

2023 SHOWCASES

February: Black Scientist Showcase March: Women in STEM Showcase

May: Asian-American & Pacific Islander Scientist Showcase

June: LGBTQ Scientist Showcase

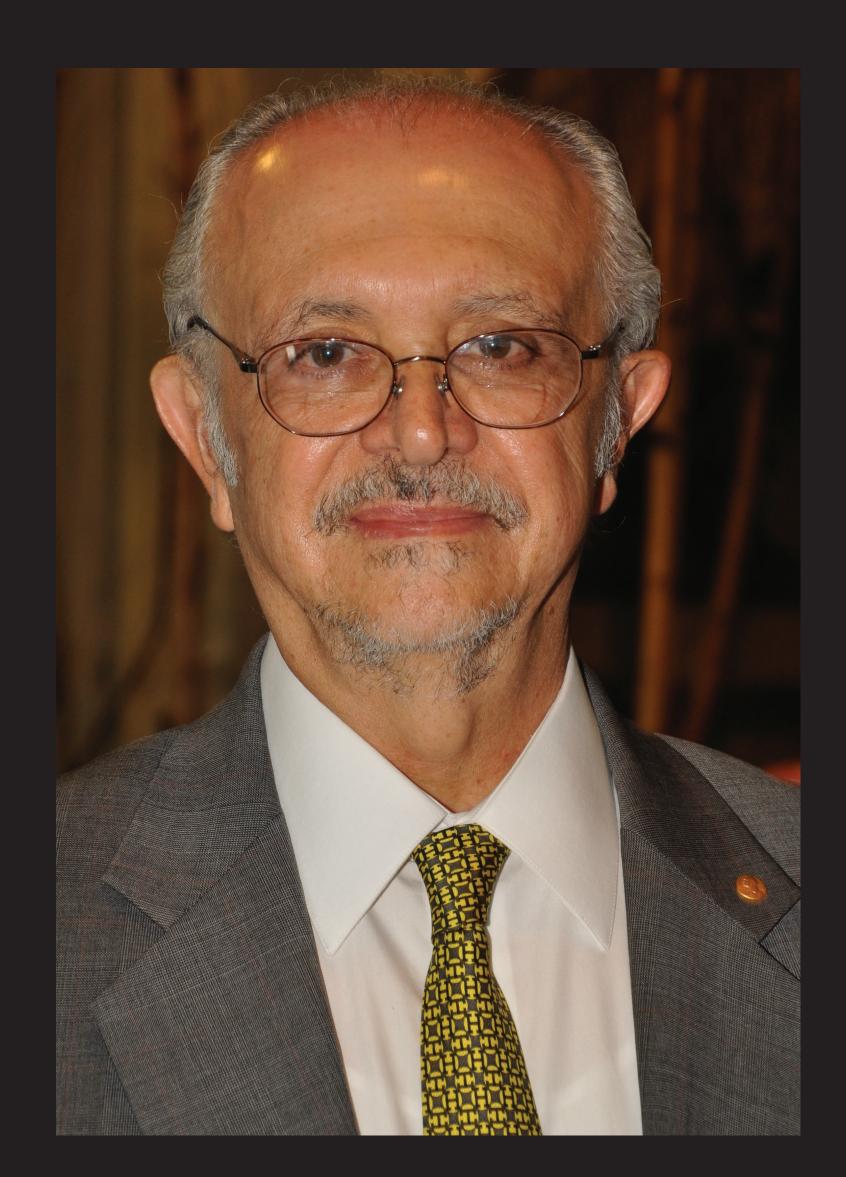
September: Hispanic Scientist Showcase

November: Indigenous Innovations Showcase



MARIO J. MOLINA, PHD

CHEMIST, MEXICAN-AMERICAN



MARCH 1943 - OCTOBER 2020

Born in Mexico City, Mexico, Dr. Mario J. Molina was completing chemistry experiments in his family's bathroom and with the help of his aunt early in his childhood. It was no surprise when he decided to become a research chemist before reaching his teenage years.

After completing undergraduate work in Mexico and Germany, Dr. Molina realized he would need to work on his math and basic chemistry skills before furthering his education. After some independent research, he began his graduate studies and Ph.D. in physical chemistry at the University of California at Berkeley, where he discovered a passion for research that could improve society.

