

CURRICULUM VITAE: MIKE MCWILLIAM

PERSONAL

Citizenship: British (Current J1 Exchange Visitor to the US)
Date of Birth: 23rd March 1991
Email: mjmcwilliam@outlook.com

CURRENT POSITION

2019-Present Postdoctoral Research Fellow
Hawaii Institute of Marine Biology, University of Hawaii Manoa

PRIOR POSITIONS

2018-2019 Research Associate in Coral Reef Biodiversity
ARC Centre of Excellence for Coral Reef Studies, James Cook University
Project: *The functional biogeography of the Pacific Ocean*

EDUCATION

2015-2018 PhD (*Cum Laude*), Natural and Physical Sciences
ARC Centre of Excellence for Coral Reef Studies, James Cook University
Thesis title: *The functional diversity and redundancy of corals*

2009-2012 BA (Hons 1st Class) Biological Sciences
University of Oxford
Dissertation title: *Evolutionary radiations of Antarctic Hydrocorals*

PEER-REVIEWED PUBLICATIONS

1. Hughes, T. P., Kerry, J. T., Álvarez-Noriega, M., Álvarez-Romero, J. G., Anderson, K. D., Baird, A. H., ... & McWilliam, M.J. (2017). Global warming and recurrent mass bleaching of corals. *Nature*, 543(7645), 373. <https://doi.org/10.1038/nature21707> **Cover Feature**
2. McWilliam, M., Hoogenboom, M. O., Baird, A. H., Kuo, C. Y., Madin, J. S., & Hughes, T. P. (2018). Biogeographical disparity in the functional diversity and redundancy of corals. *Proceedings of the National Academy of Sciences*, 115 (12) 3084-3089; <https://doi.org/10.1073/pnas.1716643115>
3. Hughes, T. P., Kerry, J. T., Baird, A. H., Connolly, S. R., Dietzel, A., Eakin, C. M., ... & McWilliam, M.J. (2018). Global warming transforms coral reef assemblages. *Nature*, 556.7702 (2018): 492. <https://doi.org/10.1038/s41586-018-0041-2> **F1000 Recommended**
4. McWilliam, M., Chase, T.J., Hoogenboom, M.O. (2018). *Neighbor Diversity Regulates the Productivity of Coral Assemblages*. *Current Biology* 28.22 (2018): 3634-3639. <https://doi.org/10.1016/j.cub.2018.09.025> **F1000 Recommended & Cover Feature**
5. Doszpot, N. E., McWilliam, M. J., Pratchett, M. S., Hoey, A. S., & Figueira, W. F. (2019). Plasticity in Three-Dimensional Geometry of Branching Corals Along a Cross-Shelf Gradient. *Diversity*, 11(3), 44. <https://doi.org/10.3390/d11030044>
6. McWilliam, M., Pratchett, M. S., Hoogenboom, M. O., & Hughes, T. P. (2020). Deficits in functional trait diversity following recovery on coral reefs. *Proceedings of the Royal Society B*, 287(1918), 20192628. <https://doi.org/10.1098/rspb.2019.2628>
7. Chase, T.J., Pratchett, M.S., McWilliam, M.J., Hein, M.Y., Tebbett, S.B., Hoogenboom, M.O. (2020). Fishes alleviate the impacts of sediments on host corals. *Proceedings of the Royal Society Open Science* (In Press).

RECENT PROFESSIONAL ACTIVITY

<i>Biogeography</i>	Global study of coral reef biodiversity distribution: Quantitative analysis of large-scale spatial and functional trait data.
<i>Ecosystem Function</i>	Biodiversity-ecosystem function relationships: Experiment quantifying the effects of biodiversity on coral reef productivity
<i>Climate Change</i>	Response to climate change in reef ecosystems: Monitoring of bleaching and species composition across the Great Barrier Reef
<i>Resilience</i>	Long-term community dynamics and regime shifts: Decadal-scale analysis of disturbance, recovery and regime shifts on reefs
<i>Evolution</i>	Phylogenetic analysis of deep-sea corals: Molecular phylogeny identifying radiations of Antarctic Hydrocorals

CONFERENCE PRESENTATIONS

2020	Session Host: International Coral Reef Symposium (ICRS): Session title: <i>Can functional studies provide a sustainable future for coral reefs?</i>
2017	Session Host: European Coral Reef Symposium (ECRS), Oxford, United Kingdom. Session title: <i>Species, traits and Coral Reef Processes</i> . Presenter: Australian Coral Reef Society (ACRS) Conference, Townsville, Australia. Title: <i>Regional disparity in the diversity and redundancy of coral functional roles</i> .
2016	Presenter: International Coral Reef Symposium (ICRS), Honolulu, Hawai'i, USA. Title: <i>Functional collapse on Caribbean Coral Reefs</i> .

