THE TYLER PRIZE IS AWARDED TO RECOGNIZE THE SCIENTIFIC CONTRIBUTIONS AND LEADERSHIP OF ENVIRONMENTAL PROBLEM SOLVERS, AND TO INSPIRE OTHERS TO FOLLOW IN THEIR FOOTSTEPS.

In the 1960s and early 70s, the world was slow to react to the growing levels of pollution and ecological imbalance faced by humanity. The environmental debate was still in its infancy and still contested by many, and the concept of sustainable practice had not yet been developed. In the spring of 1972 leading nations of the world were only just beginning their search for answers when the United Nations organized the first Conference on the Human Environment in Stockholm. Critically concerned for the state of their beloved natural environment, dedicated conservationists, philanthropists and animal-lovers, John and Alice Tyler were compelled to make a difference.

They found there was promising research underway by university scientists and administrators - but this critically important work was not yet being recognized. They wanted the world to see the progress that was being made, and to inspire others to do the same - so they endeavoured to shine a spotlight on the achievements of the world's top environmental scientists with an international award.

They assembled academics from the nation's leading universities: California Institute of Technology, Harvard, Massachusetts Institute of Technology, Scripps Institution of Oceanography, Baylor University, the University of Southern California and others, and delegated them to select the most deserving honorees.

In 1973, President Ronald Reagan, then Governor of California, helped inaugurate the John and Alice Tyler Prize. The Prize was an accomplishment that reflected the Tyler's incredible foresight and dedication. During its forty-five year history, this spark of inspiration has recognized passionate environmental science dedication across a spectrum of environmental research fields, including environmental policy, environmental health, air and water pollution, ecosystem disruption, loss of biodiversity, population, energy and food resources.

The Tyler Prize remains the premiere international award for environmental science, and is often referred to as the "Nobel for the Environment." It has been administered by the University of Southern California since 1981.

TYLER PRIZE
for Environmental Achievement

DR. PAUL FALKOWSKI

TYLER LAUREATE FOR 2018

One of the world's greatest pioneers in the field of biological oceanography, Dr. Paul Falkowski is a distinguished professor in the Departments of Marine and Coastal Sciences and Earth and Planetary Sciences at Rutgers University.

Focusing primarily on phytoplankton, coral, and the primary production of aquatic organisms, Dr. Falkowski studies the biophysical processes controlling ocean productivity, especially the roles of the nitrogen and iron cycles in ocean biogeochemistry and climate.

The knowledge that climate strongly influences the distribution and diversity of all animals and plants has been historically clear, but its effect on microbial communities were poorly understood. In the 1970s, Dr. Falkowski was among the first scientists to observe this chain of linked processes at the source of all life's origin-- our oceans-- that now informs predictions about how phytoplankton communities will change in the future and impact global climate.

In the evolution of Earth, Dr. Falkowski's research has been influential in identifying how microbes became a major force in transforming this planet to make it habitable for animals, including humans. His research observes how electron transfer reactions are mediated throughout our planet and have changed its geochemistry over time.
Over the course of his 42-year career, Dr. Falkowski has published over 300 papers in leading peer-reviewed journals, edited and authored 6 books, and advised more than 100 graduate students, postdoctoral fellows, and visiting scientists at Rutgers University, internationally known as a top-tier academic research institution in the field of biological Oceanography.

Having received his undergraduate degree in biology from the City College of New York, in 1975, Dr. Falkowski emigrated to Canada and obtained a PhD in Biology and Oceanography from the University of British Columbia. Faced with the prospect of working in a medical school in Canada, or going to sea as an oceanographer, Dr. Falkowski chose the latter and completed his postdoctoral research at the University of Rhode Island. Following his postdoctoral work, in 1976 he was hired at the Brookhaven National Laboratory as a staff scientist in the newly formed Oceanographic and Atmospheric Sciences Division, where he developed the field of environmental biophysics. Since then, he participated in over 45 cruise expeditions to regions including the subtropical Atlantic, Antarctica, and the Black Sea.

In 1998, Dr. Falkowski moved this research group to Rutgers University where he now holds tenure as the Bennett L. Smith Chair in Business and Natural Resources, and is the founding director of the Rutgers Energy Institute.

DR. JAMES J. MCCARTHY

TYLER LAUREATE FOR 2018

Throughout his long and remarkable career in interdisciplinary environmental science and policy, marine ecologist Dr. James J. McCarthy, the Alexander Agassiz Professor of Biological Oceanography at Harvard University, has fostered and led cooperative efforts among scientific disciplines to forge new, global-scale perspectives on environmental change.

With faculty appointments in the departments of Organismic & Evolutionary Biology and Earth & Planetary Sciences, Dr. McCarthy has investigated marine ecology and the effects of climate change in the world's oceans, with a particular focus on the nitrogen cycle. He and his students working at sea and in the laboratory have generated new insights into the effects of climate on biological systems, including how climate affects the production of plankton and the marine organisms that consume plankton.

In his over 47 years within the field of biological oceanography, Dr. McCarthy has been at the forefront of synthesizing scientific knowledge about these transformations, translating this science into climate policy. Dr. McCarthy contributed as an author and expert reviewer to the Intergovernmental Panel on Climate Change, the foremost international scientific body assessing the causes and impacts of climate change. He was co-chair in the IPCC's 2001 assessment on the impacts of and vulnerabilities to climate change, and later was a lead author of the seminal Arctic Climate Impact Assessment in 2004.

Dr. McCarthy's efforts to communicate the risks of climate change in novel, clear and compelling ways became an international standard in science policy. Dr. McCarthy is an emeritus chair of the board of the Union of Concerned Scientists, and former president of the American Association for the Advancement of Science. He also served as the initial chair of the International Geosphere Biosphere Programme.

Dr. McCarthy received his undergraduate degree in biology from Gonzaga University, and his Ph.D. from Scripps Institution of Oceanography. At Harvard University, Dr. McCarthy was instrumental in creating the institution's undergraduate degree program in Environmental Science and Public Policy, and he directed Harvard's Museum of Comparative Zoology from 1982 to 2002. He continues to teach ocean science and advise students.