PERSONAL DATA

Dr. David Michael, BAKER
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Affiliation: The Swire Institute of Marine Science, School of Biological Sciences, The University of Hong Kong

EDUCATION & EXPERIENCES

Experience:

2013 - present Associate Professor, The Swire Institute of Marine Science, School of Biological Sciences, The University of Hong Kong

2024 - present Director, Swire Institute of Marine Science

2020 - present Director, HKU Stable Isotope Ratio Mass Spectrometry Laboratory (SIRMS)

2023 - present Associate Director, Knowledge Exchange Office

2011 – 2012 MarineGEO Fellow (formerly Marine Science Network), Smithsonian Institution

2010 – 2012 Post-doctoral Associate & Visiting Investigator, Carnegie Institution of Washington, Geophysical Laboratory

Academic education:

Ph.D. (2010) Ecology & Evolutionary Biology; Cornell University

M.S. (2004) Biology; American University

B.A. (2001) Biology; St. Mary's College of Maryland

RESEARCH INTERESTS

1. Coral Reef Ecology
2. Biogeochemistry
3. Stable Isotope Ecology
4. Symbiosis
5. Global Change
6. Marine Pollution

GRANTS:

2023

1. Environment and Conservation Fund; *A mammoth task: creating a reliable and cheap test to distinguish mammoth and elephant ivories to prevent trafficking and laundering of elephant ivory.* (118/2022; 890 K HKD)

2. Marine Conservation Enhancement Fund; *From Conservation to Carbon Neutral: Quantifying Blue Carbon in Coastal Sediments and Their Contribution to Carbon Budgets.* (MCEF21112; 1.4 M HKD)
3. Research Grants Council Hong Kong, GRF; *Are amino acids the key to understanding the coral symbiosis?* (17114723; 1.24 M HKD)

2022

1. Agriculture, Fisheries and Conservation Department; *Provision of Service on Further Monitoring for Restored Corals on 3D-printed Reef Tiles in Hoi Ha Wan Marine Park.* (AFCD/SQ/256/18/C; 1.4 M HKD)

2020

1. Agriculture, Fisheries and Conservation Department; Provision of Service for Conducting Coral and Sea Urchin Baseline Surveys and Management Works in the Northeastern Hong Kong Waters. (AFCD/SQ/316/19/C; 689 K HKD)
2. Environment and Conservation Fund; *Assessing the impacts of human stressors on freshwater carbon cycling – Implications on CO2 emission and biodiversity conservation in Hong Kong.* (86/2019; 1.29 M HKD)
3. HKU Outstanding Young Researcher Award; *To recognize, reward and promote exceptional research accomplishments of academic and research staff.* (300 K HKD)
4. HKU Seed Fund for Basic Research; *Applying a Historical Approach to Understand the Future of Coral Reefs and using (aeDNA) to Enhance Understanding of Sediment Core Archives.* (201910159293; 69.3 K HKD)
5. Research Grants Council Collaborative Research Fund; *What lies beneath: Human and environmental health risk factors in our ocean - an experimental application of MarineGEO-Hong Kong.* (C7013-19G; 5.9 M HKD)
6. Research Grants Council Collaborative Research Fund; *Symbiosis in the sea: a comparative study of mutualism, symbiont competition, and parasitism on coral reefs.* (17108620; 1.19 M HKD)
7. Smithsonian Institution; *The Good, the Bad, the Bad, & the Ugly: carbon storage, eutrophication effects, and emergent health risks, global marine sediment microbiome.* (AR200040; 700 K HKD)

2019

1. Agriculture, Fisheries and Conservation Department; Provision of Service to Design and Deploy 3D-printed Artificial Reefs for Coral Transplantation in Hoi Ha Wan Marine Park. (AFCD/SQ/256/18/C; 1.4 M HKD)
2. HKU Seed Fund for Basic Research; *Hong Kong: The City that Coral Built. (201811159203*; 79.9 K HKD)
3. Research Grants Council Collaborative Research Fund; *SIRMS 2.0: Establishing Asia's premier stable isotope ratio mass spectrometry laboratory in Hong Kong.* (C7050-18E; 7.6 M HKD)

