshop 'MicroBioWorld and DNA microarrays: from theory to practice', Agrinio, Greece (Laboratory of Molecular Biology and Biochemistry, Department of Environmental Management, University of Ioannina)  
2009 Workshop on Molecular Evolution, Europe, Czech Republic  
2008 ECORD Summer School on 'The Deep Seafloor Biosphere', Bremen, Germany (Bremen International Graduate School for Marine Sciences „Global Change in the Marine Realm“, MARUM Organic Geochemistry Group and IODP Bremen Core Repository)  
International Workshop on ribosomal RNA technology, Bremen, Germany (Max-Planck Institute for Marine Microbiology, Bremen)  
MarBEF FISH (Fluorescent In Situ Hybridization) Training Course, Banyuls/mer, France (Laboratoire ARAGO, Station Biologique de Roscoff and MARBEF)  
2006 Advanced Organic Biogeochemistry course, Royal Netherlands Institute for Sea Research, Texel (Netherlands Bremen Oceanography Cooperation and European Graduate School in Marine Sciences)

### **OCEANOGRAPHIC EXPEDITIONS**

2014 CARIACO, CAR-216.2, MetaOmics cruise (Chief Scientist: Dr. Virginia Edgcomb)

- CARIACO, CAR-216.3, Time-series cruise (Chief Scientist: Prof. Gordon T. Taylor)  
 CARIACO, CAR-212.2, MetaOmics cruise (Chief Scientist: Dr. Virginia Edgcomb)  
 SCOR, Saanich Inlet cruise, University of British Columbia, Canada (Chief Scientist: Prof. Steven Hallam)
- 2012 MICRODEEP cruise, IAMC-CNR Messina (Chief Scientist: Dr. Michail Yakimov)  
 2011 MEDITERRANEAN DEEP BRINES, WHOI, USA (Chief Scientist: Dr. Virginia Edgcomb)  
 MAMBA\_C 11 cruise, IAMC-CNR Messina (Chief Scientist: Dr. Michail Yakimov)  
 2010 MAMBA 10 cruise, IAMC-CNR Messina (Chief Scientist: Dr. Michail Yakimov)  
 2009 PICKLED PROTISTS cruise, WHOI, USA (Chief Scientist: Dr. Virginia Edgcomb)  
 2007 MEDECO cruise, Leg 1, IFREMER, France (Chief Scientist: Dr. Jozée Sarrazin)  
 2005 HERMES 2nd cruise, HCMR, Greece (Chief Scientist: Dr. Vasilios Lykousis)

### **SYNERGISTIC ACTIVITIES**

- Member of WHOI Postdoctoral Association, 2014 - 2015  
 Fieldwork assistant for project investigating the impacts of oyster aquaculture on sediment denitrification processes in Cape Cod waters, 2014  
 Judge, AGU Fall Meeting; Poster Session, San Francisco, CA, 2015  
 Judge, 8<sup>th</sup> BioNES Meeting; Poster Session, Roger William University, Bristol, RI, 2014  
 Judge, Falmouth Academy High School Science Fair, Falmouth, MA, 2014  
 Intern supervisor, Falmouth Academy – WHOI Intern Program, 2013-2015  
 Instructor in annual summer 3-day workshop on Marine Biotechnology for high school students, offered through the Weston High School Advanced Biotechnology Institute, 2013-2014  
 Mentor, Lawrence High School Science Fair, Falmouth, MA, 2013  
 Cruise based public outreach: Dive & Discover – Expedition 14 Mediterranean Deep Brines, 2011  
 Marine Genomics of Europe Working Group - An Ocean of Techniques, Kolympari, Greece, 2007

### **OTHER ACTIVITIES**

- Open Water and Advanced Open Water Scuba Diving Certifications (PADI)  
 Nitrox Diving Certification (NOAA, WHOI)  
 Scientific Diving Certification (NOAA, WHOI)