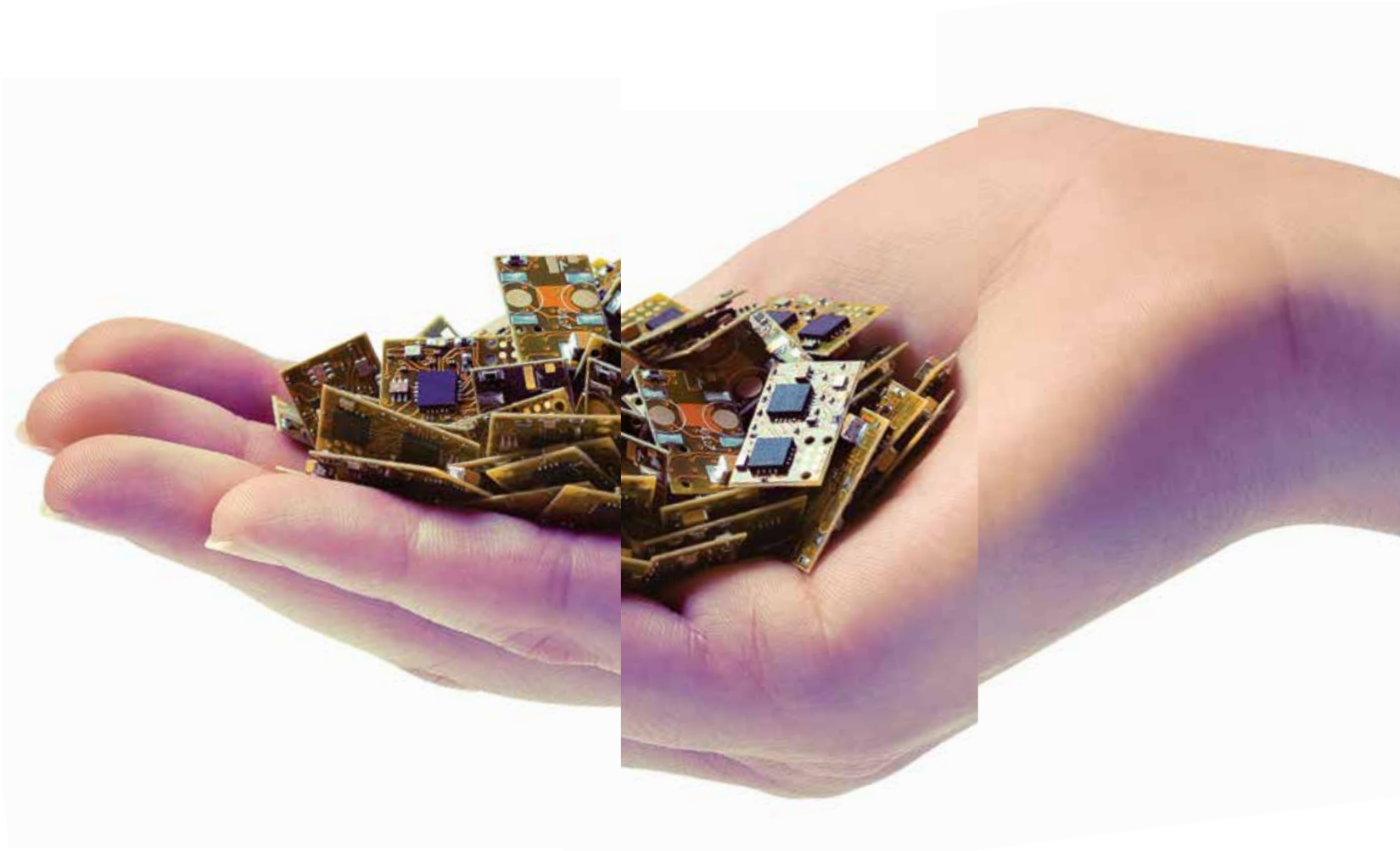


powering *invention*»

Tel Aviv University

2015 Annual Report

Oxygen for the mind

inspire

\in-ˈspī(-ə)r\

Definition: To exert an animating or exalting influence

Related to 'spirit'

» *Middle English enspiren > Old French enspirer > Latin Īnspīrāre >'into' + 'to breathe'*

Loan-translation of the Ancient Greek πνέω (pnéō, 'breathe')

It's what we do at
Israel's innovation university

לימלאנו

Activated by social protest

Dr. Orli Ronen
Porter School of Environmental Studies

Project: Laboratory for Urban Innovation and Sustainability for making cities smarter and residents more engaged.

Uniqueness: Helps cities leverage technology for the well-being of all.

Genesis: "For me, the social protest in Israel of summer 2011 was a turning point. The tent camps in Tel Aviv got city residents actually talking with each other about weighty issues for the first time."

Last word: "Cities are the problem of the 21st century, but also the solution."

Moved by bustling streets

Eyal Feder
MA student in the Adi Lautman Interdisciplinary Program for Outstanding Students; Academic Coordinator at TAU's Orange Institute for Internet Studies; Co-founder of ZenCity, an urban data start-up.

Project: "AlterNative," an app for choosing how to get around the city based on factors like cost, time and carbon footprint, while also generating useful data.

Kudos: Won 1st Prize in the 2014 Tel Aviv Municipality/EcoMotion app2go Competition.

Messy or neat? "Mess is part of the creative process."

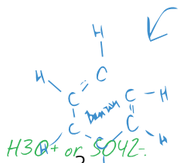
Gets best ideas falling asleep

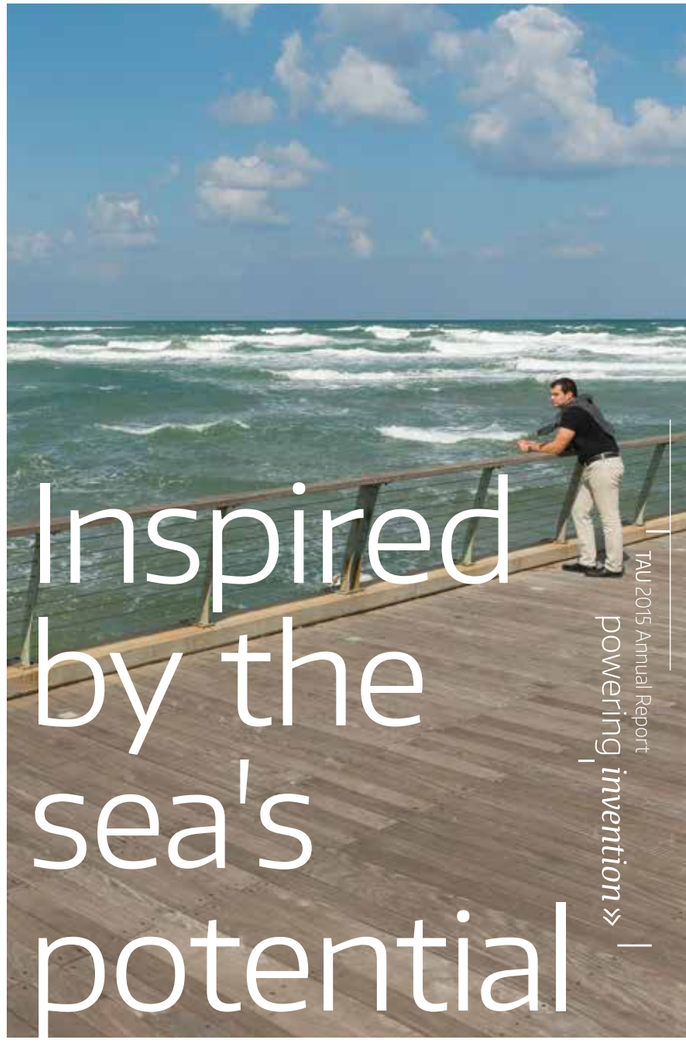
Yael Inbar
PhD student at the Faculty of Management

Project: Researching social dynamics in crowdfunding sites and how they affect funding outcomes.

Aim: Turn crowdfunding into active social networks that will benefit both entrepreneurs and backers.

Why is Israel so innovative? "The state had to build itself up in a very short time and that spirit continues until today."





Inspired by the sea's potential

Dr. Alexander Golberg
Porter School of Environmental Studies

Project: Environmental Bioengineering Laboratory for creating offshore bio-refineries that will turn marine algae – or seaweed – into biofuels, industrial chemicals and protein-rich food.

Aim: Providing Israel's fuel transportation and industrial needs, as well as thousands of jobs.

Uniqueness: Biomass farming in the sea combined with energy-efficient processes.

Measure of success: "When we see vast algae plots along Israel's coastline."

Defense Startups by Graduates

1. **Visual Defence –** surveillance technology for homeland security – Barry Tal (BA, Business Administration)
2. **Camero –** tactical through-wall imaging solutions – Amir Beeri (BS & MSc, Electrical Engineering)
3. **WeCu Technologies, Ltd. –** WeCu Security System "terrorist detector" – Ehud Givon (BSc, Mechanical Engineering)
4. **ACE IntelliGym –** video software for fighter-pilot training – Danny Dankner (LLB & MBA)
5. **3DOR Simulations –** customized software for complex, 3D operational defense simulations – Amir Fishman (BSc, Mechanical Engineering), Oren Cohen (BSc & MSc, Electronics and Electrical Engineering), Ilan Grinberg (BSc, Mechanical Engineering)

Inspired by desert locusts

Dr. Gabor Kosa
School of Mechanical Engineering
Project: Imitate insects' biomechanics to add mobility to a mini-drone.
Aim: Remote sensing and surveillance for defense applications.
Uniqueness: Weighs only 20 grams and jumps 3 meters (10 feet) – the highest for jumping robots.
Team members: Locust expert Prof. Amir Ayali of the Department of Zoology and Sagol School of Neuroscience; Dr. Uri Ben-Hanan, Ort Braude College.
Innovators: Born or nurtured? "Innovators are born. I've been inventing since I was 3 years old."

"My inspiration came from my internal drive for survival at any cost."

–Brig. Gen. (res.) Dr. Daniel Gold, leader of Iron Dome and graduate of TAU (PhD, Electrical Engineering & PhD, Business Management)

link

\'liŋk\

'Connect' *> of Scandinavian origin; akin to Old Norse hlekkr 'chain'*

'Light the way' *> Latin linchinus 'candle' > Greek lychnos*

Today: Hypertext

Architecture + Genetics

Tom Shaked, Nimrod Serok and **Shany Tal**
MA students, David Azrieli School of Architecture

Project: "Self-evolving" architectural designs inspired by the science of genetics.

Why? Architecture is increasingly looking to nature in the quest for new forms and shapes.

Initiator: Dr. Eran Neuman, Head of the Azrieli School, who taught a course on the subject at the Architectural Fabrication Digital Lab and curated an exhibition on its early pioneer, David Yannay, at the Tel Aviv Museum of Art.

"Innovation is making a connection that didn't exist before between two worlds."

—Dr. Ricardo Tarrasch

Motor coordination is the combination of body movements created with the kinematic (such as spatial direction) and kinetic (force) parameters that result in intended actions.

Attention + Motor Skills

Dr. Ricardo Tarrasch
Jaime and Joan Constantiner School of Education and Sagol School of Neuroscience

Project: Studying the relationship between children's attention capabilities and their motor coordination.

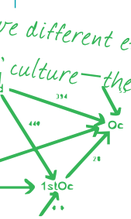
Scope: This year, 300 kids at 3 schools; next year, 1,000 kids at 10 schools.

Aim: Incorporate findings into nationwide "mindfulness" training for children that helps them focus their attention better and develop greater empathy for others.

Uniqueness: "We teach 'ninja walking,' 'yoga for lions' and 'mindful eating.'"

#1 trait of innovators? "The search for more."

Celebrating breakthroughs: "I goof off wildly with my two children."



ve different emphases—one culture—there is much that

Doing Business + Doing Good

Dr. Aliza Belman Inbal
Hartog School of Government and Policy

Project: Pears Challenge for Innovation and International Development – a competition for bringing Israeli technologies to Africa.

