

**Global Challenges:** Sustaining Coastal and Marine Zones, and Transforming Lives and Regions.

**Project outline:**

This proposal builds on a successful \$5000 GC Strategic Grant entitled “Community-Based Approaches to Fisheries Management”, a pilot collaboration between ANCORS, LHA and SMAH researchers in the Pacific Island nation of Kiribati. A collection of fine-grained stories generated by this initial GC project has been published here: <http://www.uowblogs.com/kimwilliams/>

During extended discussions with villagers in the local communities of the Outer Islands of Kiribati, the research team identified a specific problem requiring deeper research: fresh fish supplies on the outer islands of Kiribati are threatened by plastics pollution whose source is imported processed food packaging. The influx of packaged foods also points to the health issues raised by changing food practices.

Fundamental to this next-stage GC Seed Grant proposal is the inextricable relationship between coastal environmental pollution, human health, and cultural behaviours. For this reason we believe a genuine interdisciplinary research effort is required.

**Proposed Research Program:**

The proposal funds two UOW researchers to conduct field research in Kiribati for 17 days. Key relationships with communities in Kiribati have already been established over several years by researchers from ANCORS. Dr Anne McMahon (SMAH) and Ms Kim Williams (LHA) would accompany Dr Aurelie Delisle, who leads the Community Based Fisheries Management program at ANCORS. While in Kiribati, our collaborative team will work with the local community to:

- a) Develop workshops on the outer islands to explore options for the useful re-purposing of plastic waste using creative arts textiles techniques (weaving, baling, twining);
- b) Observe everyday food preparation and eating behaviours to learn about food choices, food preparation and the wider implications for nutrition and health;
- c) Work with villagers to devise a poster and to create a music video about the challenges of nutrition and its relationship to plastic-packaged processed food.

**Expected Outcomes:**

We expect that the impact of this cross-disciplinary research will involve:

- the prototyping of concrete solutions for human and environmental health within local communities in Kiribati;
- the development of new approaches to cross-disciplinary research;
- the publication of a journal article discussing the team’s research discoveries in the *Journal of Agriculture, Food Systems and Community Development*.

**BUDGET summary:**

\$4870: Airfares, vaccinations and travel medications (2 researchers)

\$3240: Accommodation (2 researchers, 17 nights)

\$1340: Daily living expenses in Kiribati (South Tarawa and Outer Islands)

\$ 700: Materials and equipment (hard drives, batteries, SD cards, paper, pens, art materials, tools)

\$4050: Design and production costs for posters and music video

**\$14,200.00 total**

### **Interdisciplinary team:**

The team is comprised of researchers from **LHA** (The Arts English and Media and ANCORS); **SMAH** (Medicine); and **Social Sciences** (Health and Society):

**Dr Lucas Ihlein** (LHA TAEM) – ARC DECRA Research Fellow, and artist, exploring the role of socially engaged art in complex agricultural and environmental management situations. Dr Ihlein will oversee the multi-partner collaboration for this GC project.

**Dr Aurélie Delisle** (LHA ANCORS) – Early Career Research Fellow, environmental social scientist, economist. She leads the Kiribati Community-Based Fisheries Management (CBFM) program and her research travel to Kiribati with the team will be funded through the CBFM program.

**Dr Joanna Russell** (School of Health and Society, Social Sciences) is a Lecturer and ECR in Public Health with a quantitative research approach exploring widespread dietary and health trends. Her research focus is on food security, with experience in Pacific Island Household Income and Expenditure Surveys. In this GC Seed Project she will analyse nutritional and health aspects related to food security in Kiribati.

**Dr Anne-Therese McMahon** (School of Medicine, SMAH) is a Senior Lecturer in Nutrition. She is a dietetics researcher using qualitative methodologies including ethnography, discourse analysis and participatory action research to explore food cultural practices and behaviours. Dr McMahon will travel to Kiribati with the team to conduct participant observation of local food practices.

**Ms Kim Williams** – (LHA TAEM) PhD student of Dr Ihlein; Ms Williams conducted field research in Kiribati with Dr Delisle as part of the initial GC Strategic Grant project, and as a research artist will travel to Kiribati with the team.

**Ms Brooke Campbell** (LHA ANCORS) – Interdisciplinary Research Fellow in Fisheries Governance. Alongside Dr Delisle, Ms Campbell has conducted extensive research in Community Based Fisheries Management in Kiribati and will advise on cultural practices specific to Pacific Island nations.

### **How this project will develop researchers, research capacity and partnerships:**

This project is built upon the Community Based Fisheries Management (CBFM) method of engaging with local communities to identify and address their own problems – a method which underpins the long-standing reciprocal and respectful relationships that ANCORS has developed in Kiribati (Dr Delisle and Ms Campbell). A qualitative and quantitative research focus through the lens of nutrition clarifies the intimate relationship between food sources, ocean resource management and waste (Dr McMahon and Dr Russell). The project builds on the socially-

engaged arts strategy of a reciprocal open-ended cultural exchange, used around the world in “artist-in-residence” programs (Dr Ihlein and Ms Williams). Bringing together these diverse approaches creates the opportunity for a genuine multi-pronged exploration of a complex environmental-social problem.

**Support for Early Career and PhD researchers:**

Four of the collaborators (Dr McMahon, Dr Delisle, Dr Russell and Ms Campbell) are early career researchers, and this project will create a concrete collaborative arena for challenging and extending their discipline-specific work in nutrition, fisheries and public health. The project also supports the research development of PhD candidate Ms Williams by involving her as a central collaborator in a real-world project.

**Linkages, partnerships and opportunities for further funding:**

In the development of this project to date, we have already begun consulting with Pacific Island waste management expert Alice Leney at Pacific Reef Savers Ltd (NZ). The research outcomes of this project will be of interest to conservation and development NGOs and institutions such as the Wildlife Conservation Society and the World Wildlife Fund. It will create opportunities for dialogue with the Government of Kiribati who may leverage funding for future work through the World Bank; as well as the Environment Program (UNEP) and Food and Agriculture Organisation (FAO) of the United Nations.