

Endowments to the American Technion Society

An Investment in Our Future

June 2023





Introduction

The American Technion Society (ATS) supports visionary education and world-changing scientific discovery and impact through the Technion - Israel Institute of Technology.

Why establish an ATS endowment to benefit the Technion? Just as the university has evolved dramatically over its first century, so has the rationale for support. Historically, the establishment of scholarships for deserving students was a dominant priority. As the Technion embarks on its second century as one of Israel's premier public universities, its initiatives are increasingly focused on fortifying three strategic research areas — Human Health, Sustainability, and Advanced Manufacturing — each deserving of unprecedented support.

The Technion Human Health Initiative, the first of these three pillars, comprises an ambitious synergy that aims to integrate AI into medicine, and to expand the frontiers of research on cancer and aging. The second pillar, addressing sustainability of our planet's natural resources, is marked by the Technion's recent launch of two innovative research centers: the Stewart and Lynda Resnick Sustainability Center for Catalysis, and the Carasso FoodTech Innovation Center. These facilities complement the university's thriving centers for water and energy research, funded by the generous support of Nancy and Stephen Grand. The third pillar addresses advanced manufacturing, which encompasses bold initiatives that allow manufacturers to vastly expand their production capabilities at much lower cost.



Each of these pillars will require significant long-term financial support on many levels — from funding the construction and renovation of research laboratories, to establishing seed grants, to developing new academic courses — as well as initiatives to attract world-leading faculty members and top-ranking students to the Technion.

As the Technion community looks forward to celebrating its centennial in 2024, devoted supporters of the university are encouraged to add to an existing endowment, increasing its impact; choose to establish an endowment for the Technion's unrestricted support; or create a new fund benefiting one of the three pillars — the sectors in which the Technion aims to lead the globe in discovery, innovation, and product development over the next several decades.

are deeply grateful for the generosity
of our donors, who are helping us build
a better world, now and forever."

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technology, a deep love for the State

enduring legacy of the Technion. We

of Israel, and a robust dedication to the

Spotlights

Professor Sima Yaron

Faculty of Biotechnology and Food Engineering

Seymour and Claire Schonwetter Chair in Sciences



"Having studied and worked at the Technion for over 30 years, the Faculty of Biotechnology and Food Engineering is my second family."

I was born and raised in a working-class family in Jerusalem, the oldest daughter among six siblings. My father was a bus driver and my mother was a homemaker. After three years of active duty in the Israeli Defense Forces, I moved to Haifa and started my studies. I earned my B.Sc. cum laude in 1994 and my Ph.D. in 1999, both from the Faculty of Biotechnology and Food Engineering at the Technion. Upon graduation I was awarded the Rothschild Fellowship for postdocs. Together with my spouse and two kids, we moved to Rutgers University in New Jersey, where I served a two-year fellowship at the Food Safety Lab of Prof. Matthews in the Department of Food Science. In 2001, as a PI at the Faculty of Biotechnology and Food Engineering, I established the Laboratory for Molecular Biology of Pathogens with the generous support of the American Technion Society.

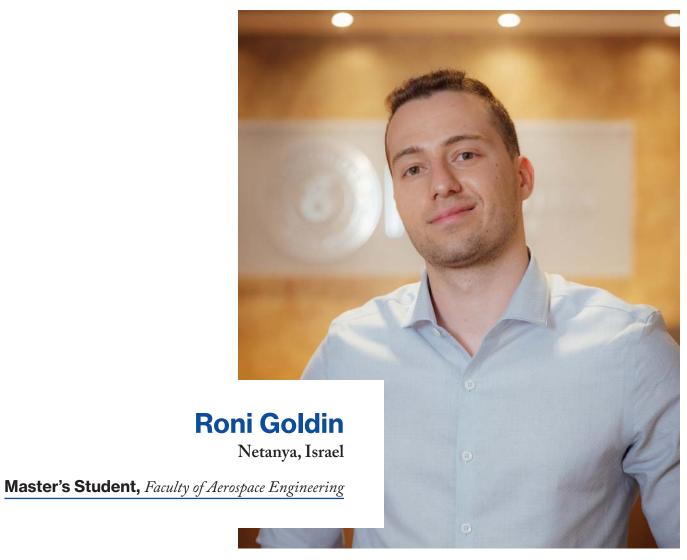
My laboratory is engaged in basic and applied research in various aspects of microbial food safety, from agricultural fields to our gut, particularly focusing on mechanisms of resistance and virulence of the foodborne pathogen Salmonella. My research indicated that a major part of Salmonella outbreaks originates from contaminated fresh agricultural

