

Curriculum Vitae

Prof. Dr. William D. Orsi

Department of Earth and Environmental Sciences

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University website: <https://www.en.palaeontologie.geowissenschaften.uni-muenchen.de/personen/professuren/orsi/index.html>

Lab website: www.orsigeomicrobiologylab.com

Positions

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| 2020-Present | Professor (with Tenure) of Geomicrobiology, Department of Earth and Environmental Sciences, Paleontology and Geobiology, Ludwig-Maximilians-Universität (LMU) München |
| 2016-2020 | Associate Professor (Tenure Track) of Geomicrobiology, Department of Earth and Environmental Sciences, Paleontology and Geobiology, Ludwig-Maximilians-Universität (LMU) München |
| 2014-2015 | Postdoctoral Investigator, Department of Marine Chemistry and Geochemistry, Woods Hole Oceanographic Institution (WHOI) |
| 2013-2014 | Assistant Research Scientist, Horn Point Laboratory, University of Maryland Center for Environmental Sciences (UMCES) |
| 2011-2013 | Postdoctoral Fellow, Department of Geology and Geophysics, Woods Hole Oceanographic Institution (WHOI) |

Education

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| 2006-2011 | Ph.D. in Biology, Northeastern University |
| 2002-2006 | B.S. in Biology with honors, Temple University |

University service and leadership experience

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| 2019-2022 | Dean of Students for the Faculty of Geoscience at LMU Munich (Department of Earth and Environmental Science). |
| 2017-2024 | Vice Director for Department of Earth and Environmental Science, LMU Munich |
| 2017-present | Director of the Mentoring Program at LMU Munich (Faculty of Geoscience). |
| 2022-present | Chair of the executive committee for the Munich GeoCenter |

Research Awards

- 2025-2028 German National Research Foundation (DFG) grant awarded (€ 248,230): **“The deep biosphere below the Baltic Sea seafloor”**. Principle Investigator: **William Orsi**.
- 2025-2028 German National Research Foundation (DFG) grant awarded (€ 302,400): **“Ribozyme trapping in ferruginous chemical gardens”**. Principle Investigator: **William Orsi**.
- 2023-2026 German National Research Foundation (DFG) grant awarded (€ 247,477): **“Investigating the food chain from magnetotactic bacteria to protozoa under laboratory and environmental conditions”**. Principle Investigator: **William Orsi**.
- 2023-2026 German National Research Foundation (DFG) grant awarded (€ 260,000): **“Testing the habitability of simulated Hadean hydrothermal vent ecosystems”**. Principle Investigator: **William Orsi**.
- 2022-2025 German National Research Foundation (DFG) grant awarded (€ 565,000): **“Illuminating the ecology of marine fungi using quantitative stable isotope probing”**. Principle Investigator: **William Orsi**.
- 2021-2022 DFG Excellence Initiative Investitionsfonds Award (€ 100,000): **“Radiolysis and deep life”**. Principle Investigator: **William Orsi**.
- 2018-2021 German National Research Foundation (DFG) grant awarded (€ 617,000): **“Tracing primordial metabolism reflected by microorganisms at hydrothermal vents”**. Co-Principle Investigator: **William Orsi**.
- 2017-2020 German National Research Foundation (DFG) grant awarded (€ 360,000): **“Aerobic microbial activity in deep sea abyssal clay”**. Principle Investigator: **William Orsi**.
- 2018-2019 German National Research Foundation (DFG) grant awarded (€ 24,000): **“Characterizing the activity of the mycoplankton and mycobenthos in the Benguela upwelling system”**. Principle Investigator: **William Orsi**.
- 2016-2017 Junior Researcher Award (DFG excellence initiative) research grant awarded (€ 50,000): **“Genome evolution over geological timescales in marine sediment”**

Research Interests

- *Geobiology*: Anaerobic microbiology, deep biosphere
- *Biogeochemistry*: Microbial trace greenhouse gas (CO₂, CH₄) cycling
- *Molecular Ecology*: Linking microbial diversity to carbon cycling

