



JONATHAN DAVID CYBULSKI, Ph.D.

The University of Hong Kong, School of Biological Sciences, Swire Institute of Marine Science. Hong Kong.
Email: cybulski.j@gmail.com | Websites: www.jonathancybulski.com, [Google Scholar](#), [ResearchGate](#), [ORCID](#)

EDUCATION

- Ph.D. Ecology and Biodiversity.** The University of Hong Kong, School of Biological Sciences, Hong Kong. 2021.
Thesis title: Hong Kong's coral assemblages through time – a paleoecological and geochemical look at human-driven change (Advisor: [David Baker](#)). Awarded “Prof. Brian Morton prize for best thesis in Marine Biology”.
- M.S. Environmental Science.** American University, USA. 2016.
Thesis title: Push-Core Sampling in Micronesia: Using Paleoecological Data to Reconstruct Guam's Coral Reef Community (Advisor: [Kiho Kim](#)). *Summa Cum Laude*.
- B.S. Environmental Science, concentration in Surficial Geological Processes.** Northeastern University, USA. 2011.
(Capstone Advisor: [Malcolm Hill](#)). *Summa Cum Laude*. Graduate with honors.

PROFESSIONAL APPOINTMENTS

- 2025 – present **Program Coordinator/Assistant Lecturer.** Integrative Marine Ecology and Conservation, MSc. Swire Institute for Marine Sciences, School of Biological Sciences, The University of Hong Kong, Hong Kong
- 2025 – present **Research Fellow.** The Smithsonian Tropical Research Institute, Panamá
- 2023 – present **Co-Founder and Chief Scientist.** Joywave, LLC. *Science-led fundraising for conservation*
- 2022 – present **Research Affiliate.** Graduate School of Oceanography. University of Rhode Island, U.S.A.
- 2022 – 2025 **Earl S. Tupper Postdoctoral Fellow.** The Smithsonian Tropical Research Institute, Panamá
- 2022 – 2024 **Affiliate Scientist.** Max Planck Institute for Chemistry. Mainz, Germany
- 2021 – 2022 **Postdoctoral Fellow.** Swire Institute for Marine Sciences and Stable Isotope Ratio Mass Spectrometry Laboratory, The University of Hong Kong, Hong Kong
- 2017 – 2021 **Swire Scholar.** The University of Hong Kong, Hong Kong
- 2015 – 2016 **Researcher.** The Forum for Climate Engineering Assessment, U.S.A
- 2010 – 2016 **Environmental Protection Specialist.** Department of Transportation, The Volpe Center, U.S.A
- 2009 – 2010 **Biological Sampling Technician.** National Oceanic and Atmospheric Association, U.S.A

RESEARCH

I am a historical ecologist who investigates human-ecosystem-climate interactions. I have >15 years' experience with environmental, ecological, marine, and conservation sciences in mangrove, coral, seagrass, coastal, tropical and temperate ecosystems, >10 years' experience as a geochemist and stable isotope ecologist, >6 years field and lab-based ecological research in Hong Kong, the Greater Bay Area, and the South China Sea.

PUBLICATIONS

* indicates co-first authorship, # indicates advised student author

29. Erin M. Dillon, Douglas J. McCauley, Migdonio Gonzalez, Sean R. Connolly, Brígida de Gracia, **Jonathan D. Cybulski**, Richard D. Norris, María Mercedes Gómez, Irene García, Nicole D. Leonard, Jian-xin Zhao, Kimberly