produce, and I was among the first to raise awareness of microbial hazards and risks associated with fruit, vegetables, and leafy greens in Israel. A major focus of my research is the evolution of Salmonella-plant interactions. The knowledge we gain is harnessed to develop novel approaches to planting and harvesting crops and in processing food. For example, our studies explore the reasons Salmonella survives high-temperature thermal treatments in foods with high fat content and low water content, such as peanut butter, chocolate, and tahini. A second part of my research is focused on the evolution of multiple antibiotic resistance in pathogens. My team has developed a novel platform of antibiotics, which is based on short peptides, and demonstrates specific activity fighting human pathogens.

Since I was a student at the Technion, my professors and mentors have always encouraged me to improve through creativity and innovation, and to strive for excellence. Today, as the dean of the faculty, my most important goal is to follow in my mentors' footsteps and lead each new class of students and researchers. As the Technion is the only academic institution in Israel offering a B.Sc. in food engineering, I believe educating

tomorrow's food engineers is crucial to Israel's economy, security, and well-being. Providing our students with basic and advanced food safety knowledge is one of my greatest passions. I am proud to have educated thousands of students and mentored more than 50 Ph.D. and M.Sc. students, and I am delighted to see them at the front line of the biotech and foodtech industries in Israel. In addition, I occasionally serve as a consultant to various food and biotech companies and agencies in Israel in the field of microbial food safety.

Over the years, I have been awarded many prizes, including the prestigious Yanai Award for Excellence in Teaching, the Lifetime Achievement Award in Phyllosphere Biology, the Hershel Rich Innovation Award, and the Henri Gutwirth Research Award. In addition, it has been an honor to hold the Seymour and Claire Schonwetter Chair in Sciences. This source of support has helped me tremendously to expand my research activities, engage more undergraduate and graduate students, and take on more demanding and challenging research topics, substantially benefiting my research program and achievements.



I was born in Netanya, Israel, to immigrants who made *aliyah* before the Soviet Union fell. From a very young age, my parents inspired me to study hard, and to do my best to excel in every endeavor I pursued. In high school, I became interested in physics and robotics, and later became fascinated by engineering. When I learned I could study rocket science at the Technion's Faculty of Aerospace Engineering, I knew this was where I wanted to study. I earned my bachelor's degree *cum laude* from the Aerospace Faculty in 2022 and am now pursuing a master's degree, with the aim of developing environmentally friendly rocket propulsion technology.

In addition to serving as a teaching assistant and the graduate students' representative in the Aerospace Faculty, I am also a student in the Atuda Program (member of the "Silon" excellence program), allowing me to commence study at the Technion prior to my

active service in the Israel Defense Forces, where I will serve as an engineering officer in a classified technological unit. I am also the coordinator of volunteers in the "Atidim" Program, managing tutors and mentors for more than 70 Technion students. The program's goal is to create equal educational opportunities and ideally narrow socioeconomic gaps, in order to train Israel's future leaders.

I have been privileged to participate as a speaker in the Ilene & Steve Berger Technion Visiting Fellows Program in 2022–23. Being a Berger Fellow is a great gift, since it has given me an opportunity not only to visit the U.S. for the first time, but also to speak with ATS supporters about the excellence of the Technion's Faculty of Aerospace Engineering. I am truly fortunate that the Technion has provided me with the tools I need to enjoy a rewarding career.



I have been a steadfast supporter of the Technion ever since my first trip to Israel with my late husband Louis (Bruce) Marschak z"l. A lifelong believer that no education is complete without the arts, I think everyone is an artist. We were taught early on that this is how you draw a tree, and if you do it differently, then it's wrong. I don't think Picasso was ever told that.

To expose more Technion students to the arts and humanities, I established a fund that sponsors class instructions in theater, art, and music as well as student art exhibitions, dance, orchestra and theater performances. This contribution allowed the university to build a theater, art studio, and music studio, in addition to providing instruments and equipment for the Technion's Zielony Symphony Orchestra and Choir and the Technion Jazz Band.

