

Yasmina Shah Esmaeili, Ph.D.

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Marine Biology Department | OCSB 280-B

Galveston, TX 77550

CURRENT POSITION

Texas A&M University at Galveston 2025
Visiting Assistant Professor (MARB 311 Ichthyology, BIOL 112 Introductory Biology)

EDUCATION

Ph.D. in Ecology Campinas, Brazil 2023
State University of Campinas
Thesis title: Fish communities of sandy beach surf zones: Exploring new methodologies and providing knowledge for management strategies.

Master in Marine and Lacustrine Science and Management Brussels, Belgium 2016
(Major in Biodiversity and Ecology)
Inter-university Program of Ghent University, Antwerp University and Brussels University (Belgium), with **exchange** at The University of Sydney (Australia)
Thesis title: Effectiveness of Aquatic Reserves of the Hawkesbury Shelf, New South Wales (Australia)

Bachelor of Science in Biology Ghent, Belgium 2013
Ghent University
Thesis title: Position of the Seabob shrimp in the foodweb of coastal waters of Suriname

GRANTS, AWARDS & FUNDING

- **National Science Foundation - Maine-eDNA EPSCoR project** 2023 – 2024
Postdoctoral Fellowship at the Bigelow Laboratory for Ocean Sciences (\$112,000)
- **Smithsonian Institution Fellowship Program (SIFP)** 2023
Postdoctoral Research Fellowship (awarded - declined) (\$114,000)
- **Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Ministry of Education of Brazil** 2023
Nominated for best PhD thesis of 2023 at a national level
- **Smithsonian Institute DNA Barcode Network (SIBN) Awards Program** 2022
Award for whole metagenome barcoding of regional species (\$1300)
- **The São Paulo Research Foundation, FAPESP – Smithsonian** 2021-2022
International Exchange Research Fellowship (\$25,800)
- **The São Paulo Research Foundation, FAPESP** 2018-2023
PhD Scholarship (R\$205,500/\$35,500)
- **Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Ministry of Education of Brazil** 2018
PhD Scholarship (R\$9,300/\$1,600)

- Corte, G. N., **SHAH ESMAEILI, Y.**, Maria, T. F., Costa, L., Mattos, G., Checon, H. H., ... & Barboza, C. A. D. M. (2023). The science we need for the beaches we want: frontiers of the flourishing Brazilian ecological sandy beach research. *Frontiers in Marine Science*, 10, 1200979.
- Checon, H. H., Corte, G. N., **SHAH ESMAEILI, Y.**, Laurino, I. R. A., & Turra, A. (2023). Sandy beach bioindicators: How each benthic taxon tells its own story. *Ocean & Coastal Management*, 240, 106645.
- Checon, H. H., Corte, G. N., **SHAH ESMAEILI, Y.**, Maciel, P.M., & Turra, A. (2023). The efficacy of benthic indices to evaluate the ecological quality and urbanization effects on sandy beach ecosystems. *Science of the Total Environment*, 856, 159190.
- **SHAH ESMAEILI, Y.**, N. Corte, G., Checon, H. H., G. Bilatto, C., Lefcheck, J. S., Zacagnini Amaral, A. C., & Turra, A. (2022). Revealing the drivers of taxonomic and functional diversity of nearshore fish assemblages: Implications for conservation priorities. *Diversity and Distributions*, 28(8), 1597-1609.
- da Costa, L. N., Nascimento, T. P. X., **SHAH ESMAEILI, Y.**, & Mancini, P. L. (2022). Comparing photography and collection methods to sample litter in seabird nests in a coastal archipelago in the Southwest Atlantic. *Marine Pollution Bulletin*, 175, 113357.
- Checon, H. H., **SHAH ESMAEILI, Y.**, Corte, G. N., Malinconico, N., & Turra, A. (2022). Locally developed models improve the accuracy of remotely assessed metrics as a rapid tool to classify sandy beach morphodynamics. *PeerJ*, 10, e13413.
- Corte, G. N., Checon, H. H., **SHAH ESMAEILI, Y.**, Defeo, O., & Turra, A. (2022). Evaluation of the effects of urbanization and environmental features on sandy beach macrobenthos highlights the importance of submerged zones. *Marine Pollution Bulletin*, 182, 113962.
- **SHAH ESMAEILI, Y.**, Corte, G. N., Checon, H. H., Gomes, T. R. C., Lefcheck, J. S., Amaral, A. C. Z., & Turra, A. (2021). Comprehensive assessment of shallow surf zone fish biodiversity requires a combination of sampling methods. *Marine Ecology Progress Series*, 667, 131-144.
- Corte, G. N., Checon, H. H., **SHAH ESMAEILI, Y.**, Lefcheck, J. S., & Amaral, A. C. Z. (2021). Mangrove fragments as key coastal reservoirs of taxonomic and functional biodiversity. *Biodiversity and Conservation*, 30(5), 1573-1593.
- **SHAH ESMAEILI, Y.**, Checon, H. H., Corte, G. N., & Turra, A. (2021). Parasitism by isopods in sandy beach fish assemblages: role of urbanization and environmental characteristics. *Hydrobiologia*, 848(20), 4885-4901.
- Checon, H. H., Corte, G. N., **SHAH ESMAEILI, Y.**, & Amaral, A. C. Z. (2018). Nestedness patterns and the role of morphodynamics and spatial distance on sandy beach fauna: ecological hypotheses and conservation strategies. *Scientific reports*, 8(1), 3759.
- **SHAH ESMAEILI, Y.***, Turnbull, J. W.*, Clark, G. F., Figueira, W. F., Johnston, E. L., & Ferrari, R. (2018). Key drivers of effectiveness in small marine protected areas. *Biodiversity and Conservation*, 1-26. (* shared first authorship)