- García-Méndez, Aaron O’Dea. “Fossil denticles reveal how ocean productivity shapes shark baselines and recovery potential”. *Science*. Accepted.
28. Xiaoyi Zeng, Annabella C. Wong, Michael J.W. Boyle, **Jonathan D. Cybulski**, Bartosz M. Majcher, Coskun Güçlü, Xiangshi Kong, Timothy C. Bonebrake, Paul Eggleton, David M. Baker, Hannah M. Griffiths, Louise A. Ashton. “Soil invertebrates facilitate plant nitrogen assimilation in a tropical seasonal secondary forest”. *PlosBio*. In press.
27. Erin M. Dillon, Rodnyel Arosemena, **Jonathan D. Cybulski**, Brígida De Gracia, Seth Finnegan, Chien-Hsiang Lin, Javiera Mora, Sven Pallacks, Aaron O’Dea. (2025). “Fossil otolith assemblages reveal millennial-scale changes in reef fish biomass and trophic structure across the Isthmus of Panama”. *Phil. Trans. R. Soc. B*. 381: 20240419. <https://doi.org/10.1098/rstb.2024.0419>
26. Sharpe, A.E., Smith-Guzmán, N.E., Pérez, C.P.D., Herrera, L.A.S., Carvajal-Contreras, D., Curtis, J., **Cybulski, J.D.**, Desjardins, B., Isaza-Aizpurúa, I., Kamenov, G. and Núñez-Cortés, Y. (2025). “Isotopic evidence of increased societal diversification in Pre-Columbian Panama”. *PLOS ONE*, 20(11), p. e0335678. <https://doi.org/10.1371/journal.pone.0335678>
25. Veronica Pace, **Jonathan D. Cybulski**, Nicole Smith-Guzmán, and Ashley Sharpe. (2025). “Aproximación isotópica a las prácticas de lactancia y destete de tres poblaciones precolombinas de Panamá”. *Revista Argentina de Antropología Biológica*. <https://doi.org/10.24215/18536387e111>
24. Aaron O’Dea, Andrew J Sellers, Carmen Pérez Medina, Javier Pardo Díaz, Alexandra Sofia Guzman Bloise, Christopher Pöhlker, Michał T Chyliński, Hedy M. Aardema, **Jonathan D Cybulski**, Lena Heins, Steven R Paton, Hans A. Slagter, Ralf Schiebel, Gerald H. Haug. (2025). “Unprecedented suppression of Panama’s Pacific upwelling in 2025”. *PNAS*. <https://doi.org/10.1073/pnas.2512056122>
23. Aaron O’Dea, Erin M. Dillon, Simon J. Brandl, Katie L. Cramer, **Jonathan D. Cybulski**, Brígida de Gracia, Kimberly García-Méndez, Katherine Griswold, Chien-Hsiang Lin, Matthieu Leray, Jessica A. Lueders-Dumont, Andrew J. Sellers, Thomas A. Wake. (2025). “Prehistoric archives reveal evidence of predator loss and prey release in Caribbean reef fish communities”. *PNAS*. <https://doi.org/10.1073/pnas.2503986122>
22. **Jonathan D. Cybulski**, Ashley Sharpe, Yahaira Núñez Cortés, Nicole Smith-Guzmán, Ilean Isaza, Diana Rocio Carvajal Contreras, Susan Monge, Erin Dillon, Brígida De Gracia, Irene Garcia#, Aaron O’Dea. (2025). “Historical ecology of the Southern Central American Pacific coast”. *Phil. Trans. R. Soc. B*. <https://doi.org/10.1098/rstb.2024.0042>
21. Smith, J.A., Dowding, E.M., ... **Cybulski, J.D.**, ... Kiessling, W. *1 of 120+ co-authors* (2025). “Identifying the big questions in paleontology: A community- driven project.” *Paleobiology*. 51(3):408-431. <https://doi.org/10.1017/pab.2025.10042>
20. Nicole Smith-Guzmán, Jeny Smid Núñez, **Jonathan D. Cybulski**, Luis Sánchez Herrera. (2024). “Biodistance Analysis via Dental Phenotypic Diversity in Early Collective Burials at Cerro Juan Díaz, Panamá (30–650 CE)”. *American Journal of Biological Anthropology*. <https://doi.org/10.1002/ajpa.25050>
19. Ralf Schiebel, Hedy M. Aardema, Maria Ll. Calleja, Antonis Dragoneas, Lena Heins, Isabella Hrabe de Angelis, Christopher Pöhlker, Hans Slagter, Hubert Vonhof, David Walter, Anthea I. Arns, Nils Adolphs, Alexandra Auderset, Sanja Basic, Aaron Bieler, Jan D. Brüwer, Sonia Chaabane, Yafang Cheng, Michał T. Chyliński, **Jonathan D. Cybulski**, Thomas Disper, Nicolas Duprey, Gregor Eichele, Björn Fiedler, Alexa Fischer, Alan D. Foreman, Bernhard M. Fuchs, Steve Galer, Jana Härrli, Klaus Peter Jochum, Adrian Jost, Jonathan Jung, Henry Kleta, Gerhard Lammel, Otto Larink, Patrick Leibold, Alfredo Martínez-García, Simone Moretti, Jann-Gerrit Müller, Björn Nillius, Xihao Pan, Subha S. Raj, Janne Repschläger, Elizandro Rodrigues, S. Emil Ruff, Mareike Schmitt, Janine L. Schmitter, Andrew Sellers Lara, Péricles Silva, Sandi M. Smart, Matthias Sörgel, Brigitte Stoll, Hang Su, Meike Vogt, Tanja Wald, Bettina Weber, Jens Weber, Ulrike Weis, Rudolf Amann, Javier Aristegui, Thorsten Dittmar, Melchor González, Aaron O’Dea, Ulrich Pöschl, Gerald H. Haug. (2024). “Special Issue on Probing the Open Ocean With the Research Sailing Yacht Eugen Seibold for Climate Geochemistry” *JGR-Atmospheres*. <https://doi.org/10.1029/2023JD040581>
18. **Jonathan D. Cybulski**, Nicolas N Duprey, Benoit Thibodeau, Moriaki Yasuhara, Naomi Geeraert, Nicole Leonard, Hubert B Vonhof, Alfredo Martínez-García, David M. Baker. (2023). “Coral carbonate-bound isotopes reveal



