



Prof. Dr. Miguel Mies

Holds bachelor's and PhD degrees in Oceanography obtained at the Oceanographic Institute of the University of the University of São Paulo (IO-USP). Currently acts as: (i) professor at IO-USP and head of the Coral Reefs and Climate Change Lab (LARC); (ii) research coordinator at the Coral Vivo Project; and (iii) member of the board of directors of the Coral Vivo Institute. Recipient of a FAPESP "Jovem Pesquisador" grant (2025-2030) and a member of the United Nations' Pool of Experts.

Has published more than 50 peer-reviewed scientific articles (being first or last author in approx. 60%), has reviewed for more than 40 international indexed journals, and holds three national and international scientific awards. Served as an editorial board member for the "Coral Reef Research" chapter of the journal *Frontiers in Marine Science*. Has supervised more than 40 undergraduate students, graduate students, and postdoctoral

The main lines of research are: coral bleaching and climate change impacts on coral reefs; Symbiodiniaceae molecular biology; reproduction and larval development of reef organisms; and coral trophic ecology.

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1. GENERAL INFORMATION

Personal Information

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Formal Education/Degrees

2012 - 2017 Doctorate in Biological Oceanography, PhD degree

University of São Paulo (USP) - Brazil

Advisor Prof. Paulo Yukio Gomes Sumida

Co-advisor Prof. Marie-Anne Van Sluys

Grants Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES)
Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq)

2005 - 2011 Graduation in Oceanography, Bachelor's degree
University of São Paulo (USP) - Brazil

Advisor Prof. Paulo Yukio Gomes Sumida

Co-advisor Prof. Marie-Anne Van Sluys

Grant Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq)

Languages

English Comprehends well, Speaks well, Reads well, Writes well

Portuguese Comprehends well, Speaks well, Reads well, Writes well

Spanish Comprehends well, Speaks reasonably, Reads well, Writes reasonably

German Comprehends reasonably, Speaks well, Reads well, Writes reasonably

Russian Reads reasonably

Positions Held

1. Oceanographic Institute of the University of São Paulo
 - Professor (2022 - present)
 - Associate Researcher (2017 - 2022)
2. Coral Vivo Institute
 - Research Coordinator (2019 - present)
 - Member of the board of directors (2024 - present)
 - Vice-president (2022 - 2024)
3. Coral Vivo Research Network
 - Associate Researcher (2017 - present)
4. United Nations
 - Member of the Pool of Experts (2025 - present)
5. Eco-Reef Ltda.
 - Founder (2008)
 - Chief Executive Officer (2008 - 2022)
 - Advisory Partner (2022 - present)

2. RESEARCH

Citation Metrics

Scientific Production

Scientific articles (53)

2026 (1)

- Faria SC, Goodbody-GringleyG, Kitahara MV, Marangoni LFB, Silva CA, Neto RR, Bianchini A, Maraschi AC, Seiblitiz IGL, Solms B, Pereira CM, **Mies M**, Garland T, Navas CA. **2026**. *Thermal refugia indicate physiological evolution in Atlantic reef corals* . Biological Journal of the Linnean Society, x:xx.

2025 (16)

- Fonseca JS, Fukushima LM, Bueno JVL, Vidal TJ, Salvi KP, Lacerda CHF, Costa PG, **Mies M**, Bianchini A **2025**. *Responses of health- and growth-related biomarkers in corals exposed to iron* . Earth: Environmental Sustainability, 1:366-382.
- Silva TRS, Marangoni LFB, Lacerda CHF, Güth AZ, Longo GO, Bianchini A, **Mies M**, Cordeiro RTS **2025**. *A fragile branch: the silent decline of neglected Brazilian milleporids amid the fourth global bleaching event* . Coral Reefs, x:xx.
- Loures A, Räddecker N, Voolstra CR, Garrido AG, Zilberberg C, Faria SC, Sumida PYG, **Mies M**. **2025**. *The larva-Symbiodiniaceae association at risk: putative impacts of climate change on reproduction, dispersal, and recruitment in coral reefs* . Coral Reefs, x:xx.
- Bianchini A, Fukushima LM, Grillo AC, Inagaki KY, Andrade J, Bechara LS, Destri G, Picolloto VAP, Vidal TJ, Araújo AL, Fonseca JS, Calderon EN, Salvi KP, Lacerda CHF, Costa PG, **Mies M**. **2025**. *Iron bioaccumulation in coral reef organisms and biodilution in the reef food web: a mesocosm approach* . Marine Environmental Research, 212:107586.
- Melo MRS, Boelter JP, Rocha LA, Ferreira CEL, Kitahara MV, **Mies M**. **2025**. *First records of Neopomacentrus cyanomos (Bleeker, 1856) (Pomacentridae: Blenniiformes) in Southwestern Atlantic reefs* . Check List, 21:909-916.
- **Mies M**, Destri G, Lacerda CHF, Carvalho JLM, Ibanhez JY, Güth AZ, Luza AL, Campos LP, Shimada AC, Omaki KNT, Jahn BE, Abreu YA, Amario M, Andrade MG, Angonese MS, Banha T, Barros F, Berrettini AB, Bianchini A, Bleuel J, Braz GB, Brito MJF, Calderon EN, Cambricoli LC, Campos PT, Capel KCC, Castro CB, Comin EJ, Conceição E, Corazza BM, Cordeiro RTS, Crivellaro MS, Dornellas APS, Falsarella LN, Faria GR, Felipe TC, Ferraz AH, Ferreira CEL, Fialho CHG, Figueiredo BS, Fonseca AC, França LG, Francini-Filho RB, Garrido AG, Gaspar TL, Gomes BM, Guebert FM, Gurgel AL, Ielpo B, Inagaki KY, Jardim A, Kato CAT, Kitahara MV, Lima JL, Lionetti J, Lolis LA, Lotufo TMC, Martello MF, Mendes TC, Miranda RJ, Mitsuhashi GC, Montañó FA, Moraes MR, Mota MJS, Nascimento FTF, Negrão F, Oliveira ALC, Oliveira TMLA, Pacheco MCO, Pereira FB, Pereira PHC, Pinheiro IEG, Pinto TK, Pires DO, Salaroli AB, Salvi KP, Sampaio CLS, Santos RG, Santos-Filho JCM, Segal B, Silva HBS, Silva MB, Sissini MN, Soares JCV, Soares MO, Teixeira JLS, Teschima MM, Toledo AP, Zilberberg C, Longo GO. **2025**. *Coral bleaching and mortality across a 24° latitudinal range in the Southwestern Atlantic during the fourth global bleaching event* . Coral Reefs. x:xx.
- Gaspar TL, Francini-Filho RB, **Mies M**, Rodrigues RR, Neto AG, Junior CAS, Banha T, Longo GO, Segal B. **2025**. *Partial attenuation of coral bleaching by turbidity along the Brazilian coast* . Coral Reefs, x:xx.
- Andrade J, Vidal TJ, Bianchini A, Costa PG, Lacerda CHF, **Mies M**, Salvi KP, Eggertsen L, Francini-Filho RB. **2025**.

Iron pollution has minor impacts on the behavioral ecology of the Brazilian endemic reef damselfish Stegastes fuscus. Marine Environmental Research, 211:107435.

- Fukushima LM, Fonseca JS, Vidal TJ, Salvi KP, Lacerda CHF, Costa PG, **Mies M**, Bianchini A. **2025**. *Impact of iron exposure on Brazilian coral reefs: acute vs. chronic stress responses* . Ecotoxicology and Environmental Safety, 298:118309.
- Destri G, Güth AZ, Luza AL, Ibanhez JY, Dottori M, Silveira ICA, Braz GB, De La Cour JL, Manzello DP, Skirving WJ, **Mies M**. **2025**. *The thermal stress history of South Atlantic reefs reveals increasing intensity, duration, frequency, and likely undocumented bleaching episodes* . Global Change Biology. 31:e70162.
- **Mies M**, Longo GO, Bianchini A, Calderon EN, Castro CB, Faria SC, Francini-Filho RB, Guebert FM, Kitahara MV, Lacerda CHF, Lotufo TMC, Marangoni LFB, Pires DO, Cordeiro RTS. **2025**. *Challenges for coral restoration in Southwestern Atlantic reefs: guidelines for ethical and sustainable practices* . Biodiversity and Conservation, 34:2287-2313.
- Dutra GF, Santos LP, Coutinho BH, Saliba A, Martinez MIG, **Mies M**, Camargo E, Teixeira JB, Bianchini A, Guebert FM, Lacerda CHF, Negrão F, Francini-Filho RB. **2025**. *Marine biodiversity hotspots in the Abrolhos Region and Vitória-Trindade Seamount Chain, Brazil, with implications for conservation* . Ocean and Coastal Research, 73:e25019.
- Grillo AC, Inagaki KY, Costa PG, Salvi KP, Lacerda CHF, **Mies M**, Bianchini A, Longo GO. **2025**. *Differential effects of iron enrichment on corals competing with macroalgae and zoantharians* . Environmental Pollution, 371:125944.
- Horta P, Sissini MN, Fonseca A, Turra A, Rodrigues AC, Rorig L, Bonomi-Barufi J, Pagliosa P, Bastos E, Grimaldi G, Dias CEP, Fialho F, Oliveira CYB, Schubert N, Silva J, Assis J, Gouvea L, Alves-Lima C, Coelho MAG, Serrão EA, Frade PR, Mansilla A, Soares M, Rossi S, Anderson AB, Joyeux JC, Berchez F, Otero-Ferrer F, Filho JLR, **Mies M**, Araújo M, Hall-Spencer JM. **2025**. *Marine Forests Forever - a necessary multilateral program for a fair future* . Aquatic Conservation: Marine and Freshwater Ecosystems, 35:e70037.
- Querido MC, Güth AZ, Garrido AG, Zilberberg C, Cardoso LP, Sumida PYG, **Mies M**. **2025**. *The photosymbiotic acoel Convolutriloba retrogemma (Xenacoelomorpha) is sensitive to thermal stress* . Journal of Experimental Marine Biology and Ecology, 582:152079.
- **Mies M**, Garrido AG, Zilberberg C, Sumida PYG, Pang CZ, YK Ip, SF Chew. **2025**. *Anatomical complexity allows for heat-stressed giant clams to undergo symbiont shuffling at both organism and organ levels* . Marine Biology, 172:4.

2024 (3)

- Neves JR, Taniguchi S, Bícigo MC, Sumida PYG, **Mies M**. **2024**. *Symbiodiniaceae-derived fatty acids are stored differentially across giant clam species and organs* . Marine Ecology, 45:e12845.
- Bianchini A, Fukushima LM, Grillo AC, Inagaki KY, Souza JA, Bechara LS, Destri G, Picolotto VAP, Vidal TJ, Araújo AL, Fonseca JS, Calderon EN, Salvi KP, Lacerda CHF, Costa PG, **Mies M**. **2024**. *Marine mesocosm system: a reliable tool for testing bioaccumulation and effects of seawater enrichment with dissolved iron in reef organisms* . MethodsX, 13:102949.
- Corazza BM, Lacerda CHF, Güth AZ, Marcançoli RKM, Bianchini A, Calderon EN, Capel KCC, Conceição E, Faria SC, Francini-Filho RB, Garrido AG, Guebert FM, Kitahara MV, Longo GO, Lotufo TMC, Salvi KP, Segal B, Sumida PYG, Zilberberg C, **Mies M**. **2024**. *No coral recovery three years after a major bleaching event in reefs in the Southwestern Atlantic Refugium* . Marine Biology, 171:114.

2023 (2)

- Pereira PHF, Fernandes LM, Jesus HE, Costa P, Lacerda CHF, **Mies M**, Bianchini A, Santos HF. **2023**. *The impact of highly weathered oil from the most extensive oil spill in tropical oceans (Brazil) on the microbiome of the coral Mussismilia harttii*. Microorganisms, 11:1935.
- Santana EFC, **Mies M**, Longo GO, Menezes R, Aued AW, Luza AL, Bender MG, Segal B, Floeter SR, Francini-Filho RB. **2023**. *Turbidity shapes shallow Southwestern Atlantic benthic reef communities* . Marine Environmental Research, 183:105807.

