Four Decades of Scholarships, Partnership, and Success: The Weizmann Institute of Science and the ISEF Foundation

From its very earliest days, the Weizmann Institute of Science has been committed to science education, firmly believing in its power to advance Israel and lift up individuals and society. Science knows no boundaries or ethnicities or languages, and science education today – for people from all walks of life – ensures a science-literate citizenry tomorrow.

In particular, teaching science to children opens up new worlds. This is especially true for young people from marginalized communities, where excellence in education is often lacking – and yet where an untapped pool of talent exists. Weizmann's science education programs have produced some of today's finest researchers, whether in academia and industry or in leadership roles. And for 40 years, the Institute has had a partner who shares these values and vision: the ISEF Foundation.

The ISEF Foundation offers scholarships for gifted Israelis from poor or immigrant communities, enabling these talented young people to pursue higher education. The scholarships were born in 1977, when the late Edmond Safra, along with Lily Safra and Nina Weiner, recognized that minority immigrants to the early State of Israel were having difficulty assimilating into their new society and were at risk of falling through the cracks. The scholarships were a major part of their efforts to remedy this problem. To date, the ISEF Foundation has awarded more than 20,000 scholarships for higher education and helped more than 6,000 underprivileged young Israelis earn degrees – an average of 500 students per year at 21 Israeli institutions of higher education.

The Weizmann Institute of Science is one of those institutions; several master's and doctoral students at the Institute's renowned, highly competitive Feinberg Graduate School have been ISEF scholars. The Institute believes that all its graduate students should have scholarships so that they can focus unencumbered on their education and research, and the ISEF Foundation has helped it maintain that commitment – with impressive results. As Ms. Weiner, president of ISEF, states, "ISEF's Weizmann graduates occupy prestigious positions in Israel's leading institutions of higher learning, and in every sphere of Israeli society."

Here are three of these success stories.

Dr. Michael Yartsev

Dr. Michael Yartsev runs the NeuroBat Lab at the Helen Wills Neuroscience Institute at the University of California, Berkeley. With the support of an ISEF doctoral fellowship, he completed his PhD in 2012 at the Weizmann Institute, studying under the guidance of Prof. Nachum Ulanovsky.

Dr. Yartsev is fascinated with the neurobiological mechanism by which bats acquire their vocalizations, targeting a core process – shared with humans – called "vocal learning." ISEF supported Dr. Yartsev throughout his higher education, from his BSc and MSc at Ben-Gurion University to his PhD at Weizmann to his postdoctoral research at the Neuroscience Institute at Princeton University, for which he received an ISEF International Fellowship. The ISEF scholarships helped Dr. Yartsev find his calling. "My time at the Weizmann Institute was transformative to my career," he says, "as it exposed me to the extraordinary model system: the bat."

Dr. Michael Yartsev

Prof. Haim Suchowski

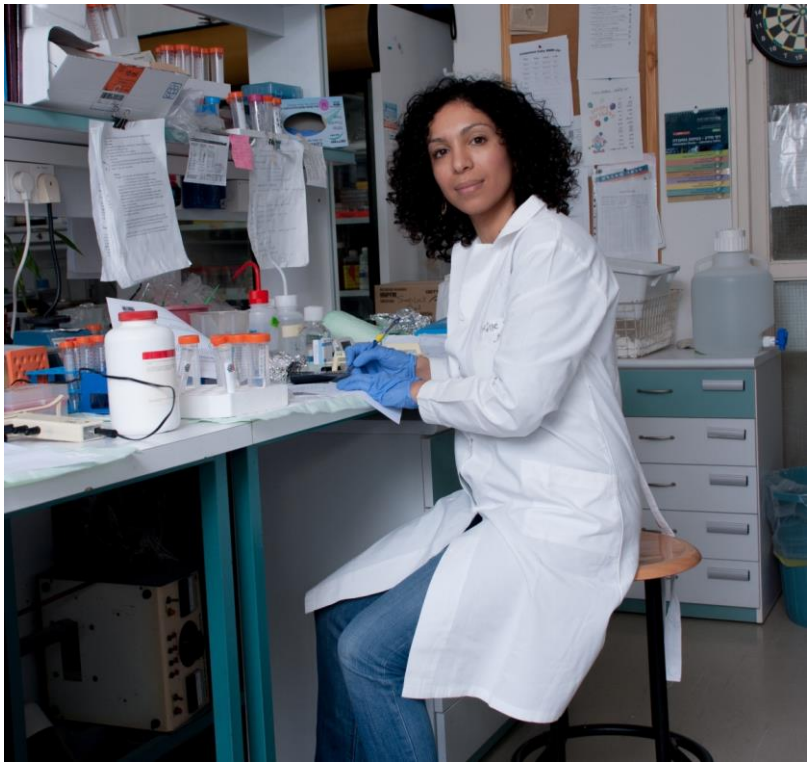
Prof. Haim Suchowski, who earned his MSc and PhD from the Weizmann Institute in 2011, leads a group exploring nano-optics and ultrafast physics at Tel Aviv University. Their goal: to use light to control and study quantum systems. This includes exotic pursuits such as exploring the dynamics of ultrafast "hot" electrons, or creating negative and even zero refractive materials that are 100% transparent to light at certain wavelengths.

Prof. Haim Suchowski

In keeping with the ISEF Foundation's focus on giving back through leadership, Prof. Suchowski was involved - while pursuing his own MSc studies - with ISEF activities on the Weizmann campus, tutoring and mentoring Ethiopian youth through the Sparks of Science Program in Memory of Moshe Pergament. He then became an ISEF-Fulbright Postdoctoral Fellow in nano-photonics at the University of California, Berkeley. He is a frequent collaborator with his Weizmann mentor, Prof. Yaron Silberberg in the Department of Physics of Complex Systems.

Dr. Orly Salama-Alber

As a current ISEF Postdoctoral Fellow in the Department of Biochemistry and Microbiology at the University of Victoria in British Columbia, Dr. Orly Salama-Alber investigates how proteins recognize carbohydrates. This basic biological mechanism is central to understanding the action of certain antibiotics and other types of drugs, how microbes and bacteria infect cells, and a number of biochemical processes important to the food and textile industries. Her work builds on many of the skills she learned as an MSc and PhD student working with Prof. Ed Bayer in the Weizmann Institute's Department of Biological Chemistry. Dr. Salama-Alber completed her PhD in 2013.



Dr. Orly Salama-Alber

"As an MSc and PhD student at the Weizmann Institute, I was constantly exposed to innovative and interdisciplinary research while having access to the most advanced instruments and services I needed for my work," Dr. Salama-Alber stated, continuing: "In addition, I was given the opportunity to attend several international courses in my field of interest, x-ray crystallography and structural biology, which broadened my expertise. My work at the Weizmann Institute was published in several peer-reviewed journals and granted me several scholarships, including the ISEF Fellowship, which paved the way to my current postdoctoral research position."