



Postdoctoral Fellowship:
Coral Symbioses in an Era of Global Change



The Baum Lab (juliakbaum.org) at the University of Victoria seeks to recruit a Postdoctoral Fellow to lead ecosystem-scale research investigating the dynamics of coral symbioses under climate change and with exposure to local anthropogenic stressors.

Research Context and Opportunity: Advancing understanding of how coral symbioses vary under climate change-amplified marine heatwaves, as well as with local anthropogenic stressors, is critical for enhancing coral resilience. While progress is being made through controlled, manipulative experiments, there is still much to learn about coral symbioses in natural ecosystems, and how these vary over long time periods. This Postdoctoral Fellowship offers the opportunity to leverage over a decade of coral reef data from Kiritimati (Christmas Island), a large coral atoll in the central equatorial Pacific Ocean that was the epicentre of the 2015-2016 El Niño (see Baum et al. 2023 *Science Advances*, Claar et al. 2020 *Nature Communications* and other [recent papers](#) on our lab website for details). The ideal Post-doctoral Fellow will help to lead scientific expeditions to Kiritimati; conduct laboratory, bioinformatics, and statistical analyses of longitudinal next-generation sequencing data set from our coral samples to investigate questions pertaining to the long-term stability (or dynamism) of coral symbioses; assist with barcoding of coral reef taxa; lead the preparation of manuscripts from this research for peer-reviewed journals; and contribute to fostering a collegial and collaborative lab dynamic.

Qualifications

Essential Qualifications:

- § A PhD in ecology or related discipline;
- § Established publication record and record of completing projects in a timely manner;
- § Experience with molecular laboratory work or willingness to learn;
- § Experience processing, manipulating, and modelling large next-generation sequencing data set. Demonstrated proficiency with R and/or Python, and with software tools for bioinformatics pipelines;
- § Excellent technical, analytical, organizational, and problem-solving skills.
- § Strong attention to detail, and meticulous work style, evidenced by previous research;
- § Interpersonal and communication skills, ability to work both independently and collaboratively, and to communicate research findings in professional contexts;

Preferred Qualifications:

- § Experience working with coral symbiont data sets and an in-depth understanding of the related literature;
- § Marine field research experience, including experience with scientific diving (AAUS or CAUS qualifications)

Research Environment and Benefits: The postdoc will be supervised by Prof. Julia Baum and based in the Department of Biology at the University of Victoria.

- § Join a supportive and stimulating research environment, with a cohort of post-doctoral researchers who are committed to climate change solutions, scientific outreach, and enhancing diversity in STEM;
- § Opportunity to participate in UVic's new [Coastal Climate Solutions Leaders](#) program;
- § Work collaboratively with the Baum Lab's network of coral symbiosis collaborators;
- § Opportunity to collaborate with scientists across the [BIOSCAN](#) network;
- § UVic is one of Canada's top comprehensive universities, has vibrant ecology and climate change research communities, and is located on Vancouver Island, British Columbia;
- § Opportunities to present at national to international conferences;
- § Competitive salary (\$55-70k/yr, depending on experience) and benefits. This position is for two years with option to renew for a 3rd year.

To Apply: Candidates should submit the following materials via email to baum@uvic.ca in a single PDF document, with their last name at the start of the file name:

- § a cover letter explaining your motivation for applying for this position; how your prior research experience qualifies you for the position; your career goals; and evidence of your commitment to equity, diversity and inclusion (EDI);
- § a CV (including publication list and clear specification of relevant quantitative skills);
- § names and contact details for three references;
- § copies of two representative publications.

Equity, Diversity and Inclusion: We value equity and diversity, and strongly encourage applicants from underrepresented groups to apply (see: juliakbaum.org/edi).

Applications will be reviewed starting June 1st, and will be accepted until the position is filled. Preference will be given to candidates who can start this position in 2023.