Finally, in academic 2021–22, the first year of the Sonia T. Marschak Artist in Residence (Pilot) Program highlighted a pianist, a sound artist, and a fine artist, encouraging faculty and students alike to view their work through an artist's eye.

The Sonia T. Marschak Academic Chair in Humanities and Arts ensures an honored place for the arts at the Technion in perpetuity. I am extremely pleased to be connected to the Technion, a truly remarkable institute whose astounding successes in science and technology have made our world a much better place.



We are third-generation supporters of the Technion. Cathy's grandparents, Anna and Samuel Brody, became involved with the Technion in 1952, when they committed to the construction of a building, housing the Faculty of Agricultural Engineering, whose cornerstone was laid in 1964 — with Cathy and her parents, Rhea and Robert Brody, at the dedication ceremony in 1966. Cathy's father, Bob, was the ATS Detroit Chapter president from 1962–68, and brought Cathy to the Technion campus again in 1971.

While working as a builder and developer in the Detroit area, James has maintained strong ties to the Technion as well. Both of us have served as Detroit Chapter Presidents and members of the ATS

National Board of Directors, as well as the Technion Board of Governors.

We have been honored to continue our family's long tradition of devotion to the Technion. In addition to supporting initiatives to maintain a children's playground, Detroit Chapter Projects and the Excellence Program, we set up the Cathy and James Deutchman Endowment for the Technion Maintenance Fund — because we knew it would help maintain the physical beauty of the university. We have always been impressed by the Technion's Haifa campus, and as the Technion begins its second century, we love the idea that many future generations will be able to enjoy it as well.



Desirée and Max Blankfeld have long been ardent supporters of Israel and the Technion. Max, who grew up in Brazil, the son of Holocaust survivors, attended the Technion as a young man in the Faculty of Aeronautical Engineering. Though he had to return to Brazil before graduating, Max maintains the fondest of memories and relationships from his Technion experience. Even after he completed his education in Brazil and graduate studies years later in Houston and embarked on a successful career as an entrepreneur, Max remained connected with the Technion. He shares his devotion to the Technion with Desirée, also the daughter of Holocaust survivors, who was educated in Brazil and the U.S. as an attorney.

The Blankfelds' appreciation of the Technion in

educating Israel's leaders has motivated them to support the university. Recognizing the financial needs of students pursuing their higher education at the Technion, they created the Desirée and Max Blankfeld Undergraduate Scholarship Fund. More recently, in memory of Max's beloved parents, they established and endowed the Eli and Chaya Blankfeld Graduate Fellowship, offering support for foreign engineering students who have made or are considering making aliyah. They created this fellowship because they believe a top-notch education should be within reach of aspiring scholars worldwide who want to make Israel their home — and because the Technion represents the best possible start for a distinguished career in a vast range of fields.

How ATS' Endowment Works

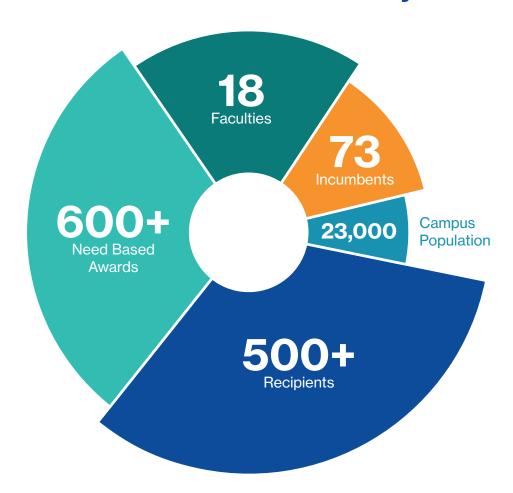
The role of the ATS endowment is to provide a permanent and continuous source of support for the Technion's students, faculty and operations. The ATS investment pool is comprised of more than 2,000 unique endowments created by donors since its inception. Its objective is to generate a stable source of income to ensure long-term sustainability.