BOOK CHAPTERS

- **SHAH ESMAEILI, Y.**, Pagliani, B., de Carvalho, R. H., & Costa, L. L. (2023). Vertebrate Biodiversity. In *Brazilian Sandy Beaches* (pp. 127-158). Cham: Springer International Publishing.
- Checon, H. H., Corte, G. N., Cunha, B. P., **SHAH ESMAEILI, Y.**, Fonseca, G., & Amaral, A. C. Z. (2023). Macro- and Meiofaunal Communities in Brazilian Mangroves and Salt Marshes. In *Brazilian Mangroves and Salt Marshes* (pp. 155-178). Cham: Springer International Publishing.

MANUSCRIPTS UNDER REVIEW

- Laumann, K.M., Hoad, N.M., Alvaro, L., Badri, S.L., Burke, N., Carew, A., Corte, G.N., Croquer, A., **SHAH ESMAEILI**, Y., Farrell, M., Kouchi, N., Lee, J., Nakaoka, M., Nordlund, L.M., Blasco, R.I.S., Sheldon, E., Villapando, M.F., Lefcheck, J.S. Closing the parachute and opening the umbrella: strategies for inclusivity and representation in producing impactful coastal ecosystem research. (Under review: Coastal Futures, PDF available upon request)
- Checon, H.H., Cunha, B.P., **SHAH ESMAEILI**, Y., Defeo, O., Corte, G.N. Beyond “paper parks”: integrating marine biodiversity into Brazilian Protected Area management (under review: Ocean and Coastal Management, PDF available upon request)
- *Bechara, L.S., Monteiro, R.D., Mattos, G., Bauer, A.B., Gatts P.V., Molisani, M.M., Fischer, L.G., **SHAH ESMAEILI**, Y., Mancini, P.L., Rezende, C.E., Barboza, C.A.M. Effects of the human modification on the trophic ecology of the ghost crab *Ocypode quadrata* (Fabricius, 1787) (under review: Frontiers in Marine Science, PDF available upon request)
- *Bechara, L.S., Monteiro, R.D., Mattos, G., Bauer, A.B., Gatts P.V., Molisani, M.M., Fischer, L.G., **SHAH ESMAEILI**, Y., Mancini, P.L., Rezende, C.E., Barboza, C.A.M. Size does matter: Trophic ontogeny of the ghost crab *Ocypode quadrata* (Fabricius, 1787) (under review: Frontiers in Marine Science, PDF available upon request)
- *Venâncio, D.C., Debiassi, P., Mancini, P.L., **SHAH ESMAEILI**, Y. Spatiotemporal variation of seabird strandings on the southeastern and southern coast of Brazil. (under review: Marine Environmental Research, PDF available upon request)

