

ZAFRA MARGOLIN LERMAN

Zafra Lerman is a scientist, educator, and humanitarian. She holds a PhD in chemistry from the Weizmann Institute of Science and conducted research on isotope effects at Cornell and Northwestern Universities in the US, and the ETH, Zurich, Switzerland.

Zafra developed an innovative approach of teaching science at all levels using art, music, dance, drama, animation, and rap. These methods proved to be extremely successful with underprivileged students around the world and received international recognition. In 2000, she adopted the school district of the town of Soweto, South Africa (the birthplace of Mandela and Bishop Tutu). In Chicago's low-income neighborhoods, she worked with students, teachers and parents and had a tremendous impact on their attitudes towards science. Zafra worked with homeless students at night in a dance studio and taught them science through dance. Many of these students graduated from college and two continued for a PhD in biochemistry. She worked with prisoners who succeeded in receiving bachelor's and master's degrees. Over 16,000 Chicago public school students and more than 1,000 teachers participated in her programs.

From 1986 to 2011, Zafra chaired the American Chemical Society's Subcommittee on Scientific Freedom and Human Rights. She worked on human rights cases in the former Soviet Union, Russia, China, Guatemala, Cuba, Peru, South Africa, Iran, and many more. She met with dissidents in many of these countries. After meeting Andrei Sakharov in 1989 and taking his advice, she took a crash course in Russian to facilitate her work with dissidents in the former Soviet Union. At great risk to her safety, she succeeded in preventing executions, releasing prisoners of conscience from jail, and bringing dissidents to freedom. From 1987 until now, she has served as a Vice Chair for Chemistry on the Board of the Committee of Concerned Scientists (CCS), where she continues to be very active in human rights cases.

Since 2001, she has been using Science Diplomacy as a Bridge to Peace in the Middle East and is the President of the Malta Conferences Foundation. The Malta Conferences are the only platform in the world which brings together scientists from 15 Middle East countries (Bahrain, Egypt, Iraq, Iran, Israel, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, Turkey, and the United Arab Emirates) with Nobel Laureates to work for five days on solving regional problems, establishing cross-border collaborations, and forging relationships that bridge chasms of distrust and intolerance.

Lerman has received over 40 international awards for her work, including the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring from President Clinton (1999); World Cultural Council's World Award for Education in Johannesburg, South Africa (2000), the first international award in the new democratic South Africa; the American Institute of Chemists Joseph Hyman Ethics Award (2000); American Chemical Society (ACS) Parsons Award for outstanding public service to society through chemistry (2003); Royal Society of Chemistry, England, Nyholm Education Award (2005); New York Academy of Sciences Pagels Human Rights for Scientists Award (2005); George Brown Award for International Scientific Cooperation from CRDF Global (2007); ACS Pimentel Award for excellence in chemical education (2010); International Conference on Chemistry for Mankind (India) Award for Stimulating Collaborations and Ensuring Human Rights (2011); American Association for the Advancement of Science (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), and Distinguished Women in Chemistry or Chemical Engineering Award from the International Union of Pure and Applied Chemistry (2017). She was honored four times by the U.S. Congress with speeches about her work in 2002, 2004, 2013, and 2019. Her work was featured on many television stations in China, Cuba, South Africa, Spain, and the US. In 2018, 2019, 2020, 2021, and 2023 she was nominated for the Nobel Peace Prize by a member of the French parliament and a member of the US Congress.