

Curriculum Vitae

PERSONAL INFORMATION

Family name, First name: Glasl, Bettina
Email: b.glasl@aims.gov.au

• AREAS OF RESEARCH

Coral reef microbial ecology
Host-microbe interactions
Sponge, coral and algae microbiomes
Microbial indicators
Symbiosis
Marine biology

• POSITION(S) AND RESEARCH EXPERIENCE

- 11/2015 – 11/2019 **PhD research position**,
College of Science and Engineering, James Cook University, Australia
Healthy and Resilient Great Barrier Reef, Australian Institute of Marine Science,
Australia
- 11/2017 **Volunteering researcher** joining mesophotic reef expedition in the coral sea,
Global Change Institute, University of Queensland, Australia
- 05/2017 **Volunteering researcher** joining National Coral Bleaching Taskforce,
Australian institute of Marine Science, Australia
- 08/2015 – 09/2015 **Research internship** in Prof. Ove Hoegh-Guldberg's Lab
Global Change Institute, University of Queensland, Australia
- 07/2015 – 08/2015 **Research internship** in Prof. Monika Bright's Lab
Department of Limnology and Bio-Oceanography, University of Vienna, Austria
- 02/2014 – 06/2015 **Master thesis research** in Prof. Gerhard Herndl's Lab
Department of Limnology and Bio-Oceanography, University of Vienna, Austria
Caribbean Marine Biological Institute, Curaçao
- 09/2012 – 03/2013 **Laboratory assistant** in Prof. Jörg Ott's Lab
Department of Marine Biology, University of Vienna, Austria

• EDUCATION

- 11/2015 – 11/2019 **Doctor of Philosophy (PhD)**
(thesis submission scheduled for 22/11/2019; pre-completion seminar
successfully presented on the 19/09/2019)
Title of thesis: *"Microbial indicators for water quality and environmental stress
assessment of coral reef ecosystems"*
College of Science and Engineering, James Cook University, Australia
Healthy and Resilient Great Barrier Reef, Australian Institute of Marine Science,
Australia
- 09/2012 – 06/2015 **Master of Science (MSc)**
Title of thesis: *"The core microbiome in coral surface mucus plays a key role in
mediation holobiont health and survival upon disturbance"*
Department of Limnology and Bio-Oceanography, University of Vienna,
Austria

- 09/2009 – 09/2012 **Bachelor of Science (BSc)**
Centre of Ecology, University of Vienna, Austria
- 09/2003 – 09/2008 **High School**
Institute of Higher Education for Fashion and Economy, HLMW9
Michelbeuern, Vienna, Austria
- 09/1999 – 09/2003 **Secondary School**, Auersthal, Austria
09/1995 – 09/1999 **Elementary School**, Auersthal, Austria

• **FELLOWSHIPS AND AWARDS**

- 11/2015 – 11/2019 AIMS@JCU PhD Scholarship, AIMS@JCU, James Cook University, Australia
03/2018 – 11/2019 Research grant received from National Environmental Science Programme
Tropical Water Quality Hub, James Cook University, Australia
- 02/2016 – 02/2019 Advance Queensland PhD Scholarship, Queensland Government, Australia
03/2017 – 03/2018 Science for Management Award received from Great Barrier Reef Marine Park
Authority, Australia
- 08/2015 – 09/2015 ERASMUS+ mobility grant, Austrian Agency for International Cooperation in
Education and Research, Austria
- 05/2015 International communication grant, Austrian Research Association, Austria
02/2014 – 05/2014 Research grant (Kurzfristige wissenschaftlich Arbeiten im Ausland), University
of Vienna, Austria
- 02/2014 – 05/2014 Siegfried Ludwig research grant awarded by Siegfried Ludwig Foundation,
Austria
- 08/2013 – 02/2014 ERASMUS mobility grant, Austrian Agency for International Cooperation in
Education and Research, Austria
- 08/2013 – 02/2014 NÖ Top Stipendium, NÖ Forschungs- und Bildungsges.m.b.H. (NFB), Austria

• **SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS**

- 11/2015 – 06/2019 Co-supervision of two graduate students and three research volunteers,
Healthy and Resilient Great Barrier Reef, Australian Institute of Marine
Science, Australia

• **ORGANISATION OF SCIENTIFIC MEETINGS**

- 10/2015 Organising assistant at AutReef: a workshop on reef research made in Austria,
Austria

• **COMMISSIONS OF TRUST**

- Since 2016 Reviewing activities for Environmental Microbiology and
Molecular Ecology

• **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

- 11/2015 – current Student Member, Research Network "AIMS@JCU"

• **MAJOR COLLABORATIONS**

- Nicole S. Webster:** PhD supervisor – microbial indicators, Australian Institute of Marine Science,
Australia, 6 joint publications
- David G. Bourne:** PhD supervisor – microbial indicators, College of Science and Engineering, James
Cook University, Australia, 6 joint publications
- Pedro R. Frade:** MSc supervisor – coral microbiome, Centre of Marine Sciences, University of

