Former AAAS President Wins Prestigious Environmental Prize

Former AAAS President James McCarthy is one of two recipients of the renowned 2018 Tyler Prize for Environmental Achievement for his work to understand and communicate the effects of climate change.

McCarthy, the Alexander Agassiz Professor of Biological Oceanography at Harvard University, shares the 2018 prize with Paul Falkowski, professor of geological and marine science at Rutgers University.

“We are recognizing these two great scientists for their enormous contributions to fighting climate change through increasing our scientific understanding of how Earth’s climate works, as well as bringing together that knowledge for the purpose of policy change,” said Julia Marton-Lefèvre, chair of the Tyler Prize Executive Committee, in the Feb. 6 announcement of the 2018 Tyler Prize laureates.

McCarthy “has had such a rich career,” Marton-Lefèvre said.
In addition to serving as AAAS president for a one-year term beginning in February 2009, McCarthy served as an author and expert reviewer to the Intergovernmental Panel on Climate Change. He co-chaired the distinguished international scientific panel’s 2001 assessment on climate change vulnerabilities and was a lead author of 2004’s Arctic Climate Impact Assessment.

As a faculty member in Harvard’s departments of Organismic & Evolutionary Biology and Earth & Planetary Sciences, McCarthy’s research has focused on the effects on climate change on the oceans and their biological systems, particularly plankton production.

The Tyler Prize, which is sometimes referred to as “the Nobel Prize of the environment,” as Marton-Lefèvre noted, was first awarded in 1974. The prize recognizes significant achievements in protecting or improving understanding of the environment.

McCarthy, a marine ecologist, said he was “nothing short of flabbergasted” to learn he would receive the Tyler Prize. “The past recipients are my hall of fame list of heroes who I’ve always looked up to as the people who made a difference in this field,” McCarthy said.

McCarthy joins a number of Tyler laureates with connections to AAAS, including 2015 co-recipient Jane Lubchenco, who served as AAAS president in 1997, John Holdren, who won the 2000 Tyler Prize and served as the 2007 AAAS president, and Peter Raven, a 1994 Tyler laureate and the 2002 AAAS president.

McCarthy has been a longtime proponent of interdisciplinary work to address environmental challenges, said Marton-Lefèvre, citing his work as the first editor of the journal *Global Biogeochemical Cycles* and the chair of the International Geosphere-Biosphere Programme, convened to study biological, chemical and physical processes on a global scale.

McCarthy credits connections across and between different disciplines with the “enormous progress” that has been made in advancing the scientific understanding of climate change.

“Rather than try to study one aspect of a problem from the perspective of its chemistry or its physics or its biology,” scientists have sought “to bring together teams of scientists from those different perspectives and say, ‘What can we learn by working together?’” McCarthy said. “In the process, we’ve come to understandings we just didn’t have before.”

Scientific societies like AAAS have played a role in fostering interdisciplinary connections, McCarthy said. The AAAS Annual Meeting – which, during his AAAS presidency, convened under a theme that emphasized connections in the Earth’s systems – is a forum for scientists from different fields to come together, he said.

People and institutions in scientific fields related to the environment may nominate others for Tyler Prize. From these nominations, the Tyler Prize Executive Committee reviews letters of recommendations by luminaries in the field to select each year’s laureate or laureates.
In one such letter of recommendation, Former Vice President Al Gore said of McCarthy, “His ability to effectively and eloquently communicate the importance and risks of the climate crises are unparalleled.”

McCarthy and Falkowski will be officially presented with the prize at a ceremony in Washington, D.C., on May 3.