The Board of Directors delegates the oversight of the endowment fund to the Investment Committee, which is comprised of board members with finance, operations and administrative experience. ATS engages a professional investment firm, Prime Buchholz, who works with our Investment Committee to recommend and review the portfolio's target

asset allocation and specific investments within these sectors. Prime Buchholz provides the highest commitment to due diligence and ongoing monitoring of investment managers. The committee reviews these recommendations and makes ongoing decisions related to investment holdings. A spending policy has been established, and is modified based on market and economic conditions and the financial needs of the Technion. To avoid potential underdistribution or unsustainable overdistributions relative to the original gift value and the current market value, each endowment fund is reviewed annually.

The following graphs and tables represent performance indicators as of December 31, 2022.

Endowment by Use



33% M.Sc. and Ph.D. Fellowship

Support

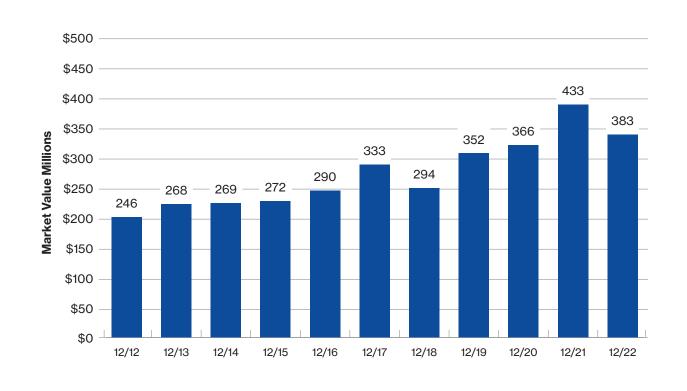
Undergraduate Scholarship & Student Support

19% Research Funds

12% Academic Chairs

7%
Building,
Maintenance,
and Resources

Growth Over 10 Years



Technion Impact



Human Health

Collaborating with multiple faculties and Israel's top-tier hospitals

Developing and commercializing groundbreaking technologies



Sustainability

Cultivating meat through plant cells

Extracting hydrogen from H₂O to use as fuel



Advanced Manufacturing

Reducing consumption of raw materials

Rebuilding coral reefs via 3D printing

Investments



Inflationary pressures and hawkish central banks were pervasive economic themes in 2022. Inflation proved to not be transitory and reached levels not seen in nearly four decades.

From March through December 2022, the U.S. Federal Reserve (Fed) raised lending rates 425 basis points in an attempt to reduce inflation, and many other countries around the world took similar action. Because interest rates are a key input into asset valuations, the combination of inflation and rising rates caused a broad decline in capital markets, from global equities to fixed income to real estate. Only a handful of investments delivered positive returns, including the U.S. dollar as a currency and some, but not all, commodities.

Domestic equities started the year at all-time highs but finished with their worst year since

2008, with the S&P 500 declining 18.1%. While also down for the year, foreign stocks outperformed U.S. equities for the first time since 2017. Fixed income markets were also affected, with the broad U.S. bond market down 13.0% for the year. Although fundamentals remained sound and default rates remained low by long-term historical standards, fear of a Fed-induced recession caused investors to demand higher compensation to invest in fixed income investments. Between a peak in July of 2020 and a low in October of 2022, fixed income as an asset class produced its worst returns in almost 50 years. For the calendar year, long U.S. Treasuries declined 29.3%, underperforming U.S. equities by more than 10.0%.

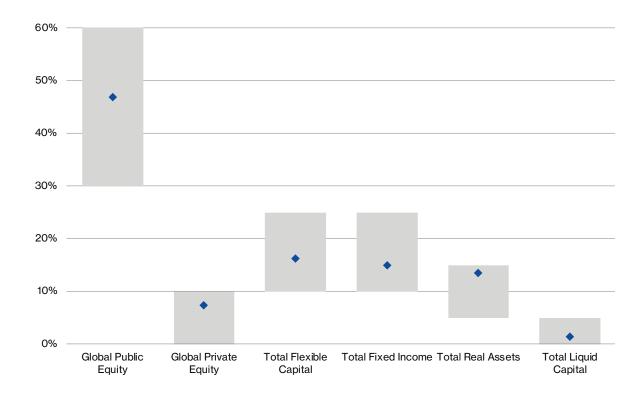
The American Technion Society's endowment declined 9.7% over the twelve months ending December 31, 2022, avoiding the double-digit losses experienced by both the broad equity and fixed income markets. A traditional 70/30 stock-bond portfolio declined more than 17%. The American Technion Society's portfolio invests in a variety of asset classes, including several that offered significant protection against broadly declining markets and others that performed extremely well.

