Emi Uchida

What does it take to change consumer behavior to mitigate microplastics pollution? Pilot experiments to identify barriers and opportunities

Proposal Abstract:

Microplastic pollution is an emerging global challenge, putting human and ecosystem health and the blue economy at risk. To mitigate microplastic fiber—a major source of microplastic waste—consumer products such as microfiber filters for home washing machines are emerging in the marketplace. However, it is unclear why few consumers currently adopt such mitigation measures. To gain greater insight into this puzzle, this pilot study will identify potential barriers and opportunities for consumers in mitigating microfiber pollution. I will achieve this goal by designing and piloting a series of small randomized experiments. Subjects will be recruited using crowdsourcing marketplace and randomly placed into groups, each of which will either receive an intervention or serve as a control group. After priming with information tailored to the group, subjects will be asked to make a bid on purchase decisions for one of the pre-selected products which mitigate microfiber waste. The pilot experiments will generate data to finetune the hypotheses on barriers and opportunities for behavioral change; provide necessary parameters to design a full-scale experiment; and preliminary data for grant proposals. Future studies will provide insights into designing new technologies, products, and policies to mitigate microplastic fibers from our waterways.

Awarded: $20,000