

Curriculum Vitae

Ewaldo Leitão - ewaldo.leitao@duke.edu

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Appointments

Postdoctoral Associate, Department of Biology, Duke University	2024-Present
Supervisor: Prof. Jean-Phillipe Gibert	
Visiting Scholar, Department of Ecology and Evolutionary Biology, Yale University	2024-2025
Host: Prof. David Vasseur	

Education

Ph.D., Oceanography, University of Connecticut (UConn), CT, USA	2024
M.Sc., Oceanography, University of Connecticut, CT, USA	2023
Supervisor: Prof. Hans Dam	
M.Sc., Ecology, Universidade Federal do Rio Grande do Norte (UFRN), Natal/RN, Brazil	2018
B.Sc., Ecology, Universidade Federal do Rio Grande do Norte (UFRN), Natal/RN, Brazil	2016
Supervisor: Prof. Kemal Ali Ger, Prof. Renata Panosso	

Peer Reviewed Publications

[†]Shared first authorship

*Undergraduate mentee

Published

Leitão, E., Catellanos, D. F. *, Park, G. and Dam, H. G. (2024). Allelopathy effects of the dinoflagellate *Alexandrium catenella* under simultaneous ocean warming and acidification. *Harmful algae*. 134 <https://doi.org/10.1016/j.hal.2024.102625>

Leitão, E., Panosso, R., Molica, R. and Ger, K. A. (2021) Top-down regulation of filamentous cyanobacteria varies among a raptorial vs. current feeding copepod across multiple prey generations. *Freshwater Biology*. 66: 142– 156. <https://doi.org/10.1111/fwb.13625>

Leitão, E., Ger, K. A. and Panosso, R. (2018) Selective grazing by a tropical copepod (*Notodiaptomus iheringi*) facilitates *Microcystis* dominance. *Frontiers in Microbiology*. <http://doi.org/10.3389/fmicb.2018.00301>

Ger, K. A., **Leitão, E.** and Panosso, R. (2016) Potential mechanisms for the tropical copepod *Notodiaptomus* to tolerate *Microcystis* toxicity. *Journal of Plankton Research*, 38 (4) 843-854. <https://doi.org/10.1093/plankt/fbw036>

In Review, Submitted, In preparation (Available upon request)

Gibert, J.P. [†], **Leitão, E.** [†], Z.-Y. Han, R. Wong, K. DeWitt, B.R. Silliman, D.J. Wiczyński. (**In press**) The energetic tug-of-war: a shifting balance between bottom- and top-down control determines food web responses to rising temperatures.

Leitão, E.[†], Liu, M.^{†*}, Yammine, A., Han, Z., DeWitt, K., Gibert, J. P. (**In review**) Intra- and interspecific interactions influence rapid evolutionary responses to temperature.

Leitão, E., Mulligan, A.^{*}, Pettit, E.^{*}, Dam, H. G. (**In review**). Thermal acclimation increases the thermal optima for growth, but decreases the thermal optima for carrying capacity.

Ger, K. A., Yetim, S., Metin, M., Yildiz, D., Yalçin, G., Calderó-Pascual, M., **Leitão, E.**, Fiorentin, C., Nejtgård, J., Jeppesen, E., Beklioglu, M. (**In review**). Allochthonous matter quality and consumer traits regulate consumption pathways in freshwater plankton ecosystems.

Leitão, E., Leles, S. G., Dam, H. G. (**In prep.**). Thermal adaptation modulates functional response and stability of zooplankton – phytoplankton interactions.

Teaching

Teaching Assistant, <i>Plankton Ecology</i> , Prof. Hans G. Dam, UConn	Fall 2023
<i>Organized lab-based classes, which included sorting and starting plankton cultures and used them in population (growth curves) and community (predation and competition) ecology assays. Guest lectured on competition, and effects of climate change on plankton dynamics.</i>	
Teaching Assistant, <i>Environmental Microbiology</i> , Prof. Renata Panosso, UFRN	Feb 2017 - July 2017
Teaching Assistant, <i>Population Ecology</i> , Prof. Miriam Plaza Pinto, UFRN	Aug 2013 - Dec 2013
Teaching Assistant, <i>Statistics for Ecology</i> , Prof. Miriam Plaza Pinto, UFRN	Feb 2013 - July 2013

Recent Presentations (since 2019 only)

Ecological interactions mediate evolutionary responses to climate warming, Talk, Ecological Society of America (Baltimore, MD, USA)	Aug 2025
Thermal adaptation modulates functional response and stability of zooplankton – phytoplankton interactions, Poster, Gordon Research Conference (Manchester, NH, USA)	Aug 2024
Does thermal adaptation matter to predator-prey interactions?, Poster, Gordon Research Conference (Ventura, CA, USA)	Jan 2024
Effects of thermal adaptation on predator-prey interactions of the copepod <i>Acartia tonsa</i> , Talk, 14th Biennial Feng Colloquium (Groton, CT, USA)	May 2023
Allelopathy effects of <i>Alexandrium catenella</i> on non-HAB phytoplankton under greenhouse conditions, Speed talk/poster, 11th US Symposium on Harmful Algae (Albany, NY, USA)	Oct 2022
A 20-year Retrospective Analysis of Long Island Sound Mesozooplankton Trends in the 21st Century, Talk, International Conference on Copepoda e-ICOC 2022 (Online)	July 2022
A 20-year Retrospective Analysis of Long Island Sound Mesozooplankton Trends in the 21st Century, Talk, 2022 Long Island Sound Research Conference (Bridgeport, CT, USA)	May 2022
Allelopathic effects on the toxigenic dinoflagellate, <i>Alexandrium catenella</i> , are dampened under combined warming and acidification, Speed talk/poster, 10.5th US Symposium on Harmful Algae (Online)	Oct 2021

