

# The Life Sciences Symposium at Penn State

Fostering collaboration across the Life Sciences at Penn State since 2016



## Dr. Nina Fedoroff

Dr. Nina Fedoroff is a molecular biologist known for her early work in plant gene cloning, mechanisms of transposable elements, her study of epigenetic mechanisms and plant stress and hormonal responses. Dr. Fedoroff joined the faculty at Penn State in 1995 as the Director of the Biotechnology Institute and the Vern M. Willaman Chair of the Life Sciences and helped to found the Huck Institutes of the Life Sciences, an umbrella program for six intercollege graduate degree programs which promotes interdisciplinary collaborations and multifaceted research.

In 2006 Dr. Fedoroff was awarded a National Medal of Science by President George W. Bush for her pioneering work on plant molecular biology, for being the first to clone and characterize maize transposons, and for her contributions to education and public policy pertaining to recombinant DNA and genetically modified plants. She served as the Science and Technology Adviser to the Secretary of State from 2006-2010 and used her platform as an advocate for the destigmatization of genetically modified foods.

Dr. Fedoroff founded the Global Knowledge Initiative (GKI), an NGO that helps connect local innovators with resources, promotes effective collaborations through skills-building and shared agendas, and promotes innovative problem solving in order to solve the world's most pressing issues. Following her appointment at the State Department, Dr. Fedoroff joined the faculty at the King Abdullah University of Science and Technology, organizing the Center for Desert Agriculture in order to address food production in arid landscapes. Dr. Fedoroff has written editorials for the New York Times, as well as a book entitled *Mendel in the Kitchen: A Scientist's View of Genetically Modified Foods*. Today, she continues her science advocacy work through writing and lecturing internationally, serving as a science adviser for GKI and OFW Law, and through public outreach events, such as her May 2017 TED Talk.

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**Friday, May 18<sup>th</sup>, 2018**  
**Smeal College of Business Building, Room 110**  
**8:30 a.m. – 6:30 p.m.**

Organized by the Huck Graduate Student Advisory Committee ([psu.hgsac@gmail.com](mailto:psu.hgsac@gmail.com))

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## Dr. David Titley

Dr. David Titley is a Professor of Practice in the Department of Meteorology, the Director of the Center for Solutions to Weather and Climate Risk, and a Professor in the School of International Affairs at Penn State known for his work and advocacy of the risks of climate change as they relate to national security.

Dr. Titley began his career through the Naval Reserve Officer Training Commissioning program and served as a naval officer for 32 years before retiring at the rank of Rear Admiral. During his time in the navy, Dr. Titley served as an oceanographer and navigator, commander of the Naval Meteorological and Oceanography Command, deputy assistant chief of naval operations for information dominance, and as senior military assistant for the director in the Office of Net Assessment in the Office of the Secretary of Defense. While serving in the pentagon, Dr. Titley initiated and lead the U.S. Navy's Task Force on Climate Change.

After retiring from the navy, Dr. Titley joined the National Oceanic and Atmospheric Administration (NOAA) as the Deputy Undersecretary of Commerce for Operations, the chief operating officer position at NOAA. Dr. Titley has served as a climate change advocate and science adviser for the CNA Military Advisory Board, the Advisory Board of the Center for Climate and Security, the Science and Security Board of the Bulletin of the Atomic Scientists, and the National Academy of Science Board on Atmospheric Sciences and Climate.

Dr. Titley has spoken across the country and around the world on the importance of climate change, particularly as it relates to national security. He was invited to present on behalf of the Department of Defense at congressional hearings and the Intergovernmental Panel on Climate Change (IPCC), acting as a science liaison between the military and congress. Dr. Titley founded the Center for Solutions to Weather and Climate Risk at Penn State, which he continues to direct. He continues to advocate on behalf of climate change and military readiness in presentations at universities across the United States as well as in a TEDx talk in November 2017.

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