

Dr. Carys Mitchelmore

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In brief, Carys is a highly qualified toxicologist. Most recently, she has conducted high profile, competitively-funded research on what is known and what remains uncertain about the impacts of sunscreens on corals. Carys has been a voice for objective science and for a risk-based understanding of how to frame regulations on chemicals within sunscreens that have been claimed to kill corals. This work earned Carys a seat on the National Academies' Consensus Committee on the Environmental Impacts of Currently Marketed Sunscreens and Potential Human Impacts of Changes in Sunscreen Usage. Through this work she has given testimony to committees in the Maryland and Hawaii state legislatures. Her testimonies have been calls for objective, scientific understanding of the risks to both corals and humans, identifying areas in which more research is needed as well as studies which have been either misinterpreted or extrapolated beyond their original scope.

At the international level, Carys is an expert in the toxicology of oil in the marine environment, conducting research in the US and UK. More importantly for this nomination, she has applied this knowledge in providing advice to world governments on oil pollution. She played a central role in conducting research that helped develop the U.S. Natural Resource Damage Assessment following the Deepwater Horizon oil spill. She has served on two National Academies Consensus Committees on Oil in the Sea which has had international impacts in how governments around the world respond to oil spills and undertake the transport of oil within their borders.

At the state level, she has worked in Maryland on a number of important issues included supporting scientific decision making regarding neonicotinoids, PFAS and tire-related contaminants washing off road surfaces.

As an individual faculty member, Carys has developed a middle school curriculum unit that meets next generation science standards, now deployed in all middle schools in Calvert, Charles and St. Mary's Counties. "A Wave of Plastic" focuses on how plastics enter rivers, lakes and coastal waters, its impacts in those environments and what school students can do to help mitigate and limit its impacts. The curriculum provides student's knowledge through structured learning and self-guided exploration to empower them to take on any challenge using scientific principles and methodologies.

Carys is a colleague who is committed to working for and on behalf of Marylanders at whatever level she can serve. Her impacts stretch from a 10 year old student in Calvert County to a similar child applying sunscreen on a beach in Maryland or Hawaii. Her impacts stretch from how our students are taught to the understanding that our students gain from her example that a life in science is lived out in the community – not in an ivory tower.