2018

1. Agriculture, Fisheries and Conservation Department; Provision of Service of Monitoring of Restored Hard Corals at Hoi Ha Wan Marine Park. (AFCD/SQ/177/17/C; 600 K HKD)
2. HKU Seed Fund for Basic Research; *Hong Kong: Hot and gorged – The future of corals in an urbanized environment.* (201711159240; 88.2 K HKD)
3. 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* . (AR170039 31.2 K HKD)

2017

1. Environment and Conservation Fund; *Assessing the Marine Biodiversity and Ecology of Tolo Harbour and Channel, with Particular Reference to Coastal Marine Environments of Ting Kok and Shuen Wan Hoi – Phase II.* (2016-79 ; $4.2M HKD)
2. Environment and Conservation Fund Hong Kong; *MarineGEO - Hong Kong: Towards an understanding of marine biodiversity and ecosystem function.* (67/2016; $3.2M HKD)
3. Ocean Park Conservation Foundation Hong Kong, *Forming a scientific foundation for coral reef restoration and resilience in Hong Kong.* (OT01.1718; $466K HKD)

2016

1. Agriculture, Fisheries and Conservation Department; Provision of Service of Hard Coral Restoration at Hoi Ha Wan Marine Park. (AFCD/SQ/3/16/C; 1.05 M HKD)
2. Research Grants Council Hong Kong, GRF; *Sedimentary records of historical coral diversity and distribution in the South China Sea.* (#17304116; $360K HKD)
3. University Grants Council, The University of Hong Kong Seed Funding for Basic Research; *3-D printed coral reefs: exploring the relationship between rugosity and biodiversity.* ($80K HKD)

2015

1. Research Grants Council Hong Kong, GRF; *Determining the sources of nitrogen to the coral skeletal organic matrix.* (#17303615; $0.7M HKD)
2. University Grants Council, The University of Hong Kong Seed Funding for Basic Research; *A Pilot Survey of Marine Biodiversity using Autonomous Reef Monitoring Structures (ARMS): A First Step for MarineGEO Hong Kong.* ($47K)

2014

1. Environment and Conservation Fund (Hong Kong), T*wo centuries of nitrogen pollution in Hong Kong's coastal waters reconstructed from hard-coral and octocoral δ15N records.* (#2013-04; w. N. Duprey; $0.5M HKD)
2. Research Grants Council Hong Kong, GRF; *Clash of the Dinoflagellates! Nitrogen competition among coral-hosted symbionts.* (#17100014; $1.03M HKD)

2013

1. NSF:RAPID *Documenting bleaching susceptibility and resilience in Guam, Micronesia.* (co-I w. K. Kim & L. Raymundo; $93,000 USD)
2. Research Grants Council Hong Kong, Early Career Scheme (RGC-ECS); *A stable isotope survey of Hong Kong's corals: Assessing the impact of nitrogen pollution on coral health and community biodiversity*. (#789913; 1.2M HKD)
3. University Grants Council, The University of Hong Kong Seed Funding for Basic Research ($120,000 HKD)

2010

1. Bermuda Zoological Society, *Investigating Bermuda's marine pollution history through stable isotope analyses of modern and museum-held gorgonians*, $1,750 USD

2007

1. NSF: IGERT Program Small Grant, *Stable isotope history of the Caribbean: Corals as sentinels for human perturbation*, $3,860 USD

2006

1. Mario Einaudi Center for International Studies, *Nitrogen isotope analyses of reef corals: investigating the role of nutrients and coral disease*, $1,000 USD
2. NSF: IGERT Program Small Grant, *Monitoring coral reefs: 15N through space and time*, $3,000 USD