Teaching Experience

- 2016-present Advisor for 12 Bachelors Student theses and 15 Masters Student theses
- 2016-present Instructor for the *Global Cycles* Masters course in Geobiology and Paleobiology Program (MGAP), at LMU Munich
- 2016-present Instructor for the *Geomicrobiology* Masters course in Geobiology and Paleobiology Program (MGAP), at LMU Munich
- 2016-present Lecturer and field course instructor for the *Geobiology* undergraduate course, Geoscience Bachelors Program at LMU Munich
- 2016-present Lecturer and field course instructor for the *Marine Geology* undergraduate course, Geoscience Bachelors Program at LMU Munich
- 2016-present Instructor for module *Molecular Methods* Masters course in Geobiology and Paleobiology Program (MGAP), at LMU Munich
- 2016-present Instructor for the *Laboratory Methods* Masters course in Geobiology and Paleobiology Program (MGAP), at LMU Munich
- 2016-present Vice-chair of selection committee for Masters Program in Geobiology and Paleobiology (MGAP), at LMU Munich

Professional Activities and Service

Reviewer for funding agencies:

NSF Biological Oceanography (Bio-OCE) Program
German Research Nation Funding Agency (DFG)
Swiss Science National Funding Agency
ERC Horizon 2017 funding program
Swedish National Academy of Sciences
French National Research Agency (ANR) 'Living Earth'
European Union Marie Curie Postdoctoral Fellowship Program

Reviewer for >20 journals including:

Nature
Nature Microbiology
Nature Reviews Microbiology
Science Advances
Geology

Marine Chemistry
Geobiology
The ISME Journal
Limnology and Oceanography
Applied and Environmental Microbiology
FEMS Microbiology Letters
FEMS Microbial Ecology
BMC Biology

Editor at the following journals:

The ISME Journal
Environmental Microbiology

Publications (*corresponding author)

H-index (June, 2025): 41 (Google Scholar), 36 (Web of Science), 41 (ResearchGate)

Helmbrecht V, Reichelt R, Grohmann D, **Orsi W*** (2025) Simulated early Earth geochemistry fuels a hydrogen-dependent primordial metabolism. *Nature Ecology and Evolution*

<https://doi.org/10.1038/s41559-025-02676-w>

Fierer, N Leung PM, Lappan R, Eisenhofer R, Ricci F, Holland SI, Dragone N, Blackall LL, Dong X, Dorador C, Ferrari BC, Goordial J, Holmes SP, Inagaki F, Korem R, Li SS, Makhalanyane TP, Metcalf JL, Nagarajan N, **Orsi W**, Shanahan ER, Walker A, Weyrich L, Gilbert J, Willis A, Callahan B, Shade A, Parkhill J, Banfield J & Greening C (2025) Guidelines for preventing and reporting contamination in low-biomass microbiome studies. *Nature Microbiology* (doi.org/10.1038/s41564-025-02035-2)

Coskun OK, **Orsi W**, D'Hondt, Gomez-Saez GV (2025) Identifying the active microbes driving organosulfur cycling from taurine and methionine in marine sediment. *ISME Communications* 5, ycaf033 (doi.org/10.1093/ismeco/ycaf033)

Mills DB, Vuillemin A, Muschler K, Coskun Ö, **Orsi W*** (2025) The rise of algae promoted eukaryote predation in the Neoproterozoic benthos. *Science Advances* 11, eadt2147 (DOI:[10.1126/sciadv.adt2147](https://doi.org/10.1126/sciadv.adt2147))

Trejos-Espeleta JC, Marin-Jaramillo JP, Schmidt SK, Sommers P, Bradley JA, **Orsi W*** (2024) Principal role of fungi in soil carbon stabilization during early pedogenesis in the high Arctic. *PNAS* 121 (28) e2402689121.

Coskun OK, Gomez-Saez GV, Beren M, Özcan D, Günay SD, Elkin V, Hoşgörmez H, Einsiedl F, Eisenreich W, **Orsi W*** (2024) Quantifying genome-specific carbon fixation in a 750-meter deep subsurface hydrothermal microbial community. *FEMS Microbiology Ecology* 100(5): fiae062.