Uniqueness: Bolstering Israel's impact on poorer countries through private sector-driven innovation rather than NGO activity.

2014 prize winner: "Livingbox," a self-sustaining "mini-farm" created by Israeli entrepreneurs that grows vegetables anywhere, without the need for soil.

#1 trait of innovators? "Humility and stubbornness."

"The hardest part of innovation is knowing whether to stick to your guns or pivot to a whole new idea."

—Dr. Aliza Belman Inbal

Food + Power

Dr. Rafi Grosglik
Department of Sociology and Anthropology

Project: Researching the political, economic and cultural forces behind the organic food movement.

Inspiration? "When I took a year off from my BA studies to learn Chinese cooking at an academy in Guangzhou, China."

Food utopia? "When food sources become transparent, local, sustainable, natural and not part of an endless global food chain. Healthy food would be the democratic right of all."

Connecting students with major social issues
care about, and providing expert academic an
vocational training before the students head ou
volunteer.

Students + Social Leadership

Racheli Warshavsky
Head, Unit for Social Involvement, Ruth and Allen Ziegler Student Services Division

Project: Mithabrim ("Connections") social leadership center for the benefit of civil society.

Aim: Connecting students with the major social challenges in Israel, and providing expert vocational training before the students head out to volunteer.

Partners: 100 Israeli NGOs, companies and agencies.

Measure of success: Graduates remain socially active in their personal and professional lives.

Greenhouse Gas + Chemistry

Dr. Roman Dobrovetsky
Organic Catalysis Chemistry Lab, Raymond and Beverly Sackler School of Chemistry

Project: Transforming chemical garbage – like CO_2 – into valuable substances for industries such as plastics, drugs, fuels and fertilizers.

Measure of success: When industrial processes use earth-abundant elements that are cheap and non-toxic.

Best ideas? "Come from unexpected results. Serendipity is a strong tool in science."

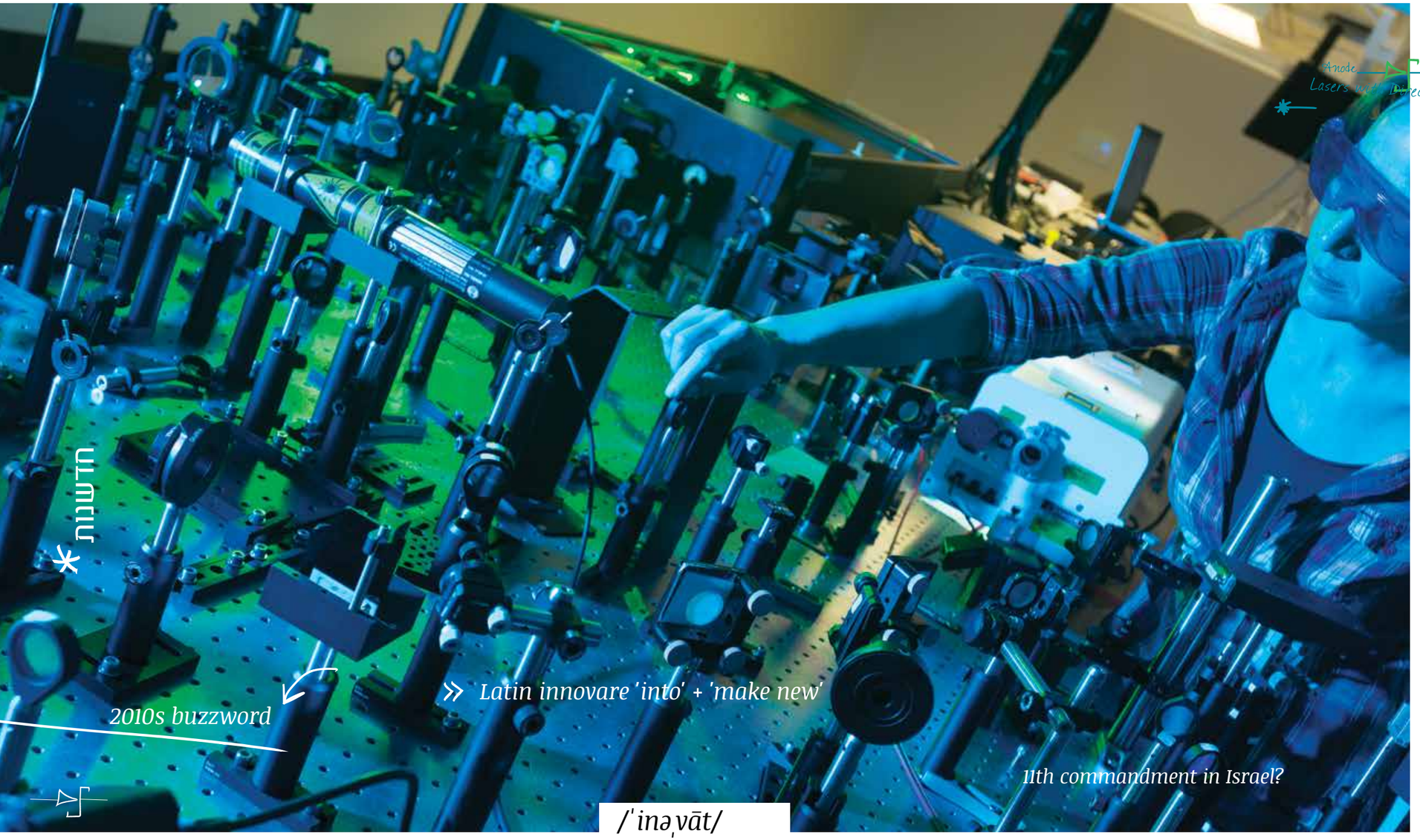
Health + Social Media

Prof. Nurit Guttman
Department of Communication

Project: Digital Social Marketing Campaign to Promote Health.

Aim: Using social media to give people health information and tips on what's important to them, rather than generic directives.

Uniqueness: The TAU team not only researched and tested what works in the community, but was given a joint budget by three government offices to create and run the national campaign.



Extreme Science

Lilya Lobachinsky, PhD student
Laboratory of Dr. Alon Bahabad, School of Electrical Engineering

Project: Researching extreme non-linear optics, which involves converting visible laser light to light of exceptionally short wavelengths.

Uniqueness: The lab-generated light pulses are the briefest event that can be produced by mankind.

Aim: Controlling the light source to track natural phenomena occurring in miniscule space and time scales – such as the motion of electrons in atoms.

Long-term usefulness: Ultra-fast optical communications and efficient light harvesting for energy purposes.

Immersive Learning

Startups by Non-Techie TAU Alumni

1. **Preen.Me –** transforming how women shop for beauty products – Tamar Yaniv (BA, Sociology & Liberal Arts)
2. **Evolero –** event and conference management – Tal Shoham (LLB & BA, Eastern Asian Studies)
3. **Insights –** crowd-consulting app – Gal Alon (BA & MSc, Public Policy, Management and Media)
4. **MindCET –** educational technology – Avi Warshavsky (MA, Philosophy)
5. **Marketing Envy –** out-sourced startup marketing – Amit Lavi (BA, Political Science and Middle Eastern History)

Udi Aharoni, CEO and Academic Director
Lahav Executive Education, Faculty of Management

Project: Executive programs in innovation and entrepreneurship combining cutting-edge academic training with best practices.

Aim: Imparting Israeli and TAU expertise to business and government leaders.

Magnet for: Groups from China, Korea, Brazil and other countries who want to learn the secrets of Israel's start-up success.

1. Process

Social Profit

Dr. Yifat Reuveni
Faculty of Management

Project: Israel's first course in Social Entrepreneurship and Innovation that equips students with both theory and practical tools to help social enterprises become financially independent.

Aim: Nurturing a generation of socially conscious businesspeople.

Measure of success: Twelve successful business plans to date, including one for integrating people with autism into the IDF, an agricultural project in Africa, and "green" public housing.

Why is Israel so innovative? "Survival mode – it's in our DNA."

Cycle of Success

Elena Donets, CEO

Project: StarTAU – Israel's largest non-profit incubator for young entrepreneurs.

Aim: Providing courses, mentors, networking and pitch events – everything for turning start-up ideas into reality.

Measure of success: "Students who came in for help with their start-ups are now coming back as mentors."

#1 trait of innovators? "They are leaders."

Innovation Gets Schooled

Dr. Miri Yemeni
Jaime and Joan Constantiner School of Education

Project: Researching entrepreneurship among school principals.

Why? With the growing decentralization and competitiveness of schools, along with funding cuts, school principals must become business-oriented and learn to use resources in creative ways.

Define innovation: "As my 8-year-old son said, 'Innovation is like a home: You can renovate and improve it, or you can build it from scratch.'"

#1 trait of innovators? "They have a clear vision, they act as a team and they are not constrained by resources."

A Safer Diagnosis

Prof. (emer.) Gil Navon
Raymond and Beverly Sackler School of Chemistry

Team member: Prof. Ilan Tsarfaty, Head of the Sackler Cellular and Molecular Imaging Center, Sackler Faculty of Medicine

Project: New MRI-based technology for diagnosing cancerous tumors that, unlike PET scans, does not use radioactive materials. Received investment from TAU's Momentum Fund.

Measure of success: "If it works in human clinical trials, it will completely change the game for diagnosing and testing cancerous tumors."

On new ideas: "When someone has an idea, at least 5 other people around the world have thought of it too. The question is, who will be the one to implement it?"

2. Product

Top TAU Biomed Start-ups

1. **Brainstorm Cell Therapeutics Inc. –** stem cell therapies for ALS, MS and Parkinson's – Profs. Eldad Melamed and Daniel Offen (Medicine)
2. **ExceeMatrix –** novel high-strength collagen for biomedical devices – Profs. Yehuda Benayahu (Life Sciences) and Dafna Benayahu (Medicine)
3. **NeuroPhage Pharmaceuticals –** therapies for diseases like Alzheimer's – Prof. Beka Solomon (Life Sciences)
4. **Quiet Therapeutics –** a new class of cancer treatments – Profs. Rimona Margalit and Dan Peer (Life Sciences)
5. **Savicell Diagnostics –** in vitro diagnostic test for early detection of immune system diseases – Prof. Fernando Patolsky (Exact Sciences)

Diving into the Gene Pool

Dr. Noam Shomron
Sackler Faculty of Medicine, Sagol School of Neuroscience and Edmond J. Safra Center for Bioinformatics

Project: Personal Human Genome Viewer, licensed to start-up Variantyx.

Aim: Catching rare and undiagnosed diseases with an easy, cost-effective DNA kit.

Measure of success: "If we manage to save many lives with our tests."

#1 trait of innovators? "Never taking anything for granted."

Toys as Tools

Digital Relations

Rony Kahana, BA student
Steve Tisch School of Film and Television

Project: The short film, *David555David* – part of the "Digital Relations" student film series.

The story: Rony captures the less romantic side of online relationships in a film about her disabled father's digital dating experience.

Innovation on campus: "TAU's film school, unlike others, lets you choose your own curriculum so that you never have to narrow your scope."

Prof. David Mioduser, **Dr. Orly Lahav** (above right) and **Dr. Vadim Talis** (left)
Jaime and Joan Constantiner School of Education

Project: Smart Lab – R&D of robotic toys and virtual spaces that foster technological thinking, formal reasoning, design skills and spatial memory among children.

Method: TAU PhD and MA students with backgrounds in science education, special education and computer science work alongside faculty members.

Aim: Creating a new generation of "young engineers," starting as early as kindergarten.

Bureaucracy
—Plant scientist Prof. Amir Sharon

When people are too pleased with what they have and don't seek change
—PhD management student Yael Inbar

No academic freedom
—VP for R&D Prof. Yoav Henis

Too much worry and stress
—BA student Rony Kahana

Being judgmental
—Alumna Maayan Cohen

Optimism
—Dr. Orli Ronen

Curiosity
—Prof. Amir Sharon

Other innovations
—Computer scientist Prof. Sivan Toledo

Great minds, unique in how they work
—Rector Prof. Aron Shai

The privilege to think and take risks
—Communication scholar Prof. Nurit Guttman

What holds innovation back?