- monsoonal influence on nitrogen sources in Southeastern China's Greater Bay Area from the mid-Holocene until the Anthropocene." *Marine Pollution Bulletin*, 197, p. 115757. <https://doi.org/10.1016/j.marpolbul.2023.115757>.
17. **Jonathan D. Cybulski**, John Doherty, Carly LaRoche[#], Kelly Donovan Gutkowski[#], Zizhan Luo, Elizabeth J. Malloy, Laurel MacMillan, Laurie Raymundo, Kiho Kim. (2023). "Using coral holes to explore the historical ecology of Guam's coral reefs." *Coral reefs* 1-7. <https://doi.org/10.1007/s00338-023-02442-z>
 16. **Jonathan D. Cybulski**, Kit Sum Leung, Carmen Oi Ning Leung, David M Baker, Terence Kin Wah Lee. (2023). "Isotopic tracing of de novo fatty-acid and sterol biosynthesis using ¹³C compound-specific stable isotope analysis." *STAR Protocols*. <https://doi.org/10.1016/j.xpro.2023.102506>
 15. Mamo, Briony L., **Jonathan D. Cybulski**, Yuanyuan Hong, Paul G. Harnik, Anne Chao, Akira Tsujimoto, Chih-Lin Wei, David M. Baker, and Moriaki Yasuhara. (2023). "Modern biogeography of benthic foraminifera in an urbanized tropical marine ecosystem." *Geological Society, London, Special Publications* 529, no. 1: SP529-2022. <https://doi.org/10.1144/SP529-2022-17>
 14. Robinson, Rebecca S., Sandi M. Smart, **Jonathan D. Cybulski***, Kelton W. McMahon, Basia Marcks, and Catherine Nowakowski. (2023). "Insights from fossil-bound nitrogen isotopes in diatoms, foraminifera, and corals." *Annual Review of Marine Science* 15. 407-430. <https://doi.org/10.1146/annurev-marine-032122-104001>
 13. Yasuhara, Moriaki, Huai-Hsuan May Huang, Markus Reuter, Skye Yunshu Tian, **Jonathan D. Cybulski***, Aaron O'Dea, Briony L. Mamo et al. (2022). "Hotspots of Cenozoic tropical marine biodiversity." In *Oceanography and Marine Biology: An Annual Review, Volume 60*, pp. 243-300. <https://doi.org/10.1201/9781003288602-5>
 12. Dillon, Erin M., Jaleigh Q. Pier, Jansen A. Smith, Nussaibah B. Raja, Danijela Dimitrijević, Elizabeth L. Austin, **Jonathan D. Cybulski** et al. (2022). "What is conservation paleobiology? Tracking 20 years of research and development." *Frontiers in Ecology and Evolution*. <https://doi.org/10.3389/fevo.2022.1031483>
 11. Lüdecke T, Leichter JN, Aldeias V, Bamford MK, Biro D, Braun DR, Capelli C, **Jonathan D. Cybulski**, Duprey NN, Ferreira da Silva MJ, Foreman AD, Habermann JM, Haug GH, Martínez FI, Mathe J, Mulch A, Sigman DM, Vonhof H, Bobe R, Carvalho S and Martínez-García A. (2022). "Carbon, nitrogen, and oxygen stable isotopes in modern tooth enamel: A case study from Gorongosa National Park, central Mozambique." *Frontiers in Ecology and Evolution*, 10:958032. <https://doi.org/10.3389/fevo.2022.958032>.
 10. **Jonathan D. Cybulski***, Christina Skinner, Zhongyue Wan, Carmen KM Wong[#], Robert J. Toonen, Michelle R. Gaither, Keryea Soong, Alex SJ Wyatt, and David M. Baker. (2022). "Improving stable isotope assessments of inter-and intra-species variation in coral reef fish trophic strategies." *Ecology and Evolution* 12, no. 9. <https://doi.org/10.1002/ece3.9221>
 9. Etienne Mok, Carmen Oi-Ning Leung, Lei Zhou, Martina Mang Leng Lei, Hoi Wing Leung, Man Tong, Tin Lok Wong, Eunice Lau, Irene Oi-Lin Ng, Jin Ding, Jing-Ping Yun, Jun Yu, Hui-lian Zhu, Chi Ho Lin, Dan Lindholm, Kit Sum Leung, **Jonathan D. Cybulski**, David Baker, Stephanie Ma, and Terence Lee. (2022). "Caspase-3-induced activation of SREBP2 drives drug resistance via promotion of cholesterol biosynthesis in hepatocellular carcinoma." *Cancer Research*. <https://doi.org/10.1158/0008-5472.CAN-21-2934>.
 8. Hong, Yuanyuan, Moriaki Yasuhara, Hokuto Iwatani, Paul G. Harnik, Anne Chao, **Jonathan D. Cybulski**, Yuan Liu, Yuefei Ruan, Xiangdong Li, and Chih-Lin Wei. (2022). "Benthic ostracod diversity and biogeography in an urbanized seascape." *Marine Micropaleontology*: 102067. <https://doi.org/10.1016/j.marmicro.2021.102067>
 7. **Jonathan D. Cybulski**. (2021). *Hong Kong's Coral Assemblages Through Time: A Paleocological and Geochemical Look at Human-driven Change*. Ph.D. Thesis. The University of Hong Kong Libraries.
 6. Alexandra Astrid Andersson, Luke Gibson, David M. Baker, **Jonathan D. Cybulski**, Sifeng Wang, Banson Leung, L. M. Chu, Caroline E. Dingle. (2021). "Stable isotope analysis as a tool to detect illegal trade in critically endangered cockatoos." *Animal Conservation*. <https://doi.org/10.1111/acv.12705>
 5. Christine Ferrier-Pagès, Stephane Martinez, Renaud Grover, **Jonathan D. Cybulski**, Eli Shemesh, Dan Tchernov. (2021). "Tracing the trophic plasticity of the coral-dinoflagellate symbiosis using amino acid compound-specific stable isotope analysis". *Microorganisms*, 9(1), 182. <https://doi.org/10.3390/microorganisms9010182>
 4. **Jonathan D. Cybulski**, Stefan Husa, Nico Duprey, Briony Mamo, Moriaki Yasuhara, Jian-Wen Qiu, David M. Baker. (2020). "Coral reef diversity losses in China's Greater Bay Area were driven by regional stressors." *Science Advances*.



- Vol 6, Issue 40. <https://doi.org/10.1126/sciadv.abb1046>
3. Duprey, Nicolas; Wang, Tony; Kim, Taihun; **Jonathan D. Cybulski**; Vonhof, Hubert; Crutzen, Paul; Haug, Gerald; Sigman, Daniel; Martínez-García, Alfredo; Baker, David. (2020). “Megacity development and the demise of coastal coral communities: evidence from coral skeleton $\delta^{15}\text{N}$ records in the Pearl River Estuary.” *Global Change Biology*. <https://doi.org/10.1111/gcb.14923>
 2. LaRoche, Carly, Benjamin Goldstein, **Jonathan D. Cybulski**, Laurie J. Raymundo, Lillian R. Aoki, Kiho Kim. (2018). “A decade of change in *Enhalus acoroides* seagrass meadows in Guam, Mariana Islands.” *Marine and Freshwater Research*. 70(2) 246-254. <https://doi.org/10.1071/MF18062>
 1. MacAvoy, S. E., Cortese, N., **Jonathan D. Cybulski**, Hohn, A. A. and Macko, S. A. (2017). “Sources of stable isotope variation among stranded Western Atlantic dolphins (*Tursiops truncatus*) in North Carolina.” *Marine Mammal Science*, 33: 1224-1234. <https://doi.org/10.1111/mms.12425>

IN REVIEW

- Xiaoyi Zeng, Michael J.W. Boyle, Gbadamassi G.O. Dossa, Michael Scherer-Lorenzen, Juan Zuo, Han Xu, Lais Ferreira Maia, Yanpeng Li, Yuen Nok Lam, Runxi Wang, **Jonathan D. Cybulski**, David M. Baker, Timothy C. Bonebrake, Paul Eggleton, Hannah M. Griffiths, Louise A. Ashton. “Invertebrates reduce plant nitrogen assimilation from decomposing litter in tropical but not temperate forests.” *Science – in review*.
- He Wang*, Moriaki Yasuhara*, **Jonathan D. Cybulski***, Pedro Julião Jimenez*, Jingwen Zhang, Chih-Lin Wei, Jialu Huang, Yuanyuan Hong, David M. Baker, Nicolas N. Duprey, Nicole S. Khan, Yosuke Miyairi, Yusuke Yokoyama. “Coral collapses and paleobiology of the shifting baseline syndrome.” *PNAS – in review*.