Helmbrecht V, Weingart M, Klein F, Braun D, **Orsi W*** (2023) White and green rust chimneys accumulate RNA in a ferruginous chemical garden. *Geobiology* 21: 758-769.

Weingart M, Chen S, Donat C, Helmbrecht V, **Orsi W**, Braun D, Alim K (2023) Alkaline vents recreated in two dimensions to study pH gradients, precipitation morphology, and molecular accumulation. *Science Advances* 9: eadi1884.

Coskun OK, Gomez-Saez GV, Beren M, Ozcan D, Hosgormez H, Einsiedl F, **Orsi W*** (2023) Carbon metabolism and biogeography of candidate phylum “Candidatus Bipolaricaulota” in geothermal environments of Biga Peninsula, Turkey. *Frontiers in Extreme Microbiology* 14: 1063139.

Mincer TJ, Bos ER, Zettler ER, Zhao S, Asbun AA, **Orsi W**, GuzzettaVS, Amaral-Zettler LA (2023) Sargasso Sea *Vibrio* bacteria: Underexplored potential pathovars in a perturbed habitat. *Water Research* 242: 120033.

Orsi W* (2023) A rapid method for measuring ATP+ADP+AMP in marine sediment. *Environmental Microbiology* 2: 1549-1558.

Orsi W and Inagaki F (2023) Decoding geobiological evolution from microbiomes. *Science Advances* 9: eadg5448.

Orsi W* (2022) Quantitative microbial ecology: future challenges and opportunities. *Environmental Microbiology* 25: 91-96.

Vuillemin A, Coskun OK, **Orsi W** (2022) Microbial activities and selection from surface ocean to subseafloor on the Namibian continental shelf. *Applied and Environmental Microbiology* 10: e0021622.

Vargas S, Leiva L, Eitel M, Curdt F, Rohde S, Arnold C, Nickel M, Schupp P, **Orsi W**, Adamska M, Wörheide G (2022) Body-plan reorganization in a sponge correlates with microbiome change. *Molecular Biology and Evolution* 40: msad138.

Michaelis T, Wunderlich A, Coskun OK, **Orsi W**, Baumann T, Einsiedl F (2022) High resolution vertical biogeochemical profiles in the hyporheic zone reveal insights into microbial methane cycling. *Biogeosciences* 19: 4551-4569.

Orsi W*, Vuillemin, Coskun OK, Rodriguez P, Oertel Y, Niggemann J, Mohrholz V, Gomes-Saez G (2022) Carbon assimilating fungi from surface ocean to subseafloor revealed by coupled phylogenetic and stable isotope analysis. *The ISME Journal* 16: 1245-1261.

Coskun OK, Vuillemin A, Schubotz F, Klein F, Sichel SE, Eisenreich W, **Orsi W*** (2022) Quantifying the effects of hydrogen on carbon assimilation in a seafloor microbial community associated with ultramafic rocks. *The ISME Journal* 16: 257-271.

Orsi W*, Magritsch T, Vargas S, Coskun OK, Vuillemin A, Höhna S, Wörheide G, D'Hondt S, Shapiro J, Carini P (2021) Genome evolution in clonal bacterial populations isolated from million-year-old subseafloor sediment. *mBio* 12: e01150-21.

Garber AI, Ramirez GA, McAllister SM, **Orsi W**, D'Hondt S (2021) Cryptic metabolisms in anoxic subseafloor sediment. *Environmental Microbiology Reports* 13: 696-701.

Puzenat V, Escartin J, Martel JE, Barreyre T, Le Moine S, Paraskevi N, Gracias N, Allemand P, Antoniou V, Coskun O, Garcia R, Grandjean P, Jørgensen SL, Magi L, Mandalakis M, Orsi W, Polymenakou P, Schouw A, Vallicrosa G, Vlasopoulos O. (2021) Shallow-water hydrothermalism at Milos (Greece): Nature, distribution, heat fluxes and impact on ecosystems. *Marine Geology* 438; 106521.