2005

1. NSF: IGERT Program Small Grant, *δ13C as a measure of photosynthetic efficiency in modified symbioses: a test of the adaptive bleaching hypothesis*, $4,000 USD
2. PADI Foundation Grant, *A century of nitrogen perturbations in the Caribbean revealed using isotopic analysis of gorgonian coral skeletons*, $4,000 USD
3. NSF: IGERT Program Small Grant, *The effect of nitrate concentration on uptake in the Caribbean octocoral* Gorgonia ventalina, $2,997 USD
4. NSF: IGERT Program Small Grant, *Stable isotopes of coral reef invertebrates: developing assessment tools to monitor reef health*, $1,000 USD

2004

1. Hemlinge Research Grant, American University $3,000 USD

PUBLICATIONS (* indicates undergraduate advisee)

87. G Puntin, JCY Wong, T Rothig, DM Baker, M Sweet, Maren Ziegler (2024) The bacterial microbiome of symbiotic and menthol-bleached polyps of long-term aquarium-reared Galaxea fascicularis. Peer Community Journal. 4:e59.
86. S McIlroy, I Guibert, A Archana, WY Chung, JE Duffy, R Gotama, J Hui, N Knowlton, M Leray, C Meyer, G Panagiotou, G Paulay, B Russell, PD Thompson, DM Baker (2024) Life goes on: spatial heterogeneity promotes biodiversity in an urbanized coastal marine ecosystem. Global Change Biology. e17248.

85. R Gotama, DM Baker, I Guibert, SE McIlroy, BD Russell (2024) How a coastal megacity affects marine biodiversity and ecosystem function: impacts of reduced water quality and other anthropogenic stressors Ecological Indicators. 160:111683.

84. V Denis, C Ferrier-Pagès, N Schubert, M Coppari, DM Baker, EF Camp, A Gori, AG Grottoli, F Houlbrèque, SR Maier, G Mancinelli, S Martinez, Ş Yalçın Özdilek, VZ Radice, M Ribes, C Richter, N Viladrich, S Rossi (2024) Heterotrophy in marine animal forests in an era of climate change. Biological Reviews DOI: 10.1111/brv.13053

83. JD Cybulski, NN Duprey, B Thibodeau, M Yasuhara, N Geeraert, N Leonard, HB Vonho, A Martínez-Garcia, DM Baker (2024) 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. 197:115757.

82. JD Cybulski, KS Leung, CON Leung, DM Baker, TKW Lee (2023) Protocol to track the biosynthesis of cholesterol in cultured HCC cells using 13C compound-specific stable isotopic tracers. STAR Protocols 4 (3), 102506.

81. BL Mamo, JD Cybulski, Y Hong, PG Harnik, A Chao, A Tsujimoto, CL Wei, DM Baker, M Yasuhara (2023) Modern biogeography of benthic foraminifera in an urbanized tropical marine ecosystem. Geological Society, London, Special Publications 529, 79-98.

80. HS Yang, T Kim, KT Lee, T Kim, DM Baker, DH Kang (2023) Use of Autonomous Reef Monitoring Structures to Monitor Changes in the Marine Environment in Jeju, South Korea: A Brief Review. Ocean Science Journal 58(2), 17

79. G Puntin, J Craggs, R Hayden, KE Engelhardt, S McIlroy, M Sweet, DM Baker, M Zeigler (2023) The reef-building coral Galaxea fascicularis: a new model system for coral symbiosis research. Coral Reefs 42, 239–252.

78. J. Hui, Y Yu, W Nong, WL So, Y Xie, HY Yip, J Haimovitz, T Swale, DM Baker, W Bendena, TF Chan, APY Chui, KF Lau, PY Qian, JW Qiu, B Thibodeau, F Xu (2022) Genome of elegance coral Catalaphyllia jardinei (Euphylliidae). Frontiers in Marine Science. 9, https://doi.org/10.3389/fmars.2022.991391

77. S Martinez, R Grover, DM Baker, C Ferrier-Pagès (2022) Symbiodiniaceae are the first site of heterotrophic nitrogen assimilation in reef-building corals. mBio. 13(5). DOI: https://doi.org/10.1128/mbio.01601-22

76. J Cybulski, C Skinner, Z Wan, C Wong, R Toonen, M Gaither, K Soong, A Wyatt, DM Baker (2022) Improving stable isotope assessments of inter- and intra-species variation in coral reef fish trophic strategies. Ecology & Evolution. 12(9), e9221.