Cynicism
—Urban studies scholar Dr. Orli Ronen

Accepting **no** for an answer
—Social entrepreneurship expert Dr. Yifat Reuveni

Being too comfortable
—Venture specialist Prof. Yesha Sivan

When you don't know what your goal is
—Biomedical engineer Dr. Natan Shaked

Fear
—Education researcher Dr. Ricardo Tarrasch

Everyday chores
—MA student Eyal Feder

Lack of funding
—Environmentalist Dr. Alexander Golberg

What spurs it on?

Chaos and danger
—Dr. Ricardo Tarrasch

The desire to succeed
—Optics engineer Prof. David Mendlovic

Acting as a team; never "I did" but always "we did"
—Entrepreneurship researcher Dr. Miri Yemini

Urge to find new things
—Chemist Prof. (emer.) Gil Navon

Morality
—Sociologist Dr. Rafi Groslik

Communication
—Dr. Alexander Golberg

A supportive environment
—Medical researcher Dr. Noam Shomron

Funding and good students
—Engineer Dr. Gabor Kosa

Soaring Aspirations

TAU student team in StarTAU's "Bee" accelerator program for start-up founders

Project: CoLab cloud platform for collaboration between researchers.

Aim: Introducing new tools for managing and accelerating research.

Measure of success: "When the top 100 universities in the world collaborate on our platform."

#1 trait of innovators?: "Resiliance. Mental toughness. Chutzpah."

Definition: Something daring, risky or of uncertain outcome

Middle English venteren > Old French aventure 'adventure'

Noun and verb

\ˈven(t)-shər\

venture

יזמות

Erez Sitecool, 28
BSc student in Engineering

Udi Menkes, 27
BSc student in Engineering and Management

Arnon Karny, 31
BSc student in Engineering

Rawan Hasan, 26
MSc student in Chemistry

Ziv Ilan, 29
BSc student in Engineering

Venturing Forth

Prof. Yesha Sivan
Faculty of Management

Project: Coller Institute of Venture at TAU.

Aim: Researching and improving the global venture ecosystem.

Uniqueness: "We're creating a database on the history of venture that can also help design the future."

Measure of success: "Our policy recommendations will be applied by governments and organizations the world over."

#1 trait of innovators? "Grit."

Top TAU Alumni Exits

1. **Waze navigational app –** sold to Google for $1 billion – Uri Levine (BA, Economics) and Ehud Shabtai (BSc, Computer Science and Philosophy)
2. **Viber mobile messaging company –** sold to Japan's Rakuten for $900 million – Talmon Marco (BSc, Computer Science and Management)
3. **Maker Studios video company –** sold to Disney for $500 million – Ynon Kreiz (BA, Economics and Management)
4. **Check mobile billing company –** sold to Intuit for $360 million – Guy Goldstein (BA, Software Engineering and Management)
5. **KAI pharmaceuticals –** sold to Amgen for $315 million – Prof. Daria Mochly-Rosen (BSc, Life Sciences)

Your Heart in Your Hands

Maayan Cohen (below right)
MBA graduate, Faculty of Management; start-up founder

Project: Hello Heart – a mobile app that helps hypertension patients understand and manage their medical data. www.helloheartapp.com

Uniqueness: No other app takes lab results directly from clinics and presents them in an easy-to-grasp visual format, together with tips and tools for monitoring health.

Measure of success: The beta version is already connected to 50% of US hospitals and clinics.

Definition of innovation: "I don't like defining things. I like doing them."

Smart Giving

Dafna Meitar-Nechmad (left) and **Edna Fast**
Attorneys-at-law and philanthropists

Project: Institute for Law and Philanthropy, Buchmann Faculty of Law.

Aim: Overhauling the philanthropic system in Israel by removing bureaucratic, legislative and fiscal obstacles to social initiatives.

Team members: Law professor Yoram Margalioth and Advocate Galia Feit.

Uniqueness: The initiative came from Meitar-Nechmad and Fast, who are teaming up with other donors to support academic and policy research on Israeli giving.

Cyber Guard

Prof. Yuval Shavitt
School of Electrical Engineering and Blavatnik Interdisciplinary Cyber Research Center

Project: BGProtect – a TAU spin-off company that keeps the Internet safe from digital hijackings.

Uniqueness: First to provide large-scale monitoring of the Internet from thousands of locations and alert clients about cyberattacks in real time.

Messy or neat? "Messy, but my computer files are exceedingly well-organized."

3D Medical

Dr. Natan Shaked
Department of Biomedical Engineering and Center for Nanoscience and Nanotechnology

Project: Compact add-on component that transforms ordinary microscopes in doctor's offices into powerful 3D diagnostic tools. Received investment from TAU's Momentum Fund.

Aim: Improving IVF success rates; cancer diagnosis and monitoring; and neuronal imaging.

100 Tags = 100 Million Locations

Prof. Sivan Toledo
Blavatnik School of Computer Science

Team members: Profs. Tony Weiss and Arie Yeredor, School of Electrical Engineering; Prof. Ran Nathan of Hebrew University, Director of the Minerva Center for Movement Ecology.

Project: Wildlife tracking system that enables ecologists to solve, for the first time, unanswered questions about animals' territory and movements.

Uniqueness: Uses "reverse GPS" technology to create tracking tags that are smaller, cheaper, more accurate and longer lasting than GPS-based ones.

Super Wheat

Prof. Amir Sharon and **Dr. Eitan Millet**
Institute for Cereal Crop Improvement and Manna Center for Plant Biosciences

Project: A new wheat variety resistant to devastating rust diseases. Received investment from TAU's Momentum Fund.

Aim: Saving the 15-50 million tons of wheat lost to rust diseases annually.

Uniqueness: Drawing upon the one-of-a-kind Harold and Adele Lieberman Gene Bank to transfer beneficial traits of wild wheat to cultured wheat.

Mobile Lab

Prof. David Mendlovic, serial entrepreneur
School of Electrical Engineering

Team member: MEMs specialist Prof. Slava Krylov, TAU School of Mechanical Engineering

Project: Unispectral Technologies start-up. Received investment from TAU's Momentum Fund.

Uniqueness: Developing smartphone cameras so sensitive and powerful that they can read the chemical composition of almost any object.

Applications: Detection of fake drugs or foodstuffs, industrial quality control, consumer uses.

Head: Prof. David Mendlovic
School of Electrical Engineering

Aim: Creating the conditions and providing the resources to make the entire campus – and beyond – even more entrepreneurial.

Uniqueness: As opposed to the other major accelerators operating in the Tel Aviv area, the TAU one will add an academic environment to the mix.

Measure of success: Already have several VC funds, companies and private investors showing interest in the project.

Definition of innovation: "When someone creates something you don't have and that you can use."

Last word: "We not only serve the university community across the disciplines, we have a national purpose to continue the Israeli drive toward innovation."

Project: TAU Center for Innovation and Entrepreneurship

TAU Bridges to Innovation

1. **Momentum Fund –** $23.5 million investment fund supporting 12 TAU discoveries so far
2. **Colton Family Next Generation Technologies Institute** and **Miles S. Nadal Institute for Technological Entrepreneurship –** philanthropic funds supporting 21 projects to date
3. **BrainBoost –** Sagol School of Neuroscience framework for seeding 10-20 projects with industrial promise
4. **Center for Innovation in Transportation –** Joint TAU-government accelerator supporting 5 new eco-friendly transportation ventures
5. **BioMedTech@TAU –** Biomedical engineering competition to seed new clinically oriented technologies in collaboration with hospitals

What's the most important change you hope to see in 50 years?

Livable cities

Peace

Technology used for society and not against it

A stronger Israel

Personalized medicine

An end to global poverty

Green energy

Cancer, Alzheimer's and other debilitating diseases eradicated

People talking to each other again

Solidarity

Something I can't even imagine today

What do you hope stays exactly the same?

Ability to disconnect from the grid

Warmth of the Israeli people

Hope

Size of the polar ice caps

People concerned about each other

All the good stuff!

Man

Hmmm...chocolate

That in Israel the streets will still be safe at night

Imagination of children

Funny and creative people

Nothing. We can do better on all fronts.

Reports

Chairman's Message

We live in a globalized world in which the markets for goods, capital and ideas are interconnected. Scientific progress and the creation of knowledge offer great opportunities that can be shared globally for the benefit of mankind. That is why progressive-minded institutions such as Tel Aviv University must operate in the global arena and actively respond to major trends.

The first global trend is the rising East. In 1990, China and India together manufactured about 7 percent of world output; in 2015 that figure was up to about 25 percent. TAU has led Israel's universities in recognizing this change in the center of gravity of the world economy. Expanding our links with Asia has become a strategic goal. The University has developed ties with 30 leading Chinese universities; initiated the robust India-Israel Forum for academic and business initiatives; and established programs with Singapore and Korea. And that is just the start.

A second global trend is openness and transparency. Simply put, nations that aspire to excellence and develop open societies and transparent governance succeed more than those who do not. Here, our University contributes significantly in the areas of law, economics, political science and public policy.

A third global trend is the ascendance of the knowledge economy. Education imparts the ability to learn, to adjust, to seize opportunities and to innovate. Tel Aviv University excels in reinforcing innovation and expertise – in Israel and internationally. With the continued backing of our Governors and Friends, TAU will play an even greater role in on shaping our shared, interconnected global future.

Prof. Jacob A. Frenkel
Chairman, Board of Governors
Tel Aviv University

President's Message

The modern university as we know it has not changed in about 300 years. Perhaps it's time to rethink the role of this institution in society?

Undoubtedly universities should continue pursuing research, disseminating knowledge and teaching students, but they are also increasingly called upon to be relevant. We are seeing a growing inter-relationship between academia, industry and society – and not just on the local level but on the global one. Universities need to identify new opportunities for connecting to the urgent issues of the day: health, security, climate and sustainability, human rights, economic justice, and many more.

One major initiative Tel Aviv University recently launched is the Momentum Fund, an investment fund for early-stage technologies that have great potential to solve real-world problems. Managed by Ramot, TAU's technology transfer company, the $23.5 million fund's investors include the giant Indian conglomerate, Tata, and the Singaporean government's Temasek. Three more strategic growth projects are the Blavatnik Initiative, the Claire Maratier Estate and the Steve Tisch School of Film and Television, all of which will significantly boost TAU's impact across the sciences, humanities and arts.

TAU has been globalizing its campus for some years now, but increasingly we are pinpointing specific areas for intensive joint cooperation. Water research with Mexico, food security with Africa, and nanoscience with China – these are a brief sampling of dozens of collaborations and TAU is developing many more. In all our efforts, the University is privileged to partner with like-minded supporters who believe in TAU's relevance for national and global progress – and are dedicated to strengthening it.