TEACHING EXPERIENCE

Visiting Assistant Professor at Texas A&M University at Galveston Ichthyology (MARB311) & Introductory Biology II (BIOL112)	2025
Lecturer at Bigelow Laboratory for Ocean Sciences in Keller Bloom program	2024
Guest Lecturer at University of Texas at Austin, Marine Community Ecology (MNS 352M)	2024
Guest Lecturer at University of the Virgin Islands, Marine Ecology (MBI424)	2023
Guest Lecturer at University of the Virgin Islands, Natural Resource Management (MES 506)	2023
Guest Lecturer at CEBIMAR Webinar series on Sandy beach Ichthyofauna	2022
Guest Lecturer at Praia com Vida Webinar series on Sandy beach Ichthyofauna	2021
Guest Lecturer at the University of Vale do Itajaí, Benthic Ecology	2020
Lecturer at The University of São Paulo, Integrated Coastal Management (PCA5020)	2019

STUDENT MENTORING

*Co-advisor | + Underrepresented demographic group

- **Bruna Rodrigues Debastiani***, MSc in Environmental Sciences and Conservation
Universidade Federal do Rio de Janeiro
Thesis title: Influence of environmental variables of sandy beaches on habitat choice by coastal birds. 2021-2023
- **Ligia Salgado Bechara*+**, MSc in Environmental Sciences and Conservation
Universidade Federal do Rio de Janeiro
Thesis title: Trophic ecology of the crab *Ocypode quadrata* (Fabricius, 1787) on beaches with different degrees of urbanization. 2021-2023

- **Débora Coelho Venâncio***, MSc in Environmental Sciences and Conservation 2022-2024
Universidade Federal do Rio de Janeiro
Thesis title: Spatio-temporal variation of seabird strandings in the Southeast and South of Brazil.
- **Tauane Raissa Cruz Gomes*+**, MSc in Biodiversity of Coastal Environments 2022-2024
Universidade Estadual Paulista - Câmpus do Litoral Paulista
Thesis title: Occurrence and area of use of Porpoises (*Pontoporia blainvillei*) in the Xixová-Japuí State Park and surrounding areas, central coast of the state of São Paulo.
- **Tatiane Pereira Xavier Nascimento***, MSc in Environmental Sciences and Conservation 2022-present
Universidade Federal do Rio de Janeiro
Thesis title: Evaluation of Brown booby (*Sula leucogaster*) nests as indicators of solid waste pollution in the Archipelago of Santana, Macaé, RJ.

PROFESSIONAL EXPERIENCE & EMPLOYMENT

- Postdoctoral Scientist** at Bigelow Laboratory for Ocean Sciences (Maine, USA) 2023
- Visiting research fellow** with MarineGEO at the Smithsonian Environmental Research Center 2022
- Research assistant** at Archipelagos Institute for Marine Conservation (Samos, Greece) 2016
- Intern** at CMRC in Guanacahabibes National Park (Cuba) 2014
- Intern** at Museum of Science, Miami (USA) Citizen science

SCIENTIFIC REVIEW

Journal reviewer: PeerJ, Conservation Biology, Estuarine Coastal and Shelf Science, Marine Ecology Progress Series, African Journal of Marine Science, PloS One, ICES Journal of Marine Science, Journal of Applied Ecology, Ocean and Coastal Research, Uttar Pradesh Journal of Zoology, Marine Pollution Bulletin, Marine Biology, Ecological Indicators, Diversity and Distributions, Environmental Monitoring and Assessment.