75. E Mok, CO Leung, L Zhou, MML Lei, HW Leung, MTong, TL Wong, E Lau, IO Ng, J Ding, JP Yun, J Yu, H Zhu, CH Lin, D Lindholm, KS Leung, JD Cybulski, DM Baker, S Ma, and T Lee (2022) Caspase-3-induced SREBP2 activation drives drug resistance via promotion of cholesterol biosynthesis in hepatocellular carcinoma. Cancer Research. 82(17):3102-3115. DOI: 10.1158/0008-5472.CAN-21-2934

74. LH Chow, VPF Yu, ZY Kho, GCL See, A Wang, DM Baker, LM Tsang (2022) An updated checklist of sea slugs (Gastropoda, Heterobranchia) from Hong Kong supported by citizen science. Zoological Studies. 61:e52. doi: 10.6620/ZS.2022.61-52

73. Y Yau, N Geeraert, DM Baker, B Thibodeau (2022) Elucidating sources of atmospheric NOX pollution in a heavily urbanised environment using multiple stable isotopes. Science of the Total Environment. 832, 154781.

72. M Medina, DM Baker, D Baltrus, GM Bennett, U Cardini, AMS Correa, SM Degnan, G Chrisa, E Kim, J Li, DR Nash, EM Marzinelli, MK Nishiguchi, C Prada, MS Roth, M Saha, C Irwin-Smith, KR Theis, JR Zaneveld (2022) Grand Challenges in Coevolution. Frontiers in Ecology & Evolution; Coevolution. https://doi.org/10.3389/fevo.2021.618251

71. JL Richards, V Sheng, WY Chung, M Liu, HH Tsang, SE McIlroy, DM Baker (2022) Development of an eDNA-based survey method for urban fish markets. Methods in Ecology & Evolution.

70. M Moynihan, N Goodkin, KM Morgan, PYY Kho, A Lopes dos Santos, FM Lauro, DM Baker, P Martin (2022) Coral-associated nitrogen fixation rates and diazotrophic diversity on a nutrient-replete equatorial reef. The ISME Journal 16, 233–246.

69. T Röthig, G Puntin, JCY Wong, A Burian, W McLeod, DM Baker (2021) Holobiont nitrogen control and its potential for eutrophication resistance in an obligate photosymbiotic jellyfish. Microbiome 9, 127.

68. T Kim, J Lee, DM Baker (2021) Modification of fatty acid profile and biosynthetic pathway in symbiotic corals under eutrophication. Science of the Total Environment 771, 145336.

67. AA Andersson, LG Gibson, DM Baker, S Wang, B Leung, LM Chu, C Dingle (2021) Applying stable isotope analysis to detect laundering of yellow-crested cockatoos (Cacatua sulphurea) in wildlife trade. Animal Conservation 24, 1021-1031.

66. M Santos, DM Baker, I Conti-Jerpe, J Reimer (2021) Populations of a widespread hexacoral have trophic plasticity and flexible syntrophic interactions across the Indo-Pacific Ocean. Coral Reefs https://doi.org/10.1007/s00338-021-02055-4.

65. JCY Wong, S Enriquez, DM Baker (2021) Towards a trait-based understanding of Symbiodiniaceae nutrient acquisition strategies. Coral Reefs 40, 625-639.

64. N Geeraert, A Archana, MN Xu, SJ Kao, DM Baker, B Thibodeau (2021) Investigating the link between Pearl River-induced eutrophication and hypoxia in Hong Kong shallow coastal waters. Science of the Total Environment 771, 145007.