Algarve, Portugal, 5 joint publications
Gerhard J. Herndl: MSc supervisor – coral microbiome, Department of Limnology and Bio-Oceanography, University of Vienna, 3 joint publications
Australian Microbiome Initiative: Marine Coastal Microbes, 3 joint publications
Torsten Thomas: microbial indicators, Faculty of Science, University of New South Wales, Australia, 1 joint publication

- **ADDITIONAL SKILLS AND COURSES**

- Advanced computational skills (R, shell computing, amplicon, metagenome and metatranscriptome analysis)
- Advanced molecular laboratory skills (DNA and RNA extractions, cell separation, PCRs and qPCRs and flow cytometry)
- Extensive experience in field- and aquaria-based research (PADI divemaster, VHF radio licence, Boat licence)
- Science Illustration (Adobe Illustrator and Adobe Photoshop)
- Research Skills Program at the James Cook University (training in professional writing and editing, research integrity, data storage and management, and intellectual property and copyright)
- Media training at the Australian Institute of Marine Science

- **UP TO TEN KEY PUBLICATIONS**

10 papers in international peer-reviewed journals including high impact journals such as ISME and Microbiome; 5 papers in preparation; 229 citations (Google Scholar per 30th Sept 2019)

Glasl, B., Bourne, D.G., Frade, P.R., Thomas, T., Schaffelke, B. and N.S. Webster (2019) Microbial indicators of environmental fluctuations in coral reef ecosystems. *Microbiome* 7:94

Glasl, B., Smith, C.E., Bourne, D.G. and N.S. Webster. (2019) Disentangling the effect of hostgenotype and environment on the microbiome of the coral *Acropora tenuis*. *PeerJ* 7:e6377

Ceccarelli, D.M., Loffler, Z., Bourne D.G, Al Moajil-Cole, G.S., Boström-Einarsson, L., Evans-Illidge, E., Fabricius, K., **Glasl, B.**, Marshall, P., McLeod, I., Read, M., Schaffelke, B., Smith, A.K., Jorda, G.T., Williamson, D.H. and L. Bay (2018) **Rehabilitation of coral reefs through removal of macroalgae: state of knowledge and considerations for management and implementation. *Restoration Ecology* 26(5):827-838**

Glasl, B., Smith, C.E., Bourne, D.G. and N.S. Webster (2018) Exploring the diversity-stability paradigm using sponge microbial communities. *Scientific Reports* 8:8425

Glasl, B., Bourne, D.G, Frade, P.R. and N.S. Webster (2018) Establishing microbial baselines to identify indicators of coral reef health. *Microbiology Australia* 10.1071/MA18011

Glasl, B., Bongaerts, P., Elisabeth, N.H., Hoegh-Guldberg, O., Herndl, G.J. and P.R. Frade (2017) Microbiome variation in corals with distinct depth distribution ranges across a shallow mesophotic gradient (15-85m). *Coral Reefs* 36(2): 447-452

Glasl, B., Webster, N.S. and D.G. Bourne (2017) Microbial indicators as a diagnostic tool for assessing water quality and climate stress in coral reef ecosystems. *Marine Biology* 164(4): 91

Astudillo-García, C., Bell, J.J., Webster, N.S., **Glasl, B.**, Jompa, J., Montoya, J.M. and M.W. Taylor (2017) **Evaluating the core microbiota in complex communities: A systematic investigation. *Environmental Microbiology* 19(4): 1450-1462**

Glasl, B., Herndl, G.J. and P.R. Frade (2016) The microbiome of coral surface mucus has a key role in mediating holobiont health and survival upon disturbance. *The ISME Journal* 10(9): 2280-2292

Frade, P.R., Schwaninger, V., **Glasl, B.**, Sintes, E., Hill, R.W., Simó, R. and G.J. Herndl (2016) **Dimethylsulfoniopropionate in corals and its interrelations with bacterial assemblages in coral surface mucus.** *Environmental Chemistry* 13(2):252-265

- **FIVE KEY SCIENTIFIC TALKS AND PRESENTATIONS, CONFERENCE CONTRIBUTIONS**

Glasl B., Bourne, D.G, Frade, P.R. and N.S. Webster Coral reef microbiomes: establishing baselines for microbial based monitoring. Talk presented at the ISME Conference. 2018 August 12-18, Leipzig, Germany

Glasl B., Bourne, D.G, Frade, P.R. and N.S. Webster Establishing a microbial baseline for the Great Barrier Reef. Talk presented at: Marine Microbes Initiative Meeting. 2018 March 7-8, Sydney, Australia

Glasl B., Bourne, D.G, Frade, P.R. and N.S. Webster Microbial indicators for assessing water quality and climate stress in coral reef ecosystems. Talk presented at Great Barrier Reef Marine Park Authority; 2018 Mai 31, Townsville, Australia

Glasl B., Herndl GJ, Frade PR. Corals use their mucus microbiome to stay healthy and survive disturbances. Poster presented at AutReef; 2015 October 28-29, Vienna, Austria

Glasl B., Herndl GJ, Frade PR. **Corals use mucus to garden their microbiome and stay healthy.** Poster presented at the Association of Marine Laboratories of the Caribbean. 37th Scientific Conference; 2015 May 18-22, Willemstad, Curaçao