AWARDS AND FUNDING

2019	Australian Marine Science Association (AMSA, North Queensland Division) Award for Research
2018	Virginia Chadwick Award for outstanding publication in peer-reviewed international journals (AUD 1000)
2017	Vikki Harriot Award, Outstanding Conference Presentation Award Australian Coral Reef Society (AUD 500)
2015	JCUPRS Scholarship, Postgraduate Research Scholarship to study in Australia (AUD 204,872)
2012	Brasenose Travel Grant (GBP 500, for coral reef ecology workshop, Bermuda)
2012	Bermuda Institute Of Ocean Sciences Scholarship (GBP 2000)
2009	Brasenose Travel Grant (GBP 500, for a research work placement, Indonesia)

RESEARCH EXPEDITIONS

2019	[16] Kaneohe Bay, Oahu (Bleaching surveys, multiple surveys over 6 months); [15] Palau (Coral trait variation study, duration: 21 Days)
2018	[14] Southern Coral Sea (Coral Sea Monitoring, duration: 20 Days); [13] Orpheus Island (Coral recruitment study, duration: 7 Days); [12] Central Coral Sea (Coral Sea Monitoring, duration: 17 Days)
2017	[11] Palm Island Reefs, Great Barrier Reef (AIMs expedition, duration: 10 days), [10] Whitsunday Island Reefs (Coral recruitment study, duration: 6 days); [9] Central Great Barrier Reef (AIMs expedition, duration: 15 days); [8] Orpheus Island, Australia (Metabolism study, 2 Months, Trip Leader)

2016	[7] Great Barrier Reef, Cairns to Cooktown (Bleaching Mortality Surveys, duration: 28 days), [6] Heron Island, Great Barrier Reef (Fish behaviour study; duration: 21 days); [5] Opal Reef, Great Barrier Reef (Fish behaviour study; duration: 4 days); [4] Great Barrier Reef, Cairns to Cooktown (Bleaching surveys, duration: 28 days)
2015	[3] Palm Island Reefs (Cross-shelf study, duration: 7 days), [2] Orpheus Island, Great Barrier Reef (Pre-bleaching surveys; duration: 14 days); [1] Lizard Island, Great Barrier Reef (Fish movement study; duration: 21 days).

POLICY REPORTS

2017	Briefing to MP's on Great Barrier Reef bleaching, delivered to MP's at 'Science Meets Parliament' in Canberra, Australia
2016	Advancing climate action in Queensland, written on behalf of the Australian Coral Reef Society (visit online) Science-based policy plan for Australia's Great Barrier Reef, written on behalf of the Australian Coral Reef Society (visit online)

TEACHING

2014-2015	Marine Science and SCUBA Instructor, ActionQuest, British Virgin Islands.
2013-2014	Resident Marine Biologist, W Resort, North Ari Atoll, Maldives
2012-2013	SCUBA Instructor and guide, Heron Island and Hayman Island, Great Barrier Reef Marine Science and SCUBA Instructor, Bayplay Adventures, Victoria, Australia

REVIEWER

Journals	Reviewer of manuscripts for high-quality journals including <i>Proceedings of the Royal Society B</i> , <i>Functional Ecology</i> , <i>Coral Reefs</i> , <i>Marine and Freshwater Research</i> , and <i>Biodiversitas</i> ; <i>Indonesian Journal of Biodiversity</i> .
Grants	Reviewer of grant proposals for the National Science Foundation (NSF) and Centre de synthèse et d'analyse sur la biodiversité (CESAB).

LINKS

[Google Scholar](#)
[PhD Exit Seminar – YouTube](#)
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