2022 (4)

- Banha TNS, Luiz OJ, Asp NE, Pinheiro HT, Magris RA, Cordeiro RTS, Mahiques MM, **Mies M**, Giglio VJ, Omachi CY, Siegle E, Nogueira LC, Thompson CC, Thompson FL, Nora V, Horta PA, Rezende CE, Sumida PYG, Ferreira CEL, Floeter SR, Francini-Filho RB. **2022**. *The Great Amazon Reef System: a fact* . Frontiers in Marine Science, 9:1088956.
- Carvalho LM, **Mies M**, Inagaki KY, Sanches EG, Souza MR, Longo GO, Tomás ARG. **2022**. *The marine ornamental market in Brazil (Southwestern Atlantic) frequently trades prohibited and endangered species, and threatens the ecosystem role of cleaning mutualism* . Marine Policy, 146:105305.
- Braz GB, Lacerda CHF, Evangelista H, Güth AZ, Rumbelsperger AMB, Capel KCC, Dall'Occo P, **Mies M**. **2022**. *Unprecedented erosion of Mussismilia harttii, a major reef-building species in the Southwestern Atlantic, after the 2019 bleaching event* . Coral Reefs, 41:1537-1548.
- Ip YK, Boo MV, **Mies M**, Chew SF. **2022**. *The giant clam Tridacna squamosa quickly regenerates iridocytes and restores symbiont quantity and phototrophic potential to above-control levels in the outer mantle after darkness-induced bleaching* . Coral Reefs, 41:35-51.

2021 (4)

- Negrão F, Lacerda CHF, Melo TH, Bianchini A, Calderon EN, Castro CB, Cordeiro RTS, Dias RJS, Francini-Filho RB, Guebert FM, Güth AZ, Hetzel B, Horta PA, Lotufo TMC, Mahiques MM, **Mies M**, Pires DO, Salvi KP, Sumida PYG. **2021**. *The first biological survey of the Royal Charlotte Bank (SW Atlantic) reveals a large and diverse ecosystem complex* . Estuarine, Coastal and Shelf Science, 255:107363.
- Pupier CA, **Mies M**, Fine M, Francini-Filho RB, Brandini FP, Zambotti-Villela L, Colepicolo P, Ferrier-Pagès C. **2021**. *Lipid biomarkers reveal the trophic plasticity of octocorals along a depth gradient* . Limnology and Oceanography, 66:2078-2087.
- Godoy L, **Mies M**, Zilberberg C, Pastrana Y, Amaral A, Cruz N, Pereira CM, Garrido AG, Paris A, Santos LFA, Pires DO. **2021**. *Southwestern Atlantic reef-building corals Mussismilia spp. are able to spawn while fully bleached* . Marine Biology, 168:15.
- Fonseca JS, **Mies M**, Paranhos A, Taniguchi S, Güth AZ, Bicego MC, Marques JA, Marangoni LFB, Bianchini A. **2021**. *Isolated and combined effects of thermal stress and copper exposure on the trophic behavior and oxidative status of the reef-building coral Mussismilia harttii*. Environmental Pollution, 268:115892.

2020 (8)

- Banha TNS, **Mies M**, Güth AZ, Pomory CM, Sumida PYG. **2020**. *Juvenile Cassiopea andromeda medusae are resistant to multiple thermal stress events* . Marine Biology, 167:173.
- Thé J, Barroso HS, Mammone M, Viana M, Melo CSB, **Mies M**, Banha TNS, Morandini AC, Rossi S, Soares MO. **2020**. *Aquaculture facilities promote populational stability throughout seasons and increase medusae size for the invasive jellyfish Cassiopea andromeda*. Marine Environmental Research, 162:105161.
- Pereira CM, Fonseca JS, Paiva ES, Costa PG, **Mies M**, Silva AG, Calderon EN, Bianchini A, Castro CB. **2020**. *Larvae of the South Atlantic coral Favia grvida are tolerant to salinity and nutrient concentrations associated with river discharges* . Marine Environmental Research, 161:105118.

- **Mies M**, Francini-Filho RB, Zilberberg C, Garrido AG, Longo GO, Laurentino E, Güth AZ, Sumida PYG, Banha TNS. **2020**. *South Atlantic coral reefs are major global warming refugia and less susceptible to bleaching* . Frontiers in Marine Science, 7:514.
- Santos HF, Santos LFA, Jesus HE, Lacerda CHF, **Mies M**. **2020**. *The South Atlantic coral Mussismilia harttii actively and quickly removes heavy crude oil from its surface* . Bulletin of Marine Science, 96:803-804.
- Monteiro EA, Güth AZ, Banha TNS, Sumida PYG, **Mies M**. **2020**. *Implications of feeding frequency, prey size and condition, and intraspecific competition for the commercial aquaculture of the nudibranch Berghia stephanieae*. Journal of the World Aquaculture Society, 51:244-254.
- Banha TNS, Capel KCC, Kitahara MV, Francini-Filho RB, Francini CLB, Sumida PYG, **Mies M**. **2020**. *Low coral mortality during the most intense bleaching event ever recorded in subtropical Southwestern Atlantic reefs* . Coral Reefs, 39:515-521.
- Okuma D, Dias JF, Silbiger HLN, Güth AZ, **Mies M**. **2020**. *Sexual pattern and caudal fin as a sexually dimorphic trait in the commercially-aquacultured Meiacanthus blennies (Teleostei: Blenniidae)* . Journal of the World Aquaculture Society, 51:1221-1234.

2019 (3)

- Marangoni LFB, **Mies M**, Güth AZ, Banha TNS, Inague A, Fonseca JS, Dalmolin C, Faria SC, Ferrier-Pagès C, Bianchini A. **2019**. *Peroxynitrite generation, and increased heterotrophic capacity are linked to the disruption of the coral-dinoflagellate symbiosis in a scleractinian and hydrocoral species* . Microorganisms, 7:426.
- **Mies M**. **2019**. *Evolution, diversity, distribution and the endangered future of the giant clam-Symbiodiniaceae association* . Coral Reefs, 38:1067-1084.
- Monteiro EA, Güth AZ, Banha TNS, Sumida PYG, **Mies M**. **2019**. *Evidence against mutualism in an aeolid nudibranch associated with Symbiodiniaceae dinoflagellates* . Symbiosis, 79:183-189.

2018 (2)

- **Mies M**, Güth AZ, Tenório AA, Banha TNS, Waters LG, Polito PS, Taniguchi S, Bicego MC, Sumida PYG. **2018**. *In situ shifts of predominance between autotrophic and heterotrophic feeding in the reef-building coral Mussismilia hispida: an approach using fatty acid trophic markers* . Coral Reefs, 37:677-689.
- **Mies M**, Güth AZ, Castro CB, Pires DO, Calderon EN, Pompeu M, Sumida PYG. **2018**. *Bleaching in reef invertebrate larvae associated with Symbiodinium strains within clades A-F* . Marine Biology, 165:6.

2017 (5)

- **Mies M**, Chaves-Filho AB, Miyamoto S, Güth AZ, Tenório AA, Castro CB, Pires DO, Calderon EN, Sumida PYG. **2017**. *Production of three symbiosis-related fatty acids by Symbiodinium types in clades A-F associated with marine invertebrate larvae* . Coral Reefs, 36:1319-1328.
- **Mies M**, Dor P, Güth AZ, Sumida PYG. **2017**. *Production in giant clam aquaculture: trends and challenges* . Reviews in Fisheries Science and Aquaculture, 4:286-296.
- **Mies M**, Sumida PYG, Rädicker N, Voolstra CR. **2017**. *Marine invertebrate larvae associated with Symbiodinium: a mutualism from the start?* Frontiers in Ecology and Evolution, 5:56.
- **Mies M**, Voolstra CR, Castro CB, Pires DO, Calderon EN, Sumida, PYG. **2017**. *Expression of a symbiosis-specific gene in Symbiodinium type A1 associated with coral, nudibranch and giant clam larvae* . Royal Society Open Science, 4:170253.
- **Mies M**, Van Sluys MA, Metcalfe CJ, Sumida PYG. **2017**. *Molecular evidence of symbiotic activity between Symbiodinium and Tridacna maxima larvae* . Symbiosis, 72:13-22.

2015 (1)

- Sumida PYG, Güth AZ, **Mies M. 2015.** *Pressure tolerance of tadpole larvae of the Atlantic ascidian Polyandrocarpa zorritensis: potential for deep-sea invasion.* Brazilian Journal of Oceanography, 63:515-520.

2014 (1)

- **Mies M**, Güth AZ, Scozzafave MS, Sumida PYG. **2014.** *Spawning behaviour and activity in seven species of ornamental dottybacks (Teleostei: Pseudochromidae)* . Journal of Zoo and Aquarium Research, 2:117-122.

2013 (1)

- **Mies M**, Braga F, Scozzafave MS, Sumida PYG, Lemos D. **2013.** *Successful spawning and a possible solution for broodstock mortality in giant clams (Tridacnidae): a neurotransmitter injection through the byssal orifice* . Aquaculture Research, 44:671-676.

2013 (2)

- **Mies M**, Sumida PYG. **2012.** *Giant clam aquaculture: a review on induced spawning and larval rearing* . International Journal of Marine Science, 2:62-69.
- **Mies M**, Braga F, Scozzafave MS, Lemos D, Sumida PYG. **2012.** *Early development, survival and growth rates of the giant clam Tridacna crocea (Bivalvia: Tridacnidae)* . Brazilian Journal of Oceanography, 60:129-135.

31 articles as first or last author (58%)

*selected publications are highlighted in blue

Scientific book chapters (5)

- **Mies M**, Banha TNS, Francini-Filho RB, Garrido AG, Santos LFA, Güth AZ, Dottori M, Longo GO, Zilberberg C. **2025.** *Reef Ecosystems in the Brazilian Continental Shelf* . In: Oceanography, Biodiversity, Fisheries and Conservation of Brazilian Continental Shelf Habitats (eds PYG Sumida, M Mies), pp 115-172, Springer-Verlag.
- **Mies M**, Banha TNS, Castro CB, Cordeiro RTS, Lotufo TMC, Bianchini A. **2024.** *Biology of Brazilian Benthic Reef Builders and Dwellers* . In: Brazilian Coral Reefs: A Multidisciplinary Approach (eds RKP Kikuchi, ZMAN Leão, ME Araújo, TMC Lotufo), pp 81-112, Springer-Verlag.
- **Mies M. 2017.** *Aquicultura de peixes ornamentais marinhos* . In: O Aquário de Recifes de Corais (ed J. C. Basso), pp 99-103, Editora do Autor.
- **Mies M**, Scozzafave MS, Braga F, Sumida PYG. **2017.** *Giant clams*. In: Marine Ornamental Species Aquaculture (eds R Calado, I Olivotto, M Planas, GJ Holt), pp 510-535, Wiley-Blackwell Publishing.
- Shei MRP, **Mies M**, Olivotto I. **2017.** *Other Demersal Spawners* . In: Marine Ornamental Species Aquaculture (eds R Calado, I Olivotto, M Planas, GJ Holt), pp 223-250, Wiley-Blackwell Publishing.

Editor for scientific books (1)

- Sumida PYG, **Mies M. 2025.** *Oceanography, Biodiversity, Fisheries and Conservation of Brazilian Continental Shelf Habitats* . Springer-Verlag.

Non-peer reviewed texts and articles (3)

- Biazon T, **Mies M.** *Reefs under stress* . Ciência Hoje, April **2023**, online. <https://cienciahoje.org.br/artigo/recifes-sob-estresse/>
- Bianchini A, **Mies M.** *Climate Change and the Oceans* . **2020.** In: Environmental Education at Basic Learning: Reef Environment Conservation and Sustainability. (ed MTJ Gouveia). pp 28-36, Projeto

Coral Vivo.