E Capo, C Giguet-Covex, A Rouillard, K Nota, P D Heintzman, A Vuillemin, D Ariztegui, F Arnaud, S Belle, S Bertilsson, C Bigler, R Bindler, AG Brown, CL Clarke, SE Crump, D Debroas, G Englund, GF Ficetola, RE Garner, J Gauthier, I Gregory-Eaves, L Heinecke, U Herzsuh, A Ibrahim, V Kisand, KH Kjær, Y Lammers, J Littlefair, E Messenger, ME Monchamp, F Olajos, **W Orsi**, MW Pedersen, DP Rijal, J Rydberg, T Spanbauer, KR Stoof-Leichsenring, P Taberlet, L Talas, C Thomas, DA Walsh, Y Wang, E Willerslev, A van Woerkom, H H Zimmermann, MJL Coolen, LS Epp, I Domaizon, IG Alsos, L Parducci (2021) Lake sedimentary DNA research on past terrestrial and aquatic biodiversity: Overview and recommendations. *Quaternary* 4: 6.

Vuillemin A, Kerrigan Z, D'Hondt S, **Orsi W** (2020) Exploring the abundance, metabolic potential, and gene expression of subseafloor Chloroflexi in million-year-old oxic and anoxic abyssal clay. *FEMS Microbiology Ecology* 96: fiae223.

Vuillemin A, Vargas S, Coskun O, Pockalny R, Murray R, Smith DC, D'Hondt S, **Orsi W*** (2020) Atribacteria reproducing over millions of years in the Atlantic abyssal subseafloor. *mBio* 11:e01937-20.

Orsi W*, Morard R, Vuillemin A, Eitel M, Wörheide G, Milucka J, Kucera M. (2020) Anaerobic metabolism of Foraminifera thriving below the seafloor. *The ISME Journal* 14: 2580-2594.

Orsi W*, Vuillemin A, Rodriguez P, Coskun O, Gomez G, Mohrholz V, Lavik G, Ferdelman T (2020) Metabolic activity analyses demonstrate that Lokiarchaeon exhibits homoacetogenesis in sulfidic marine sediments. *Nature Microbiology* 5: 248–255.

Einsiedl F, Wunderlich A, Sebito M, Coskun ÖK, **Orsi W**, Mayer B (2020) Biogeochemical evidence of anaerobic methane oxidation and anaerobic ammonium oxidation in a stratified lake using stable isotopes. *Biogeosciences* 17: 5149–5161.

Orsi W*, Schink B, Buckel W, Martin WF (2020) Physiological limits to life in anoxic subseafloor sediment. *FEMS Microbiology Reviews* 2: 219-231.

LaRowe DE, Arndt S, Bradley JA, Estes ER, Hoarfrost A, Lang SQ, Lloyd KG, Mahmoudi N, **Orsi W**, Shah Walter SR, Steen AD, Zhao R (2020) The fate of organic carbon in marine sediments – New insights from recent data and analysis. *Earth-Science Reviews* 204: 103146.

Girard EB, Kaliwoda M, Schmahl WW, Wörheide G, **Orsi W*** (2020) Biodegradation of textile waste by marine bacterial communities enhanced by light. *Environmental Microbiology Reports* 12: 406-418.

Vuillemin A, Wankel SD, Coskun OK, Magritsch T, Vargas S, Estes ER, Spivack AJ, Smith DC, Pockalny R, Murray RW, D'Hondt S, **Orsi W*** (2019) Archaea dominate oxic subseafloor communities over multimillion-year timescales. *Science Advances* 5: eaaw4108.

Coskun O, Özen V, Wankel S, **Orsi W*** (2019) Quantifying population specific growth in benthic bacterial communities under low oxygen using H₂¹⁸O. *The ISME Journal* 13, 1546-1559.

Ortega-Arbulu AS, Pichler M, Vuillemin A, **Orsi W*** (2019) Effects of organic matter and low oxygen on the mycobenthos in a coastal lagoon. *Environmental Microbiology* 21: 374-388.