Prof. Joseph Klafter
President
Tel Aviv University

TAU Officers

Lay Leaders

Prof. Jacob A. Frenkel

Chairman of the Board of Governors

Dr. Giora Yaron

Chairman of the Executive Council

Dr. h.c. Karl-Heinz Kipp

Deputy Chairman of the Board of Governors

Mr. Robert Goldberg

Mr. Harvey M. Krueger

Dr. Raymond R. Sackler

Mr. Michael H. Steinhardt

Chairmen Emeriti of the Board of Governors

Dr. h.c. Josef Buchmann, Dr. h.c. Stewart M. Colton, Mr. James Dubin, Prof. François Heilbronn, Dr. h.c. Raya Jaglom, Dr. h.c. Adolfo Smolarz, Dr. h.c. Melvin S. Taub

Vice Chairpersons of the Board of Governors

Campus Leaders

Prof. Joseph Klafter
President

Prof. Aron Shai
Rector

Mr. Mordehai Kohn
Director-General

Prof. Raanan Rein
Vice President

Prof. Yoav Henis
Vice President for Research and Development

Mr. Amos Elad
Vice President for Resource Development

Prof. Dina Prialnik
Vice Rector

Prof. Dany Leviatan
Pro-Rector

Prof. Moshe Zviran
Dean of the Faculty of Management

Prof. Eyal Zisser
Dean of the Lester and Sally Entin Faculty of Humanities

Prof. Ron Harris
Dean of the Buchmann Faculty of Law

Prof. Yossi Rosenwaks
Dean of the Iby and Aladar Fleischman Faculty of Engineering

Prof. Daniel Chamovitz
Dean of the George S. Wise Faculty of Life Sciences

Prof. Tammie Ronen
Dean of the Gershon H. Gordon Faculty of Social Sciences

Prof. Ehud Grossman
Dean of the Sackler Faculty of Medicine

Prof. Zvika Serper
Dean of the Yolanda and David Katz Faculty of the Arts

Prof. Yaron Oz
Dean of the Raymond and Beverly Sackler Faculty of Exact Sciences

Prof. Yoav Ariel
Dean of Students

Distinctions

Prof. Halina Abramowicz, Exact Sciences, Member of the Polish Academy of Arts and Sciences

Prof. Ran Canetti, Exact Sciences, Fellow of the International Association of Cryptologic Research

Mr. Shimon Cohen, Arts, Israeli Minister of Culture and Sport Special Prize in Memory of Arik Einstein

Prof. Hanoch Dagan, Law, Shneior Zalman Heshin Prize for Academic Excellence in Law – Senior Researcher category

Dr. Irit Degani-Raz, Arts, Mouton d'Or Award

Prof. Eddie Dekel, Social Sciences, Vice President of the Econometric Society; National Science Foundation Award

Prof. Nachum Dershowitz, Exact Sciences, International Conference on Rewriting Techniques and Applications Test of Time Award

Prof. Chaim Gans, Law, Fellow of the Institute for Advanced Studies at Princeton University and the Institute for Advanced Studies in the Humanities at the University of Edinburgh

Prof. Itzhak Gilboa, Social Sciences, Member of the Econometric Society Council

Prof. Eliezer Gileadi, Exact Sciences, 2014 Israel Chemical Society Medal

Prof. Dan Halperin, Exact Sciences, Fellow of the Institute of Electrical and Electronics Engineers

Prof. Eran Halperin, Exact Sciences, Juludan Research Prize

Prof. Danny Lazar, Arts, 2014 Rechter Prize for Best Project in Israel

Dr. Vered Maimon, Arts, College Art Association Millard Meiss Publication Award

Prof. Yishay Mansour, Exact Sciences, ACM Fellows Award

Prof. (emer.) Tsevi Mazeh, Exact Sciences, 2015 Lecar Prize

Prof. Tova Milo, Exact Sciences, Member of the European Academy of Science

Prof. Abraham Nitzan, Exact Sciences, 2014 Israel Chemical Society Medal

Prof. Yaron Oz, Exact Sciences, Alexander von Humboldt and the Carl Friedrich von Siemens Award

Prof. Ariel Porat, Law, EMET Prize for Science, Art and Culture; member of the Israel Academy of Sciences and Humanities

Prof. Simcha Ronen, Management, Fellow of the International Association of Applied Psychology

Prof. Ronitt Rubinfeld, Exact Sciences, ACM Fellows Award

Prof. Galia Sabar, Humanities, Certificate of Recognition for Tel Aviv residents who actively work for the welfare of residents from developing nations

Prof. (emer.) Leon Shidlowsky, Arts, Premio Nacional de Música 2014

Prof. Yossi Shiloh, Medicine, Olav Thon Foundation Prize

Prof. Ran Spiegler, Social Sciences, Michael Bruno Memorial Award

New Projects

Academic Development

- Support for the Argentinean Friends Advanced Studies Program in Life Sciences – Latin America
- Support for the Israel and the Middle East Workshop – David Becker and Ann Peckenpaugh, Becker Philanthropic Fund, USA
- Blavatnik President's Faculty Recruitment Discretionary Fund – USA
- Support for the Minerva Humanities Center and Cohn Institute for the History and Philosophy of Science and Ideas – Bertram and Barbara Cohn, USA
- Support for the Institute for National Security Studies – Crown Family Foundation, USA
- Support for the Sofaer International MBA Program – Richard Elman, USA
- Shalom Rosenfeld Institute for Media of the Jewish People – Tamar Gay, Israel
- Estate of Claire Maratier – France
- Support for the Institute for National Security Studies – Stewart Resnick, USA
- The Weiss | Shaoul Fund for Visiting Scholars and Fellows – USA
- Support for the Institute for National Security Studies – Jeffrey Silverman, USA
- Steve Tisch School of Film and Television – USA
- Support for the European Studies Program – Volkswagen AG, Germany
- Whitman Family Center for Coexistence at the Leon Recanati Graduate School of Business Administration – USA
- Zambian Jewish Community Public Health Exchange Program – Zambia
- Mexico Water Institute – CONAGUA, Mexican National Water Commission

Research

- Support for the Center for Renewable Energy – Tomer Amioz, Israel
- Support for Renewable Energy Research Equipment – Australian Friends of Tel Aviv University (Victoria)
- Blavatnik Center for Drug Discovery – USA
- Blavatnik Computer Science Research Fund – USA
- Blavatnik Interdisciplinary Cyber Research Center – USA
- William F. Cohen Nanotechnology Chronic Lymphocytic Leukemia Fund – USA
- Claudia and Ricardo Flomenbaum Research Fund for Biochemical Visualization of Molecular Processes – Latin America
- Di Laudadio Family Laboratory for Photolithography – Ethel and Mauricio Di Laudadio, Latin America
- Support for the TAU-UCSD Cosmology Collaborative Research Program – The Joan and Irwin Jacobs Fund, USA
- Research Fund for Prof. Dan Peer – Leonard Mark, USA
- Research Fund for Dr. Tal Dvir – Moxie Foundation, USA
- Ruhama Rosenberg Chair in Jewish Studies – USA
- Raymond and Beverly Sackler Center for Computational Molecular and Materials Science in honor of President Joseph Klafter – USA
- Raymond and Beverly Sackler Fund for Convergence Research in the Biomedical, Physical and Engineering Sciences – USA
- Raya Strauss Center for Family Business Research – Israel
- George S. Wise Chair in Astronomy and Physics – USA
- George S. Wise Chair in Life Sciences – USA

Campus Development

- Erez Flekser Classroom – Flekser family, Israel
- Nathan, Anne, Kim and Julian Geller Accessible Campus Project at TAU – USA
- Classroom in Memory of Engineer Avraham (Romek) Halpern and Tzippora (Pina) Halpern – Hal-Dor Import & Wholesale of Steel Products Ltd., Israel
- Support for the Lorry I. Lokey Graduate Center at the TAU Business School – USA
- Mia and Mile Pinkas Accessible Learning Center and Fund – Latin America
- Support for the Rothstein-Willamowsky Post-Graduate Dental Clinics – Drs. Garry Rayant & Kathy Fields, USA
- Support for the Steinhardt Museum of Natural History and National Research Center – Michael H. Steinhardt, USA
- Zambian Jewish Community Public Health Wing – Zambia

Student Aid and Fellowships

- Erika and Moses Beisky Estate Scholarship Fund for Graduate Students of Medicine – Israel
- Blavatnik Student Film Production Fund – USA
- Boniya and Moshe Boroshek Estate Scholarship Fund for Students of Computer Science and High-Tech – Israel
- Crown Family Foundation Graduate Doctoral Fellowships in the Sciences – USA
- Fellowship Fund – Anonymous, Switzerland
- Scholarship Fund for Students of Middle Eastern and African Studies – Doron Halpern, Israel
- Scholarships at the Eli Hurvitz Institute for Strategic Management – Zvi Meitar, Israel
- Scholarship Fund – Mildred Niren Endowed Estate, Canada
- Doctoral Fellowship Fund in memory of Rabbi Dr. Ignac Pap – Liechtenstein
- Support for Operation Protective Edge Emergency Campaign: Scholarship Fund for Reserve Combat Soldiers – Peamey Tikva Ltd. Charitable Foundation, Israel
- Marcelle and Isidore Philosophe Family Doctoral Fellowship for the Study of Neuroscience – France
- Florence Rosenberg Wise and Naomi Rosenberg Sarlin Scholarship Fund – USA
- Scholarship Fund for Needy Students with Outstanding Academic Promise – France
- Support for the Schulich Leader Scholarships – Seymour Schulich, Canada
- Dennis Schuman Estate Scholarship Fund – USA
- Support for Scholarships – Steven and Henryk Schwarz, Schwarz Foundation, USA
- Support for the Ruth and Allen Ziegler Student Services Division – Ruth Ziegler, USA
- Support for the Operation Protective Edge Emergency Campaign: Scholarship Fund for Reserve Combat Soldiers – Generous donors from around the world

Community

- Sulamot Program in Al Qasum for Bedouin Arabs in the Negev – Ruth and Amos Wilnai, Israel

Listed: Projects of $100,000 and above, by alphabetical order within categories.

Interdisciplinary Research

Generosity across the Fields

- Blavatnik Initiative

  The Blavatnik Family Foundation, headed by TAU Honorary Doctor and Governor **Len Blavatnik**, USA, has launched the Blavatnik Initiative – a multi-year program committed to the advancement of interdisciplinary scientific research, discovery and development at TAU in five areas. A state-of-the-art core lab, the Blavatnik Center for Drug Discovery, will serve dozens of drug research groups at a critical stage in their research; the Blavatnik Computer Science Research Fund promotes research in high-impact areas that could contribute to Israel's economic prosperity; the Blavatnik Interdisciplinary Cyber Research Center, which draws on TAU's rich pool of cyber scholars and experts, supports research, position papers and the training of a new generation of cyber researchers and analysts; the Blavatnik Student Film Production Fund supports student filmmakers at TAU's Steve Tisch School of Film and Television; and the Blavatnik President's Faculty Recruitment Discretionary Fund helps TAU attract world-class researchers and faculty to the University.

- Major French bequest

  A bequest from the late **Claire Maratier**, made possible through intensive and dedicated efforts by the French Friends of Tel Aviv University, will provide vital funding for the arts, sciences and humanities. Funds will support the establishment of laboratories for six newly recruited researchers in Exact Sciences, Life Sciences, Medicine and Environmental Studies. The bequest will also support faculty recruitment, French culture studies and refurbishment of facilities in the Humanities; and a broad range of activities in the Arts, including scholarships, art history seminars, faculty recruitment, and the acquisition of state-of-the-art equipment.

The Brain and Decision-Making

- As decisive as a worm

  The long-held view that decision-making is essentially rational has been replaced with the understanding that people also decide irrationally. **Dr. Dino Levy** (Management) and **Dr. Oded Rechavi** (Life Sciences), both of the Sagol School of Neuroscience, have come together to study the process of decision-making in its most basic neurological form – in the genes of the roundworm. Among nature's most primitive organisms, the roundworm nevertheless shares many of the same biological characteristics as humans. Discovering inconsistent choices by these worms would indicate a biological rather than cognitive basis for irrational behavior. The research partners believe that, by studying these organisms, they will be able to develop a more biologically based theory of decision-making.

- How the brain controls movement

  Dr. Jason Friedman (Health Professions) arrived at TAU after post-docs at Penn State, USA, in Kinesiology, and at Macquarie University, Australia, in Cognitive Science. He is involved in several collaborative research projects, studying how the brain controls movement, how movement interplays with decision-making, and how this can influence the design of computer-human interfaces. Together with **Dr. Sharon Shaklai** of TAU and Loewenstein Rehabilitation Hospital, he is studying finger movement in healthy children and in those with developmental disorders. By better understanding typical and atypical development of the amount of force exerted in movement, they aim to develop improved rehabilitation methods for kids with difficulties.

- The media and your politics

  At the new Media-User Interaction Lab, **Dr. Shira Dvir-Gvirsman** (Social Sciences) will be studying how people engage with and process online information, in particular with regard to their political opinions. Dvir's research will ask the question: Do people treat political information in a rational manner? The new lab's equipment will track eye movements and capture facial expressions during natural web surfing, allowing analysis of what attracts people's attention or elicits emotional reactions. The resulting data will reveal how the consumption of online information affects political behavior.