- **Mies M.** *Giant clam aquaculture* . Global Aquaculture Advocate, September-October **2013**, pp. 66-69.

Abstracts in conference proceedings (19)

- Shimada AC, Garrido AG, Zilberberg C, **Mies M.** **2025**. Who are the Brazilian Symbiodiniaceae? A review on diversity and distribution of symbiodiniaceans in the Southwestern Atlantic Ocean. International Congress of the Brazilian Genetics Society 2025 - Belém (PA), Brazil.
- Leme DM, Kitamura RSA, Silva MH, Gaspar AM, Gomes MP, **Mies M**, Bianchini A, Vita NA, Pinto DCMF, Canavez ADPM, Schuck D. **2025**. Towards the development of animal-free alternatives to coral toxicity testing using symbionts. 13th World Congress on Alternatives and Animal Use in the Life Sciences - Rio de Janeiro (RJ), Brazil.
- Kato CAT, **Mies M**, Güth AZ, Dias JF. **2025**. exploratory search for a diagnostic and predictive tool for fish larval survival based on egg mass characteristics. XXV Brazilian Ichthyology Meeting - Palmas (TO), Brazil.
- Kato CAT, **Mies M**, Güth AZ, Dias JF. **2025**. Marine ornamental fish commercial aquaculture shows a bias toward species with demersal spawning and easy cultivation. XXV Brazilian Ichthyology Meeting - Palmas (TO), Brazil.
- Kitamura RSA, **Mies M**, Bianchini A, Silva MH, Torquato B, Gomes MP, Leme DM. **2024**. Industrial preservatives and their ecotoxicological effects in reef environments: a study with zooxanthellae. XVII Brazilian Conference of Ecotoxicology - Belém (PA), Brazil.
- Kitamura RSA, **Mies M**, Bianchini A, Silva MH, Torquato B, Gomes MP, Leme DM. **2024**. Sunscreens and their toxicity to the reef environment: development of a method with zooxanthellae. XVII Brazilian Conference of Ecotoxicology - Belém (PA), Brazil.
- Ibanhez JY, **Mies M.** **2024**. Heat wave: the before and after of coral cover in Recife de Fora, BA. XX Latin America Conference of Marine Science (COLACMAR) - Itajaí (SC), Brazil.
- Braz GB, Güth AZ, Fonseca JS, Seta AS, Campos LP, Bianchini A, **Mies M.** **2024**. Comparison of resistance and resilience between corals from the South Atlantic, Caribbean, and Indo-Pacific in response to rising temperatures. XX Latin America Conference of Marine Science (COLACMAR) - Itajaí (SC), Brazil.
- Destri G, Güth AZ, Francini-Filho RB, **Mies M.** **2024**. History of thermal stress events in reef environments of the South Atlantic. 2024 Brazilian Reef Encounter - Niterói (RJ), Brazil.
- Braz GB, Lacerda CHF, Evangelista H, Güth AZ, Rumbelsperger AMB, Capel KCC, Dall'Occo PL, **Mies M.** **2024**. Unprecedented erosion of *Mussismilia harttii* , a major reef-building species in the Southwestern Atlantic, after the 2019 bleaching event. 2024 Brazilian Reef Encounter - Niterói (RJ), Brazil.
- Dornellas APS, Mendes G, Barroso CX, Freitas JEP, **Mies M**, Lotufo TMC. **2024**. Revealing the submerged reefs of Sergipe (NE Brazil): a first look at Pedra do Robalo. 2024 Brazilian Reef Encounter - Niterói (RJ), Brazil.
- Loures A, **Mies M.** **2024**. The initial holobiont at risk: multiple effects of climate change on the symbiosis of marine invertebrate larvae and zooxanthellae. 2024 Brazilian Reef Encounter - Niterói (RJ), Brazil.
- Picolotto VAP, **Mies M**, Grillo AC, Destri G, Inagaki KY, Salvi KP, Bechara LS, Bianchini A, Barboza CAM, Longo GO, Horta PA, Lacerda CHF, Luza AL, Segal B. 2024. How does Iron contamination affect the ecosystem functions of a reef environment?. 2024 Brazilian Reef Encounter - Niterói (RJ), Brazil.
- Campos LP, **Mies M**, Braz GB, Güth AZ. **2024**. Effect of thermal stress on the photosynthetic efficiency of reef-building corals from the South Atlantic, Caribbean, and Indo-Pacific. 2024 Brazilian Reef Encounter - Niterói (RJ), Brazil.
- Mariano AEB, **Mies M**, Abessa DMS. **2023**. Monitoring of the rocky reefs in São Paulo State: evaluation of the effects of tourism in *Palythoa caribaeorum* (Cnidaria, Anthozoa) colonies. V Brazilian Symposium of Marine Geology and Geophysics - São Paulo (SP), Brazil.
- Faria SC, Goodbody-Gringley G, Marangoni LFB, Pereira CM, Solms B, Zilberberg C, **Mies M**, Kitahara MV, Bianchini A, Garland T, Navas CA. **2020**. Brazilian phenotypic plasticity under climate changes: an evolutionary history scripted in the coral-dinoflagellate symbiosis. Society for Integrative and Comparative Biology - Austin (TX), USA.
- Banha TNS, **Mies M**, Güth AZ, Sumida PYGS. **2018**. Effects of multiple thermal stresses on chlorophyll-*a* content and size of *Cassiopea* sp. (Cnidaria: Scyphozoa) and the role of heterotrophy and Symbiodinium concentration. International Symposium of Effects of Climate Change on the World's Oceans - Washington D.C., USA.
- Banha TNS, **Mies M**, Sumida PYGS. **2018**. Records of bleaching events in Brazilian reef communities. International Symposium of Effects of Climate Change on the World's Oceans - Washington D.C., USA.
- Lemos DEL, Braga F, **Mies M**, Scozzafave MS, Sumida PYGS. **2009**. Induced spawning of the giant clam *Tridacna crocea* (Bivalvia: Veneroida) by means of a serotonin injection through the byssal orifice. World Aquaculture Society - Veracruz, Mexico.

Scientific conference talks (39)

- 2025** Coral Vivo Research Network: guidelines and future perspectives. XI Workshop of the Coral Vivo Research Network - Rio de Janeiro (RJ), Brazil. Shared with Adalto Bianchini.
- 2025** Anatomical complexity allows for heat-stressed giant clams to undergo symbiont shuffling at both organism and

- organ levels. Aquaculture 2025 - New Orleans (LA), USA.
- 2024** Coral bleaching in Brazilian reef environments. Petrobras SMS Conference - Rio de Janeiro (RJ), Brazil.
- 2024** The Coral Vivo Bleaching Monitoring Program and the current bleaching scenario. 2024 Brazilian Reef Encounter - Niterói (RJ), Brazil. Shared with Tito Monteiro da Cruz Lotufo.
- 2023** The 2019 bleaching episode at Southern Bahia: was there recovery? X Workshop of the Coral Vivo Research Network - Porto Seguro (BA), Brazil. Shared with Beatriz Martins Corazza.
- 2023** Future investigations on the Royal Charlotte Bank. X Workshop of the Coral Vivo Research Network - Porto Seguro (BA), Brazil.
- 2023** Directives for the Coral Vivo Research Network. X Workshop of the Coral Vivo Research Network - Porto Seguro (BA), Brazil.
- 2022** The Coral Vivo expeditions to the Royal Charlotte Bank. IX Workshop of the Coral Vivo Research Network - Online.
- 2022** Directives for the Coral Vivo Research Network. IX Workshop of the Coral Vivo Research Network - Online.
- 2022** South Atlantic coral reefs are major global warming refugia and less susceptible to bleaching. XIX Latin America Conference of Marine Science (COLACMAR) - Panama City, Panama.
- 2022** Research at Coral Vivo. Coral Vivo in São Paulo - São Paulo (SP), Brazil.
- 2021** Coral Vivo expedition to the Royal Charlotte Bank. VIII Workshop of the Coral Vivo Research Network - Online.
- 2021** Directives for the Coral Vivo Research Network. VIII Workshop of the Coral Vivo Research Network - Online.
- 2021** Coral reef bleaching: the global disparity in resilience. Cebimário Talks, at the Marine Biology Center (CeBiMar) of the University of São Paulo. Online.
- 2021** South Atlantic coral reefs are major global warming refugia and less susceptible to bleaching. International Coral Reef Symposium 2021 - Online.
- 2021** The use of live feed for the aquaculture of marine organisms. Aquicultura Online 2.0 - Online.
- 2021** The impacts of multiple stressors on coral reefs. XXII Biology Week of the Federal University of Rio Grande (FURG) - Online. Shared with Adalto Bianchini.
- 2020** South Atlantic coral reefs are major global warming refugia and less susceptible to bleaching. Scripps Institution of Oceanography Ecology Seminar Series - Online.
- 2020** Coral reefs: socioeconomic relevance and anthropogenic impacts. II Brazilian Wildlife Conference - Online.
- 2019** The Coral Vivo Research Network. II APA Costa dos Corais Research Seminar - Maceió (AL), Brazil.
- 2019** Directives for the Coral Vivo Research Network. VII Workshop of the Coral Vivo Research Network - Porto Seguro (BA), Brazil.
- 2019** Marine Ornamental Aquaculture. III Week of Aquaculture Engineering of the Federal University of Paraná (UFPR) - Pontal do Paraná (PR), Brazil.
- 2019** Giant Clam Aquaculture. III Week of Aquaculture Engineering of the Federal University of Paraná (UFPR) - Pontal do Paraná (PR), Brazil.
- 2019** Bleaching in Brazilian coral reefs: history and perspectives. IV National Plan of Action for the Conservation of Coral Reef Ecosystems (PAN Corais) - Arraial do Cabo (RJ), Brazil.
- 2019** Evolution, diversity, distribution and the endangered future of the giant clam-*Symbiodinium* association. Aquaculture 2019 - New Orleans (LA), USA.
- 2019** Production in giant clam aquaculture: trends and challenges. Aquaculture 2019 - New Orleans (LA), USA.
- 2018** Coral reef biology and conservation. 2018 FAEF Symposium - Garça (SP), Brazil.
- 2017** The symbiotic relationship between *Symbiodinium* and coral reef larvae: gene expression, fatty acid biochemistry and responses to thermal stress. V Workshop of the Coral Vivo Research Network - Rio de Janeiro (RJ), Brazil.
- 2017** Marine Ornamental Aquaculture. Academic Week of Veterinary Medicine of the Metodista University - São Bernardo do Campo (SP), Brazil.

- 2016** Marine Ornamental Aquaculture in Brazil: Need for research and integration between universities and breeders
Aquaculture 2016 - Las Vegas (NV), USA.
- 2016** Production of symbiosis-specific fatty acids by different *Symbiodinium* clades associated with *Tridacna crocea*
larvae. Aquaculture 2016 - Las Vegas (NV), USA.
- 2015** Marine ornamental aquaculture: obstacles, progress and Brazilian scenario. Latin America and Caribbean
Aquaculture 2015 - Fortaleza (CE), Brazil.
- 2013** Metabolical contributions of different clades of the zooxanthellae *Symbiodinium* sp. to larvae of Bivalvia,
Gastropoda and Anthozoa. II Workshop of the Coral Vivo Research Network - Rio de Janeiro (RJ), Brazil.
- 2013** Giant clam aquaculture: constraints. Aquaculture 2013 - Nashville (TN), USA.
- 2013** Occurrence of symbiosis between the zooxanthella *Symbiodinium* sp. and the veliger larva of the giant clam
Tridacna maxima. Aquaculture 2013 - Nashville (TN), USA.
- 2012** Induced spawning of bivalve molluscs. Fishing Engineering Week of the State University of Santa Catarina (UDESC) -
Laguna (SC), Brazil.
- 2011** Induced spawning of bivalve molluscs. Aquaculture Week of the Federal University of Santa Catarina (UFSC) -
Florianópolis (SC), Brazil.
- 2011** Successful spawning and possible solution for broodstock mortality in giant clams: a neurotransmitter injection
through the byssal orifice. World Aquaculture Society - Natal (RN), Brazil.
- 2007** Marine Ornamental Fish. Brazilian Aquarium Conference - São Bernardo do Campo (SP), Brazil.

