

# **Technion Fund Report**

Fiscal Year 2021





# Thank you for your generous support of the Technion Fund.

When you donate to the Technion Fund you join thousands of like-minded individuals across the U.S. who know that the Technion, Israel's first university, is the key to advancing the State of Israel, and contributing to the global good.





TECHNION STUDENTS WITH PROF. YECHEZKEL KASHI (TOP)

#### **Students**

What does it take to get an asteroid named in your honor? Ask Aseel Nama '21. When the undergraduate student discovered two previously unknown asteroids, NASA dubbed them ANI801 and ANI2001 after her name and Israel. The Technion has a culturally diverse student population of more than 14,000 students. Nama is just one of many who inspire us with their brilliance, creativity, and dedication.

- Technion students discovered that adding a virus found naturally in the ground can prevent fruit juices from spoiling — a problem that has been vexing PepsiCo for years. The breakthrough won the team first prize in the European Food Contest.
- And a team of students from the Technion and the Jacobs Technion-Cornell Institute won a coveted Cornell Tech Startup Award for their project to develop a portable defibrillator run on a mobile phone's power supply. Defi, which could save the life of someone suffering from a heart attack, was born at the first virtual Jacobs Technion-Cornell Institute's iTrek program.



PROF. DORON MELAMED (R) AND DR. REEM DOWERY

#### **Biomedicine**

The Technion is ideally positioned to meet the complex medical and health care challenges of the 21st century. With expertise in the physical sciences, data analytics, engineering, and its own medical school, Technion researchers are achieving breakthroughs that touch lives everywhere. Your contributions to the Technion Fund provide the flexibility to support potentially life-changing biomedical projects.

 Professor Avi Schroeder and Dr. Hanan
 Abumanhal Masarweh discovered that a simple product available at any supermarket

- baking soda can fight cancer. The unassuming white powder increases the efficacy of chemotherapy by changing the acidity of a cancerous tumor.
- Professor Doron Melamed's investigation into why the elderly are more susceptible to severe COVID-19 symptoms led to a discovery in rejuvenating the aging process in the body's immune system.
- Technion researchers developed a method of identifying RNA molecules that can be used to detect COVID-19 as well as earlystage metastatic cancer.

#### **Defense**

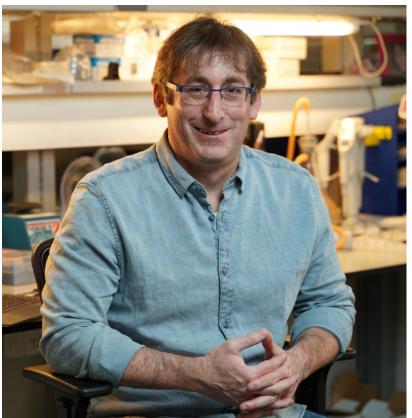
"Every field of our existence bears the stamp of the Technion," said Israeli General Moshe Dayan in 1967. The same remains true today. Home to Israel's only faculty of aerospace and a globally-ranked faculty of computer science, Technion is keeping Israel and the world safe in the air, on the ground, and in cyberspace.

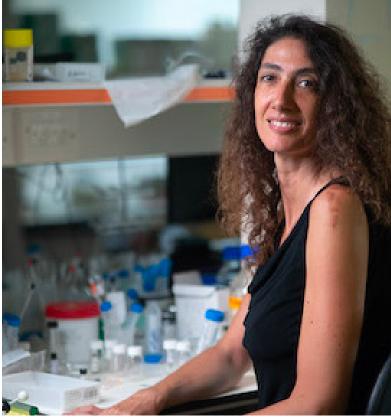
- In March 2021, the Norman and Helen Asher Space Research Institute (ASRI) launched three autonomous satellites into space

   a landmark in mini-satellite technology. The trio of satellites could be used to locate people, planes, and ships.
- The ASRI, in conjunction with the Technion Faculty of Aerospace Engineering, the only department of its kind in Israel, is also exploring innovative space projects that include the next generation microsatellite propulsion and simulations of lunar landing missions.
- CyberMDX, co-founded by alumnus Amir Magner, former head of the Israeli Prime Minister's Cyber Division, prevents hackers from infiltrating hospital health records, as well as medical devices such as X-ray, CT, and MRI machines.