Early Detection of Disease

- Ancient teeth for modern treatment

  A unique lab has recently been established through collaboration between the Orthodontics Department of the Maurice and Gabriela Goldschleger School of Dental Medicine and the Dan David Laboratory for the Search and Study of Modern Humans at the Steinhardt Museum of Natural History. The new Facial & Dental Anthropology Lab is dedicated to exploring the evolutionary aspects of the configuration of our teeth. Working out of the lab, **Dr. Rachel Sarig** (Medicine) discovered a pathological occlusion, or defective bite, in a prehistoric skull some 100,000 years old. Such novel findings regarding the origins of physiological traits lead to a better understanding of how they developed and to improved treatment strategies.

- Identifying oral cancer

  Combining oral pathology and medicine with engineering, nanotechnology and advanced materials, **Prof. Abraham Hirshberg** (Dental Medicine) collaborated with Dr. Dror Fixler of Bar Ilan University to develop a non-invasive method for early detection of oral cancer. First, they use gold nanorods (GNRs), adapted to adhere only to oral cancer cells based on these cells' high level of epidermal growth factor. They then apply a novel nanophotonic method by which a near-infra-red laser beam detects any presence of GNRs, indicating the existence of cancer cells. This could lead to a simple tool for identifying cancer in an everyday clinical setting.

Tiny Devices and Growing Fields

- Packing a mighty punch

  A research group led by chemists **Prof. Diana Golodnitsky** and **Prof. Emanuel Peled** (Exact Sciences), both of the TAU Center for Renewable Energy and Center for Nanoscience and Nanotechnology, together with **Prof. Menachem Nathan** (Engineering), has developed a technology that enables fabrication of 3D micro-battery networks of 10,000-30,000 tiny energy-storing units connected in parallel. These novel batteries provide record high energy capacity up to 20 times higher than similarly sized ones being produced now. They can be used in neuro-stimulators, drug delivery chips, ear implants, micro-sensors and other devices. The research team has established a start-up, Honeycomb Battery Ltd., through TAU's technology commercialization arm, Ramot.

- Taking research to heart

  Supported by a grant from the European Research Council, **Dr. Tal Dvir** (Life Sciences) is integrating complex micro- and nano-electronics with engineered cardiac patches to treat heart attacks. Part of the growing biomedical field of electroceuticals, which uses implanted devices that modify bodily functions through electrical stimulation, the patch senses heart tissue functioning and intervenes when needed by providing electrical pulses or a controlled release of drugs. Other directions of Dvir's research into cardiac treatment are being funded by the Israeli Science Foundation and the Moxie Foundation.

> "Innovation is in Israelis' cultural genetics – instilled by the early pioneers who founded the state and made something out of nothing."
> —Prof. Amir Sharon, faculty

- Setting up a new Minerva Center

  Three faculty members from various departments at the George S. Wise Faculty of Life Sciences are receiving funding to establish a prestigious Minerva Center for Genome Evolution: Incumbent of the GoI Family Chair for Applied Microbiology **Prof. Martin Kupiec** (Microbiology and Biotechnology), **Prof. Lilach Hadany** (Molecular Biology and Plant Ecology), and **Dr. Oded Rechavi** (Neurobiology). The TAU team, in collaboration with Prof. Tzahi Pilpel from the Weizmann Institute and leading French and German scientists, will study the dynamics of genome evolution in microbes. Researchers will evolve microorganisms under challenging conditions and follow their changing genetic make-up as they adapt. The Center will also train a new generation of interdisciplinary scientists with expertise ranging from genome engineering to mathematical modeling and computational biology.

- Handling mountains of data

  The amount of digital data we create could reach 44 trillion gigabytes – the equivalent of 6.6 stacks of computer tablets reaching from earth to the moon – by the year 2020. Now, in a bid to find efficient ways to manage and make sense of all this information, TAU has established the Data Science Center led by **Prof. Yaron Oz,** Dean of the Raymond and Beverly Sackler Faculty of Exact Sciences. Data science (or "Big Data") aims to generate solutions for storing, mining, analyzing, sharing and securing huge amounts of information. Ten percent of TAU researchers across the campus are involved in data science in fields ranging from cyber security to medicine, from food security to e-commerce, and from brain science to ethics. Uniting these researchers under a single academic framework, the Center will build upon – and expand – TAU achievements and could have far-reaching impact on key issues facing the world today.

History, Society and the Environment

- A new slant on history

  The Israeli Forum for Environmental History, organized by **Dr. Miri Shefer-Mossensohn** (Humanities), **Dr. David Schorr** (Law) and doctoral candidate **Yaron J. Balslev** (Environmental Studies), brings together 98 senior scholars and PhD students from five Israeli universities. Its aim is to promote the emerging field of environmental history research in Israel. At monthly meetings, which will culminate in a first-of-its-kind annual conference, participants present and discuss studies covering a wide range of disciplines, from history of law, geography and architecture, to history of the Middle East and Europe. The TAU quarterly *Zmanim* will dedicate an entire issue in 2016 to environmental history – also an Israeli first. The forum is sponsored by the Porter School of Environmental Studies and the Zvi Yavetz School of Historical Studies.

- Business and the environment

  SPREE is the flagship project of the new Innovations in Industrial Ecology Lab initiated by **Dr. Vered Blass** (Management). The lab was established as a collaboration between the Faculty of Management and the Porter School of Environmental Studies in response to growing interest in this multidisciplinary field. Funded by the EU 7th Framework Research Program, SPREE aims to help governments revolutionize the way everyday products and services are consumed so as to promote sustainable economic growth while reducing environmental damage. The project examines options for transitioning to an economy that favors services over products in meeting consumer needs. Three models were developed to simulate application of various policy packages aimed at accelerating this transition.

- Keeping plastics off the menu

  Plastic waste, often taking the form of environmental steroids, is cause for growing concern. When these steroids enter the body via water pollutants, they act like estrogen hormones and may be related to breast and testicular cancer in humans, or feminization of wildlife. Steroid analysis has therefore become an important issue in analytical chemistry, medical diagnosis, pharmaceutics and environmental applications. PhD candidate **Keren Hakshur** (Engineering) is working on producing a quick, simple, low cost and highly sensitive method for detecting environmental steroids. Combining nano- and optical technologies with molecular biology, she is aiming to develop an optical-based biosensor for the cost-effective monitoring of these harmful steroids.

- How should nations address their violent histories?

  International experts recommend that aggrieved parties confront one another's contested histories as a crucial step toward post-conflict reconciliation. Post-doctoral fellow **Yifat Gutman** (Social Sciences) is assessing the effectiveness of this strategy. Focusing on a new type of nongovernmental player called "memory activists," she compared reconciliation processes in Central Europe and Israel. She found in both cases that although recommended reconciliation paradigms were influential in shaping the vocabulary and political claims of activists and national leaders, they could also be used to hinder, and not only advance, resolution of grievances.

- Exposing inequalities

  Dr. Lilach Lurie (Social Sciences) studies connections between law, society and the labor market. Focusing on the impact of law on industrial relations and the pension market, she conducted an empirical study of collective agreements, demonstrating that labor unions fail to represent certain groups of workers such as the elderly or female employees. In another current study regarding the bylaws of pension funds, Lurie details the high risks involved in private pension schemes as opposed to public pensions offered by the government. By exposing inequalities, her studies present a major step toward correcting them.

- An interdisciplinary look at food

  With over 7 billion mouths to feed globally, ensuring a secure supply of food is a burgeoning challenge for scientists and policymakers alike. The Manna Center Program for Food Security and Safety, headed by **Prof. Nir Ohad** (Life Sciences), is an interdisciplinary research and teaching program that brings together biologists, economists, political scientists, businesspeople and public health experts from around the world. It offers a new course cluster for Israeli and international MA and PhD students who wish to specialize in food security. The Program also established an outreach project for students from Vietnam in cooperation with the Arava regional council.

> "The best innovations are when you think to yourself, 'Wow, I can't believe no one thought of this before.'"
> —Yael Inbar, student

International Initiatives

Collaborations with North America

- Scientific convergence

  As part of its ongoing collaborations with the University of California, Berkeley, TAU launched the **Raymond and Beverly Sackler** Fund for Convergence Research in the Biomedical, Physical and Engineering Sciences. The fund, generously provided by TAU benefactors Raymond and Beverly Sackler, will promote cooperation between scientists at the two universities, providing support for four promising joint research projects each year. The aim is to facilitate a prestigious seed fund program for researchers with complementary research interests, harnessing the strengths of both institutions.

- TAU and Johns Hopkins get together on health

  Dr. Silvia Koton (Health Professions) and Prof. Joseph Coresh of Johns Hopkins University, together with a team of experts from several US universities, studied the incidence of stroke, a major cause of death in both Israel and the US, over the period 1987 to 2011 in the US. They found that while incidence among the over-65s has declined, there has been little progress in reducing risk of stroke among young people. However, there was a drop in stroke-related deaths among the younger group, while mortality rates held firm in the over 65s. Plans are underway by Koton and Coresh to establish a new Johns Hopkins-Tel Aviv University Health Research Initiative aimed at increasing connections between the two institutions.

- Canadian ties boost medical research

  The TAU Sackler Faculty of Medicine has entered into two new joint projects with Canadian universities.

  - The TAU-McGill Student and Post-Doctoral Fellow Exchange Collaborative Program is devoted to research into neurodevelopmental, neurodegenerative and neuropsychiatric diseases. The program is supported by the Eldee Foundation and the Bloomfield family of Montreal, Canada, and headed by **Prof. Illana Gozes** (Medicine), Head of the Adams Super-Center for Brain Studies; **Prof. Karen Avraham**, Vice Dean of Medicine; and **Prof. Uri Ashery** (Life Sciences), Head of the Sagol School of Neuroscience.

  - The Jeannie Tanenbaum Joint Program for Collaborative Research between TAU and the University of Toronto is focusing on neuroscience, developmental biology, human genetics, cancer, hematology and immunology, with the aim of combating disease. The program is headed by **Prof. Karen Avraham**, **Dr. Michael Milyavsky** and **Prof. Shai Izraeli** (all of Medicine).

Delving into Ever-Smaller Worlds

- How heavy is an atom?

  The research group of **Prof. Uzi Kaldor** (Exact Sciences) has developed methods for accurate prediction of properties of super-heavy elements, which are very difficult to measure since they exist in minute quantities and have short lifespans. Radioactive Astatine is an element with medical potential because it could serve as an ideal source for short-range radiation therapy; Lawrencium is another element of great scientific interest. Properties of these two elements were obtained recently through the TAU group's collaboration with experimental groups in CERN and at the Japanese Atomic Energy Agency. Joint reports have been published in the top science journals *Nature* and *Nature Communications*.

- Medicine tailored to your DNA

  Out of 450 research proposals competing for major European funding, one of the 9 that were chosen was submitted by a group of EU-based researchers coordinated by TAU's **Dr. Yuval Ebenstein** (Exact Sciences) and focused on personalized medicine. The 7-member team will base their work on a technology that reads information from individual DNA molecules, and each scientist will apply his or her particular expertise for extracting and using this information for clinical diagnostics. At TAU, a method is being developed for detecting damaged sites on DNA, as well as cancer at a very early stage, which could lead to treatment tailored to an individual's own DNA. The research group was awarded €6 million by Horizon 2020, the EU Framework Program for Innovation and Research.

Close Encounters of the Academic Kind

- A magnet for mathematicians

  The Mathematical Institute at Tel Aviv University has been launched this academic year with funding from the Office of TAU President Prof. Joseph Klafter. The Institute supports a variety of research-related activities at the School of Mathematical Sciences, including talks by visiting lecturers, workshops and travel abroad by research students. This year the Institute will hold a lecture series of several globally prominent mathematicians, including Prof. Henri Berestycki, École des hautes études en sciences sociales, Paris; Prof. Alex Furman, University of Illinois at Chicago; Prof. Sorin Popa, UCLA; and Prof. Van Vu, Yale University. It will also support several workshops to be held at TAU.