Session chairing in scientific conferences (5)

- 2025** Chair of the "Giant Clam" session in Aquaculture 2019. New Orleans (LA), USA. Coordinated by World Aquaculture
Society.
- 2019** Chair of the "Giant Clam (*Tridacna*)" session in Aquaculture 2019. New Orleans (LA), USA. Coordinated by World
Aquaculture Society.
- 2016** Chair of the "Giant Clam (*Tridacna*)" session in Aquaculture 2016. Las Vegas (NV), USA. Coordinated by World
Aquaculture Society.
- 2015** Chair of the "Ornamentals" session in Latin America and Caribbean Aquaculture 2015. Fortaleza (CE), Brazil.
Coordinated by World Aquaculture Society.
- 2013** Chair of the "Giant Clam (*Tridacna*)" session in Aquaculture 2013. Nashville (TN), USA. Coordinated by World
Aquaculture Society.

Scientific conference organization (9)

- 2025** Organization of the XI Workshop of the Coral Vivo Research Network. Rio de Janeiro (RJ), Brazil. Coordinated by
Coral Vivo Institute.
- 2024** Organization of the 32nd USP Undergraduate Symposium at the Oceanographic Institute - Coordinated by
Oceanographic Institute - University of São Paulo.
- 2024** Organization of the 1st Post-Docs Meeting of the IO-USP. Coordinated by Oceanographic Institute - University of
São Paulo.
- 2024** Organization of a symposium during the 2024 Brazilian Reef Encounter: Bleaching in Brazil: past, present, and
future. Coordinated by the Coral Vivo Institute.
- 2023** Organization of the X Workshop of the Coral Vivo Research Network. Porto Seguro (BA), Brazil. Coordinated by Coral

Vivo Institute.

2022 Organization of the IX Workshop of the Coral Vivo Research Network. Online. Coordinated by Coral Vivo Institute.

2021 Organization of the VIII Workshop of the Coral Vivo Research Network. Online. Coordinated by Coral Vivo Institute.

2021 Member of the scientific evaluation committee for the Brazilian Reef Encounter 2021. Coordinated by the Brazilian Reef Encounter.

2019 Organization of the VII Workshop of the Coral Vivo Research Network. Porto Seguro (BA), Brazil. Coordinated by Coral Vivo Institute.

Research Projects

Lead coordinator (2)

2025 - GLO-CORE - The historical GLObal impacts of climate change on COral REefs: the role of refugia and key oceanographical and functional traits

Funding agency Fundação de Amparo à Pesquisa do Estado de São Paulo

Leading Institution University of São Paulo

2025 - The triple planetary crisis on coral reefs in Brazil: global warming as an intensifying agent of the impacts of plastic pollution

Funding agency Fundação de Apoio à Universidade de São Paulo

Leading Institution University of São Paulo

Research collaborator (6)

2025 - Study of specialized metabolites produced by cyanobacteria isolated from South Atlantic corals

Coordinator Prof. Anelize Bauermeister

Funding agency Conselho Nacional de Desenvolvimento Científico e Tecnológico

Leading Institution University of São Paulo

2023 - Using the phylogenetic past to predict climate impacts: ecophysiology of symbiosis and accelerated evolution in coral reef conservation

Coordinator Prof. Samuel Coelho de Faria

Funding agency Fundação de Amparo à Pesquisa do Estado de São Paulo

Leading Institution University of São Paulo

2023 - Ecophysiological trade-offs of corals living in climate refugia

Coordinator Prof. Ronaldo Bastos Francini-Filho

Funding agency Fundação de Amparo à Pesquisa do Estado de São Paulo

Leading Institution University of São Paulo

2022 - Integrating tools and disciplines for the understading of the future of Western South Atlantic shallow-water corals in a changing world

Coordinator Prof. Marcelo Visentini Kitahara

Funding agency Fundação de Amparo à Pesquisa do Estado de São Paulo

Leading Institution University of São Paulo

2022 - 2024 Nutritional and antioxidante enrichment of corals as a tool against multiple anthropogenic stressors

Coordinator Dr. Laura Fernandes Barros Marangoni
Funding agency Central Caribbean Marine Institute
Leading Institution Smithsonian Tropical Research Institute

2022 - 2024 Predicting the effects of climate change on the photosymbiotic organisms associated with Brazilian corals
Coordinator Prof. Carla Zilberberg
Funding agency Fundação de Amparo à Pesquisa do Estado do Rio de Janeiro
Leading Institution Federal University of Rio de Janeiro

Head of research (4)

2026 - Coral Vivo Regenera
Coordinator Dr. Flávia Maria Guebert
Funding agency Banco Nacional de Desenvolvimento Econômico e Social
Leading Institution Coral Vivo Institute

2024 - Coral Vivo Project VI
Coordinator Dr. Flávia Maria Guebert
Funding agency Petrobras
Leading Institution Coral Vivo Institute

2021 - 2023 Coral Vivo Project V
Coordinator Dr. Flávia Maria Guebert
Funding agency Petrobras
Leading Institution Coral Vivo Institute

2019 - 2020 Coral Vivo Project IV
Coordinator Dr. Flávia Maria Guebert
Funding agency Petrobras
Leading Institution Coral Vivo Institute

Member of Editorial Board for JCR-indexed Scientific Journals (2)

2023 Microorganisms (ISSN 2076-2607), Guest Editor for Special Issue on "Advances in Investigations of the Coral Holobiont"
2019 - 2020 Frontiers in Marine Science (ISSN 2296-7745), Specialty Editor for Coral Reef Research

Refereeing for JCR-indexed Scientific Journals (64)

- Animals (ISSN 2076-2615), 1x
- Aquaculture (ISSN 0044-8486), 4x
- Aquaculture, Fish and Fisheries (ISSN 2693-8847), 1x
- Aquatic Invasions (ISSN 1798-6540), 1x
- Biological Bulletin, The (ISSN 0006-3185), 1x
- Bulletin of Marine Science (ISSN 0007-4977), 1x
- Communications Biology (ISSN 2399-3642), 1x

- Conservation Biology (ISSN 0888-8892), 1x
- Coral Reefs (ISSN 0722-4028), 8x
- Earth System Science Data (ISSN 1866-3516), 1x
- Ecology and Evolution (ISSN 2045-7758), 1x
- Environment, Development and Sustainability (ISSN 1573-2975), 1x
- Estuarine, Coastal and Shelf Science (ISSN 1096-0015), 1x
- Frontiers in Marine Science (ISSN 2296-7745), 2x
- Frontiers in Physiology (ISSN 1664-042X), 1x
- Gene Reports (ISSN 2452-0144), 1x
- Harmful Algae (ISSN 1568-9883), 1x
- Hydrobiologia (ISSN 0018-8158), 1x
- Journal of Applied Aquaculture (ISSN 1045-4438), 1x
- Journal of Aquaculture Research and Development (ISSN 2155-9546), 1x
- Journal of Fish Biology (ISSN 1095-8649), 1x
- Journal of Molluscan Studies (ISSN 0260-1230), 1x
- Journal of Phycology (ISSN 1529-8817), 1x
- Journal of Shellfish Research (ISSN 0730-8000), 1x
- Journal of The World Aquaculture Society (ISSN 1749-7345), 1x
- Marine Biodiversity (ISSN 1867-1616), 1x
- Marine Biology (ISSN 0025-3162), 2x
- Marine Ecology (ISSN 1439-0485), 1x
- Marine Ecology Progress Series (ISSN 0171-8630), 2x
- Marine Environmental Research (ISSN 0141-1136), 2x
- Marine Pollution Bulletin (ISSN 0025-326X), 3x
- Mediterranean Marine Science (ISSN 1108-393X), 1x
- Ocean and Coastal Research (ISSN 1679-8759), 6x
- Pacific Conservation Biology (ISSN 1038-2097), 1x
- PeerJ (ISSN 2167-8359), 1x
- PLoS Climate (ISSN 2767-3200), 1x
- PLoS One (ISSN 1932-6203), 1x
- Reviews in Aquaculture (ISSN 1753-5131), 1x
- Royal Society Open Science (ISSN 2054-5703), 1x
- Science of the Total Environment (ISSN 1879-1026), 2x
- Scientific Reports (ISSN 2045-2322), 2x

64 reviews for 41 different journals

Refereeing for Funding or Support Agencies (15)

- Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) grant proposal, 2x
- Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) PhD proposal, 1x
- United Nations Ocean Decade Support Program, 1x
- Institut français de recherche pour l'exploitation de la mer (IFREMER) post-doc proposal, 1x
- University of Guam Sea Grant Program, 1x
- Reviewing of research proposals for the Marine Extraction Reserve of Corumbau (RESEX de Corumbau) and

3. TEACHING

Subjects Taught at IO-USP

Undergraduate (7)

- 2024** - "Biological Oceanography III" (IOB-0169)
- 2024** - "Coral Reefs" (IOB-0175)
- 2024** - "Biology of Marine Invertebrates" (IOB-0177)
- 2023** - "Effects of climate change on marine ecosystems" (IOB-0176)
- 2023** "Data Analysis I" (2100115)
- 2023** "Integrative Oceanography I - Oceanic System" (2100120)
- 2023** "Marine Invertebrates" (IOB-0157)

Postgraduate (3)

- 2025** - "Pedagogical Training in Oceanography" (IOC-5940)
- 2024** - "Experimental Ecology of Marine Invertebrate Larvae" (IOC-5740)
- 2022** - "Reef ecosystems" (IOC-5734)

Subjects/courses Created at IO-USP (3)

- 2024** Experimental Ecology of Marine Invertebrate Larvae course for the Oceanography postgraduate program.
Coordinated by the Oceanographic Institute - University of São Paulo.
- 2023** Effects of Climate Change on Marine Ecosystems course for the Bachelor's Degree in Oceanography program.
Coordinated by the Oceanographic Institute - University of São Paulo.
- 2023** Coral Reefs course for the Bachelor's Degree in Oceanography program. Coordinated by the Oceanographic Institute - University of São Paulo.

Supervisions

Post-doctoral (2)

- 2025** - Marina Nasri Sissini. Second coral bleaching episode in the Southwest Atlantic during the fourth global event.
Oceanographic Institute - University of São Paulo.
- 2024** - Michelle Amario. Are coral restoration sites doomed? Thermal stress episodes, turbidity, and depth as criteria for assessing the suitability of current coral restoration sites. Oceanographic Institute - University of São Paulo.

PhD degree (9) *Main supervisions (5)*

- 2025** - Giulia Buzzacaro Braz. Corals in a warming ocean: history and limits of resistance in climate refugia. PhD Degree in Oceanography. Oceanographic Institute - University of São Paulo.
- 2025** - Camila Aya Tanaka Kato. Linking fish functional diversity, coral nutrition, and resilience: exploring trophic

- interactions in coral reef ecosystems. PhD Degree in Oceanography. Oceanographic Institute - University of São Paulo.
- 2024** - Beatriz Martins Corazza. Degradation in a context of climate change: the role of recovery, trophic ecology and symbiotic interactions in coral reef resilience. PhD Degree in Oceanography. Oceanographic Institute - University of São Paulo.
- 2024** - Aline Shimada da Cruz. Unveiling the resistance and resilience of southwest Atlantic coral reefs: an analysis of responses to climate change through functional aspects of autotrophy and heterotrophy. PhD Degree in Oceanography. Oceanographic Institute - University of São Paulo.
- 2023** - Giovanna Nascimento D'Aquino Destri. Climate change in Brazilian coral reefs: past, present and future. PhD Degree in Oceanography. Oceanographic Institute - University of São Paulo.
- 2023** - Gabriela Cristina Mitsuhashi. The global decline in coral cover and the role of oceanographic, environmental and biological traits on resilience. PhD Degree in Oceanography. Oceanographic Institute - University of São Paulo.