Top-down regulation of filamentous cyanobacteria contrasts among raptorial vs. active filter feeding copepods, Talk, **10th US Symposium on Harmful Algae (Orange Beach, Alabama, USA)** Nov 2019

Dam, H. G., Park, G., **Leitão, E.** Will *Alexandrium catenella* blooms be worse in a greenhouse world?, Talk, **10th US Symposium on Harmful Algae (Orange Beach, Alabama, USA)** Nov 2019

Contrasting top-down effect of a cyclopoid vs. calanoid copepod on filamentous cyanobacteria dominance, Talk, **ASLO 2019 Aquatic Sciences Meeting (San Juan, Puerto Rico)** Mar 2019

Distinctions & Awards

Ecological Dissertation in Aquatic Sciences (ASLO Program, [link](#)) – Invited researcher April 2024

Serrapilheira Training Program in Quantitative Biology and Ecology ([link](#)) – Mentor Jan 2024

International Center for Theoretical Physics-South American Institute for Fundamental Research, Brazil

Training Program in Quantitative Biology and Ecology (Acceptance, Online) July 2021

School on Physics Applications on Biology (Acceptance) Jan 2016

II Southern-Summer School on Mathematical Biology (Acceptance and Travel Fund) Jan 2013

University of Connecticut

UConn Graduate School Predoctoral fund May 2023

Conference Travel Award, CT Sea Grant Oct 2019

Conference Travel Fund Award, Department of Marine Sciences, UConn Oct 2018

UConn Graduate School Predoctoral fund May 2019

University of Rio Grande do Norte (UFRN), Brazil

Full Merit Scholarship from CAPES – MSc Degree Feb 2016-Feb 2018

Conference Travel Award, UFRN July 2017

Full Merit Scholarship "Scientific Initiation" from ProPesq – BSc Degree June 2012-Dec 2015

Napier University, Edinburgh, UK

Year-long scholarship - *Ciências sem Fronteiras* Scholarship (CNPq) Jan 2014-Dec 2014

Research Experience

Post-Doctoral Assistant – Food-Web Ecology and Climate Change – Duke, USA Sept 2024 – Present

- Applied statistical, mathematical, and experimental approaches to ecological research assessing the effects of climate change (i.e., temperature) on microbial food-web interactions
- Mentored and coordinated undergraduate and graduate students to aid with my research

Graduate Research Assistant – Plankton Ecology and Climate Change – UConn, USA Aug 2018 – Aug 2024

- Thesis title: The Role of Temperature and Thermal Adaptation on Plankton Ecology: Population Dynamics, Predator-prey and Antagonistic Interactions
- Applied experimental and analytical methods to evaluate climate change impacts (i.e., ocean acidification and warming) on ecological interactions in aquatic microbial systems
- Conducted environmental and biological analysis using a 20-year data set from Long Island Sound, used for state-level water quality reports of CT Department of Energy and Environmental Protection

Graduate Research Assistant - Laboratory of Aquatic Microbiology - UFRN, Brazil

2016 - Feb 2018

- Performed experiments and field expeditions in freshwater environments with occurrences of harmful algal blooms

Science communication, Services, Mentoring

Services

- Co-Chaired the scientific conference Gordon Research Seminar ([link](#)) 2026
- Organized Marine Sciences weekly seminar series (Brown Bag) – invited speakers both to talk about ongoing science (graduate students) and professional development (external speakers) 2021 - 2022

Science Communication

Edited manuscripts and theses for international colleagues and students (in English and Portuguese), focusing on clarity, structure and scientific soundness.

Collaborated on science communication efforts in departmental settings and public events:

- Wrote a newsletter at UConn Marine Sciences Department ([link](#)) Fall 2022 - Spring 2023
- Ocean Week at Catherine Kolnaski Magnet School - elementary school ([link](#)); 2022
- Sip & Science - Velvet Mill Stonington, CT (adult and children audience); 2019, 2021
- Science Day at New London Public Library, CT (children); 2019
- Skype-a-Scientist participations (children) 2020, 2021

Mentoring

Post-baccalaureate in research, Duke University

Fall 2024-Present

Mentored Megan Liu and Korey Cadiz, post-baccalaureate at Duke University, to effectively finish a project and writing manuscript, including formal data analysis.

Undergraduate Student in laboratory and research, UConn

Fall 2023

Mentored Edin Sisson, undergraduate from Connecticut College, working in the lab techniques, data curation, and analysis.

Research Experience for Undergraduate (REU) Students, UConn

Summer 2021, 2022, 2023

Mentored Diana F. Castellanos (2021) on the project Allelopathic effects of toxic phytoplankton (paper in review). Mentored Andrew Mulligan (2022) and Emelia Pettit (2023) who together worked on projects of thermal adaptation on phytoplankton growth, metabolism, and population dynamics.

Undergraduate Honor's Thesis, UFRN

Jul 2017 - Feb 2018

Mentored Natalia Paiva on her Honor's Thesis, in which I was part of her Honor's Thesis committee.

Reviewing activity

Pee-reviewer for:

Hydrobiologia (1), Harmful Algae (3), Journal of Plankton Research (3), Biology Letters (1)

Skills

Software: R programming (proficient), R markdown (data curation, organization, and visualization), Python (Basic), Zotero, Overleaf, Google tools

Languages: Portuguese (Native), English (Fluent), Spanish (Intermediate), French (Intermediate), Modern Greek (Basic)