PROFESSIONAL PUBLICATIONS

- Raymundo, L.J., B. Goldstein, D. Baker, K. Kim, S. McIlroy, P. Thompson, V. Lapacek, N. Duprey, **Jonathan D. Cybulski**, C. LaRoche, N. Geeraert. (2018). “Atlas of the Nearshore Shallow Benthic Habitats within the Manell-Geus Habitat Focus Area.” *University of Guam Marine Laboratory Technical Report No. 163. Produced for the National Oceanic and Atmospheric Administration*.
- Jonathan D. Cybulski**, Judith L. Rochat, and David R. Read. (2013). “Roadway Departure Warning Indicators: Synthesis of Noise and Bicycle Research.” *No. NPS/NSNS/NRTR—2013/780*.
- Jonathan D. Cybulski**. (2013). “Transportation Infrastructure Resiliency: A Review of Transportation Infrastructure Resiliency in Light of Future Impacts of Climate Change.” *No. DOT-VNTSC-14-02*.
- Zevitas, Christopher D., **Jonathan D. Cybulski**, and Eileen McNeely. (2012). “Evaluating the health benefits of natural sounds: an approach for assessing the environmental impacts of transportation noise.” *INTER-NOISE and NOISE-CON Congress and Conference Proceedings. Vol. 2012. No. 2. Institute of Noise Control Engineering*.
- Petho, k. L., Christopher d. Zevitas, Adam Klauber, and **Jonathan D. Cybulski**. (2011). “Greenhouse Gas Emissions Modeling: A Tool for Federal Facility Decommissioning.” *Proceedings of The Annual International Conference on Soils, Sediments, Water And Energy. Vol. 16. No. 1*.

TEACHING AND CURRICULUM DEVELOPMENT

- 2025-2026 **Curriculum Development Lead**. MSc Integrative Marine Ecology and Conservation, including courses: IMEC7001 Ocean Biodiversity, IMEC7002 Fisheries, IMEC7003 Seafood Mariculture and Trade, IMEC7004 Conservation Genomics, IMEC7005 Blue Carbon Ecosystems, IMEC7006 Sustainable Development and Engineering, and IMEC7007 Research Methods. The University of Hong Kong.
- 2025-2026 **Course Coordinator**. IMEC7001, IMEC7003, IMEC7005, IMEC8008, IMEC7008, IMEC7007. The University of Hong Kong.



- 2025-2026 **Lecturer.** IMEC7001 Ocean Biodiversity, IMEC7003 Seafood Mariculture and Trade, IMEC7005 Blue Carbon Ecosystems, IMEC7006 Sustainable Development and Engineering.
- 2024 **Invited Lecturer.** GEOG 3410: Paleoclimatology. Utah Tech University.
- 2024 **Invited Lecturer.** BIO466: Conservation Biology. UNC Wilmington.
- 2023 – 2024 **Lecturer.** BIOL 553: NEO-McGill-STRI Tropical Biology Program. McGill University / Panamá.
- 2021 **Invited Lecturer.** Applications in Palaeontology. University of Portsmouth.
- 2021 **Invited Lecturer.** ENVS2001: Methods in environmental science. Stable Isotope Ecology. HKU.
- 2021 **Invited Lecturer.** ENVS2001: Methods in environmental science. Atmospheric pollution. HKU.
- 2021 (winter) **Co-Lecturer, co-curriculum developer.** BASC2001: Essential skills for undergraduates. The Leadership Development Course on Culture, Science and Society (ES4L). HKU.
- 2019 **Lecturer and lab assistant.** IsoCamp. Compound-specific Isotope analysis. HKU.
- 2019 **Research and teaching assistant.** Historical ecology field course. University of Rykyus, Okinawa, Japan.
- 2017 – 2019 **Graduate group leader.** Field course in BIOL2306: Ecology and Evolution. HKU.
- 2017 **Research and teaching assistant.** EMNFT4: Rocky Intertidal Ecology field course. Tsitsikamma National Wildlife Refuge. South Africa. University of Johannesburg and the University of Hong Kong.
- 2017 **Invited Lecturer.** BIOL4302: Environmental impact assessment. HKU.
- 2017 **Graduate Demonstrator.** ENVS2002: Environmental data analysis. HKU.
- 2016 – 2019 **Graduate Demonstrator.** ENVS2001: Methods in environmental science. HKU.
- 2015 **Graduate Assistant** GNED-250: The Marine Environment. American University.
- 2015 **Lead laboratory lecturer.** ENVS160: Introduction to Environmental Science. American University.
- 2014 **Laboratory lecturer.** ENVS150: Sustainable Earth. American University.
- 2011 **Senior Environmental Science tutor and teaching assistant.** Northeastern University.

STUDENT MENTORSHIP/TRAINING

Graduate student supervision, co-supervision#, mentor, collaboration, and training^*