PhD thesis evaluation committee: Universidade Federal do Rio de Janeiro, Universidade Federal de Uberlândia, Universidade Federal de São Paulo

COMMITTEES & SERVICES

International Association of Biological Oceanography (**IABO**): Head of Communications Task Group

IABO Hub at **PeerJ**: Fund Manager

Marine Biodiversity Observation Network (**MBON Pole to Pole**): Active member

Marine Life 2030: Active member

SELECT INVITED TALKS & CONFERENCE PRESENTATIONS

- **Oral presentation** at Benthic Ecology Meeting, Portland (Oregon, USA) 2024
- **Oral presentation** at Benthic Ecology Meeting, Charlotte (South Carolina, USA) 2023
- **Invited Panelist** during MBON side event at All-Atlantics meeting (virtual) 2022
- **Invited Panelist** representing Regional AmeriGEO at the GEOAquaWatch Biennial Meeting (virtual)
- **Panelist** representing Marine Life 2030 at the OSM Stakeholder Listing Session, Brazil (virtual)

- **Oral presentation** at Benthic Ecology meeting, Portsmouth (USA)
- **Poster presentation**, Fórum de Governança Ambiental da Macrometrópole Paulista (Brazil) 2019
- **Oral presentation**, 2nd Marine Biodiversity Workshop: from the Sea to the Cloud (MBON Pole to Pole), Puerto Morales (Mexico)
- **Oral presentation**, International Sandy Beach Symposium, Creta (Greece) 2018
- **Poster presentation** of PhD project, São Paulo School of Advanced Studies: Ocean, São Paulo (Brazil)
- **Oral presentation**, Marine Biodiversity Workshop: from the Sea to the Cloud (MBON Pole to Pole), CEBiMar Sao Sebastião (Brazil)
- **Oral presentation**, Australian Marine Sciences Association (Annual Symposium); Geelong (Australia) 2015

MEDIA & OUTREACH

- Oral presentation** at Ocean on Tap speaker series, Boothbay Harbour (Maine) 2024
<https://www.boothbayregister.com/index.php/article/ocean-tap-speaker-series-boothbay-harbor-continues-tonight-march-21/184361>
<https://www.boothbayregister.com/article/ocean-tap-brings-fun-science-boothbay-community/187924>

Volunteer at Bigelow Laboratory for Ocean Sciences Open House, East Boothbay (Maine)

Seminar at South Bristol School for Maine Bioscience Day, South Bristol (Maine)

Online educational series: “Sera que vai dar praia” sponsored by UNESCO Catedra for Ocean Sustainability
<https://www.youtube.com/watch?v=MWvFsVoOBk4&list=PLrN2xMe9PBGASNLbZDGB0mvdMcuuvqxm&index=2>
<https://www.youtube.com/watch?v=hgVBAP1zxE&list=PLrN2xMe9PBGASNLbZDGB0mvdMcuuvqxm&index=3>

ADDITIONAL TRAINING

- FieldFutures **Harassment Prevention** Training workshop 2024
- **Leadership** workshop series: Foundations in Leadership/Teambuilding and Navigating Conflict/
 Building Safe and Constructive Work Atmospheres
- **Multidimensional biodiversity data** workshop: management, visualization, analysis, 2023
 and process-based modeling (A Rules Of Life Engine (RoLE)), Albuquerque (USA)
- **Multivariate analysis** of ecological data in R (40 hours) UNICAMP (Brazil) 2019
- Ecological niche and **species distribution modelling** (40 hours) UNICAMP (Brazil)
- International Ocean Institute: **Ocean governance, sciences and geo-ethics** (160 hours) University of Valparaíso (Chile)
- São Paulo School for Advanced Sciences: **Ocean** (120 hours) University of São Paulo (Brasil) 2018
- **Marine GIS for ICZM** (40 hours) VLIZ Oostende (Belgium)
- **Design and Analysis of Ecological Experiments** (70 hours) University of Sydney (Australia) 2015