Orsi W* (2018) Ecology and evolution of seafloor and subseafloor microbial communities. *Nature Reviews Microbiology* 16, 671-683. [Recommended by Faculty of 1000]

Coskun OK, Pichler M, Vargas S, Gilder S, **Orsi W*** (2018) Linking uncultivated microbial populations with benthic carbon turnover using quantitative stable isotope probing. *Applied and Environmental Microbiology* 84(18): e01083-18.

Pichler M, Coskun O, Ortega AS, Conci N, Wörheide G, Vargas S, **Orsi W*** (2018) A 16S rRNA gene sequencing and analysis protocol for the Illumina MiniSeq platform. *MicrobiologyOpen* e00611.

Vuillemin A, Horn F, Friese A, Winkel M, Alawi M, Wagner D, Henny C, **Orsi W**, Crowe SA, Kallmeyer J (2018) Metabolic potential of microbial communities from ferruginous sediments. *Environmental Microbiology* 20, 4297-4313.

Vuillemin A, Ariztegui D, Horn F, Kallmeyer J, **Orsi W**, the PASADO Science Team (2018) Microbial community composition along a 50,000 year lacustrine sediment sequence. *FEMS Microbiology Ecology* 94, fyy029.

- Kose SH, Grice K, **Orsi W**, Ballal M, Coolen MJL (2018) Metagenomics of pigmented and cholesterol gallstones: the putative role of bacteria. *Scientific Reports* 8, 11218.
- Giosan L, **Orsi W**, Coolen M, Wuchter C, Dunlea AG, Thirumalai K, Munoz S, Clift PD, Donnelly JP, Galy V, Fuller DQ (2018) Neoglacial climate anomalies and the Harappan Metamorphosis. *Climate of the Past* 14, 1669-1686.
- More KD, **Orsi W**, Galy V, Giosan L, He L, Grice K, Coolen MJL (2018) A 43 kyr record of protist communities and their response to oxygen minimum zone variability in the Northeastern Arabian Sea. *Earth and Planetary Science Letters* 496, 248-256.
- Orsi W***, Richards TA, Francis WR (2018) Predicted microbial secretomes and their target substrates in marine sediments. *Nature Microbiology* 3: 32-37.
- Orsi W***, Wilken S, del Campo J, Heger T, James E, Richards TA, Keeling PJ, Worden AZ, Santoro AE (2018) Identifying protist consumers of photosynthetic picoeukaryotes in the surface ocean using stable isotope probing. *Environmental Microbiology* 20, 815-827
- He K, Gilder SA, **Orsi W**, Zhao X, Petersen N (2017) Constant flux of spatial niche partitioning through high-resolution sampling of magnetotactic bacteria. *Applied and Environmental Microbiology* 83(20) e01382-17.
- Orsi W***, Coolen MJ, Wuchter C, He L, More KD, Irigoien X, Chust G, Johnson C, Hemingway JD, Lee M, Galy V, Giosan L (2017) Climate oscillations reflected in the microbiome of Arabian Sea sediments. *Scientific Reports* 7: 6040.
- Orsi W***, Jørgensen BB, Biddle JF (2016) Transcriptional analysis of sulfate reducing and chemolithoautotrophic sulfur oxidizing bacteria in the deep seafloor. *Environmental Microbiology Reports* 8, 452-460.
- Orsi W***, Smith JM, Liu S, Liu Z, Sakamoto CM, Wilken S, Poirier C, Richards TA, Keeling PJ, Worden AZ, Santoro AE (2016) Diverse, uncultivated bacteria and archaea underlying the cycling of dissolved protein in the ocean. *The ISME Journal* 10, 2158-2173. [Recommended by Faculty of 1000]
- Klein F, Humphris SE, Guo W, Schubotz F, Schwarzenbach EM, **Orsi WD** (2015) Fluid mixing and the deep biosphere of a fossil Lost City-type hydrothermal system at the Iberia Margin. *PNAS* 112, 12036-12041.
- Orsi W***, Richards TA, Santoro AE (2015) Cellular maintenance processes potentially underpin the survival of seafloor fungi over geological timescales. *Estuarine Coastal and Shelf Science* 164: A1-A9.