- 2025 – present **Ke Wei***, IMEC MSc. student, HKU. Mangrove emissions geochemistry.
- 2025 – present **Liu Xiangjun***, IMEC MSc. student, HKU. Marine organic matter blue carbon sources.
- 2025 – present **Gao Haoyang***, IMEC MSc. student, HKU. Uranium series geochemistry.
- 2025 – present **Herao Zhang#**, IMEC MSc. student, HKU. Plastic pollution fate and transport.
- 2025 – present **Tess Morelli#**, MPhil student, McGill University. Decapod trophic ecology.
- 2024 – present **Andrea Bogantes#**, MPhil student, La Universidad de Costa Rica. Historical ecology.
- 2024 – 2026 **Joshua Pi^**, PhD student, Unv. of Rhode Island. Isotope geochemistry of reef fish.
- 2024 – 2025 **Laura Lardinois#**, Ph.D. student, McGill University. Tropical reef isotope ecology.
- 2024 – 2025 **Ethan Enos^**, MPhil student, STRI. Fish stable isotope ecology.
- 2023 – present **Hannah Rempel^**, Ph.D. student, Unv. Texas. Compound-specific isotope geochemistry.
- 2023 – 2024 **Teresa Peil^**, MPhil student, Unv. of Rostock. Isotope geochemistry of Lucinid clams.
- 2022 – 2024 **Lindsay Agvent^**, MPhil student, Unv. of Rhode Island. Isotope geochemistry of marine inverts.
- 2022 – 2024 **Natasha Hinojosa^**, Ph.D. student, USCS. Biogeochemistry of reef fish.
- 2023 – 2024 **Paige Gardner^**, MPhil student, STRI. Fish otolith geochemistry.
- 2022 – 2023 **Catrina Nowakowski^**, Ph.D. student, Unv. of Rhode Island. Isotope geochemistry / N-cycling.
- 2021 – 2024 **Brinna Barlow^**, Ph.D. student, HKU. Forest isotope ecology and Bayesian modelling in R.
- 2021 – 2024 **Xiaoyi Zeng^**, Ph.D. student, HKU. Plant isotope ecology and forest decomposers.
- 2020 – 2023 **Allison Corley^**, Ph.D. student, HKU. Isotope geochemistry and coral biology.
- 2021 – 2022 **Kevin Goeghan^**, Ph.D. student, HKU. Rocky shore isotope ecology and Bayesian modelling in R.
- 2021 **Jake Dytnersky^**, Ph.D. student, HKU. Isotope ecology of sea urchins and Bayesian modelling in R.
- 2021 **Amy Tung Zhao^**, Ph.D. student, CUHK. Denitrifier method of ocean water.



- 2022 **Adrian Wong[^], Ph.D. student, HKU.** Rocky shore isotope ecology and Bayesian modelling in R.
2019 **Jihane Benbahtane[#], MPhil student, McGill.** Historical ecology of Panamanian reefs.
2015 – 2016 **John Doherty[#], MPhil student, American University.** Paleoecology.

Undergraduate student mentorship and training (= indicates final year project or senior thesis)*

- 2024 – 2025 **Luis Oyalbis, La Universidad de Panama,** Zooarchaeology isotope ecology.
2023 – 2026 **Lucía Morales*, International Maritime University,** Stable Isotope geochemistry.
2023 – 2025 **Rodnyel Arosemena, STRI,** Compound-specific isotope geochemistry.
2023 **Roman Ferraro, NSF REU Fellow, Unv. of Rhode Island,** Historical ecology / geochemistry.
2023 **Juan-Pablo Peña, Unv. Texas,** Compound-specific isotope geochemistry.
2022 **Nicole Yuet Fung Ling, HKU,** Carbon resource partitioning in butterflies.
2021 **Bonnie Chun Tung Lee, HKU,** Isotope biogeochemistry and data analysis in R.
2021 **Jolene Wong*, HKU,** Stable isotope processing and analysis.
2019 **Diluksha Soysa, Sri Lanka,** Field research and methods.
2019 **Hasi Vanitage, Sri Lanka,** Field research and methods.
2019 **Thisara Srimal, Sri Lanka,** Field research and methods, scientific SCUBA diving.
2019 **Jaime Wong, HKU,** C-N-S isotopes in fish of Dongsha Atoll, summer internship.
2018 **Merry Chuck Yee Chan, HKU,** Historical ecology of Hong Kong mollusks, summer internship.
2017 - 2019 **Carmen Ka Man Wong*, HKU,** “Using SIA to delineate trophic niches of corals in Dongsha Atoll”.
2017 **Chan Cheuk Yee*, HKU,** ArcGIS.
2016 **Ben Goldstein, American Unv.** Field work and ArcGIS.
2015 – 2016 **Kelly Gutkowski, American Unv.** Historical ecology of coral reefs.
2014 – 2016 **Carly LaRoche, American Unv.** Historical ecology of coral reefs and seagrass meadows.

RESEARCH GRANTS / FELLOWSHIPS / FUNDRAISING

- 2025 Shortlisted. HKU Tech Up GBA Innovators Programme. “JoyWave”. PI. (600,000 HKD / \$76,400 USD)
2025 Teaching Development and Language Enhancement Grant, HKU. “Enhancing public engagement and outreach training across HKU curricula”. CoI. (PI. Dr. Michael Rivera; 800,000 HKD / \$102,000 USD)
2024 Private donor, support of the STRI geochemical lab expansions. CoI. (\$500,000 USD / 3,924,972 HKD)
2023 The Paleontological Society Conference Grant. PI. (\$1000 USD / 7,850 HKD)
2022 The Paleontological Society Invited Lecturer Travel Grant. PI. (\$400 USD / 3,100 HKD)
2021 Hong Kong Offshore LNG Terminal Project Marine Conservation Enhancement Fund. “When was Acropora-coral-habitable environmental quality lost from the Hong Kong's southern waters? Historical ecology approach.” CoI. (PI: M. Yasuhara; 1,400,000 HKD / \$176,000 USD).
2020 Earl Tupper Postdoctoral Fellowship, Smithsonian Tropical Research Institution. “Using geochemical records to track humanity’s fingerprint on Tropical Eastern Pacific ecosystems through time” PI. (\$213,000 USD / 1,672,038 HKD)
2019 Hung Hing Ying Physical Science Foundation grant. “Hong Kong: The city that coral built.” CoI. (PI: DM. Baker; 31,000 HKD / \$4,000 USD)
2019 Hong Kong University Seed Funding grant. “Hong Kong: The city built by coral.” CoI. (PI: DM. Baker 78,500 HKD / \$10,000 USD)
2019 NAPC student travel grant. PI. (\$350 USD)
2018 Smithsonian Tropical Research Institution, short-term research fellowship. PI. (Co-PIs: A. O’Dea; \$4,700 USD)
2018 IsoEcol student travel grant. PI. (\$500 USD)
2017 – 2020 Swire Scholarship, Academic Ambassador. 7 awarded annually of a pool of 5,000+ postgraduates.