Co-supervisions (3)

- 2025** - Amanda Escarabichi Bueno Mariano. Resistance and vulnerability of Brazilian coral reef communities in a climate change context: addressing ecological, oceanographic, and local impact gaps. PhD Degree in Oceanography. Oceanographic Institute - University of São Paulo. Co-supervision with Denis Moledo de Souza Abessa.
- 2024** - Valberth Francisco Nunes Costa. Bleaching event in coral reefs subject to multiple uses of Marine Protected Area: use of ecological and biological indicators in a scenario of global warming. PhD Degree in Biological Sciences. Federal University of Alagoas. Co-supervision with Taciana Kramer de Oliveira Pinto.
- 2023** - Carolina Freitas Schlosser. Ecophysiological trade-offs for reef corals living in climate refugia. PhD Degree in Ecology. Biosciences Institute - University of São Paulo. Co-supervision with Ronaldo Bastos Francini-Filho.

Master's degree (10) *Main supervisions (6)*

- 2025** - Bianca Espindula Jahn. From the past to the future: meteorological and oceanographic factors mitigating coral bleaching and the evolution of growth rates in Brazil. Master's Degree in Oceanography. Oceanographic Institute - University of São Paulo.
- 2025** - Mariana Ferreira Acipreste. Climate refugia for coral reefs: resilience and underlying biological and oceanographic mechanisms in Raja Ampat and the South Atlantic. Master's Degree in Oceanography. Oceanographic Institute - University of São Paulo.
- 2024** - Arthur Loures Choucair Rodrigues de Oliveira. El Niño 2023-24: Importance of fish assemblage and functional loss during coral bleaching in Brazil. Master's Degree in Oceanography. Oceanographic Institute - University of São Paulo.
- 2023 - 2025** Luna Mayura da Fonseca Bauer. Beyond Morphology: Functional Traits and Resilience Implications in Symbiodiniaceae. Master's Degree in Oceanography. Oceanographic Institute - University of São Paulo.
- 2023 - 2025** Giulia Buzzacaro Braz. Traces of the past and warnings from the present: a physiological and sclerochronological assessment of thermal stress in south atlantic corals. Master's Degree in Oceanography. Oceanographic Institute - University of São Paulo.
- 2021 - 2023** Beatriz Martins Corazza. Bleaching across the South Atlantic in 2021-22. Master's Degree in Oceanography. Oceanographic Institute - University of São Paulo.

Co-supervisions (4)

- 2022 - 2024** Amanda Escarabichi Bueno Mariano. Monitoring of rocky reefs in the northern coast of São Paulo State: bleaching of *Palythoa caribaeorum* (Cnidaria, Anthozoa) and anthropogenic stressors. Master's Degree in Biological

- Sciences. Júlio de Mesquita Filho São Paulo State University (UNESP). Co-supervision with Denis Moledo de Souza Abessa.
- 2020 - 2024** Camila Aya Tanaka Kato. bottlenecks and trends in the commercial production of marine ornamental fish: search for a diagnostic tool for success in larviculture and identification of the reproductive profile of cultivated species. Master's Degree in Oceanography. Oceanographic Institute - University of São Paulo. Co-supervision with June Ferraz Dias.
- 2016 - 2018** Thomás Nei Soto Banha. The effect of multiple bleaching events on the symbiosis between different *Symbiodinium* clades and the Upside Down Jellyfish, *Cassiopea* sp. Master's Degree in Oceanography. Oceanographic Institute - University of São Paulo. Co-supervision with Paulo Yukio Gomes Sumida.
- 2014 - 2016** Arthur de Albuquerque Tenório. Shifts between autotrophy and heterotrophy in the reef-building coral *Mussismilia hispida* : an approach using fatty acid trophic markers. Master's Degree in Oceanography. Oceanographic Institute - University of São Paulo. Co-supervision with Paulo Yukio Gomes Sumida.

Undergraduate (22) Main supervisions (17)

- 2025 -** Stephany de Souza Dantas. Does coral cover recovery decrease with increasing depth? Oceanographic Institute - University of São Paulo.
- 2025 -** Melissa Rodrigues de Moraes. Photosynthetic performance of *Mussismilia hispida* under different health conditions and feeding regimens. Oceanographic Institute - University of São Paulo.
- 2025 -** Giovana Lima de Souza. Bleaching assessment of gonadal tissues and gametes of the South Atlantic corals *Millepora alcicornis* and *Mussismilia harttii* . Oceanographic Institute - University of São Paulo.
- 2024 -** Milena Santos de Lara. Raja Ampat as a climate refugium: oceanographic insights into coral reef resilience. Oceanographic Institute - University of São Paulo.
- 2024 -** Daniela Fernanda Brochero Giraldo. Differential coral cover loss in ecoregions. Oceanographic Institute - University of São Paulo.
- 2021 -** Luiza Peres de Campos. The effects of multiple stressors on the photosynthetic efficiency of South Atlantic, Caribbean and Indo-Pacific reef-building corals. Oceanographic Institute - University of São Paulo.
- 2024 - 2025** Júlia Yumi Ibanhez. 2023-24 ENSO: bleaching and mortality on Bahia reefs. Oceanographic Institute - University of São Paulo.
- 2023 - 2025** Mariana Ferreira Acipreste. The history of bleaching and thermal stress at Raja Ampat. Oceanographic Institute - University of São Paulo.
- 2023 - 2024** Júlia Romero Neves. The storing of photosynthetic product in different organs of giant clams. Oceanographic Institute - University of São Paulo.
- 2024 - 2024** Júlia Lima Monteiro de Carvalho. 2023-24 ENSO: bleaching and mortality on marginal reefs. Oceanographic Institute - University of São Paulo.
- 2023 - 2024** Anna Beatriz Dias Oliveira Berretini. The diversity of reef organisms at the Royal Charlotte Bank. Oceanographic Institute - University of São Paulo.
- 2021 - 2023** Arthur Loures Choucair Rodrigues de Oliveira. The impacts of climate change on the larva-Symbiodiniaceae association. Oceanographic Institute - University of São Paulo.
- 2021 - 2022** Kelly Tartas Olaia. The marine aquarium trade's long road towards sustainability. Oceanographic Institute - University of São Paulo.
- 2021 - 2022** Giovana Aparecida Camargo Damiani. Recent turbidity regimens in Southwestern Atlantic coral reefs. Bachelor's Degree in Biology. Júlio de Mesquita Filho São Paulo State University (UNESP).
- 2021 - 2021** Giulia Buzzacaro Braz. The 2019 bleaching episode promoted erosion in a major South Atlantic reef builder.

Bachelor's Degree in Biology. Mackenzie Presbyterian University.

2020 - 2020 Renata Karina Marconi Marcançoli. The 2019-2020 bleaching episode at the southern Bahia coast. Projeto Coral Vivo.

2014 - 2017 Estela de Almeida Monteiro. The sea slug *Berghia stephanieae* : the symbiosis with zooxanthellae and practical aspects for aquaculture. Oceanographic Institute - University of São Paulo.

Co-supervisions (5)

2024 - 2024 Bárbara Uenoyama da Silva. Chemical characterization of Corals from Ubatuba (São Paulo, Brazil). Oceanographic Institute - University of São Paulo. Co-supervision with Tailisi Hoppe Trevizani.

2019 - 2020 Marcelo de Castro Querido. Response to thermal stress in the acoel-zoochlorella association. Bachelor's Degree in Oceanography. Oceanographic Institute - University of São Paulo. Co-supervision with Paulo Yukio Gomes Sumida.

2017 - 2018 Diego Okuma. The reproductive biology of the genus *Meiacanthus* (Teleostei: Blenniidae). Bachelor's Degree in Oceanography. Oceanographic Institute - University of São Paulo. Co-supervision with June Ferraz Dias.

2017 - 2017 Lucas Lopes Gonçalves. The impact of wild zooplankton on the metamorphosis rate of the ornamental dottyback *Pseudochromis sankeyi* . Bachelor's Degree in Oceanography. Oceanographic Institute - University of São Paulo. Co-supervision with Paulo Yukio Gomes Sumida.

2014 - 2015 Gabriela Cristina Mitsuhashi. Differences in the intron/exon structure of the H⁺-ATPase in different *Symbiodinium* clades. Bachelor's Degree in Oceanography. Oceanographic Institute - University of São Paulo. Co-supervision with Paulo Yukio Gomes Sumida and Marie-Anne van Sluys.

FAPESP scholarships awarded to supervised students and post-doctoral researchers (11)

Post-doctoral (1) Michelle Amario

PhD (3) Aline Shimada da Cruz, Beatriz Martins Corazza, Giovanna Nascimento D'Aquino Destri

Master's (1) Arthur Loures Choucair Rodrigues de Oliveira

Undergraduate (6) Anna Beatriz Dias Oliveira Berrettini, Daniela Fernanda Brochero Giraldo, Júlia Yumi Ibanhez, Júlia Romero Neves, Luiza Peres de Campos, Mariana Ferreira Acipreste

Participation in Examination Boards

Faculty hiring (1)

2025 Chair of the committee for hiring a faculty member at IO-USP in the area of "Data Science in Oceanography".

PhD degree (6)

2025 Bruno Henrique de Moraes e Souza. Benthic biodiversity patterns in the deep Southwest Atlantic. Oceanographic Institute, University of São Paulo. Supervisor: Paulo Yukio Gomes Sumida.

2024 Gilberto Bergamo Neto. Diversity and connectivity of polychaetes in different deep-sea habitats in the Santos Basin. Oceanographic Institute, University of São Paulo. Supervisor: Paulo Yukio Gomes Sumida.

2023 Silas Príncipe Candido de Souza. How will Atlantic coral reefs look in the future? Predicted shift in the distribution of key species of shallow reef environments in face of climate change. Oceanographic Institute, University of São Paulo. Supervisor: Tito Monteiro da Cruz Lotufo.

- 2021** Sérgio Leandro Araújo Silva. Behavioural and reproductive aspects, and spawn, egg and larval description for captive held *Gramma brasiliensis*. Federal University of Santa Catarina (UFSC). Supervisor: Mônica Yumi Tsuzuki.
- 2021** Juliana da Silva Fonseca. Combined effects of thermal stress and copper exposure on the energy metabolism, trophic behavior and oxidative status of the coral *Mussismilia harttii*. Federal University of Rio Grande (FURG). Supervisor: Adalto Bianchini.
- 2019** Bruna Louise Pereira Luz. Life history and molecular mechanisms for development and regeneration in *Tubastrea coccinea* (Dendrophylliidae, Scleractinia): an assay for its establishment as a model organism. Federal University of Paraná (UFPR). Supervisor: Marcelo Visentini Kitahara.

PhD evaluation committee (4)

- 2024** Lucas Nóbrega Delcistia. Comparative investigation of reef cryptic diversity in Brazil through the use of Autonomous Reef Monitoring Structures (ARMS). Oceanographic Institute, University of São Paulo. Supervisor: Tito Monteiro da Cruz Lotufo.
- 2024** Yuri Ricardo Andrade Aiube. Taxonomic and ecophysiological diversity of coral symbionts from the Abrolhos Bank. Institute of Biology, Federal University of Rio de Janeiro. Supervisor: Paulo Sérgio Salomon.
- 2022** Gilberto Bergamo Neto. Diversity, ecology and population genetic of deep-water polychaetes in different habitats at the Santos Basin. Oceanographic Institute, University of São Paulo. Supervisor: Paulo Yukio Gomes Sumida.
- 2020** Silas Príncipe Candido de Souza. Predicted shifts in the distribution of Western Atlantic reef builders in face of climate change. Oceanographic Institute, University of São Paulo. Supervisor: Tito Monteiro da Cruz Lotufo.