- Orsi W***, Smith JM, Wilcox HM, Swalwell JE, Carini P, Worden AZ, Santoro AE (2015). Ecophysiology of uncultivated marine euryarchaea is linked to particulate organic matter. *The ISME Journal* 9: 1747-1763.
- Coolen MJL** and **Orsi W**** (2015) The transcriptional response of microbial communities in thawing Alaskan permafrost soils. *Frontiers in Microbiology* 6:197. **Co-first authors.
- Engelhardt T, **Orsi W**, Jørgensen BB (2015) Viral activities and life-cycles in deep subseafloor sediment. *Environmental Microbiology Reports* 7: 868-873..
- Santoro AE, Dupont CL, Richter RA, Craig MT, Carini P, McIlvin MR, Yang Y, **Orsi W**, Moran D, Saito MA (2015). Genomic and proteomic characterization of ‘Candidatus *Nitrosopelagicus brevis*’: an ammonia-oxidizing archaeon from the open ocean. *PNAS* 114:1173-1178.
- Orcutt BN, LaRowe D, Lloyd K, Mills H, **Orsi W**, Reese BK, Sauvage J, Huber JA, Amend J. (2014) IODP deep biosphere research workshop report – a synthesis of recent investigations, and discussion of new research questions and drilling targets. *Scientific Drilling* 2:1-6.
- Stoeck T, Filker S, Edgcomb V, **Orsi W**, Yakimov M, Pachiadaki M, Breiner HW, LaCono V, Stock A. (2014) Living at the limits: Evidence for microbial eukaryotes thriving under pressure in deep anoxic, hypersaline habitats. *Advances in Ecology* doi:10.1155/2014/532687
- Orsi W***, Edgcomb V, Christman G, Biddle J. (2013). Gene expression in the deep biosphere. *Nature* 499: 205-208.
- Coolen MJL, **Orsi W**, Balkema C, Quince C, Harris K, Sylva S, Filipova-Marinova M, Giosan L. (2013). Evolution of the plankton paleome in the Black Sea from the Deglacial to Anthropocene. *PNAS* 110(21): 8609-14.
- Orsi W***, Biddle J, Edgcomb, V. (2013). Deep sequencing of subseafloor eukaryotic rRNA reveals active Fungi across multiple subseafloor provinces. *PLoS ONE* 8(2): e56335.
- Burgaud G, Woehlke S, Redou V, **Orsi W**, Beaudoin D, Barbier G, Biddle J, Edgcomb V. (2013). Deciphering presence and activity of fungal communities in marine sediments using a model estuarine system. *Aquatic Microbial Ecology* 70: 45-62.
- Stock A, Edgcomb V, **Orsi W**, Filker S, Breiner HW, Yakimov M, Stoeck T. (2013). Evidence for isolated evolution of deep-sea ciliate communities through geological separation and environmental selection. *BMC Microbiology* 13:150.
- Edgcomb V, Bernhard J, Summons R, **Orsi W**, Beaudoin D, Visscher P. (2013). Active eukaryotes in microbialites from Highborne Cay, Bahamas, and Hamelin Pool (Shark Bay), Australia. *The ISME Journal*. 8: 418-429.
- Edgcomb V, **Orsi W**, Biddle J. (2013) Fungi in the marine subsurface; In: Kallmeyer, J. and Wagner, D. (eds.), Microbial life of the Deep Biosphere. (in press) De Gruyter, Berlin.
- Orsi W***, Song Y, Hallam S, Edgcomb V. (2012). Effect of oxygen minimum zone formation on

communities of marine protists. *The ISME Journal* 6: 1586-1601.

Orsi W, Edgcomb V, Faria J, Foissner W, Fowle W, Hohmann T, Suarez S, Taylor C, Taylor GT, Vdacny P, Epstein S. (2012). Class Cariacotrichea, a novel ciliate taxon from the anoxic Cariaco Basin, Venezuela; *International Journal of Systematic and Evolutionary Microbiology* 62: 1425-1433.