PROF. BENI CUKUREL





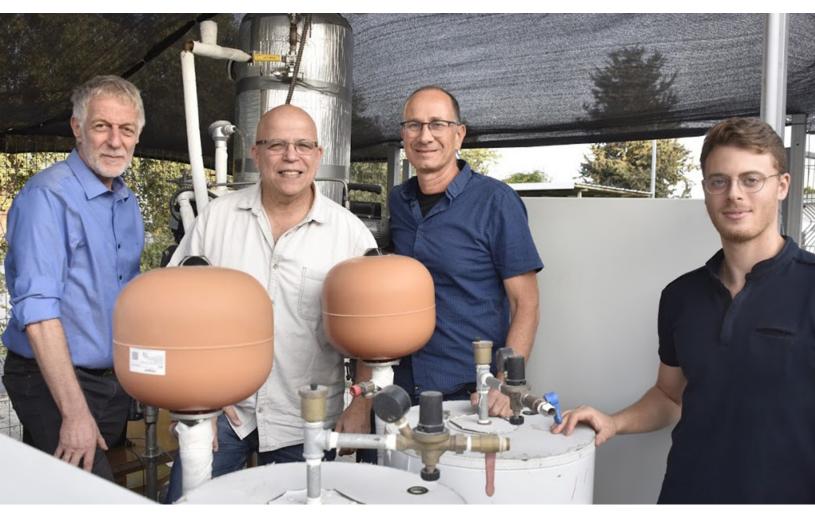
PROF. SHAI SHEN-ORR

PROF. GALIA MAAYAN

### **Faculty**

Technion faculty have created discoveries that have attracted promising students worldwide. But recruiting top-tier faculty is highly competitive. Your generosity helps the Technion to hire new faculty members and maintain its academic edge.

- Professor Roy Kishony and a team of researchers from the Technion and Maccabi Healthcare Services were first to **discover that people who receive the COVID-19 vaccine are less likely to transmit the virus.** The highly publicized study was covered in *The New York Times* and cited by Dr. Anthony Fauci during a White House briefing in February 2021.
- Professor Shai Shen-Orr's company CytoReason has collaborations with four of the world's 10 largest pharmaceutical companies including Pfizer, which is using Prof. Shen Orr's **technology to fast-track drug development for autoimmune diseases.**
- Professor Galia Maayan and doctoral student Anastasia Behar from the Schulich Faculty
  of Chemistry, in collaboration with researchers from Le Centre National de la Recherche
  Scientifique (CNRS) in Toulouse, France, led a study that discovered an artificial molecule that
  may inhibit the development of Alzheimer's disease.



(L TO R) PROF. DAVID BRODAY, PROF. ERAN FRIEDLER, ILAN KATZ, AND LIRON HOUBER

#### **Sustainability**

Climate change now threatens every aspect of human life, making Technion innovation more important than ever. Your contributions to the Technion Fund help support projects with global impact in alternative energy, water technologies, and food scarcity.

- Doral Energy-Tech Ventures plans to invest in renewable energy projects at the Technion, climate studies, and other initiatives in the Nancy and Stephen Grand Technion Energy Program, the Technion DRIVE Accelerator, and the Technion Technology Transfer Unit.
- An estimated 20% of the world's irrigated soil is too salty for agricultural use. SaliCrop, co-founded by graduate Sharon Devir '88, M.S. '91, has devised a seed **treatment** that enables crops to grow in high-saline conditions.
- Professors David Broday and Eran Friedler's H2OLL won a prestigious Water Europe Innovation Award for technology aimed at extracting moisture from the air. The innovative water technology could benefit the 670 million people around the world with no access to clean drinking water.