63. A Archana, DM Baker (2020) Multifunctionality of an urbanized coastal marine ecosystem. Frontiers in Marine Science doi.org/10.3389/fmars.2020.557145

62. JD Cybulski, S Husa, NN Duprey, B Mamo, T Tsang, M Yasuhara, JY Xie, JW Qiu, Y Yokohama, DM Baker (2020) Coral reef diversity losses in China's Greater Bay Area were driven by regional stressors Science Advances 6(40), eabb1046

61. X Li, M Yan, JR Gu, VTT Lam, TC Wai, DM Baker, PD Thompson, SKF Yiu, PKS Lam, PTY Leung (accepted) The effect of temperature on physiology, toxicity and toxin content of the benthic dinoflagellate Coolia malayensis from a seasonal tropical region. Water Research 185:116264.
60. SE McIlroy, JCY Wong, DM Baker (2020) Competitive traits of coral symbionts may alter the structure and function of the microbiome. The ISME Journal 14, 2424-2432.
59. T Röthig, H Bravo, A Corley, T Prigge, A Chung, V Yu, SE McIlroy, M Bulling, M Sweet, DM Baker (2020) Environmental flexibility in Oulastrea crispata in a highly urbanised environment - a microbial perspective. Coral Reefs 39:649-662.
58. C Hatten, A Whitfort, DM Baker, CE Dingle (2020) Wildlife forensic science in Hong Kong. WIREs Forensic Science
57. YY Yau, DM Baker, B Thibodeau (2020) Quantifying the impact of anthropogenic atmospheric nitrogen deposition on the generation of hypoxia under future emission scenarios in Chinese coastal waters. Environmental Science & Technology 54(7):3920-3928.
56. I Conti-Jerpe, PD Thompson, CWM Wong, NL Oliveira, NN Duprey, MA Moynihan, DM Baker (2020) Trophic strategy and bleaching resistance in reef-building corals. Science Advances 6 (15), eaaz5443
55. CJ Freeman, CG Easson, KO Matterson, RW Thacker, DM Baker, V Paul (in press) Microbial symbionts and ecological divergence of Caribbean sponges: A new perspective on an ancient association. The ISME Journal 14:1571-1583.
54. A Wang*, IE Conti-Jerpe, JL Richards, DM Baker (2020) Phestilla subodiosus, sp. nov., (Nudibranchia: Trinchesiidaea) a corallivorous pest species in the aquarium trade. Zookeys 909:1-24.
53. N Geeraert, NN Duprey, S McIlroy, PD Thompson, BR Goldstein, C LaRoche, K Kim, LJ Raymundo, DM Baker (2020) The anthropogenic nitrogen footprint of a tropical lagoon: spatial variability in Padina δ15N. Pacific Science 74(1):19-29.
52. J Richards, V Sheng, WY Chung, LY Chan, ST Ng, Y Sadovy, DM Baker (2020) Prevalence of critically endangered European eel (Anguilla anguilla) in Hong Kong supermarkets. Science Advances 6(10), eaay0317. (link)
51. NN Duprey, XT Wang, T Kim, JD Cybulski, HB Vonhof, PJ Crutzen, GH Haug, DM Sigman, A Martínez-García, DM Baker (2020) Megacity development and the demise of coastal coral communities: evidence from coral skeleton δ15N records in the Pearl River Estuary. Global Change Biology 26:1138-1353.
50. DE Burkepile, AA Shantz, TC Adam, KS Munsterman, KE Speare, MC Ladd, MM Rice, SE McIlroy, JCY Wong, DM Baker, AJ Brooks, RJ Schmitt, and SJ Holbrook (2019) Nitrogen source drives differential impacts of nutrients on coral bleaching prevalence, duration, and mortality. Ecosystems doi.org/10.1007/s10021-019-00433-2