Orsi W*, Charvet S, Vd'áčný P, Bernhard JM, Edgcomb V. (2012). Prevalence of partnerships between bacteria and ciliates in oxygen-depleted marine water columns. *Frontiers in Extreme Microbiology* 3: 341.

Vdacny P, Bourland W, **Orsi W**, Epstein S, Foissner W. (2012). Genealogical analyses of multiple loci of litostomatean ciliates (Protista, Ciliophora, Litostomatea). *Molecular Phylogenetics and Evolution* 65(2): 397-411.

Filker S, Stock A, Breiner H W, Edgcomb V, **Orsi W**, Yakimov M, Stoeck T. (2012). Environmental selection of protistan plankton communities in hypersaline anoxic deep-sea basins, Eastern Mediterranean Sea. *MicrobiologyOpen* 2(1): 54-63.

Orsi W and Edgcomb V. (2012). Microbial Eukaryotes in Oxygen Minimum Zones; In: Seckbach, J., Oren, A., and Stan-Lotter, H. (eds.), *Polyextremophiles – Organisms living under multiple stress*; Springer, Dordrecht.

Edgcomb V and **Orsi W**. (2012). Microbial Eukaryotes in Hypersaline Anoxic Deep Sea Basins; In: Seckbach, J., Oren, A., and Stan-Lotter, H. (eds.), *Polyextremophiles – Organisms living under multiple stress*; Springer, Dordrecht.

Orsi W, Edgcomb V, Jeon S O, Leslin C, Bunge J, Taylor G T, Varela R, Epstein S. (2011). Protistan microbial observatory in the Cariaco Basin, Caribbean. Part II. Habitat specialization. *The ISME Journal* 5:1344-1356.

Edgcomb V, **Orsi W**, Bunge J, Jeon S O, Leslin C, Christen R, Holder M, Taylor G T, Suarez P, Varela R, Epstein S. (2011). Protistan microbial observatory in the Cariaco Basin, Caribbean. Part I. Pyrosequencing vs. Sanger insights into species richness. *The ISME Journal* 5: 1357-1373.

Edgcomb V, **Orsi W**, Taylor G T, Vd'áčný P, Taylor C, Suarez P, Epstein S. (2011). Commentary: Accessing marine protists from the anoxic Cariaco Basin. *The ISME Journal* 5: 1237-1241.

Edgcomb V, **Orsi W**, Breiner HW, Stock A, Filkner S, Yakimov M, Stoeck T. (2011). Eastern Mediterranean deep hypersaline anoxic lakes: novel active kinetoplastids associated with halocline habitats. *Deep-Sea Research I* 58 (10): 1040-1048.

Vd'áčný P, Bourland W, **Orsi W**, Epstein S, Foissner W. (2011). Phylogeny and classification of the Litostomatea (Protista, Ciliophora), with an emphasis on free-living taxa and the 18S rRNA gene. *Molecular Phylogenetics and Evolution* 59 (2): 510-522.

- Vd'áčný P, **Orsi W**, Bourland W, Satoshi S, Epstein S, Foissner W. (2011). Morphological and molecular phylogeny of Dileptids: resolution at the base of the class Litostomatea (Ciliophora, Intramacronucleata). *European Journal of Protistology* 47 (4): 295-313.
- Vd'áčný P, **Orsi W**, Foissner W. (2010). Molecular and morphological evidence for a sister group relationship of the classes Armophorea and Litostomatea (Ciliophora, Intramacronucleata, Lamellicorticata infraphyl. nov.), with an account on basal haptorid litostomateans. *European Journal of Protistology* 46 (4): 298-309.
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- Stoeck T, Behnke A, Christen R, Amaral-Zettler L, Rodriguez-Mora MJ, Chistoserdov A, **Orsi W**, Edgcomb VP. (2009). Massively parallel tag sequencing reveals the complexity of anaerobic marine protistan communities. *BMC Biology* 7:72.