



Professor Alon Chen
PRESIDENT

Rosh Hashana 2024

Dear friends,

This Rosh Hashana, we look back on the past year—perhaps the most difficult one in Israel's existence—with pain and sadness. As I write this letter, the conflict has entered a new stage in the north. My hope for the new Jewish year 5785 is for the immediate return of all the hostages, and a swift and long-lasting end to Israel's multiple-front conflicts. I believe I reflect the wishes of all our close friends, here in Israel and around the world, for a resolution of conflict and the beginning of a process of healing. I wish everyone a *Shana Tova*.

We are about to mark a year since the tragic events of October 7, and on campus we plan to hold a quiet but meaningful event that will allow us to remember the victims, honor the hostages, and express gratitude for all those on the war front who are protecting and defending Israel in crisis. The hard work and resilience shown by our community of scientists, students, and staff, despite the challenges, together with the support of our entire global community of friends, around our common scientific mission has kept the Weizmann Institute strong. This is precisely what is needed for the country, for academia, and for the ongoing advancement of scientific research at this time and moving forward.

Our science continues along its path of excellence. I'm happy to relay that our success rate in the Starting Grants category (for young scientists) from the European Research Council, in the most recent funding round, was exceptionally high. Impressively, eight out of 13 submissions were accepted, representing a 62 percent success rate. In comparison, the average rate across the EU in this category was 14% and 28% for Israeli institutions.

The root of this success, of course, is outstanding research—which often emerges from surprising and unexpected directions. Just like the multiple sclerosis drug Copaxone emerged serendipitously from Weizmann scientists' attempts decades ago to create a mouse model for the disease—and instead found a cure for it—**Prof. Eldad Tzahor** and Senior Staff Scientist **Dr. Rachel Sarig** made a surprising discovery about the drug: it can heal damaged hearts. Driven by curiosity and knowing that Copaxone alters the composition of immune system cells and the proteins they release, thereby suppressing inflammation, the scientists wondered whether it would be possible to use the drug to see how it might trigger the immune system to improve heart function. They found that Copaxone reduces scar tissue formation after a heart attack and enhances the heart's ability to pump blood, and also improves heart function in cases of chronic heart failure.

And in another unexpected outcome with major practical consequences: About a decade ago, **Prof. Igor Lubomirsky** of the Department of Molecular Chemistry and Materials Science noticed that some ceramics used in fuel cells exhibit unusual properties at room temperature, and wanted to find out why, without any practical application in mind. He recently discovered that a form of these ceramics—an alloy of cerium and zirconium oxides—could potentially replace current materials used in a variety of devices, from home appliances like washing

machines to medical ultrasound, which often contain lead and pollute the environment when they reach landfills. In contrast, his newly developed compound is lead-free and thus non-toxic.

We are delighted that **Prof. Adi Shamir** of the Department of Computer Science and Applied Mathematics has been awarded the highly prestigious **Wolf Prize** by the **Wolf Foundation**, for his contributions to the mathematics behind cryptography, electronic commerce, and information security. Prof. Shamir is a co-developer of the RSA algorithm and method, which changed the face of computer communication.

The **Wolf Prize** uniquely recognizes lifetime achievement—which usually takes root early in a scientist's life of course. Prof. Shamir's curiosity about math and science began in his teenage years (if not earlier). When the Weizmann Institute's academic programs for youth were beginning to take off in the 1960s, he participated in several of them, including science summer camps on campus. Providing such foundational experiences for future scientists—and school students of all kinds—is at the heart of the mission of the **Davidson Institute of Science Education**. Its import for Israeli society, and indeed world science, is immeasurable.

I'm delighted that the President and Prime Minister's Award was bestowed on **Prof. Jehuda Reinharz** and **Prof. Motti Golani**, whose comprehensive biography of **Dr. Chaim Weizmann** was recently published to much acclaim (*Dr. Chaim Weizmann: A Biography*, published by Brandeis University Press). Prof. Reinharz, our former International Board Chair who is President and CEO of the **Jack, Joseph, and Morton Mandel Foundation**, and Prof. Golani of Tel Aviv University, were recognized in a state ceremony for their seminal work in preserving the memory and legacy of Israel's first President.