Private real assets, for example, gained 27.6% for the year, making it the strongest segment in the portfolio for the period. Private equity also contributed to returns, rising 12.0% during the year. Public real assets grew 1.5%, adding modestly to returns. Flexible capital declined 2.4% during the year, largely succeeding in its role as a portfolio diversifier. The overall fixed income segment declined 6.9% for the year, outpacing the FTSE World Government Bond Index, which lost 18.3% over the same time period. Global public equity declined 19.1%, trailing the global equity benchmark by less than 1.0%.

While a difficult year overall in the capital markets, calendar year 2022 provided strong evidence in support of the diversified approach utilized within the American Technion Society's investment portfolio.

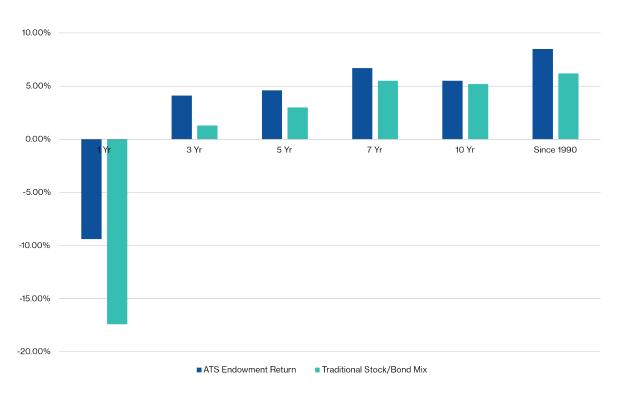
Endowment Asset Allocation

ATS' Target Allocation Policy Range is represented in grey. Actual allocation at 12/31/2022 is represented with the blue diamond.



ATS Endowment Returns

Compared to a Traditional Investment Approach



Footnote: Data is presented on a fiscal year basis. For details concerning ATS investments, please refer to annual audited financial statements on ats.org.

Why the Technion **Needs Your Support**

Those who have established endowments at the Technion have played a critical role in guiding the university as it has built itself into a powerhouse across a vast range of areas, from research to student support.

These donors' generosity will continue to ensure those initiatives are able to thrive. At the same time, Technion supporters who are thinking of establishing a new endowment, or adding to an existing endowment, can play a key role as the university launches state-of-the-art initiatives in Human Health, Sustainability, and Advanced Manufacturing — the three pillars on which the university is now focused. Whether supporting projects that provide novel treatments for a vast range of diseases, that ensure Earth's resources are protected in an era of climate change, or that dramatically improve the versatility and efficiency of numerous industries, a Technion endowment will support cutting-edge research allowing the university to improve the world in which we live.

How Can I Create or Add to an Endowed Fund?

Establishing an endowed fund with the American Technion Society is easy. The investment amount required depends on the type of fund that a donor seeks to create. For some purposes, such as professorial chairs or fellowships, a minimum gift is required, though the amount may vary depending on the purpose of the fund and the academic discipline it is designated to support. Whatever your financial objectives and your philanthropic goals, there are a range of ways to support Technion in perpetuity.

Contact your local ATS representative by visiting our website at **ats.org** or call 212.407.6300.



Thank you for your generous support.

From VISIONARY EDUCATION to a WORLD of IMPACT

The American Technion Society supports visionary education and world-changing impact through the Technion - Israel Institute of Technology. Based in New York City, we represent thousands of U.S. donors, alumni, and stakeholders who invest in the Technion's growth and innovation to advance critical research and technologies that serve the State of Israel and the global good. For more than 80 years, our nationwide supporter network has funded Technion scholarships, research, labs, and facilities that have helped deliver world-changing contributions and extend Technion education to campuses in three countries.

For more than a century, the Technion - Israel Institute of Technology has pioneered in science and technology education and delivered world-changing impact. Proudly a global university, the Technion has long leveraged boundary-crossing collaborations to advance breakthrough research and technologies. Now with a presence in three countries, the Technion will prepare the next generation of global innovators. Technion people, ideas, and inventions make immeasurable contributions to the world, innovating in fields from cancer research and sustainable energy to quantum computing and computer science to do good around the world.