- (~804,619 HKD, \$102,500 USD)
- 2017 National Geographic Young Explorers Grant. “Lime kilns as an archive for changing biodiversity on coral reefs in SE Asia: from the Qing Dynasty to modern-day Sri Lanka.” PI. (CoI: DM. Baker, M. Atha, J. Pandolfi, A. Premaratna; \$5,000 USD / 39,000 HKD).
- 2017 Swire research and travel grant. PI. (37,000 HKD / \$4,800 USD)
- 2016 – 2020 Hong Kong PhD Fellowship. ~200 awarded annually to entire Hong Kong graduate applicant pool. (~1,177,491 HKD / \$152,000 USD)
- 2014 – 2015 American University Graduate Research Grant. PI. (\$4,000 USD)
- 2014 American University Graduate Research Grant: Thesis related coral reef research support for travel to Guam. PI. (\$1,000 USD)
- 2013 Volpe National Transportation Systems Center. “Climate Change Adaptation and Resilience Support for Transportation Practitioners.” Co-PI. (Co-PIs: C. Zevitas, K. Petho, A. Klauber; \$30,000 USD)

SEMINARS

SELECT CONFERENCE PRESENTATIONS

* *Invited talk*, ^ *Keynote*

19. **Jonathan D. Cybulski**, Ashley Sharpe, Yahaira Núñez Cortés, Nicole Smith-Guzmán, Ilean Isaza, Diana Rocio Carvajal Contreras, Susan Monge, Erin Dillon, Brigida De Gracia, Irene Garcia, Aaron O’Dea. *Crossing the Paleontological-Ecological Gap & Conservation Paleobiology Symposium. 2025. Zurich, Switzerland.* “Exploring the historical ecology of the Southern Central American Pacific Coast and its conservation implications.”
18. **Jonathan D. Cybulski***, Ashley Sharpe, Yahaira Núñez Cortés, Nicole Smith-Guzmán, Ilean Isaza, Diana Rocio Carvajal Contreras, Susan Monge, Erin Dillon, Brigida De Gracia, Irene Garcia, Aaron O’Dea. *ICES, Working Group on the History of Fish and Fisheries. 2025. Nice, France.* “Pre-historical and Historical Marine Resource Use on the Southern Central American Pacific Coast.”
17. **Jonathan D. Cybulski**[^], Nicolas Duprey, Erin M. Dillon, Sean R. Connolly, Alan Foreman, Hubert Vonhof, Alfredo Martinez-Garcia, Brígida De Gracia, Kelton W. McMahon Aaron O’Dea. *North American Paleontological Convention, 2024. USA.* “Nitrogen stable isotopes from coral fossils contextualize climate-ecology-human interactions through millennia”
16. **Jonathan D. Cybulski***, Nicole E. Smith-Guzmán, Luis A. Sánchez Herrera, Kelton McMahon, Ashley E. Sharpe. *Society for American Archaeologists Annual Meeting, 2024. USA.* “Investigating human subsistence strategies in Panamá during the Late Holocene.”
15. **Jonathan D. Cybulski**, Aaron O’Dea, Nicolas Duprey, Alan Foreman, Ashley E. Sharpe, Nicole E. Smith-Guzmán, Sean R. Connolly, Erin M. Dillon, Alfredo Martinez-Garcia, Hubert Vonhof, Brígida De Gracia, Ilean Isaza Aizpurúa, Luis A. Sánchez Herrera, Kelton W. McMahon. *Ocean Science Meeting, 2024. USA.* “Using marine paleoecological proxies and archaeological evidence to investigate human-environment-ecosystem interactions in the Tropical Eastern Pacific throughout the late-Holocene.”
14. **Jonathan D. Cybulski**[^], Corley, Alison; Conti-Jerpe, Inga; Kim, Taihun, McIlroy, Shelby, Duprey, Nicolas N., Thibodeau, Benoit, Yasuhara, Moriaki, Baker, David M. *Geological Society of America. 2023. USA.* “Tracking nutrient assimilation in coral using stable isotopes of amino and fatty acids: Implications for past, present, and future reefs.”
13. **Jonathan D. Cybulski**, Nicolas Duprey, Sean Connolly, Alan Foreman, Erin Dillon, Hubert Vonhof, Alfredo Martinez-Garcia, Brigida De Gracia, Aaron O’Dea. *XXI International Union for Quaternary Research Congress. Rome, Italy. 2023.* “Coral geochemical records as tracers of ecosystem change in the Tropical Eastern Pacific over the late-Holocene.”



12. **Jonathan D. Cybulski**, Nicolas Duprey, Sean Connolly, Alan Foreman, Erin Dillon, Hubert Vonhof, Alfredo Martinez-Garcia, Brigida De Gracia, Aaron O’Dea. *2nd Conservation Paleobiology Symposium, 2023. USA*. “Coral geochemical records track millennial-scale ecosystem change and resilience in the Tropical Eastern Pacific.”
11. **Jonathan D. Cybulski**, Conti-Jerpe, I., Corley, A., Duprey, N., McIlroy, S., Yasuhara, M., Thibodeau, B., Baker, D. *International Coral Reef Symposium, Germany. 2022*. “Improving historical reconstructions with modern analogs: using stable isotopes to track nutrient assimilation into the coral skeleton.”
10. **Jonathan D. Cybulski***, Ms. Leung Kit Sum, David M. Baker. *BECOME: The Second International Conference on Biodiversity, Ecology and Conservation of Marine Ecosystems, Hong Kong. 2022*. “Exploring the Possibilities of Stable Isotope Ecology at the Stable Isotope Ratio Mass Spectrometry Laboratory (SIRSMS) at HKU.”
9. **Jonathan D. Cybulski**, Vriko Yu, Nico Duprey, Naomi Geeraert, Benoit Thibodeau, David M. Baker. *3rd Paleontological Virtual Conference. 2021*. “Hong Kong Corals: Case-study on Using the Past to Restore the Future.”
8. **Jonathan D. Cybulski**, Jihane Benbahtane, Brigida De Gracia, Aaron O’Dea. *Conservation Paleobiology Symposium, Bologna, Italy. 2020*. “The Taphonomy of Panama’s Pacific Coral Reefs and their Historical Resilience”.
7. **Jonathan D. Cybulski**, Stefan Husa, Nicolas Duprey, Briony Mamo, Vriko Yu, Toby Tsang, Moriaki Yasuhara, David Baker. *North American Paleontological Convention, California, USA. 2019*. “The past, present, and future of Hong Kong corals: hope for future ecosystems found in an unlikely place.”
6. **Jonathan D Cybulski**, Conti-Jerpe Inga, Phillip Thompson, Baker David M. *Fourth Xiamen Symposium on Marine Environmental Sciences, China. 2019*. “Ground truthing historical and paleo nutrient records from hard coral.”
5. **Jonathan D Cybulski**, Conti-Jerpe Inga, Baker David M. *11th International Conference on Stable isotope Ecology, IsoEcol, Chile. 2018*. “Unraveling nutrient assimilation into the coral skeletal organic matrix has implications for historical interpretations.”
4. **Jonathan D Cybulski**, Stefan Husa, Nicolas Duprey, Briony Mamo, Toby Tsang, Moriaki Yasuhara, James Y. Xie, Jian-Wen Qiu, David Baker. *Asia-Pacific Coral Reef Symposium, Philippines. 2018*. “A link to the past: The story of Hong Kong’s coral assemblages through time.”
3. **Jonathan D Cybulski**, David M. Baker. *Hainan Coral Reef Symposium. Sanya, Hainan, China. 2017*. “Push-Core Sampling and Other Methodologies for Collecting Paleoecological Data in Hong Kong And Southeast Asia.”
2. **Jonathan D Cybulski**, Carly LaRoche, Kiho Kim. *13th International Coral Reef Symposium (ICRS13). Oahu, Hawai’i. 2016*. “Push-Core Sampling in Micronesia: Using Paleoecological Data to Reconstruct Guam’s Coral Reef Community.” Abstract number: 28387.
1. **Jonathan D Cybulski**, Carly LaRoche, Kiho Kim. *8th Annual Association for Environmental Studies and Sciences Conference. Washington, D.C. 2016*. “Push-Core Sampling in Micronesia: Using Paleoecological Data to Reconstruct Guam’s Coral Reef Community.”