Earlier this month, **Ruth Shoham** stepped into the role of CEO of the Davidson Institute, replacing **Dr. Liat Ben-David**, who served in that position for seven years. Ruth comes with a wealth of leadership experience in the education and technology sectors. She previously served as CEO of the Open University of Israel, and was Executive Director of Strategy and Partnerships at the Israel National Cyber Directorate. She held senior positions and was a member of the Strategic Forum of IBM Israel. Ruth spent 25 years in key positions in the IDF, including in the Intelligence Corps 8200 unit; she retired from the IDF as a colonel. She has a master's degree in Operational Research and a bachelor's degree in mathematics from the Faculty of Exact Sciences at Tel Aviv University. I wish Ruth the best of luck in her new role.

On Dec. 1, **Prof. Yinon Rudich** of the Department of Earth and Planetary Sciences will step down after six highly successful years as the Dean of the Faculty of Chemistry. I deeply thank Yinon for his outstanding leadership and vision for ensuring the field of chemistry is well-positioned at Weizmann for the years to come. **Prof. Milko van der Boom** of the Department of Molecular Chemistry and Materials Science will pick up the torch as the incoming Dean.

As of Oct. 1, the new chair of the Scientific Council is **Prof. Nir Davidson** of the Department of Physics of Complex Systems, who until now served as Vice Chair. A special thank you to **Prof. Maya Schuldiner** of the Department of Molecular Genetics for her dedicated work as Chair of the Council. I also welcome **Prof. Tzachi Pilpel**, a departmental colleague of Maya's, as Vice Chair. Also, as of January 1, **Prof. Roy Bar-Ziv** from the Department of Chemical and

Biological Physics will take over as Chair of the Council of Professors, following the leadership of **Prof. Naama Barkai**, the current Chair, also from Molecular Genetics. I thank all these scientists for their leadership, and I wish the best of luck to those taking on new roles.

I also want to warmly welcome several newly hired scientists and introduce you to them on paper—and hopefully you'll have the pleasure of meeting them on a future trip to campus. Following a postdoctoral fellowship at Stanford University, **Dr. Tal Iram** joined the Department of Molecular Neuroscience, where she will continue to reveal how the brain's glia cells impact brain aging. Whereas cognitive aging is often attributed to neuronal vulnerability, the Iram lab will focus on the dysfunction of oligodendrocytes—which provide insulation to brain axons—as a key driver of cognitive decline.

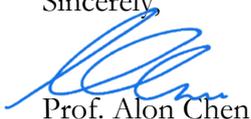
This year, we have a particularly strong group of new scientist recruits from computer science and math. **Dr. Oded Padon** recently joined the Department of Computer Science and Applied Mathematics. He develops new techniques that use mathematical reasoning to ensure that complex software systems are correct and free of bugs. And **Prof. Daniel Wise**, an American professor at McGill University in Montreal, joined the Department of Mathematics in August. Prof. Wise is a geometric group theorist whose research uses objects built from high-dimensional cubes to understand fundamental problems about symmetry in algebra and topology.

The commencement ceremony for the **Feinberg Graduate School**, usually held in June, took place on September 10 this year because the start of the academic year was delayed as a consequence of the war. What makes this year's achievement even more special is that many students overcame unprecedented hurdles: many Israeli students were called up to reserve duty, and some international students grappled with the challenges of returning to Israel in wartime and ensuring the continuity of their studies. We were inspired and moved by the remarks of our guest of honor, **Eyal Waldman**, 2024 Israel Prize recipient in entrepreneurship and technological innovation, whose daughter **Danielle** was murdered at the Supernova music festival on October 7.

Keeping in mind the travel challenges to Israel, we do very much look forward to seeing you at the 76th Annual General Meeting of the International Board, November 10-13, 2024. It will be an opportunity for us to update you on the many scientific advancements in the last two years—given the cancellation of last year's Board, there are indeed many that have accumulated. Among other highlights, we will celebrate the new gift that has enabled us to establish the **Aaron and Miriam Gutwirth Medical School and MD/PhD Program**, hold the always-inspiring PhD *honoris causa* ceremony, and more. You are invited to register [here](#).

Let us remember the values of renewal and hope as we head into the new year. *Shana Tova*.

Sincerely,



Prof. Alon Chen