#### **Entrepreneurship** & Innovation

The Technion has a long history of collaboration with industry and unique opportunities for investment. More than 70% of Technion graduates are employed in the high-tech sectors that drive Israel's economic growth. The Technion Fund supports programs and competitions centered on entrepreneurship that help bring promising research to commercialization and encourage female graduates to shatter the proverbial glass ceiling.

- Professor Hossam Haick is partnering with a California-based Al company to create an easy-to-use breathalyzer test for COVID-19. Dia Nose builds on his acclaimed artificial nose technology.
- The Technion reputation has recently attracted some high-profile supporters. Bill Gates backed the hydrogen-energy company H2Pro, founded by a team led by Professors Gideon Grader and Avner Rothschild. And Hollywood's Leonardo DiCaprio invested in Aleph Farms, which produces cultivated meat based on Professor Shulamit Levenberg's research.
- Technion alumna Mor Assia '05 is CEO and co-founder of iAngels, a women-led VC firm specializing in early-stage startups. iAngels has 100 portfolio companies, in Al, food tech, digital health, cybersecurity, and more. It has presided over 22 successful exits.





15,581

Number of students for the 2020-2021 academic year

578

Faculty

11,296

Undergraduate Students

2,990

**Graduate Students** 

1,295

**Doctoral Students** 

Number of degrees awarded

1,939

199

Bachelor's

Ph.D.

827

155

Master's

M.D.



**Undergraduate Programs** 

**Graduate Programs** 



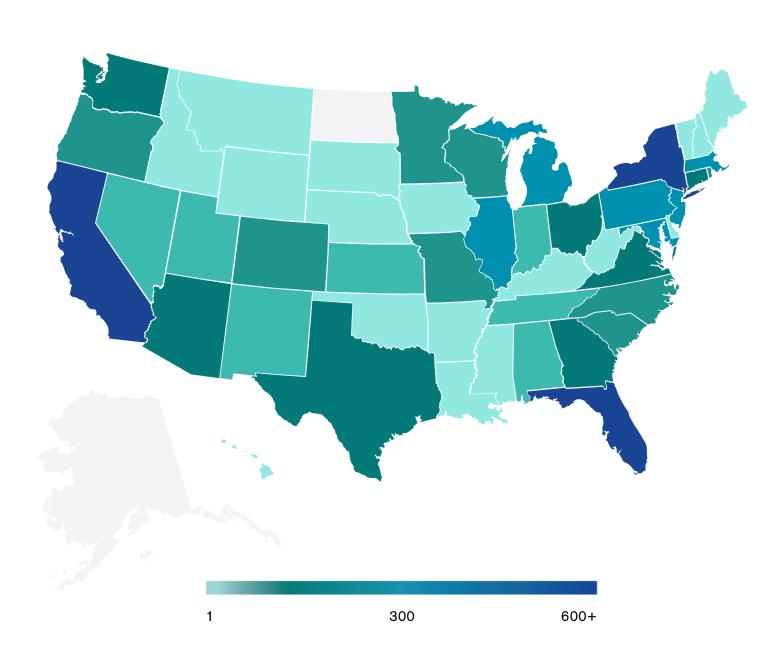
**Research Centers** 

106

**Buildings on Campus** 

## **Technion Fund**

Donors by State



By The Numbers



#### **A Lasting Legacy**

Special Ways You Can Support the Technion Today

Including the American Technion Society in your will or living trust, or as a beneficiary of your retirement plan, is a wonderful way for you to help Technion's future. These bequests have an enormous impact in educating the next generation of Technion leaders and innovators. Your support ensures the Technion continues to drive Israel's economic growth and security, and to solve the greatest challenges of the 21st century.

For more information on how best to create your bequest and become a member of the Genesis Circle, contact Judy Sager, Executive Director of Planned Giving, at <a href="mailto:judy@ats.org">judy@ats.org</a>, or call 781.531.0441.

ats.plannedgiving.org

# Powering ISRAEL. Changing the WORLD.

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 over 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.



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