SELECT INVITED LECTURES AND PANELS

18. Xiamen University, State Key Laboratory for Marine Environmental Science. December 2025. Invited by: Prof. Ling Cao. “Ocean Baselines and Ancient Food Webs in the Eastern Tropical Pacific.”
17. The Chinese University of Hong Kong. Archaeology Seminar Series. May 2025. Invited by: Dr. Christina Cheung. “What Coral Fossils and Ancient Humans Reveal About Past Environments and Societies.”
16. The University of Hong Kong, Hong Kong. Ecology and Biodiversity Seminar Series. April 2025. “Exploring what ancient humans and coral fossils tell us about past environments, ecosystems, and culture.”
15. Smithsonian Tropical Research Institute. Tupper Symposium. December 2023. Panamá. “Nitrogen stable isotopes reveal tropical Pacific climate-ecology-human interactions through millennia.”
14. Max Planck Institute of Marine Microbiology. Seminar Series. April 2022. Bremen, Germany. “Investigating coral assemblages through a paleoecological and geochemical lens.”
13. The University of Hong Kong, Hong Kong. Biology Graduate Student Association, Departmental Seminar Series. 2021. “Exploring the Possibilities of Stable Isotope Ecology at HKU.”
12. The Hong Kong University of Science and Technology. Research Seminar Series. 2021. Invited by: Dr. Alex Wyatt.



- “Hong Kong coral assemblages through time – a paleoecological and geochemical look at human-driven change.”
11. American University, USA. Environmental Science Seminar Series. 2021. Invited by: Dr. Stephen MacAvoy. “Hong Kong coral assemblages through time – a paleoecological and geochemical look at human-driven change.”
 9. TedX TinHau, “Countdown”, 2020. Nominated speaker. “How to build your climate fitness”.
<https://www.youtube.com/watch?v=yb03LBA9Q4A>
 8. National Geographic’s Explorer Classroom, 2020. “Historical Ecology of Corals.”
 7. LUI Che Woo Prize for World Civilization – Laureate Public Lecture. Hong Kong, SAR. 2019. Panelist.
 6. National Geographic Society. Keynote at Grant Seminar. Hong Kong, SAR. 2019. “Understanding Hong Kong corals through time: Getting to the ‘Core’ of the problem.”
 5. Smithsonian Tropical Research Institute, Panama 2019. “Link to the past: Hong Kong’s coral assemblages through time.”
 4. National Geographic Asian Explorer Festival, Hong Kong 2018. “3-minute research story pitch”.
 3. Oceanswell. Colombo, Sri Lanka. 2018. “A field guide for your field research – how to plan a successful expedition.”
 2. National Geographic Society. Keynote at Grant Seminar. Colombo, Sri Lanka. 2018. “A link to the past: using paleoecology to tell the story of ecosystems through time.”
 1. Hong Kong Maritime Museum. Hong Kong. 2016. “Looking to the Past for Answers: Using Paleoecology to tell the story of Hong Kong Corals.” Invited guest for “Past, Present, and Future of Hong Kong’s Coral Reefs” lecture series.

JUSTICE, EQUITY, DIVERSITY, AND INCLUSION INITIATIVES

- | | |
|----------------|-------------------------------------------------------------------------------------------------|
| 2023 – 2025 | Smithsonian Tropical Research Institute Task Force for Multilingualism and Community Engagement |
| 2022 – present | Smithsonian Tropical Research Institute Inclusion, Diversity, Equity & Accessibility Member |
| 2020 – 2022 | Student Panel of the Conservation Paleobiology Network |
| 2020 | National Geographics “Explorer Classroom” Program |
| 2018 – 2020 | The University of Hong Kong Biology Graduate Student Association. |

SELECTED PUBLIC OUTREACH (See <https://www.jonathancybulski.com/media> for extended list)

