

Christopher Keneally, Microbial Ecologist

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Driving license Class C Driving, SA Boat Licence (Rec.)

LINKS [Website \(Github Pages\)](#), [Researcher Profile](#), [Github](#), [Google Scholar](#)

PROFILE Experienced and passionate researcher in microbial ecology. Expertise in remote ecological fieldwork, bioinformatics, and data analysis. Skilled in team leadership and research.

EMPLOYMENT HISTORY

Feb 2021 — Present **Teaching, The University of Adelaide** Adelaide

Casual Teaching contracts across Freshwater Ecology III, (2021-23) & Molecules Genes & Cells (2022-23). Received overwhelmingly positive student evaluations from undergraduates.

- Delivered lectures on microbiology to ecology students.
- Demonstrated field-based experiments in Freshwater Ecology and lab-based experiments in Molecular Biology.
- Enhanced student learning in each settings through effective demonstration.

Jan 2021 — Present **Laboratory Supervisor, The University of Adelaide** Adelaide

Volunteer role with *ad hoc* casual contracts during university-wide lab audits. Achieved efficient lab operations and safety compliance across two labs: i) a limnology lab, and ii) a plant/microbial genetics lab.

- Facilitated researcher inductions and lab-based student mentoring
- Managed chemical safety and Chemwatch register
- Implemented first aid and hazard management protocols.
- Conducted laboratory maintenance to ensure cleanliness and proper functioning of laboratory equipment

Jul 2020 — Jun 2021 **Graduate Research Assistant, The University of Adelaide** Lower Murray-Darling

Led zooplankton sampling projects in the Lower Murray-Darling Basin. Coordinated teams for remote fieldwork, contributing to the SA DEW (Department of Environment & Water) environmental initiatives through detailed data management and reporting alongside a DEW steering committee.

Jul 2019 — Feb 2020 **Undergraduate Research Assistant, The University of Adelaide** Lower Murray-Darling

Supported field-based water quality research in the Murray-Darling Basin as part of a Commonwealth Environmental Water Holder-led project on spring pulses of environmental water. Prepared and calibrated field equipment, and undertook multi-day sampling campaigns to ensure accurate data collection in remote areas.

Nov 2012 — Jul 2019 **Retail Supervisor, Rivers Australia** Adelaide

Balanced part-time retail supervision with undergraduate academic studies. Enhanced customer experience, managed budgets, and organised team operations and rosters efficiently.

EDUCATION

Nov 2020 — Present **Doctor of Philosophy, University of Adelaide** Adelaide

Research focus on microbial ecology in Coorong Lagoon, South Australia. Research summary video available [here](#).

Jul 2019 — Jul 2020 **(First Class) Honours Degree of Bachelor of Science (Ecology & Environmental Sciences) , University of Adelaide** Adelaide

Thesis entitled: "Towards Recovery of the Coorong: A Framework for Investigating Denitrification, Diversity & Other Functional Roles of Microbial Communities in Hypersaline Sediments" is available on request.

Feb 2015 — Dec 2018 **Bachelor of Science (Microbiology & Immunology), University of Adelaide** Adelaide

PUBLICATIONS

- Brookes, J., Brendan Busch, Phill Cassey, Daniel Chilton, Sabine Dittmann, Tyler Dornan, George Giatas, Bronwyn M. Gillanders, Matt Hipsey, Peisheng Huang, Christopher Keneally, et al. "How well is the basin plan meeting its objectives? From the perspective of the Coorong, a sentinel of change in the Murray-Darling Basin." *Australasian Journal of Water Resources* (2023) 2023
[10.1080/13241583.2023.2241161](https://doi.org/10.1080/13241583.2023.2241161)
- Huang, J., David Welsh, Dirk Erlen, Angus Ferguson, Justin Brookes, Christopher Keneally, et al. "Coorong nutrient cycling and fluxes." Goyder Institute for Water Research Technical Report Series 22/07 (2022). 2022
- Keneally, C., Matilda Southgate, Daniel Chilton, Tyler Dornan, Justin Brookes, "Sediment microbial ecology and methane dynamics during resuspension events in a hypersaline coastal lagoon", Conference Poster (SIL 2022, Berlin) 2022
- Priestley, S., et al. "N and C isotope variations along an extreme eutrophication and salinity gradient in the Coorong Lagoon, South Australia." *Frontiers in Earth Science* 9 (2022): 1345. 2021
[10.3389/feart.2021.727971](https://doi.org/10.3389/feart.2021.727971)

SKILLS

Project Management & Organising Teams in Challenging Remote Environments

Expertise in Scientific Writing and Reporting

Proficiency in R, Python & Bash for Bioinformatics & Ecological Data Analysis

Advanced Lab-based Molecular Biology and Microbiology Skills

Geographic Information Systems (QGIS)

Interpersonal & Leadership Skills

EXTRA-CURRICULAR ACTIVITIES

- Nov 2022 — Present **President, Biology Society of South Australia** South Australia
Leading a non-profit in promoting biology studies, managing funds, and fostering conservation research in South Australia.
- Mar 2023 — Apr 2023 **Cystic Fibrosis Hackathon, Flinders University Accelerator for Microbiome Exploration (FAME)** Adelaide
Inter-University collaborative project exploring microbial ecology of a large Cystic Fibrosis patient cohort in South Australia. Developed bioinformatics skillset with the guidance of experienced computational biologists and collaborated directly with clinical physicians.
- Jul 2021 — Nov 2022 **Chief Fire Warden, Benham Laboratories (UoA)** Adelaide
Oversaw emergency procedures, developed evacuation plans, and ensured safety compliance. Underwent Floor and Chief Warden training.

Jan 2020 — Nov 2022 **Secretary, Biology Society of South Australia** South Australia
Managed secretarial duties, administrative tasks, [website](#) design, and podcast technical support for the society.

Feb 2016 — Nov 2018 **Senior Peer Mentor, University of Adelaide**
Facilitated transition for first-year students into university life through mentoring and support.

Feb 2003 — Jan 2015 **Scout Member** Brisbane, Darwin, Adelaide
A longstanding member of Scouts Australia from a young age, Activities ranged from sailing, bush-craft and survival skills to first-aid and leadership development. I was also involved with many fundraising and community engagement initiatives.

INTERNSHIPS

Nov 2018 — Feb 2019 **Summer Research Intern, University of Adelaide** Adelaide
Investigating nitrogen flux in the Coorong lagoon, included:
- On-site fieldwork (sediment core sample collection)
- Laboratory processing, with experience of DNA/RNA extraction and purification, qPCR and associated lab techniques
- Data analysis and scientific writing

HOBBIES

Guitar and music, cycling, hiking, and reading science fiction.

REFERENCES

References available upon request