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SUMMARY

PhD in Oceanology, Bel. and Msc in oceanography with emphasis in marine biogeochemistry, I have experience in sample planning, cruise preparation, sample collection of physical, chemical and biological parameters, sample processing, hydrodynamic, water quality and biogeochemical numerical modelling, data management, statistical analysis and data interpretation, production of reports and technical-scientific manuscripts. I have academic and professional interests on studies aimed to identify and solve environmental problems related to human activities in the coastal and oceanic regions, its sustainable management through technical-scientific and operational support. I am responsible, dedicated, organized, proactive and communicative, able to work in a multidisciplinary team.

EDUCATION

PhD in Oceanology (03/2019 – 08/2023). Post-graduation Program in Oceanology – Universidade Federal do Rio Grande (FURG), Brazil. Emphasis in marine biogeochemistry. Thesis project: Aquatic Ecosystem Metabolism in Patos Lagoon Estuary: A Multiscale Approach.

Msc in Oceanography (03/2016 – 06/2018). Post-graduation Program in Oceanography – Universidade Federal de Santa Catarina (UFSC), Brazil. Emphasis in marine biogeochemistry. Dissertation: Nutrient and carbon dynamics under the water mass seasonality on the continental shelf at the South Brazil Bight.

Bachelor in Oceanography (03/2009 – 12/2014). Universidade Federal do Paraná (UFPR), Brazil. Emphasis in marine biogeochemistry. Monograph: Relationship between chlorophyll-*a* and physicochemical parameters at the inner-shelf of Paraná State.

PROFESSIONAL EXPERIENCE

Postdoctoral Associate - Northern Gulf Institute (NGI) and the Physical Oceanography Division at NOAA's Atlantic Oceanographic and Meteorological Laboratory (AOML) (11/2023 – current). Responsibilities: build a subseasonal-to-seasonal red tide and hypoxia warning system for the West Florida Shelf fisheries.

Fellow researcher – INCT-BAA (Instituto Nacional de Ciência e Tecnologia, Biodiversidade da Amazônia Azul) (08/2023 – current). Responsibilities: systematic review about the state of the art of the biodiversity of Blue Amazon; meta-analysis; writing of papers and books; sample planning and material preparation; seasonal cruises; laboratorial analysis of photosynthetic pigments, nutrients, total dissolved inorganic carbon and total alkalinity.

Msc scholarship as oceanographic research technician – Marine Biogeochemistry Laboratory UFSC (03/2016 – 03/2018).

Responsibilities: cruise preparations, sampling of physical data (temperature and salinity – with CTD), biological (Chl-*a*) and chemical (suspended particulate matter, TOC, POC, dissolved oxygen, pH, alkalinity and nutrients: nitrite, nitrate, ammonium, phosphate and silicate); primary production experiments (oxygen method); samples processing (e.g., colorimetric and fluorometric analyses); preparation of chemical reagents and equipment calibration.

Trainee – Oceanographic research technician at Associação MarBrasil, Pontal do Paraná, PR, Brazil (08/2010 – 12/2011).

Responsibilities: sampling planning; cruise preparations; sampling of physical data (temperature and salinity - with CTD), biological (Chl-*a*) and chemical (nutrients: nitrate, phosphate and silicate); samples processing; statistical analyses and interpretation of data; writing of reports and technical-scientific manuscripts; fishing monitoring activities in the traditional communities of Paraná coast; environmental education in schools in Pontal do Paraná and on the beaches during the summer operation.

Volunteer trainee at the Marine Biogeochemistry Laboratory – Center of Marine Studies UFPR (04/2009 – 12/2014).

Learning and training of oceanographic research and laboratory skills (the same tasks cited above) by volunteering in the research activities of undergraduate and postgraduate colleagues, during my undergraduate course.

COURSES AND SKILLS

- Training course 'Satellite-based tools for investigating aquatic ecosystems'. Trevor Platt Science Foundation and PML (In progress);
- Git (learning);
- Programming language Python;
- Programming language "R"
- Programming language Matlab
- Open water diver (PADI), 2010;
- Full English course (successfully completed, 2001 - 2007);
- Microsoft Office (Word, Excel and Power Point);
- Software Ocean Data View;
- QGIS;
- Environmental monitoring, oceanographic research technician - biogeochemistry;
- Laboratory skills;
- Statistical analyses;
- Oceanographic data interpretation;
- Hydrodynamic and biogeochemical numerical modelling - Delft3D;
- Hydrodynamic and biogeochemical numerical modelling – ROMS;
- Research.