- Bridging rabbinic and academic studies

  Dr. Maoz Kahana (Humanities) uniquely combines his background in ultra-orthodox rabbinical education with academic Jewish and legal studies toward the elucidation of rabbinic literature, law and legal culture within the social and intellectual contexts of European history. Renowned in his field, he was invited to join the Pinkassim Project conducted by scholars from seven countries aimed at uncovering Jewish communal minute books that survived the Holocaust. Focused on research into early modern Hebrew and German/Yiddish, the project's goal is to analyze and digitize all of these surviving manuscripts and to deepen understanding of Jewish life in modern times.

- Acquiring language

  Dr. Sara Ferman (Health Professions) is one of three Israeli representatives in COST ACTION (European Cooperation in Science & Technology), an international collaboration focused on developing interventions for children experiencing difficulties acquiring a first language. Ferman uses an artificial language to examine language learning among a range of populations varying in age, socioeconomic level and language impairment. Her finding that adults are superior to children in acquiring an artificial language does not support conventional wisdom that children generally have an advantage in language learning. Other parameters that may influence language achievement are being tested, with the aim of optimizing language rehabilitation programs.

- Better therapy for visual impairment

  The VISION project, initiated and coordinated by **Prof. Arieh S. Solomon** (Medicine) and funded by a large European grant, involves a consortium of 5 partners from Israel, Germany and Spain working to develop a new therapy for glaucoma and other eye diseases involving the death of vision-related nerve cells. Solomon's team identified a protein (Sema3A) responsible for inducing neuron cell death, and demonstrated that an antibody acting against this protein inhibited further death of the relevant nerve cells. Based on this discovery, the new, more effective therapy will involve a minimally invasive implant for controlled release of the therapeutic substance.

> "Innovation answers a need you didn't even know you had."
> —Rony Kahana, student

Community

Reaching out to Children...

- Enhancing the school experience

  The Komemiyut elementary school in Bnei Brak is attended by children from stressed environments. A project led by **Dr. Orit Bart** and **Sara Gat** (Health Professions), and backed by Tovanot B'Hinuch ("Insights into Education"), a group of educators and business leaders dedicated to assisting schools, provided these children with individual or group occupational therapy conducted by professionally supervised TAU students. Special activities aimed at improving children's writing, play, motor and organizational skills included their working on a school newspaper and playing games with parents and siblings. The children's academic and communication skills showed marked improvement, commensurate with teachers' reported satisfaction with the project.

- Promoting reading among Israeli-Arab children

  Reading in Arabic is a challenge since the spoken language differs significantly from the written one. In an ongoing community program involving teachers and parents in the Arab town of Umm al-Fahem, adults are encouraged to read together with children. **Prof. Dorit Aram** (Education) is now evaluating this program with colleagues from other institutions, with the aim of creating a model that can be emulated by other Arab towns. Given the importance of book reading with young children for academic and social adjustment in school, implementing such research-based community projects can contribute to reducing scholastic gaps between Israel's Jewish and Arab children.

- Resident-driven change

  Following the lead of a US program that reduced child maltreatment while enhancing the positive influence of parents and the community, **Dr. Carmit Katz** (Social Work) adopted the program in Israel. She sent 125 students to a south Tel Aviv neighborhood, accompanied by a supervising social worker and research coordinators who evaluated the program's effectiveness. Students worked together with residents to plan activities designed both to promote socializing among the diverse members of the neighborhood and to provide informal support for parents. Over 70 local residents were actively involved, and the local elementary school provided space for activities.

...and to the World

Members of the TAU chapter of Engineers Without Borders—Israel have been working on a project to supply a rural Tanzanian village with potable drinking water. In 2014, a rainwater harvesting system was installed at a regional secondary school in the village where it serves 400 students and staff. The system is capable of storing 48,000 liters of water for drinking and cooking. Following the TAU students' further assessments of the needs of the community, the team's plan now is to install an off-grid solar electricity system at the local clinic, which will dramatically improve the quality of medical services. The next phase, contingent on successful fundraising, is planned for implementation in October 2015.

Doctoral Student Breakthroughs

- A new twist on nanomaterials

  PhD student **Assaf Ben Moshe**, advised by Head of the Raymond and Beverly Sackler School of Chemistry **Prof. Gil Markovich** (Exact Sciences), leads a collaborative research team that achieved a breakthrough. He succeeded in preparing the first nanostructures of inorganic materials that are atypically asymmetrical. Known as chiral nanomaterials, they took the form of twisted nanocrystals of Tellurium, a rare metal similar to tin. Recently published in *Nature Communications*, this work opens a new research direction in materials science, whereby new nanoscale structures with complex shapes and unique optical properties could be prepared in large quantities through simple chemical processes.

- Of genes, cells and viruses

  PhD student **Ranen Aviner** received the Rothschild Fellowship for his work in cell biology with **Prof. Orna Elroy-Stein** (Life Sciences). He discovered a novel mechanism important to healthy cell growth that reduces protein synthesis rates in dividing cells, thereby allowing proper completion of their division into two identical daughter cells. Mutations affecting this mechanism can lead to aberrant cell division and development of cancer. Aviner also devised a technique for detecting and quantifying newly-synthesized proteins, providing insights into the dynamics of gene expression. Now, working with researchers from Stanford University, he is looking into virus-host interactions in human pathogenic viruses.

- Inspired by... or copied?

  Copyright law prohibits the creation of derivative works, or the making of artistic works based upon existing ones. This aspect of the law has often led to controversy. PhD candidate **Omri Rachum-Twaig** (Law), a Fellow at the Edmond J. Safra Center for Ethics, confronts this issue by delving into cognitive psychology and genre theory for an understanding of behavioral aspects of creativity, which he suggests must be considered by copyright law. He proposes a new model that would clearly differentiate between derivative works and mere reproductions. Among the remedies he suggests is a compulsory licensing scheme allowing authors to use preexisting works as a basis for their creations, with original authors obtaining a commensurate fee.

- Environment, sociology and politics

  PhD candidate **Natalia Gutkowski** (Environmental Studies), a Fellow at the Edmond J. Safra Center for Ethics, combined her environmental interests with her studies in sociology and anthropology in founding the Social-Environmental Lab at the Porter School of Environmental Studies. The lab investigates how society impacts upon the environment and vice versa. Exploring the issue of sustainable agricultural policy in Israel, and particularly its implications for the nation's Arab citizens, her research sheds light on the political meanings of agriculture and landscape, and on possibilities for reconstructing State-citizen relations through a sustainability paradigm.

- Tracking the footsteps of... the ribosome

  PhD student **Renana Sabi**, a member of Dr. Tamir Tuller's research group (Engineering) and a Fellow at the Edmond J. Safra Center for Bioinformatics, uses a computational approach to understand biological processes. Looking at how proteins are created, she is analyzing large-scale measurements of the movement of ribosomes – the molecules that synthesize proteins. Sabi and Tuller have identified protein parts that cause ribosome movement to stall. They have also demonstrated that these protein parts tend to be eliminated over time through natural processes. These findings contribute to our understanding of the evolution of genes and ribosomes, and open the door to biotechnological applications for protein engineering.

> "Why are Israelis so innovative? They are inherently argumentative and never accept anything as is."
>
> –Maayan Cohen, alumna

Campus-Wide R&D

Science Influencing the Way We Work

- Recycling CO2

  Dr. Brian Rosen (Engineering), a recent arrival from the University of Illinois, has established TAU's Energy Materials Laboratory. Having developed an acclaimed and patented electrochemical process for converting CO2 into valuable products, he is now focusing the new lab's research on addressing global fuel challenges. He hopes to discover new catalytic materials for recycling greenhouse gases back into fuels. Such recycling could prove to be a powerful solution for supporting worldwide energy requirements in the face of depleted oil reserves.

- Can cryptic be uncomplicated?

  Cryptography is a vital part of the security field, but requires huge amounts of computing power that is not always available or is too costly. In an attempt to reduce this need and simplify the process, **Dr. Benny Applebaum** (Engineering) of the Blavatnik Interdisciplinary Cyber Research Center is leading a 5-year research project that has received a €1.3 million grant from the European Research Council (ERC). The success of the project may lead to the development of faster tools for writing and decoding ciphers, and to new insights into the nature of efficient computation.

Revealing More about Our Physical Universe

- Protons hog momentum in nuclei

  Like couples swirling on the dance floor as bystanders look on, protons and neutrons that have briefly paired up in the nucleus have higher average momentum, leaving less for non-paired nucleons. Using data from experiments carried out at the Thomas Jefferson National Accelerator Facility in the USA, **Prof. Eliazer Piasetzky** (Exact Sciences), incumbent of the Wolfson Chair in Experimental Physics, and his students, **Or Hen** and **Igor Korover**, have shown for the first time that this phenomenon exists in all atomic nuclei, including those that have many more neutrons than protons. Implications of the findings for other systems, such as quarks in nucleons, atoms in cold gases and neutrons in neutron stars, are now being studied.

- Shining a light on dark matter

  More than 80% of the universe is made up of mysterious dark matter. We can neither see it nor measure it, but scientists know it is there due to the gravitational force it exerts. **Dr. Tomer Volansky** (Exact Sciences) is studying novel theories of dark matter and new technologies that will allow the discovery of its particle nature. Together with incumbent of the Raymond and Beverly Sackler Chair in Clusters and Nanoparticles **Prof. Ori Cheshnovsky**, physicist **Prof. Abner Soffer** (both of Exact Sciences), and others, he has initiated a groundbreaking project to develop a detector sensitive enough to measure dark matter. Going far beyond current capabilities, his research opens a new field of enquiry aimed at solving the mystery of these dark particles.

- Riding a comet

  Culminating 35 years of research, **Prof. Akiva Bar-Nun** (Exact Sciences) helped plan the European Space Agency's Rosetta Mission to fly alongside a comet, continuously sample it for a year, and land a probe on its surface. Although the probe is now dormant, the Rosetta spacecraft has been successfully sampling gases emanating from the comet's surface. At the TAU Comet Studies Laboratory, Prof. Bar-Nun, **Dr. Diana Laufer**, and PhD student **Adi Ninio Greenberg** are analyzing initial findings, which include many firsts. If this comet is representative of those that hit primordial Earth, then its contribution to the liquid and gas make-up of our planet was rather minor, contrary to previous thought.

Understanding Life, Human Development and Behavior

- Plants, genes and resilience

  Sustainable food production is a major challenge for today's plant biologists. To advance this field, a sophisticated growth chamber for plants called a phenomics chamber has been installed at the Molecular Biology & Ecology of Plants Department (Life Sciences). It will provide a tightly controlled environment allowing high precision phenotyping – the study of plants' genetic make-up – and how this determines appearance, function and performance. Furthermore, it will help improve understanding of gene function under environmental stress, leading to better tools for improvement of plant resilience in harsh environments.

idea
/ī'dēə/
shares root with 'wit' and 'vision'

> "With innovation, genius and hard work outweigh luck."
> —Eyal Feder, student

- Ancient clue to human development

  The oldest human skull to be found outside of Africa, and that is directly related to modern man, has been discovered in a cave in Israel's Western Galilee. According to **Prof. Israel Hershkovitz**, who heads the Dan David Laboratory for the Search and Study of Modern Humans at the Steinhardt Museum of Natural History and National Research Center, and **Dr. Hila May** (both of Medicine), this skull links ancient African and European populations, and supports evidence that modern humans moved from Africa through the Nile Valley into the Middle East some 60-70,000 years ago, later spreading into Eurasia. While in Israel it is likely that they encountered Neanderthals, with whom they coexisted for several thousand years and probably interbred, later carrying Neanderthal genes to other parts of the world. That makes Israel perhaps the earliest site of the human melting pot.

- Do children perceive robots as "alive"?

  Today's children are surrounded by smart machines. **Prof. David Mioduser** (Education) has developed a robot-programming learning environment for young children to assess how they perceive these seemingly autonomously behaving machines. Findings of recent studies conducted in collaboration with former and current PhD students, **Dr. Karen Precel**, **Asi Kuperman** and **Gonen Raveh**, indicate that constructing and programming adaptive behaviors of devices leads children down the path from anthropomorphic to technological perceptions and language. Such learning environments, already implemented in kindergartens, are now being planned on a broader scale for elementary school children.

