INFORMING PERCEIVED RISKS FROM FUKUSHIMA THROUGH SCIENTIFIC ENGAGEMENT FROM DATA COLLECTION TO SOCIAL MEDIA

JONATHAN P. KELLOGG¹, JAY T. CULLEN¹, KEN O. BUESSELER², JING CHEN³, MICHAEL W. COOKE³, ERICA FRANK⁴, HELEN GURNEY-SMITH⁵, JEAN-FRANCOIS MERCIER³, SUSAN VELAZQUEZ¹, JOHN SMITH⁶ AND MARC TRUDEL⁵

School of Earth and Ocean Sciences, University of Victoria, Victoria, BC V8P 5C2, Canada (*correspondence jcullen@uvic.ca)

²Woods Hole Oceanographic Institution, Woods Hole, MA, United States

³Health Canada, Radiation Protection Bureau, Ottawa, ON, Canada

⁴University of British Columbia, School of Population and Public Health, Vancouver, BC, Canada

Fisheries and Oceans Canada, St Andrews Biological Station, St Andrews, NB, Canada

Bedford Institute of Oceanography, NS, Canada

The Integrated Fukushima Ocean Radionuclide Monitoring (InFORM) network was developed to address growing public concern about the effects of Fukushima derived radionuclide contamination on the west coast of North America. An academic program with governmental and non-governmental partnerships, InFORM relies heavily on citizen scientists and First Nations involvement for successful monthly sampling across the remote locations of the British Columbian coast. Many coastal First Nations students have been involved in water sampling for years and inland First Nations communities donate salmon from their subsistence catch for analyses to ensure the safety of a major portion of their diet. Results are distributed to volunteers. First Nations, and the public through email marketing, social media, blog posts, and community meetings. As a source of rigorous empirical data in competition with numerous sources of pseudo-scientific misinformation, InFORM has learned much about addressing existing misconceptions about the scientific method, and using evidence based research to educate, improve science literacy by engaging with the public. We will discuss the positive aspects and potential pitfalls of science communication, education and outreach activities for early career scientists and those working on controversial scientific topics.