49. L Lachs, NA Mohd Johari, DQ Le, Z Bachok, CD Mohd Safuan, K Tanaka, DM Baker, NN Duprey, NC Ory, M Kochzius, TC Hong, K Shirai (2019) Effects of tourism-derived sewage on coral reefs: isotopic assessments identify effective bioindicators. Marine Pollution Bulletin 148:85-96.
48. SE McIlroy, PD Thompson, F Landry Yuan, TC Bonebrake, DM Baker (2019) Subtropical thermal variation supports persistence of corals but limits productivity of coral reefs. ProcB 286: 20190882.
47. J Chen, SE McIlroy, A Archana, DM Baker, G Panagiotou (2019) A pollution gradient shapes the microbiome, functionome and resistome in marine sediments. Microbiome 7:104.
46. TC Bonebrake, F Guo, C Dingle, DM Baker, RL Kitching, LA Ashton (2019) Integrating proximal and horizon threats for conservation. Trends in Ecology & Evolution https://doi.org/10.1016/j.tree.2019.04.001
45. CWM Wong, IE Conti-Jerpe, LJ Raymundo, CE Dingle, A Ponzo, DM Baker (2019) Whale shark ecotourism: impacts on coral reefs in the Philippines. Environmental Management 63(2):282-291.
44. MJ Kwon, C Tudge, K Kim, DM Baker, SE MacAvoy (2018) Museum collections yield information on nitrogen sources for coastal Gulf of Mexico, North Carolina, USA and Caribbean Sea invertebrates 1850 to 2004. Journal of Shellfish Research 37(5):1157-1165.
43. CP Shin*, A Hoffman, W Lee, RC Kendrick, DM Baker, TC Bonebrake (2018) Stable isotopes of Lithosiini and lichens in Hong Kong show the bioindicator potential of lichenivorous moths. Journal of Asia-Pacific Entomology 21:1110-1115.
42. MJ Perkins, YKY Mak, LSR Tao, ATL Wong, JKC Yau, DM Baker, KMY Leung (2018) Short-term tissue decomposition alters stable isotope values and C:N ratio but does not change relationships between lipid content, C:N ratio, and Δδ13C in marine animals. PLOS ONE doi.org/10.1371/journal.pone.0199680
41. A Archana, N Geeraert, MN Xu, SJ Kao, B Thibodeau, DM Baker (2018) Nitrogen sources and cycling revealed by dual isotopes of nitrate in a complex urbanized environment. Water Research 142(1):459-470.
40. LG Gibson, A Andersson, D Dudgeon, Y Song, Y Chen, DM Baker, A Hofford. (2018) Hong Kong's delayed ivory ban endangers African elephants. Frontiers in Ecology and the Environment 16(7):378-380.
39. K Kang, Y Ni, J Li, L Imamovic, C Sarkar, Y Heshiki, T Zheng, S Kumari, JCY Wong, A Archana, CWM Wong, CE Dingle, S Denizen, DM Baker, MOA Sommer, CJ Webster, G Panagiotou (2018) The Environmental Exposures and Inner-and Intercity Traffic Flows of the Metro System May Contribute to the Skin Microbiome and Resistome. Cell Reports 24:1190-1202 (link)

38. V Bacalan, T Poinsatte, DM Baker, ML Fogel, K Kim (2018) Stable isotope analyses of manatee bones measure historical nitrogen pollution in Florida waters, 1975 - 2010. Marine Biology 165:85.

37. A Ohdera , MJ Abrams, CL Ames, DM Baker, LP Suescun Bolivar, AG Collins, CJ Freeman, Edgar Gamero-Mora, TL Goulet, DK Hofmann, A Jaimes-Becerra, PF Long, AC Marques, LA Miller, L Mydlarz Laura, AC Morandini, CR Newkirk, SP Putri, S Julia, N Stampar, B Steinworth, M Templeman, PE Thomé, M Vlok, C Woodley, JCY Wong, MQ Martindale, WK Fitt and M Medina (2018) Upside-down but headed in the right direction: The highly versatile Cassiopea xamachana system. Frontiers in Ecology and Evolution doi: 10.3389/fevo.2018.00035 (link)

36. DM Baker, CJ Freeman, JCY Wong, ML Fogel, N Knowlton (2018) Climate change promotes parasitism in a coral symbiosis. The ISME Journal 12(3):921-930 (link)

35. N Duprey, SE McIlroy, TPT Ng, PD Thompson, T Kim, JCY Wong, CWM Wong, SM Husa, SMH Li, GA Williams, DM Baker (2017) Facing a wicked problem with optimism: issues and priorities for coral conservation in Hong Kong. Biodiversity and Conservation 26(11): 2521-2545.