Master's degree (9)

- 2025** Cezar Felipe Lugullo Maia de Araújo. Fish herbivory rates and habitat drivers in a tropical reef. Algarve University, Portugal. Supervisor: Nadine Schubert.
- 2024** Luiz de Souza Oliveira. Production of calcium carbonate (CaCO₃) by *Mussismilia hispida* (Verril, 1902) in the subtropical region of the southwest Atlantic. Federal University of São Paulo (UNIFESP). Supervisor: Guilherme Henrique Pereira-Filho.
- 2024** Aline Shimada da Cruz. Comparative physiology of epibiotic diatoms on coral reefs in the Abrolhos reef system: a transcriptomic approach. Federal University of Rio de Janeiro (UFRJ). Supervisor: Paulo Sérgio Salomon.
- 2023** Wildna Fernandes do Nascimento. Massive coral bleaching caused by the 2020 heatwave in northeastern Brazil. Federal University of Rio Grande do Norte (UFRN). Supervisor: Guilherme Ortigara Longo.
- 2023** Valberth Francisco Nunes Costa. Assessment of the ecological status of coral reefs subject to multiple stressors in a Marine Protected Area through ecological indicators and biochemical responses. Federal University of Alagoas (UFAL). Supervisor: Taciana Kramer de Oliveira Pinto.
- 2021** Daniel Castro Martignago. Functional markers in the oocyte of the Brazilian corals *Mussismilia harttii* and *Mussismilia braziliensis*. Federal University of Rio Grande do Sul (UFRGS). Supervisor: Guendalina Turcato.
- 2021** Amanda Pereira de Amaral. Thermal stress influences the viability of the spermatozoa of the coral *Mussismilia harttii*: relationship between morphology, motility, cellular aging and oxidative stress. Nilton Lins University. Supervisor: Leandro Godoy.
- 2020** Jéssica Bleuel. Brazilian corals and global climate change: future projections and vulnerability hotspots. Federal University of Rio Grande do Norte (UFRN). Supervisor: Guilherme Ortigara Longo.
- 2020** Laila Maria de Carvalho. Marine ornamental fisheries: unreported collection and trade in Brasil. Fisheries Institute (IP-SP). Supervisor: Eduardo Gomes Sanches.

Master's evaluation committee (4)

- 2025** Júlia Melo Molina. Invisible diversity to the naked eye: exploring the microbiome associated with *Actinostella flosculifera* (Cnidaria; Anthozoa) and *Cassiopea andromeda* (Cnidaria; Medusozoa). Júlio de Mesquita Filho São Paulo State University (UNESP). Supervisor: Sérgio Nascimento Stampar.
- 2025** Juliana Aparecida Moureira. South Atlantic corals and climate change: the effect of shading on reducing coral bleaching. Federal University of Rio Grande do Norte (UFRN). Supervisor: Edson Aparecido Vieira Filho.
- 2025** Juliano Guerra de Castro. Evolutionary hotspots along the Brazilian coast: are we protecting the most genetically diverse areas of our seas? Federal University of Sergipe (UFS). Supervisor: Ana Paula Siqueira Dornellas.
- 2021** Hayla Paixão Viveiros. In vitro coral generation through cryopreserved semen: strategy for conservation of the endemic species *Mussismilia harttii*. Federal University of Rio Grande do Sul (UFRGS). Supervisor: Leandro Godoy.

Bachelor's degree (10)

- 2025** Christian Diego de Carvalho. Prevalence and parasitic intensity of cestodes from the family Pterobothriidea (Pintner, 1931) in *Micropogonias furnieri* (desmarest, 1823) in the Anchieta Island State Park region and its relation to biological and oceanographic parameters. Oceanographic Institute, University of São Paulo. Supervisor: June
- 2024** Guilherme Wenceslau Piazzaroli Leite. Ascidiars of the Ubatuba coast. Oceanographic Institute, University of São Paulo. Supervisor: Tito Monteiro da Cruz Lotufo.
- 2024** Guilherme Oliveira Souza. Comparison of the mechanisms controlling the dissolution/preservation of calcium carbonate in the Santos and Pelotas Basins between 30,000 and 110,000 years. Oceanographic Institute, University of São Paulo. Supervisor: Karen Badaraco Costa.
- 2024** Giovanna Louro Goldemberg. An analysis of the port environmental agenda in relation to ESG parameters. Oceanographic Institute, University of São Paulo. Supervisor: Alexander Turra.
- 2023** Vanessa Regina Silva Xavier. Catástrofe ambiental e ciência oceanográfica: Environmental catastrophe and oceanographic science: the impact of the Mariana tragedy on scientific production and the repercussions of science in the Brazilian traditional media. Oceanographic Institute, University of São Paulo. Supervisor: Christian Millo.
- 2023** Thabata Grecco Oliveira Fonseca. Effects of climate change on the distribution of the macroalgae *Gelidiella acerosa*. Oceanographic Institute, University of São Paulo. Supervisor: Tito Monteiro da Cruz Lotufo.
- 2023** Agatha Todam. Fish for Health: a critical evaluation of the effects of shrimp consumption on human health. Oceanographic Institute, University of São Paulo. Supervisor: Daniel Eduardo Lavanholi de Lemos.
- 2022** Edson Cavalcante dos Santos. Carbon source and growth pattern of the deep-sea coral *Paragorgia arborea* in the Davis Strait (North Atlantic). Oceanographic Institute, University of São Paulo. Supervisor: Christian Millo.
- 2022** Amanda Escarabichi Bueno Mariano. Bleaching of *Palythoa caribaeorum* (Cnidaria, Anthozoa) at sites with different levels of anthropogenic impact in APAMLN and ESEC Tupinambás (Ubatuba, São Paulo, Brazil). Júlio de Mesquita Filho São Paulo State University (UNESP). Supervisor: Denis Moledo de Souza Abessa.
- 2022** Letícia May Fukushima. Assessment of the acute toxicity of contaminants associated with petroleum and petrochemical activities on the invasive coral *Tubastraea coccinea*: a contribution to the study of pollution in Brazilian reef environments. Júlio de Mesquita Filho São Paulo State University (UNESP). Supervisor: Denis Moledo de Souza Abessa.

Others (12)

- 2025** Member of the PhD (Oceanography) selection committee for candidate Fernanda Pasetto Corrêa. Oceanographic Institute of the University of São Paulo. Supervisor: Paulo Yukio Gomes Sumida.
- 2025** Member of the PhD (Oceanography) selection committee for candidate Ana Luiza Portezani Brandão. Oceanographic

- Institute of the University of São Paulo. Supervisor: Amanda Gonçalves Bendia.
- 2025** Member of the PhD (Oceanography) selection committee for candidate Leandro Fernandes Antonio Santos. Oceanographic Institute of the University of São Paulo. Supervisor: Alexander Turra.
- 2025** Member of the PhD (Oceanography) selection committee for candidate Kárita Cristine Rodrigues dos Santos. Oceanographic Institute of the University of São Paulo. Supervisor: Amanda Gonçalves Bendia.
- 2025** Member of the PhD (Oceanography) selection committee for candidate Jonathas Ferreira dos Santos. Oceanographic Institute of the University of São Paulo. Supervisor: Tito Monteiro da Cruz Lotufo.
- 2025** Member of the PhD (Oceanography) selection committee for candidate Monique Torres de Queiroz. Oceanographic Institute of the University of São Paulo. Supervisor: Alexander Turra.
- 2024** Member of the PhD (Oceanography) selection committee for candidate Maria Eduarda Castro do Nascimento. Oceanographic Institute of the University of São Paulo. Supervisor: Vivian Helena Pellizari.
- 2024** Member of the PhD (Oceanography) selection committee for candidate Érico Silva Lima Gomes dos Santos. Oceanographic Institute of the University of São Paulo. Supervisor: June Ferraz Dias.
- 2024** Member of the PhD (Oceanography) selection committee for candidate Renato Gamba Romano. Oceanographic Institute, University of São Paulo. Supervisor: Vivian Helena Pellizari.
- 2024** Member of the evaluation committee overseeing the transition from the master's to the PhD (Oceanography) program for Júlia Petroski Olier. Oceanographic Institute, University of São Paulo. Supervisor: Maria de los Angeles Gasalla.
- 2023** Member of the PhD (Oceanography) selection committee for candidate João Pedro Mancio Amorim. Oceanographic Institute of the University of São Paulo. Supervisor: Ilson Carlos Almeida da Silveira.
- 2023** Examination board member for the selection of a substitute professor at the Department of Biological Oceanography of the Oceanographic Institute of the University of São Paulo.

Other Teaching Activities

Stand-alone classes or lectures taught (32)

- 2025** "The advance of coral bleaching in Brazil and in the world" during the course "Ecology and evolution of reefs: from individuals to ecosystems"- Graduation course Federal University of Ceará. Tamandaré (PE), Brazil. Coordinated by Prof. Marcelo Oliveira Soares/UFC.
- 2025** "Coral Reef Fish Life Cycles" during the course "Marine Fish Life Cycles and Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. June Ferraz Dias/IO-USP.
- 2024** "Coral Reef Fish Life Cycles" during the course "Marine Fish Life Cycles and Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. June Ferraz Dias/IO-USP.
- 2023** "Marine Ornamental Aquaculture" during the course "Aquaculture Practices" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Vicente Gomes/IO-USP and Prof. Daniel Lemos/IO-USP.
- 2022** "Benthic-pelagic coupling" during the course "Pelagic System" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Camila Signori/IO-USP.
- 2022** "Impacts and resilience of Brazilian reefs" for Biological Sciences graduate students of the State University of Rio de Janeiro. Online. Coordinated by Prof. Beatriz Fleury/IBRAG-UERJ.
- 2022** "Coral Reef Fish Life Cycles" during the course "Marine Fish Life Cycles and Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. June Ferraz Dias/IO-USP.
- 2022** "Ethics when discarding fish" for the training course "Ethical Principles and Handling of Animals in Research and Teaching". Online. Coordinated by University of São Paulo.

- 2022** "Quarantine and transfer from quarantine to research" for the training course "Ethical Principles and Handling of Animals in Research and Teaching". Online. Coordinated by University of São Paulo.
- 2022** "The origins of fish used in research and teaching activities" for the training course "Ethical Principles and Handling of Animals in Research and Teaching". Online. Coordinated by University of São Paulo.
- 2021** "Brazilian reefs: impacts and resilience" for Biological Sciences undergraduate students of the Federal University of Rio de Janeiro. Online. Coordinated by Prof. Carla Zilberberg/NUPEM-UFRJ.
- 2021** "Marine Ornamental Aquaculture" for Biological Sciences undergraduate students of the University Center of Adamantina. Online. Coordinated by Regina Ruete/UNIFAI.
- 2021** "Coral Reefs: Biology and Conservation" for Biological Sciences undergraduate students of the Federal University of Triângulo Mineiro. Online. Coordinated by Prof. Luciana Segura/UFTM.
- 2021** "Coral Reef Fish Life Cycles" during the course "Marine Fish Life Cycles and Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. June Ferraz Dias/IO-USP.
- 2020** "Coral Reef Fish Life Cycles" during the course "Marine Fish Life Cycles and Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. June Ferraz Dias/IO-USP.
- 2019** "Scientific Writing" during the course "Marine Larval Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.
- 2019** "Experimental Design" during the course "Marine Larval Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.
- 2019** "Marine Larval Aquaculture" during the course "Marine Larval Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.
- 2017** "Coral Reefs" during the course "Benthic System" - Undergraduation course IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.
- 2017** "Scientific Writing" during the course "Marine Larval Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.
- 2017** "Experimental Design" during the course "Marine Larval Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.
- 2017** "Marine Larval Aquaculture" during the course "Marine Larval Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.
- 2016** "Marine Ornamental Aquaculture" during the course "Fisheries Biology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Marcelo Melo/IO-USP.
- 2016** "Use of zooplankton in aquaculture" during the course "Zooplankton Ecology" - Undergraduation course IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Luz Amelia Vega-Pérez/IO-USP.
- 2016** "Coral Reefs" during the course "Benthic System" - Undergraduation course IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.
- 2015** "Scientific Writing" during the course "Marine Larval Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.
- 2015** "Experimental Design" during the course "Marine Larval Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.
- 2015** "Marine Larval Aquaculture" during the course "Marine Larval Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.
- 2014** "Symbiosis in Corals" during the course "Marine Invertebrates" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.
- 2012** "Marine Ornamental Aquaculture" during the course "Alternative Technologies for the Exploration and Use of Marine Resources" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Frederico Brandini/IO-

- USP.
- 2011** "Giant Clam Aquaculture" during the course "Marine Zooplankton" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Luz Amelia Vega-Pérez/IO-USP.
- 2009** "Giant Clam Aquaculture" during the course "Aquaculture" - Undergraduation course at IO-USP. São Paulo (SP), Brazil Coordinated by Prof. Daniel Lemos/IO-USP.