LANGUAGES

- Portuguese (native);
- Spanish: reading and speaking (beginner); writing (beginner) – studying.
- English: reading and writing (advanced); conversation (intermediate) – studying.

INTERNATIONAL EXPERIENCE

- Postdoctoral associate at the Northern Gulf Institute (NGI) and the Physical Oceanography Division at NOAA's Atlantic Oceanographic and Meteorological Laboratory (AOML);
- International exchange scholarship supported by Universidade Federal do Paraná in 2012. A semester at Faculdade de Ciências - Universidade de Lisboa (FCUL), Portugal. Undergraduate course in Meteorology, Oceanography and Geophysics.

EVENTS PARTICIPATION

- ASLO Amplifying Voices Early Career Webinar (2023). Oral presentation.
- AMEMR – Advances in Marine Ecosystem Modelling Research, Plymouth, UK (Virtual Conference). Oral presentation (2021).
- IV Sea – Academic Week of Oceanography – UFSC, Florianópolis, Santa Catarina, Brazil (2018);
- I Workshop Acidification of the Oceans – UFSC, Florianópolis, Santa Catarina, Brazil (2017);
- II Ibero-american Congress on Integrated Management of Coastal Areas – UFSC, Florianópolis, Santa Catarina, Brazil (2016);
- III Academic Week of Oceanography – UFPR, Pontal do Paraná, Paraná, Brazil (2012);
- Congress National Week of Oceanography – SNO, Florianópolis, Santa Catarina, Brazil (2012);
- Brazilian Congress of Oceanography – CBO, Rio Grande, Rio Grande do Sul, Brazil (2010).

TEACHING

- Teaching internship II (required by the FURG Post-Graduate program in Oceanology) – FURG, Rio Grande, Rio Grande do Sul, Brazil (2022);
- Teaching internship I (required by the FURG Post-Graduate program in Oceanology) – FURG, Rio Grande, Rio Grande do Sul, Brazil (2021);
- Teaching internship (required by the UFSC Post-Graduate program in Oceanography) – UFSC, Florianópolis, Santa Catarina, Brazil (2017);
- R Statistic Introduction Course – UFSC, Florianópolis, Santa Catarina, Brazil (2016).

PUBLICATIONS

- Bordin, L.H., Machado, E.D.C., Mendes, C.R.B., Fernandes, E.H.L., Schettini, C.A.F. (2024). Nutrient fluxes, budgets and net ecosystem metabolism in a Brazilian coastal system under drought conditions. *Estuarine, Coastal and Shelf Science*. <https://doi.org/10.1016/j.ecss.2023.108613>
- Bordin, L.H., Machado, E.D.C., Mendes, C.R.B., Fernandes, E.H.L., & Camargo, M. (2024). Total Ecosystem Variability in a Subtropical Lagoonal Estuary Channel-site. *Estuaries and Coasts*. <https://doi.org/10.1007/s12237-023-01270-2>
- Bordin, L.H., Machado, E.D.C., Mendes, C.R.B., Fernandes, E.H.L., Kerr, R.D., Schettini, C.A.F., & Camargo, M. (2023). Daily Variability of Pelagic Ecosystem Metabolism in a Subtropical Lagoonal Estuary. *Journal of Marine Systems*. <https://doi.org/10.1016/j.jmarsys.2023.103861>
- Bordin, L.H., Machado, E.D.C., Carvalho, M., Freire, A.S., & Fonseca, A.L. (2019). Nutrient and carbon dynamics under the water mass seasonality on the continental shelf at the South Brazil Bight. *Journal of Marine Systems*. <https://doi.org/10.1016/j.jmarsys.2018.09.006>
- Bordin, L.H., Silva, G.S.M., Garcia, C.A., Machado, E.C., 2017. Avaliação da performance do algoritmo para a determinação das concentrações de Carbono Orgânico Particulado através de sensoriamento remoto em áreas costeira e oceânica no Oceano Atlântico Sudoeste. Anais do XVIII Simpósio Brasileiro de Sensoriamento Remoto, INPE. Santos – SP. P. 4367 – 4373. <https://proceedings.galoa.com.br/sbsr/trabalhos/avaliacao-da-performance-do-algoritmo-para-a-determinacao-das-concentracoes-de-carbono-organico?lang=pt-br>