34. CJ Freeman, EW Stoner, CG Easson, KO Matterson, DM Baker (2017) Variation in δ13C and δ15N suggests a coupling of host and symbiont metabolism in the Symbiodinium - Cassiopea mutualism. Marine Ecology Progress Series 571: 245-251.

33. N Duprey, XT Wang, PD Thompson, J Pleadwell, LJ Raymundo, K Kim, DM Sigman, DM Baker (2017) Life and death of a sewage treatment plant recorded in a coral skeleton δ15N record. Marine Pollution Bulletin 120(1-2): 109-116.

32. Y Heshiki, T Dissanayake, T Zheng, K Kang, N Yueqiong, Z Xu, C Sarkar, PCY Woo, BKC Chow, DM Baker, A Yan, C Webster, G Panagiotou, and J Li. (2017) Towards a metagenomic understanding on the bacterial composition and resistome in Hong Kong banknotes. Frontiers in Microbiology 8:632. (link)

31. CWM Wong, N Duprey, DM Baker (2017) New insights on the nitrogen footprint of a coastal megalopolis from coral-hosted Symbiodinium δ15N. 51(4), 1981-1987. Environmental Science and Technology 51, 1981-1987.

30. DM Baker, T Murdoch, I Conti-Jerpe, ML Fogel (2017) Investigating Bermuda's pollution history through stable isotope analyses of modern and museum held gorgonian corals. Marine Pollution Bulletin 114, 169-175.

29. AH Yeung, DM Baker (2016) A turnaround at Sanya National Coral Reef Nature Reserve? Proceedings of the 13th International Coral Reef Symposium, Honolulu: 570 - 589. (link)

28. A Anand, L Li, SJ Kao, B Thibodeau, DM Baker (2016) Variations in nitrogen isotope composition of wastewater effluents by treatment type in Hong Kong. Marine Pollution Bulletin 111(1-2), 143-152.