- | | |
|----------------|-------------------------------------------------------------------------------------------------------------------|
| 2025 | National Geographic x East HK. “Ideas to wake up to”, a discussion on sustainable food. Hong Kong. |
| 2025 | Museo de la Nacionalidad, Los Santos, Panama. 50 th anniversary archaeological event. |
| 2023 – 2024 | National Geographic X Swire Trust. Exhibition at Pacific Place “Our City Our Sea.” Hong Kong. |
| 2023 | Invited speaker at Coventry High School, USA. |
| 2021 | National Geographic. “Planet Possible” worldwide live television event. |
| 2020 | OceanSwell. “Tiny-desk Adventures” educational video and live Q&A. |
| 2019 | National Geographic Society. Online community lecture. “How to prepare for your next expedition.” |
| 2019 | Hong Kong Environmental Film Festival. Panel mediator for public viewing of “Chasing Coral.” |
| 2019 – present | Smithsonian Tropical Research Institute. Panama. Invited lectures and organized field trips for donors. |
| 2019 | Mrs. Smith’s 3 rd grade elementary class, Rhode Island. Repeated “pen pal” outreach. |
| 2018 – 2020 | Invited lecture for 4 th and 5 th grade students in the Coventry Public School system, USA. |
| 2017 | GE2017-15 Reef Encounters at the Underwater Garden Hoi Ha Wan (海下灣浮潛生態遊), Hong Kong. |
| 2017 | Hong Kong Island School Workshop on Marine Ecology, Hong Kong. |
| 2016 | Hong Kong Maritime Museum, Hong Kong. Public presentation and coral exhibit. |
| 2016 | Junior Science Institute (JSI) Ocean Odyssey Workshop. Swire Institute of Marine Science, Hong Kong. |

PROFESSIONAL DEVELOPMENT



AdvanceHE Teaching Fellowship HKU Teaching and Learning Innovation Centre	Fellowship (FHEA) Professional Certificate in Teaching and Learning in Higher Education	2026 (expected) April 2025
Smithsonian Institute	Inclusive Internship Supervisor Training	May 2024
Smithsonian Institute	First responder and CPR training	August 2023
University of Rhode Island	JEDI Professional Development Training	2023
University of Hong Kong	Hong Kong IsoCamp graduate	July 2019
University of Hong Kong	Flow-injection Analysis training	May 2019
Smithsonian Institute	Scientific Diver Certification	January 2019
PADI	Rescue Diver	December 2018
Oxford University Short Course	Bayesian statistical modeling for ¹⁴ C dating	March 2018
University of Utah	Stable Isotope Ecology, IsoCamp graduate	June 2017
HKU, Dr. Iglesias-Preito & Dr. Enriquez	Light and Photosynthesis Workshop	August 2016
PADI	Open Water/Advanced SCUBA Certification	August 2015
Institute for Environmental Education	Field Soil Sampling Training	February 2014
National Transit Institute	Managing the Environmental Review Process	August 2013
OSHA Ten Hour Construction Safety Training	Occupational Safety and Health Administration	September 2012
Wetland Permitting	National Association of Environmental Planners	September 2012
FAA Fall Safety Level II Certified Climber	FAA Facility, Hanscom, MA.	May 2011
Northeastern University	Residential Life Diversity Training	Annual, 2008-11

SELECTED HONORS AND AWARDS

2021	Professor Brian Morton Postgraduate Prize in Marine Biology - best Thesis, The University of Hong Kong.
2017	National Geographic Explorer, National Geographic Society
2016	<i>Summa Cum Laude</i> , American University
2016	Founders Excellence Award for Most Distinguished Student Leader, American University
2011	<i>Summa Cum Laude</i> , Northeastern University
2007 – 2011	Deans Honors List, Northeastern University

SYNERGISTIC ACTIVITIES

2025	Taikoo Primary School visit and assessment on Marine Science curriculum
2024	Developed and lectured a short course on stable isotope ecology at Smithsonian Tropical Research Institute
2024	Session Co-chair – “Lessons Learned and Future Visions for Conservation Paleobiology”, NAPC 2024.
2024	Primary session chair of ME004 – “Leveraging historical archives to reconstruct ecological processes across temporal and spatial scales”, OSM 2024.
2023	Week-long field expedition to Cuajiniquíl, Costa Rica, marine and mangrove bivalve sampling.
2023	Workshop leader, Student workshop on Advancing conservation paleobiology through academic-agency partnerships, Conservation Paleobiology Symposium, 2023.
2023	Session Co-Chair “Conservation Paleobiology session” at the 4 th Paleontological Virtual Congress
2022	Week-long expedition to Las Perlas, Panamá, underwater paleontological coring (6 cores) / living aboard.
2020 – 2022	Inaugural Co-Chair of the Student Panel, Conservation Paleobiology Network.
2018 – 2019	Conducted two field excursions to Sri Lanka for SCUBA and field collections
2019	3 months living, and regularly conducting field research and SCUBA (25+ dives) in Panamá
2019	2-week SCUBA and paleontological field course in Okinawa, Japan
2018 – 2020	Inaugural elected President, the University of Hong Kong Biology Graduate Student Association.
2017	2-week field course in Tsitsikamma National Wildlife Refuge, South Africa



- 2017 1-month SCUBA/field excursion to Donsgha Atoll
2016 – present 400+ SCUBA dives in Hong Kong / Greater Bay Area
2016 Week-long expedition to Hong Kong, underwater paleontological coring (12 cores) / living aboard
2015 – 2016 Elected Graduate Class President, American University College of Arts and Science.
2014 2+ months of field research in Guam, and surrounding Marianas Island Chain
2011 – 2014 Several multiple-week backwoods expeditions in USA National Parks conducting environmental research
2009 – 2011 Senior Resident Assistant for a 200+ student dormitory, Northeastern University

SOCIETIES

Hong Kong Marine Protection Alliance, Society of American Archaeology, Geological Society of America, Association for the Science of Limnology and Oceanography, Paleontological Society, Conservation Paleobiology Network, National Geographic Society, Royal Geographic Society, Coral Reef Society

JOURNAL REVIEWS

Marine Ecology Progress Series (1), Osteoarcheology (1), Journal of Geophysical Research (2), Historical Biology (2), Limnology and Oceanography (4), Environmental Archaeology (1), Paleoceanography and Paleoclimatology (3), Ecography (2), Frontiers in Marine Science (1), Frontiers in Ecology and Evolution (1), Global Change Biology (2), Marine Pollution Bulletin (2), National Geographic Expert Reviewer (2), Smithsonian Expert Reviewer (4), PeerJ (2), Science Advances (2).