Dr. Molina moved to Irvine, California, in 1973, where he joined a group led by Professor F. Sherwood Rowland. He soon began studying chlorofluorocarbons, or CFCs, which were used in everyday objects such as air conditioners and refrigerators. He felt the project offered him an opportunity to learn a new field, and sought to discover what happened to the CFC molecules once they reached the atmosphere. It did not take long before Dr. Molina and his team realized that CFCs were destroying the Earth's ozone, and the damage needed attention from the world. Their work led to serious conversations among media, politicians, and communities to seek ways to stop the use of the chemicals. While this was not Dr. Molina's only accomplishment during his lifetime, it was an important one that fulfilled his dream of making the world a better place.

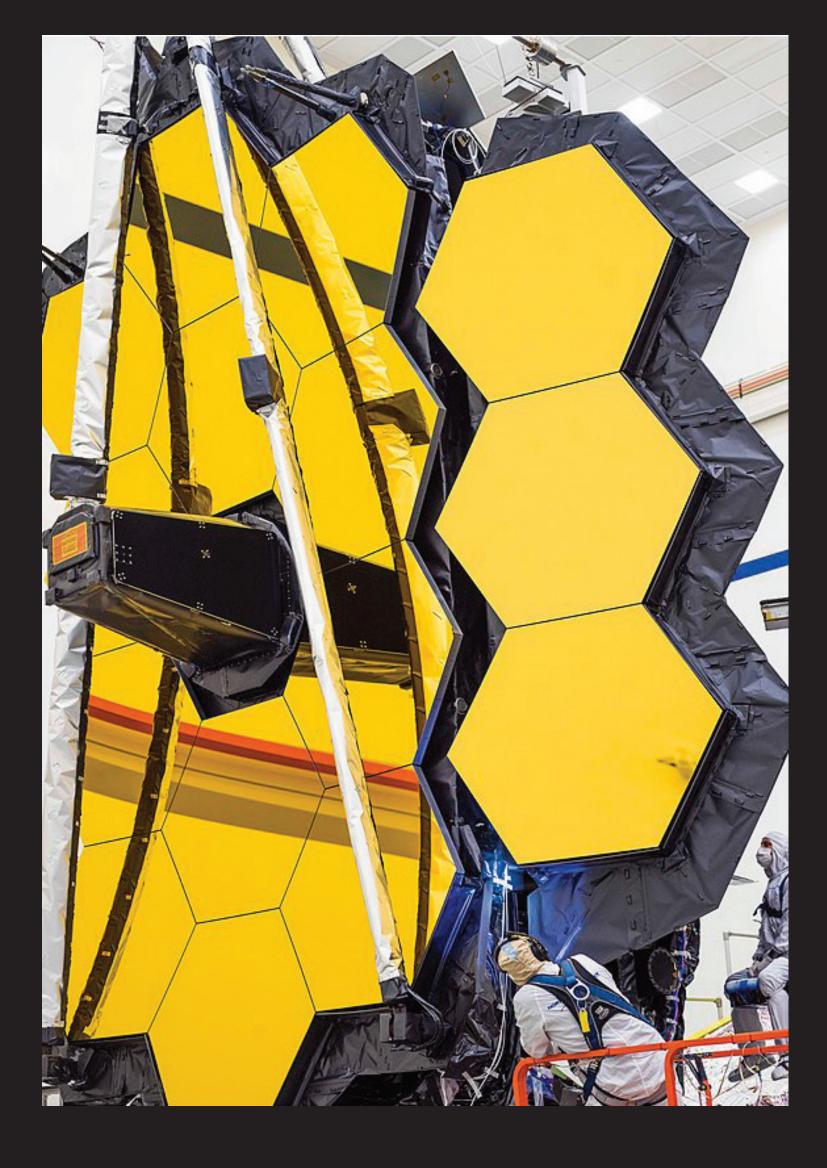
Find out more about Mario J. Molina here:





