ZAFRA LERMAN

TUESDAY, MARCH 4, 1:00PM
CARL C. ICAHN LABORATORY - 101

Beyond the Lab:
A Scientist's Role in Education, Human Rights, and Peace



BIO: Zafra Lerman is a scientist, educator and humanitarian. She received a Ph.D. in Chemistry from the Weizmann Institute of Science, Israel and conducted research on Isotope Effects at Cornell and Northwestern Universities in the U.S. and the ETH, Zurich, Switzerland. She developed an innovative approach of teaching science through art, music, drama, dance, and rap which was successful with underprivileged students around the globe. She worked on human rights cases in the former Soviet Union, Russia, China, Guatemala, Cuba, Peru, and South Africa and was successful in preventing executions, releasing prisoners from jail and bringing dissidents to freedom. She is the President of the Malta Conferences Foundation which uses science diplomacy as a bridge to peace in the Middle East. She received over forty international awards, including Presidential Award for Mentoring from President Clinton (1999), AAAS Award for Science Diplomacy (2015), American Physical Society Andrei Sakharov Prize for Human Rights (2016), Peace and Justice prize from the UN NOVUS summit (2016), Distinguished Women in Chemistry or Chemical Engineering Award from the International Union of Pure and Applied Chemistry (2017), and she was nominated for the Nobel Peace Prize by a member of the US Congress and a member of the French Parliament (2017, 2018, 2019, 2020, 2021, 2023, 2025). Her book "Human Rights and Peace: A Personal Odyssey" was published in August 2024. On March 6, 2025 she will receive in New York the International Advocate for Peace Award from the Cardozo Journal of Conflict Resolution (https://cardozo.yu.edu/news/scientist-zafra-lerman-receive-cardozos-24th-annual-international-advocate-peace-award-march).

Abstract: In 1988, I met with Andrei Sakharov who advised me to never stop pressuring governments or organizations that abuse human rights. Based on his council, I took a crash course in Russian before traveling again to the Soviet Union where I met with dissidents in dark allies after midnight, distributed scientific material, delivered in the middle of the night seminars, and collected CVs to work on behalf of the dissidents upon my return. All these activities were illegal in the Soviet Union and could have landed me in prison. I always believed that science education is a human right that belongs to all and therefore, I developed alternative methods of teaching, learning, and assessing students using art, music, dance and drama which attracted students at all educational levels to science. These methods were proven to be successful around the globe. After 9/11, I expanded my work on scientific freedom and human rights to the Middle East by organizing the Malta Conferences, which use science diplomacy as a bridge to peace. Science diplomacy plays a central role in solving problems affecting society. Currently, widespread conflict, spurred by a deteriorating environment, rapidly expanding populations, unsustainable water and energy supplies, and inadequate educational institutions threaten civilization. Cross-border collaborations are essential in solving these problems. Science diplomacy is a tool to catalyze these cross-border collaborations. It can overcome cultural, religious, and political boundaries that other forms of diplomacy cannot. The Malta Conferences Foundation (MCF) has been a pioneer in using science diplomacy as a bridge to peace in the Middle East. MCF brings together scientists from 15 Middle East countries, Morocco and Pakistan with several Nobel Laureates for five days to form multinational collaborations in order to address these problems, which affect the region and the world.

PRINCETON ECOLOGY & EVOLUTIONARY BIOLOGY