27. F Stein, JCY Wong, V Sheng, SWC Law, B Schröder, DM Baker (2016) First genetic evidence of illegal trade in endangered European eel (Anguilla anguilla) from Europe to Asia. Conservation Genetics Resources 8(4), 533-537.
26. N Duprey, M Yasuhara, DM Baker (2016) Reefs of tomorrow: nutrients reduce coral biodiversity in an urbanized seascape. Global Change Biology 22(11), 3550-3568.
25. JCY Wong, P Thompson, JY Xie, JW Qiu, DM Baker (2016) Symbiodinium clade C generality among common scleractinian corals in subtropical Hong Kong. Regional Studies in Marine Science 8(3), 439-444.
24. CJ Freeman, EW Stoner, CG Easson, KO Matterson, DM Baker (2016) Carbon and nitrogen metabolism by symbionts within Cassiopea xamachana. Marine Ecology Progress Series 544, 281-286.
23. CJ Freeman, CG Easson, DM Baker (2016) Niche structure of marine sponges from temperate hard-bottom habitats within Gray's Reef National Marine Sanctuary. Journal of the Marine Biological Association of the United Kingdom. 96(2), 559-565.
22. PK Cheung*, KK Yuen*, PF Li*, WH Lau*, CM Chiu*, M Yuen*, DM Baker (2015) To swim or not to swim? A disagreement between microbial indicators on beach water quality assessment in Hong Kong. Marine Pollution Bulletin 101, 53-60.
21. DM Baker, CJ Freeman, N Knowlton, RW Thacker, K Kim, ML Fogel (2015) Productivity links morphology, symbiont specificity, and bleaching in the evolution of Caribbean octocoral symbioses. The ISME Journal 9, 2620-2629. (open access PDF)
20. CJ Freeman, DM Baker, CG Easson, RW Thacker (2015) Shifts in sponge-microbe mutualisms across an experimental irradiance gradient. Marine Ecology Progress Series 526, 41-53.
19. K Pinkerton, DM Baker, MR Cuddy, LJ Raymundo, KA Meyer, K Kim. (2015) Nitrogen dynamics on Guam as revealed by the seagrass Enhalus acoroides. Marine Ecology Progress Series 528, 117-126.
18. CJ Freeman, CG Easson, DM Baker (2014) Metabolic diversity and niche structure in sponges from the Miskito Cays, Honduras. Peer J 2:e695 (link)
17. CG Easson, M Slattery, DM Baker, D Gochfeld (2014) Complex ecological associations: Evidence for competition and facilitation in a sponge-algal interaction. Marine Ecology Progress Series 507, 153-167.
16. C Fiore, DM Baker, M Lesser (2013) Nitrogen biogeochemistry in the Caribbean sponge Xestospongia muta: A source or sink of dissolved inorganic nitrogen? PLOS ONE 8(8): e72961. (link)
15. JE Redding, RL Myers-Miller, DM Baker, ML Fogel, LJ Raymundo, K Kim (2013) Link between sewage-derived nitrogen pollution and coral disease severity. Marine Pollution Bulletin 73(1), 57-63. (link)
14. DM Baker, RE Rodríguez-Martínez, ML Fogel (2013) Tourism's nitrogen footprint on a Meso-american coral reef. Coral Reefs 32(3), 691-699. (link)

13. CJ Freeman, RW Thacker, DM Baker, ML Fogel (2013) Quality or quantity: Is nutrient transfer driven more by symbiont identity and productivity than by symbiont abundance? The ISME Journal 7, 1116-1125. (link)
12. DM Baker, JP Andras, AG Jordán-Garza, ML Fogel (2013) Nitrate competition varies with temperature among Symbiodinium clades. The ISME Journal 7, 1248-1251. (link)
11. DM Baker, L Weigt, M Fogel, N Knowlton (2013) Ancient DNA from coral-hosted Symbiodinium reveal a static mutualism over the last 172 years. PLoS ONE 8(2): e55057. (link)
10. M Moynihan*, DM Baker, AJ Mmochi (2012) Isotopic and microbial indicators of sewage pollution from Stone Town, Zanzibar. Marine Pollution Bulletin 64, 1348-1355.
9. RE Rodríguez-Martínez,, GA Jordán-Garza, DM Baker, E Jordán-Dahlgren (2012) Prevalence of coral-Tridemnum solidum interactions on Mexican Caribbean reefs. Coral Reefs 31(2), 571-577.
8. DM Baker, K Kim, JP Andras, JP Sparks (2011) Light-mediated 15N fractionation in Caribbean gorgonian corals: implications for pollution monitoring. Coral Reefs 30, 709-717.
7. DM Baker, E Jordán-Dahlgren, MA Maldonado, CD Harvell (2010) Sea fan corals provide a stable isotope baseline for assessing sewage pollution in the Mexican Caribbean. Limnology & Oceanography 55(5) 2139-2149.
6. DM Baker, K Webster, K Kim (2010) Caribbean octocorals record changing carbon and nitrogen sources from 1862-2005. Global Change Biology, 16(10), 2701-2710.
5. EB Rivest*, DM Baker, KL Rypien, CD Harvell (2010) Nitrogen preference of Aspergillus sydowii, an infective agent associated with aspergillosis of sea fan corals. Limnology & Oceanography, 55(1), 386-392.
4. KL Rypien, DM Baker (2009) Isotopic labeling and antifungal-resistance as tracers of gut passage of the sea fan pathogen Aspergillus sydowii. Diseases of Aquatic Organisms, 86, 1-7
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