- How to decide

  Behavioral economics and psychological aspects of decision-making are new faculty recruit **Dr. Ayala Arad's** (Management) areas of interest. In her research into how people reason and behave in complex competitive interactions with others, she found that they simplify complex situations to reach a decision. For example, when faced with numerous options, they group them into categories that involve fewer details to consider. This is the strategy of successful decision-makers, as long as no important input is missed. Arad proposes that this kind of reasoning is relevant to many complex interactions ranging from auctions to competitive military or political resource allocation.

> "The main reason for Israeli innovativeness is a strong higher education system."
> Prof. Sivan Toledo, faculty

- Far-reaching effects of a tummy-bug

  Dr. Khitam Muhsen (Medicine) has been studying the bacterium *Helicobacter pylori*, which colonizes the stomach and causes chronic symptom-free gastritis in most infected people, with only a minority much later developing a disease such as peptic ulcer or gastric cancer. Dr. Muhsen found that the presence of this infection in children coincided with a high prevalence of anemia, as well as lower cognitive development. She also recently showed that children infected at age 3-5 display slower growth at school age. In another novel study, Dr. Muhsen is examining the involvement of *H. pylori* in diseases such as adult-onset diabetes and dementia. These studies are expected to impact global public health and clinical treatment strategies.

- Teaching doctors more than medicine

  Can bedside manner, interpersonal skills and humor be taught? **Dr. Orit Karnieli-Miller** (Medicine) set out to assess the effectiveness of a course for medical students that intended to do just that. Led by **Dr. Arik Steinberger** (Medicine), a dentist and a theater director, the course introduced concepts of empathy, verbal and non-verbal communication, and elements of theater such as improvisation and medical clowning. Dr. Karnieli-Miller then evaluated students' behavior toward patients in a simulated medical encounter. Her study found that the course improved students' interpersonal skills, attitudes toward use of humor and ability to apply it. The study was funded by a grant from The Magi Foundation.

- Memory on the silver screen

  As part of a research workshop entitled Presence and Absence of Memory and Trauma in Contemporary Israeli Cinema, **Prof. Raz Yosef** (Arts) explored the role of cinema in remembering and restaging past traumas and losses that were denied entry into the shared national past. He contends that current Israeli cinema reflects a radical discontinuity between history and memory, with many events becoming the private memories of specific groups within society rather than a collective memory. Wars, ethnic and sexual discrimination, and loss of identity through immigration all cast long shadows on Israel's history, giving a melancholic air to contemporary Israeli cinema and opening old wounds in an attempt to bring them into the realm of historical national memory.

- The economics of the Israeli-Palestinian conflict

  While political, religious and sociological explanations of the conflict abound, little has been written about the economic aspects of the Israeli-Palestinian conflict. **Dr. Sami Miaari** (Social Sciences), in collaboration with an overseas colleague, seeks to shed light on the role that economic factors have played in escalating or alleviating the conflict. He has assembled a comprehensive dataset on Palestinian violence and attitudes toward the conflict over two decades. His findings indicate that economic shock due to reduced Palestinian trade with Israel coincided with higher levels of violence during the Second Intifada, while local employment within the Palestinian Authority seems to have had little effect on levels of violence against Israel. The one variable that was found to lead to reduced Palestinian grievances, lower levels of violence and less support for aggression against Israeli targets, was Palestinian employment inside Israel.

enterprise
/ˈen(t)əˌprīz/
> Latin inter 'between' + prendere 'seize, grasp'
Related to booty, predatory, prey

- Tunisian lawyers and the uprising

  Dr. Lena Salaymeh (Law), recently arrived from UC Berkeley where she completed a post-doc, investigates why and how Tunisian lawyers took a leading role in protecting citizens from government repression during the 2010-2011 Tunisian uprising. The lawyers, arguing that independence from the government was necessary for their professional autonomy and for safeguarding the rule of law in Tunisia, used their unique combination of legal resources and expertise to facilitate resistance to the abuse of power, particularly when the pretext of security was manipulated to expand that power. Tunisian lawyers have emerged in the aftermath of the uprising as government "watchdogs" who view themselves not as agents of the state's legal system, but as agents of the rule of law.

- All in the family

  Family-owned businesses dominate the Israeli economy, but the phenomenon is seldom researched. In a collaboration between **Ms. Raya Strauss** of Israel's family-owned food empire and the Faculty of Management, the Raya Strauss Center for Family Business Research has been established to close this gap. The center is jointly headed by **Prof. Dan Weiss** and **Dr. Nava Michael-Tsabari**, initiator of the project, who recently submitted the first doctorate in this field in Israel. In her research, Michael-Tsabari defines a new parameter, kin climate (KC), for measuring the extent to which a company or organization displays a family-like organizational structure. Her findings indicate that KC has a significant effect on company growth and success.

New Teaching Programs

To Benefit Students

- **The winning numbers**

  In support of Israel's impressive results in international mathematics competitions, TAU's School of Mathematical Sciences has assumed responsibility for training the students representing the country in upcoming International Mathematical Olympiads. Four special status students studying at TAU for a BSc in mathematics while still in high school made up the 2014 Israeli team that won 4 silver medals at the Olympiad in Cape Town, while in Bulgaria the Israeli team won first prize – the first ever in an international competition. PhD student **Lev Radzivilovsky** (Exact Sciences) has been training the teams with assistance from TAU math student **Gal Dor**.

- **Scientific summer in Israel**

  Exceptional undergraduate and graduate students from the US, Canada, Germany and India took part in the newly established, 8-week Biological and Neuro Sciences Summer Program on the TAU campus. Each participant became an active member of one of 30 different TAU research laboratories. The program was founded by **Prof. Karen Avraham**, Vice Dean of the Sackler Faculty of Medicine, and **Prof. Uri Ashery**, Head of the Sagol School of Neuroscience, and was coordinated by TAU International.

The Economy

- **Wanted: Oil & gas experts**

  To help provide Israel with the experts it needs to manage sustainability efforts and newly discovered natural resources, the Porter School of Environmental Studies is developing new interdisciplinary degree programs. The first is a double major in Mechanical Engineering and Geophysics with an emphasis on Environmental Studies. It prepares students for careers in fast-growing industries such as oil and gas, water desalination, renewable energy, green and earthquake-resistant construction, and more.

- **Focus on technology**

  The Sofaer International MBA (IMBA) Program has redesigned its curriculum to provide an attractive program for students interested in entrepreneurship and innovation. Program Head **Dr. Iris Ginzburg** and Academic Director **Prof. Shai Danziger** are working closely with Management Dean **Prof. Moshe Zviran** to integrate the IMBA with the School's Hebrew-language MBA in Innovation, Technology and Entrepreneurship, a program founded by Zviran and Ginzburg six years ago. The goal is to leverage the strength of both programs to provide new opportunities and benefits for international and local students. These include Israel's first pre-accelerator for student-driven ventures and professionally-focused partnerships in Hong Kong, France, and the US.

- **Concept to company**

  Delta Start-Up Studio, a self-defined "pre-accelerator," is an Israeli first. While accelerator programs help start-ups get off the ground, a pre-accelerator leads participants through the entire process of developing an idea and turning it into a viable business proposition. An accredited course in TAU's MBA program in Technology, Innovation and Entrepreneurship, Delta gives students the tools to devise business strategies and create polished presentations. The intensive program links academia with entrepreneurship and leads to well-defined start-ups with investor interest.

Arts and Culture

- **An honors program for art historians**

  The Art History Department has inaugurated a new undergraduate honors program for a dozen or so of its most outstanding first-year students. They are being offered an enriched curriculum that bridges between scholarship and the museum and gallery scene. Operating since October 2014, the program has included such unique activities as a masterclass with Prof. Antonio Natali, director of the Uffizi Museum, a travel seminar to the Louvre, and a materials and techniques masterclass. These activities and others were made possible by donations from the French Friends of Tel Aviv University and from **Doron Sebbag.**

> "We are a competitive nation."
> Dr. Natan Shaked, faculty

- **Ten years of preeminent music education**

  The Buchmann-Mehta School of Music, celebrating its tenth anniversary this year, remains in harmony with changing social needs and is quick to innovate. This year, in cooperation with the Jaime and Joan Constantiner School of Education, the school has begun to offer music students a teaching certificate as a part of their academic degree. The new program includes pedagogy studies, courses in music teaching, and practical training in schools. It promises to open new employment opportunities for music school alumni while encouraging extensive involvement of TAU graduates in the national education system. Meanwhile, in the international arena, the Buchmann-Mehta School of Music Symphony Orchestra traveled to Frankfurt where it performed a special concert conducted by Maestro **Zubin Mehta** in honor of Goethe University's centenary. The tour was sponsored by major TAU benefactors **Josef and Bareket Buchmann**, who founded the music school and are longtime supporters of TAU-Goethe academic cooperation and exchange.

Health and Welfare of Society

- **Training Palestinian physicians**

  In a cooperative effort organized by **Prof. Karen Avraham**, **Prof. Yechiel Levkovitch** and **Sonia Kasher** (Medicine), together with Prof. Raphael Walden of the TAU-affiliated Chaim Sheba Medical Center, a special training course was offered to Palestinian physicians. The 14 participating doctors, arriving from the Palestinian cities of Kalkilya, Bethlehem, Hebron and Nablus, learned about "Assessment and Treatment of Patients in the Emergency Ward" at Sheba. The course was funded by the Mauerberger Foundation.

- **Understanding disparities**

  The Sociology and Anthropology Department has initiated a new MA program designed to enrich students' understanding of social and economic inequality, a research forte of the department. The new MA in Inequality and Distributional Justice, headed by **Prof. Yossi Shavit**, incumbent of the Weinberg Chair in Social Stratification and Inequality, and **Prof. Sigal Alon** (both of Social Sciences), will provide students with the analytical and research skills needed to study the causes and consequences of socioeconomic disparities. Graduates will be able to apply these skills in academia, in the public sector or in private sector organizations.

- **Accelerated PhD in Political Science**

  The Political Science Department opened a straight PhD track that will allow outstanding students to enroll in doctoral studies directly after completing their BA degrees. Aimed at training the next generation of scholars and teachers in the fields of political science and international relations, the prestigious 5-year program accepted 9 students in its first year. They are receiving fellowships together with travel grants for attending conferences, special programs and seminars at leading universities abroad.

- **Every city deserves the best mayor**

  The Department of Public Policy has positioned itself as the main go-to source for public servants at the highest echelons. Its Institute for Local Government, headed by former Interior Minister **Ophir Pines Paz** (Social Sciences), has developed a unique training program for newly elected mayors of Arab municipalities. The program was designed to give new city leaders practical knowledge as well as one-on-one guidance by seasoned municipal experts. Main issues addressed include management of the municipal budget, planning and construction, and general management skills. The program was established with the cooperation of two partners: Injaz Center for the promotion of Arab municipalities and the Matanel Foundation.

On Campus

Cinematic Talents on the Rise

- Upgraded to a school

  Steve Tisch, Academy Award-winning film producer, businessman and philanthropist, has committed major support to the Department of Film and Television, which was ranked by Hollywood Reporter Magazine as 12th among the 25 best filmmaking academies outside the USA. His gift will transform the department into a full-fledged school. The funding will help attract top-level teachers and students, boost the capacity to offer scholarships, provide for new state-of-the-art equipment and building renovations, enhance curricula, and bring international collaborations. The new Steve Tisch School of Film and Television will not only enhance academic training and knowledge in the discipline, but will strengthen Israel's global influence in the cinematic arts.

- Hollywood taking notice too

  Hollywood and the international TV industry are increasingly embracing Israeli artists and adopting the best content to come out of Israel. Two of TAU's film students did the country proud when Israel's first ever Oscar in the Student Film category was won by **Hadas Ayalon** in 2014 for her film, *Paris on Water*, while **Yuval Hameiri** won the Short Film Special Jury Award for Nonfiction at the Sundance Film Festival for *I Think This is the Closest to How the Footage Looked.*

Students Get Inspired

- Student Clubs explore novel fields of law

  The Student Council at the Buchmann Faculty of Law launched seven Student Clubs, each with up to 30 participants, to introduce the range of fields in which law can be practiced, such as cyber law, international law, real estate law, litigation, women and the law, law and cinema and gay rights. An impressive list of well-known figures led or spoke at club events, including former Supreme Court Justice Dalia Dorner and current Supreme Court Justice Esther Hayut. Club activities included lectures, workshops and visits to law firms and corporations.

