Passion for progress

Simon and Golde Picker and Dr. Sharon Wolf

"There are two ways into the Weizmann Institute," jokes Simon Picker. "Be an excellent scientist, or lead an effort to support excellent science."

With his lifelong passion for understanding the composition of materials and innovative manufacturing processes, Simon Picker has wholeheartedly chosen the latter option by supporting Weizmann Institute research on new materials. Simon is a new member of the International Board who lives with his wife Golde in Mexico City.

Simon grew up in Tel Aviv, but he enjoyed regular visits to family in Kfar Bilu—an agricultural *moshav* not far from Rehovot—which offered him an opportunity to visit the Weizmann Institute. It was there that his interest in how things are built was first sparked. At the age of 16, he moved with his family to the U.S., where he received degrees in chemistry and chemical engineering from the University of California, Berkeley. After graduation, he focused on several related fields, including pharmaceutics, chemical industrial plants, metallurgy, electronics, and aerospace.

Shimon and Golde Picker were honored at the International Board for their support of a Research Fellow Chair for Dr. Sharon Wolf

Profile of a Pair

After marrying Olga (Golde) Schatz, the pair moved to her hometown of Mexico City, where they raised a family of three children; today they have nine grandchildren. Simon first applied his expertise in innovative engineering to the chemical industry. He founded Stainless Mexicana—a major manufacturer of specialty alloy pipes and industrial accessories for the chemical and petrochemical industries—and later Grupo Seguritech, an international high-tech consortium responsible for integrating major homeland security projects in Mexico and other Latin American countries. Grupo Seguritech, which Simon co-founded with his son Ariel, also has an aeronautics division that develops airports and aerospace industrial parks in the U.S. and Latin America.

Simon's enthusiasm for progress and technological advances led him back to the Weizmann Institute, where he and Golde found a kindred spirit in Dr. Sharon Wolf. Last year the Pickers made a major gift to support a Research Fellow Chair in electron microscopy for Dr. Wolf.

A revolution in microscopy

An American *olah*, Dr. Wolf heads the Electron Microscopy (EM) Unit within the Department of Chemical Research Support. She oversees the provision of services and in-depth, practical EM training for scientists throughout the Institute, including numerous studies on the properties and potentials of new materials. Her collaborative assistance is vital to the success of biology, chemistry, and physics experiments.

"It was a true pleasure to meet Golde and Simon," says Dr. Wolf, "and to have the opportunity to share our excitement in providing such important, advanced imaging technologies to the Weizmann community. Their interest and enthusiasm is so genuine."

Her personal area of expertise is three-dimensional cryogenic EM (3D cryo-EM) and scanning transmission EM (STEM). Cryo-EM has been referred to as 'resolution revolution'—a dramatically more powerful way to campture images of biospecimens with atomic and near-atomic sensitivity. Dr. Wolf's know-how is critical to the success of the Weizmann Institute's new flagship project, the Center for Advanced and Intelligent Materials (C-AIM). C-AIM will support groundbreaking research on advanced materials, with an eye towards possible applications in medicine, space and aeronautics, energy and sustainability, electronics and optics, and more.

In the past year alone, Dr. Wolf has overseen the EM Unit's acquisition of a new generation of cutting-edge tools that allow for the highest level of imaging and analysis in both the materials sciences and biological sciences—including the Titan microscopy system, which is capable of producing images with 0.07 nanometer resolution. The Titan system can identify atoms, measure their chemical state, and even probe the electrons that bind them together.

Dr. Sharon Wolf

"Scientists try to create masterpieces of vision, and they need the proper tools for expression," says Simon. "If a picture is worth a thousand words, a 3D image is worth a million words." With the Pickers' support, Dr. Wolf envisions the EM Unit becoming a leading imaging facility in Israel and indeed, in terms of its unique interdisciplinary approach, the world.