CCNY Alum Wins the 2018 Tyler Prize

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Dr. Paul Falkowski Receives Award for Environmental Achievement by Victor Anosike

The City College of New York alumnus Dr. Paul Falkowski has been selected as the winner of the 2018 Tyler Prize for Environmental Achievement – an international award that recognizes individuals in the scientific community who have helped advance scientific and public knowledge on ways the natural environment can be preserved and improved upon. Seventy-one people have received this prestigious award during its forty-four years of existence. Dr. Falkowski will receive his award on May 3rd, 2018 in Washington D.C.



Dr. Falkowski currently lectures at Rutgers University. Photo by: Katie Voss

Dr. Falkowski is a biological oceanographer who works in the Department of Marine and Coastal Sciences at Rutgers University. After receiving both his B.S. and M.A. in Biology at City College in 1972 and 1973, respectively, Dr. Falkowski went on to obtain his PhD in Biology at the University of British Columbia in 1975. As a distinguished professor within the Department of Marine and Coastal Sciences, Dr. Falkowski is the Lead Principal Investigator for the Environmental Biophysics and Molecular Ecology Lab. His body of work includes being the lead author in over 200 peer-reviewed articles as of 2015. Throughout his career, his devotion to scientific research has been recognized by receiving the following awards: a fellowship from the American Academy of Arts and Sciences (2003), the Vernadsky Medal from the European Geosciences Union (2005), a membership into the National Academy of Sciences (2007), and an Einstein Professorship from the Chinese Academy of Sciences (2012).

Dr. Falkowski was selected as the recipient of the Tyler Prize for his work on the role microorganisms play in the evolution of modern climate on Earth. His main research interests include figuring out how microscopic organisms were integral to the development of Earth's

unique life-accommodating environment and uncovering the chemistry behind Earth's transformation into a planet capable of sustaining complex life (like generating a massive amount of oxygen in our environment). Attempting to answer the major questions surrounding this topic requires expertise in a wide range of scientific fields, including the biochemistry behind the protein function in microbes as well as the geochemistry of minerals present within the Earth.

As the lead Principal Investigator for the Environmental Biophysics and Molecular Ecology Lab at Rutgers University, Dr. Falkowski is currently working on a project that aims to "map the electronic blueprint of life" by discovering the evolutionary origins of "core genes" – the genes that code for the biochemical processes necessary for the existence of life on Earth. These genes, which help code proteins that help carry out electron-transfer reactions in organisms, were present in early microbes and have remained present in organisms today despite the large amount of genetic diversity that is seen in nature. The project aims to analyze the proteins produced by these core genes and trace the origins to an ancient microorganism.

Dr. Falkowski's winning of the Tyler Prize is particularly significant because this will be the first time since the award's inception in 1972 that a marine ecologist, whose work involves centuries of biological evolution and its modern day influence in climate change, will be exonerated. The immense scientific success of Dr. Falkowski proves that both City College and CUNY are institutions that nurture the best and the brightest.