Providing That Extra Help

- Recognizing students who serve

  Over 1,000 TAU students were called up to serve in Operation Protective Edge during summer 2014. To help ensure the smooth continuation of their studies, TAU President **Prof. Joseph Klafter** announced an emergency campaign for scholarships. TAU's supporters in Israel and around the world rallied to the cause and donated the scholarships, which were allocated by the Celia, Henry and Gerald Burger Unit for Student Aid at the Ruth and Allen Ziegler Student Services Division. The Psychological Services Unit at the Ziegler Division was also ready to respond, helping students who served to deal with the impact of their experiences. Thanks again to donor support, every student who sought help received it.

- *Walking Together* mentoring project

  Freshmen students arriving at a large university can find the experience rather daunting. To ease their introduction to a new physical, academic and social environment, the Unit for Student Advancement at the Ziegler Division initiated a project in which first-year students are matched up with seasoned upperclassmen who walk them around the campus and familiarize them with the university. Participating first-year students have indicated that this friendly introduction makes all the difference to their feeling confident, at home, no longer alone and able to dive into their studies.

- Ramping up accessibility on campus

  Two major projects aimed at making life easier for students with disabilities were recently established. The **Nathan, Anne, Kim and Julian Geller** Accessible Campus Project is carrying out sweeping improvements ranging from wheelchair lifts, ramps and handrails at dozens of buildings, to a campus-wide "Step-Hear" navigation system for the blind and visually-impaired. The **Mia and Mile Pinkas** Accessible Learning Center, a new physical facility to be located at the Sourasky Central Library, will provide space for hearing- and vision-impaired students to study and collaborate on assignments using specialized, state-of-the-art computer equipment. The accompanying Mia and Mile Pinkas Accessible Learning Fund will provide scholarships and essential services to students with disabilities on campus, thereby ensuring they have every opportunity to successfully complete their degrees.

TEL AVIV UNIVERSITY FRIENDS ASSOCIATIONS CONTACT DETAILS

ARGENTINA

Asociación de Amigos de la Universidad de Tel Aviv en Argentina (AUTA)
Paraguay 4010 1-A
1425 Buenos Aires
Tel. +54 11 4833 7090
info@auta.org.ar
www.auta.org.ar

AUSTRALIA

Australian Friends of Tel Aviv University – Victoria
TOK Corporate Centre
Level 1, 459 Toorak Road
Toorak, Victoria 3142
Tel. +61 3 9296 2065
aftau.vic@gmail.com
www.aftau.asn.au

Australian Friends of Tel Aviv University – New South Wales
P.O. Box 128
Double Bay, NSW 1360
Tel. +61 2 9363 0004
nsw@aftau.org.au

AUSTRIA

Gesellschaft der Freunde der Universität Tel Aviv in Österreich
c/o Christl Langstadlinger
University of Vienna, Faculty of Physics
Boltzmanngasse 5, 1090 Vienna
Tel. +43 1 4277 51108
christl.langstadlinger@univie.ac.at

BRAZIL

Sociedade Brasileira dos Amigos da Universidade de Tel Aviv
c/o Marcelo Maghidman
Av. Sao Gualter 1850
Alto de Pinheiros
05455-002 Sao Paulo-SP
Tel. +55 11 3022-2324
maghidman@hotmail.com

c/o Dr. Esther Kuperman
Rua Das Laranjeiras 518/204
Rio de Janeiro – 22240006
Tel. +55 21 2567 5596
estherkuperman@gmail.com

c/o Dr. Mario Gurvitz Cardoni
Rua Dona Inocencia 266/201
Jardim Botanico – 90690-030
Porto Alegre – Rio Grande do Sul
Tel. +55 51 3391 4537
cardoni@terra.com.br

CANADA

Canadian Friends of Tel Aviv University – National Office
Decarie Square,
6900 Decarie Boulevard – Suite 3480
Montreal, Quebec H3X 2T8
Tel. +1 514 344 3417
cftau@bellnet.ca

Canadian Friends of Tel Aviv University – Ontario and Western Region
3130 Bathurst Street – Suite 214
Toronto, Ontario M6A 2A1
Tel. +1 416 787 9930
stephen@cftau.ca
www.cftau.org

ECUADOR

Asociacion de Amigos de la Universidad de Tel Aviv en Ecuador
Unidad Educativa Alberto Einstein
c/o Raquel Katzkowicz
Av. Diego Vásquez de Cepeda N77-157 y Alberto Einstein
Quito
rKatzkowicz@einstein.k12.ec

FRANCE

French Friends of Tel Aviv University
Tel. +33 1 40 70 18 40
afauta@wanadoo.fr
www.ami-universite-telaviv.com

GERMANY

Freunde der Universität Tel Aviv e. V.
c/o Mrs. Stefanie Wilms
Tituscorso 2 B
60439 Frankfurt am Main
Tel. +49 (0) 69 29728709/21999934
freunde-uni-telaviv@t-online.de

HONG KONG

Hong Kong Friends of Tel Aviv University
Tel: +852 91726714
michalms@tauex.tau.ac.il

INDIA

Indian Friends of Tel Aviv University
Solomon & Co.
Calcot, House, 3rd Floor
8/10 M.P. Shetty Marg, Fort, Mumbai – 400023
Tel. +91 22 6627 3900
aaron.solomon@slmnco.in

ISRAEL

Israeli Friends of Tel Aviv University
Tel Aviv University
Guttmann Administration Bldg. – Room 002
Ramat Aviv, Tel Aviv 69978
Tel. +972 3 640 8055/6401
yedidim@post.tau.ac.il
www.yedidim-tau.org.il

MEXICO

Amigos TAU México A.C.
Boulevard de los Virreyes 1140
Col. Lomas de Virreyes
Del. Miguel Hidalgo
Mexico D.F., C.P. 11000
Tel. +52 55 2223 1199
amigos@taumexico.mx

NETHERLANDS

Dutch Friends of Tel Aviv University
Ruijs de Perezlaan 10, 2111 WP Aerdenhout
Tel. +31 23 544 31 15
m.r.vanderheijden@casema.nl

NORWAY

Norwegian Friends of Tel Aviv University
Bogstadveien 8
Oslo N-0355
Tel. +47 22 603 190

SOUTH AFRICA

South African Friends of Tel Aviv University
Stenham Investments
Montclare Place
4th Floor, 21 Main Road
Claremont, Cape Town, 7708
Tel. +27 21 674 5494
jonathan.osrin@stenham.com

SPAIN

Asociación de Amigos de la Universidad de Tel Aviv en España
c/o Patricia Nahmad
Tel. +34 659612224
patprom@hotmail.com

SWEDEN

Swedish Friends of Tel Aviv University
Tel. +46 739 661000
peter@seideman.se

SWITZERLAND

Swiss Friends of Tel Aviv University
Rütimeyerstrasse 20
4054 Basel
elsohn@post.tau.ac.il

UK

The Tel Aviv University Trust
ORT House
126 Albert Street
London NW1 7NE
Tel. +44 207 446 8790
info@tau-trust.co.uk
www.tau-trust.co.uk

The Tel Aviv University Trust, Scottish Group
Leslie Wolfson & Co. Solicitors
19 Waterloo Street
Glasgow G2 6BQ
Tel. +44 141 204 1453
gsw@lesliewolfson.co.uk
leslieandalma@yahoo.com

URUGUAY

Asociación de Amigos de la Universidad de Tel Aviv en Uruguay
c/o Bernardo Faincaig
Palestina 1562
Montevideo 11400
Tel. +598 26003318
bernardofaincaig@gmail.com

USA

American Friends of Tel Aviv University – National/Northeast Region
39 Broadway – Suite 1510
New York, NY 10006
Tel. +1 212 742 9070
info@aftau.org
www.aftau.org

Southeast Region
Tel. +1 800 989 1198
info@aftau.org

Midwest Region
9715 Woods Drive, #1608
Skokie, IL 60077
Tel: +1 312 618 3303
infomidwest@aftau.org

Western Region
11766 Wilshire Boulevard – Suite 1110
Los Angeles, CA 90025
Tel. +1 310 553 5232
infowest@aftau.org

Northern California
Tel: +1 415 246 7411
infonocal@aftau.org

Concept and production: Rava Eleasari
Text: hi-Text/Mimi Tanaman
Additional texts: Louise Shalev, Ruti Ziv, Sharon Domb, Tal Gerzon, Michelle Bitran, Ariela Lehrman
Graphic design: Issi Dvir
Photography: Yoram Reshef
Additional photography: Ran Yaniv Hartstein, Nir Shaanani
Administrative coordination: Sharon Domb
Printing: Havazelet Printing
Issued by the Development and Public Affairs Division
Tel Aviv University
Ramat Aviv 69978, Tel Aviv, Israel
publicat@post.tau.ac.il
www.tau.ac.il

TEL AVIV UNIVERSITY FRIENDS ASSOCIATIONS LEADERSHIP

ARGENTINA
Polly Mizrahi de Deutsch, President
Argentinean Friends of Tel Aviv University

AUSTRALIA
Dr. Victor Wayne, President
Australian Friends of Tel Aviv University (Victoria)

David Dinte, President
Australian Friends of Tel Aviv University (New South Wales)

AUSTRIA
Dr. Hannes Androsch, President
Austrian Friends of Tel Aviv University

BRAZIL
Eduardo Wurzmann, President
Brazilian Friends of Tel Aviv University
São Paulo

Lea Klabin, President
Brazilian Friends of Tel Aviv University
Rio de Janeiro

Dr. Mario Gurvitz Cardoni, President
Brazilian Friends of Tel Aviv University
Porto Alegre

CANADA
Judge Barbara Seal, CM, National President
Canadian Friends of Tel Aviv University (CFTAU)

Claire Dalfen, Vice President
Canadian Friends of Tel Aviv University
Montreal, Ottawa and Eastern Region

Jeff Wagman, Chairman
Canadian Friends of Tel Aviv University
Toronto, Ontario and Western Region

ECUADOR
Raquel Katzkowicz, Liaison
Ecuadorian Friends of Tel Aviv University

FRANCE
Prof. François Heilbronn, President
French Friends of Tel Aviv University (AFAUTA)

GERMANY
Dr. h.c. Ernst Gerhardt, President
German Friends of Tel Aviv University

HONG KONG
Sharon Ser, Chairperson
Hong Kong Friends of Tel Aviv University

INDIA
Aaron Solomon, President
Indian Friends of Tel Aviv University

ISRAEL
Amnon Dick, Chairman
Israeli Friends of Tel Aviv University

MEXICO
Jaime Murow Troice, President
Mexican Friends of Tel Aviv University

NETHERLANDS
Robert van der Heijden, President
Dutch Friends of Tel Aviv University

NORWAY
Herman Kahan, Chairman
Norwegian Friends of Tel Aviv University

RUSSIA
Viktor Vekselberg, President
Russian Friends of Tel Aviv University

SOUTH AFRICA
Jonathan Osrin, Chairman
South African Friends of Tel Aviv University

SPAIN
Patricia Nahmad, Co-President

Isaac Querub, Co-President
Spanish Friends of Tel Aviv University

SWEDEN
Peter Seideman
Swedish Friends of Tel Aviv University

SWITZERLAND
Patrick Loeb, President
Swiss Friends of Tel Aviv University

UK
William Shaul, Acting Chair and Treasurer
The Tel Aviv University Trust

Leslie Wolfson, Chairman, Scottish Group
The Tel Aviv University Trust

URUGUAY
Bernardo Faincaig, President
Uruguayan Friends of Tel Aviv University

USA
Jon Gurkoff, National Chairman
American Friends of Tel Aviv University (AFTAU)