SCARLIN HERNANDEZ

COMPUTER AND ASTRONAUTICAL ENGINEER, DOMINICAN-AMERICAN



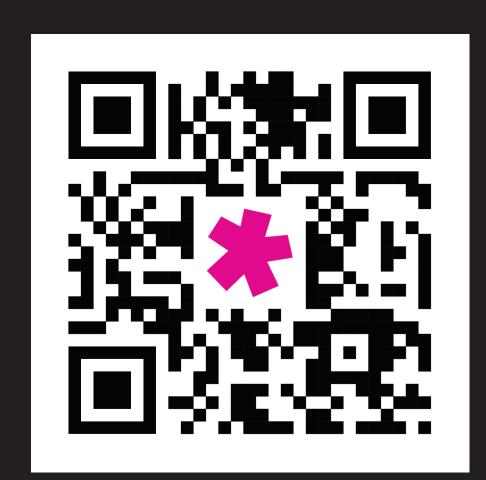
JULY 20, 1991 -

At the age of four, Scarlin Hernandez moved to the United States from the Dominican Republic. Growing up with limited resources, her mother encouraged her to be strong and independent. By the time she graduated high school, she had worked hard enough to be awarded a full, four-year scholarship from the National Science Foundation to attend Capitol Technology in Laurel, Maryland.

Hernandez felt she was "a unicorn" at the university. She had a hard time finding other women to connect with in her computer engineering program, which inspired her to start a new chapter of the Society of Women Engineers (SWE). She spent her time at university helping to lead this group, continuing her coursework, and completing an internship at the NASA Goddard Space Flight Center.

After graduating with a bachelor's degree in computer engineering in 2013, NASA offered Hernandez to turn her internship into a role as mission planning lead and system engineer for the same project. Shortly after, she transferred to work on the James Webb Space Telescope mission, where she worked as a spacecraft engineer. In this new position, she helped design critical parts of the telescope's function, from its launch procedure to how it would maneuver during its ten years in space. Meanwhile, Hernandez noticed feeling similar to how she felt during her early college years, so she established a women's empowerment program at NASA. She continues with both the mission and the program today.

Find out more about Scarlin Hernandez here:





ADRIANA OCAMPO, PHD

PLANETARY GEOLOGIST, COLUMBIAN-AMERICAN



JANUARY 5, 1955 -

Although Dr. Adriana Ocampo was born in Columbia, she spent most of her childhood in Argentina. Growing up there, she recalls her parents being supportive of her early interest in space exploration. As she watched the stars and planned missions with their family dog, her parents made sure she understood that education was the way to make these dreams come true.

Dr. Ocampo's family moved to the United States when she was a teenager, and she immediately wondered where NASA was. Thanks to the Space Exploration Post 509, sponsored by the Jet Propulsion Laboratory (JPL), she was able to volunteer and then work at that same laboratory. While still working at JPL, Dr. Ocampo went to college for geology at the California State University in Los Angeles. Pursuing her passion further, she went on to get a master's degree in planetary geology from California State University, Northridge, while working as a full-time research scientist at JPL.

According to NASA, Dr. Ocampo's favorite accomplishment was when her research led to the discovery of the Chicxulub Impact Crater on Mexico's Yucatan peninsula. After years of expeditions, data collection, research, and experiments, she and other scientists concluded that the asteroid that made this large impact caused an extinction event of more than half the species on Earth more than 65 million years ago.

Since then, Dr. Ocampo has assisted on several space missions with NASA and completed her PhD in 2012 in Amsterdam. She now works as Science Program Manager at their headquarters.

Find out more about Adriana Ocampo here:





PEDRO A. SANCHEZ, PHD

ECOLOGIST AND SOIL SCIENTIST, CUBAN-AMERICAN



OCTOBER 7, 1940 -

Growing up, Dr. Pedro A. Sanchez imagined he would follow in his father's footsteps and get his bachelor's degree from Cornell University before returning home to Cuba to work at his father's fertilizer business. Unfortunately, his father lost everything during his sophomore year in college, and Dr. Sanchez had to work to pay for the rest of his degree. This life change helped him realize that he would need to look somewhere else for his future. He soon decided that he wanted to bring the Green Revolution (an effort to bring food to areas where it is scarce) to Africa. He began by voicing his interest in tropical soil science to his professors, who sent him to the Philippines to aid in the Asian Green Revolution, where scientists were selectively breeding rice plants for specific physical and nutritional qualities.

The challenge that Dr. Sanchez faced most in his desire to end hunger was that the soil of Africa was missing key plant nutrients. Even the carefully bred plants of the Asian Green Revolution could not succeed in soil that was missing these key components. His efforts resulted in the UN Millennium Project Hunger Task Force, where scientists helped African villages by providing fertilizer and specialized seeds. The desire to make food more universally available to people around the world inspired Dr. Sanchez to revolutionize the way scientists support farmers. Dr. Sanchez continues to inspire, inform, and advise others about these topics today.

Find out more about Pedro A. Sanchez here:

