Lucy C Stewart

Environmental science | Science communication and outreach | Advice and advocacy

KEY COMPETENCIES

Science expertise – environmental scientist with wide-ranging experience including fieldwork, laboratory work, written and quantitative analysis, data visualisation, and report/publication preparation. Adept translator of science impact for non-scientists.

Communication and outreach – Confident communicator in many contexts including live and recorded interviews, written comment to media, consultation submissions to government, public talks, and planning and chairing meetings.

Strategy and advocacy– Respected advocate for industry issues who has identified key problems, raised profile, and driven change.

CAREER HISTORY

Senior Scientist
Toha Foundry (Wellington)
Environmental finance startup focused on regenerative agriculture in Aotearoa New Zealand
Mar 2020 – May 2023

Scientific planning and project lead for an environmental impact investment start-up, ensuring scientific rigour in targeting achievable environmental outcomes above and beyond regulatory requirements, and representing the organisation on scientific issues to stakeholders and publicly.

Achievements

- Developed multiple scientific measurement frameworks for voluntary environmental action
- Provided scientific advice to leadership on engagement opportunities
- Led in-depth reviews of current science in fields of interest (regenerative agriculture, biodiversity)
- Represented Toha in engagements with stakeholders including investors, clients, researchers, and regulators
- Wrote organisational submissions to government and organisational policy on data quality
- Held project management as well as technical responsibilities

Marine Microbiologist
GNS Science (Wellington)
Jan 2018 – Jan 2020

Microbiology lead on $8 million Endeavour Fund programme (HYDEE) investigating the potential environmental impact of deep-sea methane extraction.

Achievements

- Managed own budget and project plan
- Led microbiology fieldwork and laboratory/data analysis
- Developed bioinformatic data analysis and visualisation pipelines
- Advocate for early career researchers internally and externally to the organisation

Rutherford Postdoctoral Fellow
GNS Science (Wellington)
Jan 2016 – Jan 2018

Led two-year independent research project involving planning, execution, reporting, and budgetary management.

Achievements

- Managed own budget and project planning
- Planned and carried out fieldwork at three remote sites & on two research voyages
- Conducted all laboratory and data analysis
- Produced 3 publications

PhD Candidate/Research and Teaching Assistant
University of Massachusetts Amherst (United States)
2012-2015

Conducted field and laboratory research. Supervised undergraduate students conducting laboratory work including essay marking/feedback. Gave guest and introductory lectures.

EDUCATION

Ph.D. (Microbiology) – *University of Massachusetts Amherst (2015)*
Bachelor of Science(Hons), First Class (Microbiology) – *University of Canterbury (2010)*
Bachelor of Arts (History) – *University of Canterbury (2009)*

SELECTED LEADERSHIP/SERVICE WORK

Co-President, New Zealand Association of Scientists (2021 – present)
Also Treasurer 2020 – present
Co-chair, Royal Society Te Apārangi Early Career Researcher Forum (2018 – 2020)
Registration/helpdesk manager, BSides Wellington security conference (2017)

MEDIA & OUTREACH

Interviewed on Morning Report, Tova O'Brien's radio show, TV1 breakfast show
Written comment/interviews for the Listener, NZ Herald, Research Professional newsletter
Many **talks for the general public** e.g. Forest and Bird branch meeting, school science classes, GNS public seminar series, Nerd Night Wellington
Writing for lay audiences e.g. Article: "Why I care about methane and you should, too"
https://divediscover.whoi.edu/why-i-care-about-methane-and-you-should-too/

OTHER SKILLS/TRAINING

Languages - French, German, Te Reo Māori (in order of proficiency)
Science Media Centre two-day training course (2022)
Project Management Fundamentals one-day course (Victoria University of Wellington, 2023)

SELECTED PUBLICATIONS

2022 – Regenerative Agriculture Science Roadmap, Toha Foundry (lead author)
https://www.tohascience.org/our-work
2022 – Soar, M., **Stewart, L.,** Nissen, S., Naepi, S., McAllister, T. Sweat Equity: Student Scholarships in Aotearoa New Zealand's Universities. *New Zealand Journal of Educational Studies* (1-19)
https://link.springer.com/article/10.1007/s40841-022-00244-5
2018 – **Stewart, L.C**., Stucker, V.K., Stott. M.B., de Ronde, C.E.J. Marine-influenced microbial communities inhabit terrestrial hot springs on a remote island volcano. *Extremophiles* 22(4): 687-698.
https://doi.org/10.1007/s00792-018-1029-4
2015 – Wang, D.T., Gruen, D.S., Lollar, B.S., Hinrichs, K., **Stewart, L.C**., et al. Nonequilibrium clumped isotope signals in microbial methane. *Science* 348(6233): 428-431

References available on request