Assessment of PhD and Master's plans (7)

- 2025** Assessment of the PhD plan for University of São Paulo candidate João Vitor Langorte Bueno. Coordinated by Oceanographic Institute - University of São Paulo.
- 2025** Assessment of the PhD plan for University of São Paulo candidate Luana Petri Fucks. Coordinated by Oceanographic Institute - University of São Paulo.
- 2025** Assessment of the Master's plan for University of São Paulo candidate Bárbara Uenoyama da Silva. Coordinated by Oceanographic Institute - University of São Paulo.
- 2024** Assessment of the PhD plan for University of São Paulo candidate Heloísa de Cia Caixeta. Coordinated by Oceanographic Institute - University of São Paulo.
- 2024** Assessment of the Master's plan for University of São Paulo candidate Ingra Araújo Oliveira Queiroz. Coordinated by Oceanographic Institute - University of São Paulo.
- 2024** Assessment of the Master's plan for University of São Paulo candidate Luiza Soares Ferreira Guimarães. Coordinated by Oceanographic Institute - University of São Paulo.
- 2023** Assessment of the Master's plan of activities for Universidade Federal Rural de Pernambuco (UFRPE) candidate Natanael Cícero. Coordinated by the Universidade Federal Rural de Pernambuco (UFRPE).

Miscellaneous (11)

- 2024** Assessment on the candidate course "Biological Oceanography of Polar Ecosystems" for integration in the Oceanography graduation program. Coordinated by Oceanographic Institute - University of São Paulo.
- 2024** Member of the IO-USP Evaluation Committee for the USP "Outstanding Thesis" Award. Coordinated by Oceanographic Institute - University of São Paulo.
- 2023** Assessment of projects for the Institutional Undergraduate Scholarships Program (PIBIC). Coordinated by the National Council for Scientific and Technological Development (CNPq).
- 2023** Assessment of two projects for the University of São Paulo's Unified Scholarships Program (PUB). Coordinated by University of São Paulo.
- 2023** Formulation of the syllabi for the Integrative Oceanography I and Integrative Oceanography II courses for the Bachelor's Degree in Oceanography program. Coordinated by Oceanographic Institute - University of São Paulo.
- 2023** Assessment on the candidate course "Genetics Applied to Biological Oceanography" for integration in the Oceanography graduation program. Coordinated by Oceanographic Institute - University of São Paulo.
- 2022** Judging of student oral presentations at the 21st University of São Paulo Undergraduate Research Symposium. Online. Coordinated by University of São Paulo.
- 2021** Judging of student oral presentations at the 20th University of São Paulo Undergraduate Research Symposium. Online. Coordinated by University of São Paulo.
- 2021** Assessment on the candidate course "Plankton Secondary Production" for integration in the Oceanography graduation program. Coordinated by Oceanographic Institute - University of São Paulo.
- 2019** Judging of student oral presentations at Aquaculture 2019. New Orleans (LA), USA. Coordinated by World Aquaculture Society.

2012 Judging of student abstracts for Aquaculture 2013. Nashville (TN), USA. Coordinated by World Aquaculture Society.

Teaching assistant (7)

2019 "Marine Larval Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.

2017 "Marine Larval Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.

2016 "Autoecology and Life Cycle of Marine Organisms" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.

2015 "Autoecology and Life Cycle of Marine Organisms" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.

2015 "Marine Larval Ecology" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida/IO-USP.

2014 "Marine Invertebrates" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Paulo Yukio Gomes Sumida and Prof. Luz Amelia Vega-Pérez/IO-USP.

2011 "Marine Zooplankton" - Undergraduation course at IO-USP. São Paulo (SP), Brazil. Coordinated by Prof. Luz Amelia Vega-Pérez/IO-USP.

4. OUTREACH

Short Courses (18)

2025 "Coral Reefs". Brasília (DF), Brazil. Independent organization.

2025 "Climate Change", during the XX Oceanography Week. Coordinated by the Oceanographic Institute of the University of São Paulo.

2024 "Coral Reefs". Belo Horizonte (MG), Brazil. Independent organization.

2023 "Coral reefs and their structural response to anthropogenic pressures", during the V Brazilian Symposium on Marine Geology and Geophysics. Coordinated by the Oceanographic Institute of the University of São Paulo.

2023 "Coral reefs: impacts and conservation", together With Ronaldo Francini-Filho, at the XXVI Biology Week of the University of São Paulo. Coordinated by Biosciences Institute of the University of São Paulo.

2022 Co-organization and ministration of two classes in the "Blue Tourism" outreach course offered to tour divemasters: i) coral reef bleaching: the global disparity in resilience; and ii) the activities of the Coral Vivo Research Network. Online. Coordinated by Coral Vivo Institute.

2021 "Coral Reefs". Online. Coordinated by EcoSaber, Inc.

2021 "The impacts of multiple stressors on coral reefs". Coordinated by Vivamar, Inc.

2021 "Coral Reefs". Online. Coordinated by EcoSaber, Inc.

2021 "Techniques for keeping live marine organisms". Online. Coordinated by Petz, Inc.

2020 "Coral Reef Biology and Conservation". Online. Coordinated by Mackenzie Presbyterian University.

2020 "An Overview of Marine Ornamental Aquaculture". São Paulo (SP), Brazil. Coordinated by the Biosciences Institute of the University of São Paulo (IB-USP).

- 2020** "Coral Reef Biology and Conservation". Online. Coordinated by Federal University of Paraná (UFPR).
- 2019** "Coral Reef Biology, Conservation and Climate Change". São Paulo (SP), Brazil. Coordinated by the Biosciences Institute of the University of São Paulo (IB-USP).
- 2019** "Coral Reef Biology and Conservation". Florianópolis (SC), Brazil. Coordinated by Federal University of Santa Catarina (UFSC).
- 2018** "Coral Reef Biology and Conservation". São Paulo (SP), Brazil. Independent organization.
- 2018** "Coral Reef Biology and Conservation" at the São Paulo Fisheries Institute. São Paulo (SP), Brazil. Coordinated by the São Paulo Fisheries Institute and ABLA Association.
- 2012** "Giant Clam Aquaculture" at the company Sustainable Aquatics. Jefferson City (TN), USA. Coordinated by Sustainable Aquatics, LLC.

Lectures (4)

- 2025** Presentation on "The impacts of multiple stressors on coral reefs and its inhabitants" during the EcoFish Brasil 2025. Coordinated by EcoFish Brasil.
- 2024** Presentation for 'Cine Costão,' part of the Costão Rochoso Project: "The history of bleaching in Brazilian reef environments". Coordinated by Costão Rochoso Project.
- 2024** Class on climate change for students of Rainha da Paz school. Coordinated by Oceanographic Institute - University of São Paulo.
- 2021** Presentation on Coral Bleaching at the X UFABC Biology Week. Online. Coordinated by Federal University of ABC (UFABC).

Debates and roundtables (16)

- 2025** Online discussion on "The reality of aquarium keeping and climate change". Online. Coordinated by Reef Show, LLC.
- 2025** Debate during the 1st Petrobras Socioenvironmental Meeting of São Paulo. Santos (SP), Brazil. Coordinated by Petrobras.
- 2025** Participation on the "Voices of the Ocean" debate. Online. Coordinated by Correio Sabiá and O Eco.
- 2025** Debate on what is the role of universities in tackling the climate crisis? São Paulo (SP), Brazil. Coordinated by the Geosciences Institute - University of São Paulo.
- 2025** Participation in the debate "Good Socio-environmental Practices in the Ocean Decade: Goal 2 – A Healthy and Resilient Ocean". Coordinated by the Brazilian Coastal Management Agency.
- 2025** Panelist at the Forum "Ocean Sustainability and the Blue Economy". Coordinated by the Advanced Studies Institute - University of São Paulo.
- 2024** Debate on Careers in Oceanography during the XIX Oceanography Week. São Paulo (SP), Brazil. Coordinated by the Oceanographic Institute - University of São Paulo.
- 2022** Debate on Careers in Oceanography during the XVII Oceanography Week. São Paulo (SP), Brazil. Coordinated by the Oceanographic Institute - University of São Paulo.
- 2022** Debate on Climate Change at the Coral Vivo in São Paulo Conference. São Paulo (SP), Brazil. Coordinated by Coral Vivo Institute and Oceanographic Institute of the University of São Paulo.
- 2021** Moderation of a debate on coral reef restoration during the Brazilian Reef Encounter 2021. Coordinated by the Brazilian Reef Encounter.
- 2019** Debate on Oil Spills in Marine Environments. Maceió (AL), Brazil. Coordinated by Instituto Chico Mendes de

- Biodiversidade.
- 2019** Debate on Research Networks. Maceió (AL), Brazil. Coordinated by Instituto Chico Mendes de Biodiversidade.
- 2019** Debate on Entrepreneurship in Oceanography during the XIV Oceanography Week. São Paulo (SP), Brazil. Coordinated by the Oceanographic Institute - University of São Paulo.
- 2018** Debate on Entrepreneurship in Oceanography during the XIII Oceanography Week. São Paulo (SP), Brazil. Coordinated by Oceanographic Institute - University of São Paulo.
- 2014** Presentation and debate ministered on Marine Ornamental Aquaculture in the Oceanographer's Day. São Paulo (SP), Brazil. Coordinated by Oceanographic Institute - University of São Paulo.
- 2013** Presentation and debate ministered on Entrepreneurship in Oceanography during the XXV Brazilian National Week of Oceanography. São Paulo (SP), Brazil. Coordinated by Brazilian National Week of Oceanography.

Advisor for the Formulation of Public Policies for Marine Conservation (10)

- 2025** Expert member for the 2nd PAN Corais Cycle. Coordinated by Instituto Chico Mendes de Biodiversidade (ICMBio).
- 2025** Contribution to the conservation status assessments for Brazilian Cnidaria. Coordinated by Instituto Chico Mendes de Biodiversidade (ICMBio).
- 2022** Substitute member on the consulting board of the Laje de Santos State Marine Park. Coordinated by Laje de Santos State Marine Park.
- 2022** Contribution to the conservation status assessments for Brazilian Cnidaria. Coordinated by Instituto Chico Mendes de Biodiversidade (ICMBio).
- 2021** Participation in the construction of the proposal for the establishment of the Tartaruga-de-Pente Marine State Park (SP). Coordinated by Fundação Florestal, São Paulo State government.
- 2020** Redaction of a letter to the Brazilian Ministry of Agriculture that led to the conservation and prohibition of the collection of *Gramma brasiliensis* (Actinopterygii). Coordinated by the Brazilian Ichthyology Society.
- 2019** Executive Coordinator for the Evaluation and Supervision Group of the oil spill in the Brazilian coast in 2019 (GT7 - Reefs). Coordinated by the Brazilian Federal Government.
- 2019** Debate on the impact of sunscreens on coral reefs on a Federal Senate Commission. Brasília (DF), Brazil. Coordinated by Brazilian Senate.
- 2019** Consulting on the regulation of Brazilian ornamental fisheries. Brasília (DF), Brazil. Coordinated by ABLA Association.
- 2018** Consulting on the invasive potential of marine invertebrates. Brasília (DF), Brazil. Coordinated by Brazil's Ministry of Environment.

