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### A journey in pursuit of marine genetic toxicology

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Understanding organisms responses to contaminants, pollutants, and environment stressors is critical for predicting ecosystem impacts. This is particularly important in light of climate change driving physical changes such as temperature, pH, and transport and spread of contaminants at rates previously not experienced in stable marine environments. Responses can be in the form of detoxification and stress response mechanisms, and species vary in their sensitivity to stress as well as their capacity to respond and adapt. Incorporation of genetic effects analyses into other biological process such as growth, reproduction, and survival can illuminate additional mechanisms of sensitivity and response. These questions have been at the heart of my scientific career for the past fifteen years, couple with the curiosity of understanding lesser-studied species and creatures in the diverse marine habitats. My journey has meandered from temperate regions to warmer subtropical Bermuda shores, up to the cold Arctic of Svalbard and back to familiar British shores, encompassing the diversity of marine life of fish, echinoderms, and zooplankton. Ultimately, this journey has provides overarching insight into how different species can adapt or suffer from a stressful environment, and the wealth of scientific information we can gain for looking into new species, new molecular systems, and new genetic responses. The goal of this story is to inspire aspiring genetic toxicologists to think beyond their immediate shores and to show an example of a international scientific adventure which has delivered rewards in both exciting data and a fun journey.