

# 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 46-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. MICHAEL E. MANN

TYLER LAUREATE FOR 2019

Having been ranked among the top 50 most influential people in the world, Dr. Michael E. Mann is one of the world's 'go to' climate scientists.

He is currently Distinguished Professor of Atmospheric Science at Penn State, in the Department of Meteorology & Atmospheric Science, with joint appointments in the Departments of Geosciences and the Earth and Environmental Systems Institute (EESI), and the Director of the Penn State Earth System Science Center (ESSC).

Mann pioneered statistical techniques to reconstruct past global temperatures using 'proxy data' from ice cores, tree rings, lake sediments, and other markers. By tracking the Earth's temperature back hundred of years, Mann was able to graphically demonstrate that the increase in temperature since the 20th century was both anomalous and historically-unprecedented. This graph, known as the Hockey Stick (1999), presented clear scientific evidence of anthropogenic climate change.

The Hockey Stick graph quickly became the most controversial graph in modern science, and the resulting media attention pushed Mann into the spotlight. Suddenly a target for climate deniers, his science was put under increased scrutiny and he became the recipient of attacks from governments, individuals, and fossil fuel companies. Some of these escalated to lawsuits and death threats.

Mann was a contributing author for the 2001 Intergovernmental Panel on Climate Change (IPCC) Third Scientific Assessment Report, co-leading the chapter 'Observed Climate Variability and Change', in which the Hockey Stick graph appeared. Later, his work with the IPCC was recognised with the 2007 Nobel Peace Prize.

Never passive, Mann pushed back and defended his science and the science of climate change more generally, thrusting himself into the world of climate science communication. Aside from over 200 peer reviewed publications, Mann has written four books and numerous op-eds and commentaries. He is the co-founder of RealClimate.org, an award-winning climate change website.

He received the Stephen H. Schneider Award for Outstanding Climate Science Communication from Climate One in 2017, the Award for Public Engagement with Science from the American Association for the Advancement of Science in 2018 and the Climate Communication Prize from the American Geophysical Union in 2018.

Mann undertook his Bachelor of Science (Physics and Applied Math) at the University of California, Berkeley, before completing his Master of Science (Physics) and Ph.D. (Geology and Geophysics) from Yale University. He is currently a Fellow of the American Geophysical Union, the American Meteorological Society, the Geological Society of America, the American Association for the Advancement of Science, and the Committee for Skeptical Inquiry.



DR. WARREN M. WASHINGTON

TYLER LAUREATE FOR 2019

**Dr. Warren M. Washington is an internationally recognized expert in climate models, climate change research, and atmospheric sciences.**

Previously President of the American Meteorological Society, Washington is currently a Distinguished Scholar at the National Center for Atmospheric Research (NCAR), where he focuses on climate and global dynamics research.

The impact Washington's climate models have had on improving our understanding of the climate is huge. Using the laws of physics, climate modeling has allowed us to study weather patterns, explore large-scale climate, and project long-term climate and weather possibilities with astounding accuracy. Washington was a pioneer in his field, as one of the first scientists to realize and use various climate models to this end, paying specific attention to climate change. Having starting with the original clunky, room-sized computers, his methodology of creating more accurate and comprehensive climate computer models is still the basis of what we use today. Washington incorporated new findings into his models for the highest accuracy, which is how crucial elements such as sea ice, ocean, surface hydrology and vegetation are now essential aspects of climate computer models.

Washington began his work with climate modeling as a research assistant at Pennsylvania State University in 1960. After receiving his PhD, he moved to NCAR in 1963. He has been part of almost 100 councils, boards and committees throughout his career; including the President's National Advisory Committee on Oceans and Atmosphere, the National Science Board (Chair from 2002-2006) and the National Oceanic and Atmospheric Administration Science Advisory Board. He has advised Democrats and Republicans, State and Federal governments, six consecutive presidents, researchers and scientists, universities, and occasionally entertainers in the ways of climate, computer models, and atmospheric sciences.

As the second African-American to be awarded a PhD in Meteorology, Washington has become an inspiration and a leader to minorities in not only his field, but within the larger science community. He has received multiple awards, among them the National Medal of Science, presented by President Obama in 2010 and shared in the International Intergovernmental Panel on Climate Change (IPCC) 2007 Nobel Peace Prize, in recognition of his contributions to climate science. Washington has written over 150 published papers alongside two books, one of which has been described by his peers as "literally the book on climate modelling."

Washington completed his Bachelor of Science (Physics) at Oregon State University (OSU), before his summer work at a weather station made him fascinated by storm patterns, inspiring him to get a Master of Science (Meteorology), also at OSU. He continued on to get a PhD in Meteorology from Pennsylvania State University, where he started to experiment with weather models. He is currently a member of the National Academy of Engineering, the American Philosophical Society, and the American Academy of Arts and Sciences.