Organization of Outreach Events (3)

- 2025** Member of the curatorial committee of “Mudamos o Clima, Agora o Clima Muda Tudo” exhibit at COP30. Belém (PA), Brazil. Coordinated by Coral Vivo Institute.
- 2023** Supervision of the student organizing committee for the XVIII Oceanography Week. São Paulo (SP), Brazil. Coordinated by the Oceanographic Institute - University of São Paulo.
- 2022** Organization of the Coral Vivo in São Paulo Conference. São Paulo (SP), Brazil. Coordinated by Coral Vivo Institute and Oceanographic Institute of the University of São Paulo.

Others (5)

- 2024** Science project guidance for Dante Alighieri school student Marina Kneese Strang, alongside Dr. Luciana Sariva Filippou.
- 2023** Writing of six small scripts for the webseries Amar-o-Mar, about coral reef ecology. Coordinated by Coral Vivo Institute.
- 2023** Discussion on coral reefs and climate change with Saint Paul's School students. Coordinated by the Biosciences Institute - University of São Paulo.
- 2021** Discussion with children that graduated from the environmental education program "Young Guardians". Coordinated by Rede de Conservação Águas da Guanabara (REDAGUA).
- 2020** Consultancy on coral identification for the Catavento Museum. São Paulo (SP), Brazil. Coordinated by the São Paulo State Government.

Media appearances

Television shows (8)

- 2025** *Fantástico, Rede Globo* : <https://g1.globo.com/fantastico/noticia/2025/03/09/corais-brasileiros-em-risco-como-aqu>
- 2024** *Cidades e Soluções, Globo News* : <https://globoplay.globo.com/v/12643709/?s=0s>
- 2024** *Fantástico, Rede Globo* : <https://globoplay.globo.com/v/12536818/?s=0s>
- 2023** *Globo Repórter, Rede Globo* : <https://globoplay.globo.com/v/12199898/?s=0s>
- 2019** *Jornal Hoje, Rede Globo* : <https://globoplay.globo.com/v/8193445/>
- 2019** *Jornal da Noite, Globo News* : <https://g1.globo.com/globonews/jornal-globonews/video/especialista-comenta-os-av>
- 2019** *Fantástico, Rede Globo* : <https://g1.globo.com/fantastico/noticia/2019/11/03/cientistas-estudam-como-o-oleo-pod>
- 2019** *Jornal Hoje, Rede Globo* : <https://globoplay.globo.com/v/7868771/>

News websites and online magazines (40)

- 2025** *The Conversation* : <https://theconversation.com/nao-e-so-na-australia-como-o-estresse-termico-do-passado-amea>
- 2025** *Jornal da USP* : <https://jornal.usp.br/ciencias/onda-de-calor-de-2024-dizimou-corais-no-nordeste-mas-nao-em-out>
- 2025** *Jornal Folha de São Paulo* : <https://www1.folha.uol.com.br/ambiente/2025/01/brasil-teve-mortandade-em-massa-d>
- 2025** *Radio France Internationale* : <https://www.rfi.fr/br/podcasts/planeta-verde/20250130-o-futuro-pessimista-para-os-c>
- 2025** *Revista Pesquisa FAPESP* : <https://revistapesquisa.fapesp.br/como-o-turismo-afeta-as-mudancas-climaticas-e-vice>
- 2024** *Jornal do Sol* : <https://www.jornaldosol.com.br/noticias/meio-ambiente/coral-vivo-divulga-relatorio-de-monitorame>
- 2024** *Revista Pesquisa FAPESP* : <https://revistapesquisa.fapesp.br/ameaca-a-corais-brasileiros-poe-peixes-em-risco/>
- 2024** *Eos* : <https://eos.org/articles/some-reefs-could-bleach-year-round-by-2080>
- 2024** *Reuters News* : <https://www.reuters.com/business/environment/brazil-braces-worst-coral-bleaching-ever-2024-04->
- 2024** *Jornal O Globo* : <https://oglobo.globo.com/um-so-planeta/noticia/2024/04/13/a-morte-branca-aquecimento-do-atla>
- 2024** *O Eco* : <https://oeco.org.br/noticias/quarto-branqueamento-em-massa-dos-recifes-de-corais-ja-atinge-o-brasil/>
- 2024** *Um Só Planeta* : <https://umsoplaneta.globo.com/biodiversidade/noticia/2024/04/11/corais-nova-onda-global-de-br>
- 2024** *Correio Sabiá* : <https://correiosabia.com.br/por-que-restauracao-corais-pode-ser-problema/>
- 2023** *Correio 24 Horas* : <https://www.correio24horas.com.br/correio24horas/bahia/abrolhos-disputa-indenizacao-biliona>
- 2023** *Jornal O Globo* : <https://oglobo.globo.com/brasil/noticia/2023/07/el-nino-ameaca-corais-do-brasil-bercarios-da-vid>
- 2022** *Jornal da USP* : <https://jornal.usp.br/ciencias/mergulho-no-royal-charlotte-cientistas-descobrem-novos-recifes-de-i>
- 2022** *Jornal do Sol* : <https://www.jornaldosol.com.br/noticias/meio-ambiente/tecnologia-auxilia-no-estudo-e-preservaca>
- 2022** *Jornalismo IESB* : <https://jornalismo.iesb.br/destaque1/aquecimento-global-e-a-principal-cao-da-morte-dos-reci>
- 2022** *Jornal da USP* : <https://jornal.usp.br/ciencias/corais-brasileiros-recorrem-a-jeitinho-para-resistir-ao-aquecimento-d>

2022 *Um Só Planeta* : <https://umsoplaneta.globo.com/sociedade/noticia/2022/03/17/como-se-proteger-do-sol-sem-imp>

2022 *Jornal do Sol* : <https://www.jornaldosol.com.br/meio-ambiente/meio-ambiente/protetor-solar-quimico-e-inimigo-de>

2022 *Agência EcoNordeste* : <https://agenciaeconordeste.com.br/biodiversidade/o-turismo-e-seus-impactos-na-biodiversidade>

2021 *Jornal da USP* : <https://jornal.usp.br/ciencias/aquecimento-global-pode-aniquilar-recifes-de-coral-no-brasil-e-no-mundo>

2021 *Correio 24 Horas* : http://miguelmies.com.br/wp-content/uploads/2021/06/70124_0626-merged.pdf

2021 *Revista Piauí* : <https://piaui.folha.uol.com.br/materia/esqueletos-brancos/>

2021 *Conexão Planeta* : <https://conexaoplaneta.com.br/blog/cientistas-brasileiros-fazem-registro-inedito-no-mundo-de>

2021 *Revista Galileu* : <https://revistagalileu.globo.com/Ciencia/Meio-Ambiente/noticia/2021/03/cientistas-brasileiros-usam>

2020 *Jornal da USP* : <https://jornal.usp.br/ciencias/cientistas-descobrem-novos-ecossistemas-recifais-na-costa-da-bahia>

2020 *Brasil de Fato* : <https://www.brasildefato.com.br/2020/07/03/apos-dez-meses-investigacoes-ainda-nao-apontaram>

2020 *ComCiência Jornalismo Científico* : <https://www.comciencia.br/quando-os-corais-descolorem/>

2019 *EcoDebate* : <https://www.ecodebate.com.br/2019/11/20/impactos-do-oleo-nos-corais-brasileiros-sao-estudados-por>

2019 *Jornal O Globo* : <https://oglobo.globo.com/brasil/para-cientistas-faltam-dados-que-ajudem-conter-crise-ambiental>

2019 *Jornal da USP* : <https://jornal.usp.br/ciencias/ciencias-biologicas/oleo-no-nordeste-ao-menos-os-corais-sobreviver>

2019 *Hakai Magazine* : <https://hakaimagazine.com/news/giant-clams-spread-their-symbiotic-algae-through-their-poop/>

2019 *O Eco* : <https://oeco.org.br/reportagens/cientista-detecta-imenso-branqueamento-de-corais-no-sudeste-brasileiro>

2019 *Jornal da USP* : <https://jornal.usp.br/ciencias/ciencias-ambientais/branqueamento-ameaca-sobrevivencia-de-corais>

2018 *Portal Terra* : <https://www.terra.com.br/noticias/estudo-avalia-impacto-de-branqueamento-em-larvas-recifais,2ffe5>

2016 *Jornal O Estado de São Paulo* : <https://noticias.r7.com/sao-paulo/ong-pede-que-dory-nao-seja-procurada-30062016>

2015 *Jornal Folha de São Paulo* : <https://m.folha.uol.com.br/ciencia/2015/06/1647973-resistencia-de-corais-a-aguas-que>

2011 *Agência USP de Notícias* : <https://www.usp.br/agen/?p=69531>

Documentaries (2)

2023 *Coral Vivo 20 Anos* : <https://www.youtube.com/watch?v=h9-9mvuevpl>

2023 *A Era dos Humanos* : <https://globoplay.globo.com/a-era-dos-humanos/t/DDVGVxhNBW/>

Podcasts (1)

2024 *Herton Escobar e Jornal da USP* : <https://open.spotify.com/episode/6XCsvurH7bu7XTVSTVXArY?si=OFG3BnegRieL8>

Radio interview (1)

2019 Rádio Bahia Nordeste: n/a.

Others (1)

2022 *Aquaculture Brasil* : <https://www.aquaculturebrasil.com/projeto-e-assessoria/67/miguel-mies>

5. OTHERS

Awards and Nominations (5)

2021 Medal for services provided against marine animal trafficking - Rio de Janeiro Police Department, Rio de Janeiro, Brazil.

- 2019** Nominated for Best PhD dissertation of 2017-18 (University of São Paulo) - São Paulo, Brazil.
- 2013** Second Best Student Oral Presentation (World Aquaculture Society) - Nashville, USA.
- 2011** Second Best performance by a student during the undergraduation course (Oceanographic Institute, University of São Paulo) - São Paulo, Brazil.
- 2011** Best Student Oral Presentation (World Aquaculture Society) - Natal, Brazil.

Administrative Roles at the University of São Paulo (16)

- 2025** - President of the Research and Innovation Committee of the IO-USP.
- 2025** - Member of the IO-USP congregation.
- 2025** - Substitute member of the IO-USP selection committee for the post-graduate program in Oceanography.
- 2025** - Coordinator of the IO-USP Marine Experimentation Laboratory.
- 2025** - Substitute member of the IO-USP communications committee.
- 2025** - Substitute member of the IO-USP Council for the Department of Biological Oceanography.
- 2025** - Substitute member of the Research Committee of the Centro de Biologia Marinha-USP.
- 2023** - Member of the IO-USP graduation paper assessment committee.
- 2023** - Substitute member of the IO-USP graduation committee.
- 2023 - 2025** Vice-president of the Research and Innovation Committee of the IO-USP.
- 2023 - 2025** Substitute member of the Coordinating Committee of the Graduate Program of the IO-USP.
- 2023 - 2025** Substitute member of the IO-USP congregation.
- 2023 - 2025** Member of the IO-USP selection committee for the post-graduate program in Oceanography.
- 2023 - 2025** Member of the IO-USP Council for the Department of Biological Oceanography.
- 2023 - 2025** Member of the Research Committee of the Centro de Biologia Marinha-USP.
- 2022 - 2023** Coordinator of the elaboration of the obligatory internship program for the Bachelor's course in Oceanography at the IO-USP.

Additional qualifications (2)

- 2013** - Certified diver (Open Water, Advanced, Nitrox): has been out in the field at multiple international (Raja Ampat, Thailand, Maldives, Panama) and national (Fernando de Noronha, Rocas Atoll, Abrolhos, Recife de Fora, Cabo Frio, Alcatrazes, Ilha Anchieta, Queimada Grande, Ilha Grande, Laje de Santos, Maragogi, and Tamandaré) reef sites.
- 2011** - Member of the World Aquaculture Society.

