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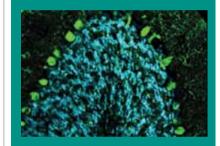
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Psychology Plus

Cutting-edge combinations of psychology with other disciplines are enabling TAU scientists to explore the deepest connections between behavior and the brain.

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Dear Friends,

The word "interdisciplinary" is certainly a mouthful, and sounds, for many, dry and abstract. But from my perspective as a scientist and a university president, the interdisciplinary approach is one of the most exciting trends in research today, and represents the future of the entire academic enterprise.

World problems are simply too complex

and multi-faceted for any one field to solve. By pulling down intellectual barriers, applying the methods of one field to another, and fusing together older disciplines into newer, synergized ones, academia can open entirely new avenues of scientific investigation and enrich its study programs as well.

Tel Aviv University is the recognized leader in Israel in encouraging and supporting interdisciplinary research and teaching. This issue of *TAU Review* puts the spotlight on just a few of the University's interdisciplinary achievements: the merging of psychology with brain imaging, immunology, chip engineering and philosophy; an international project for identifying security threats posed by emerging technologies; and a TAU-developed archaeological tool that draws on geology and materials science. In dozens of major areas, such as renewable energy, nanoscience, neurodegenerative diseases, cancer, and environmental studies, TAU is creating the best conditions possible for fruitful interdisciplinary work.

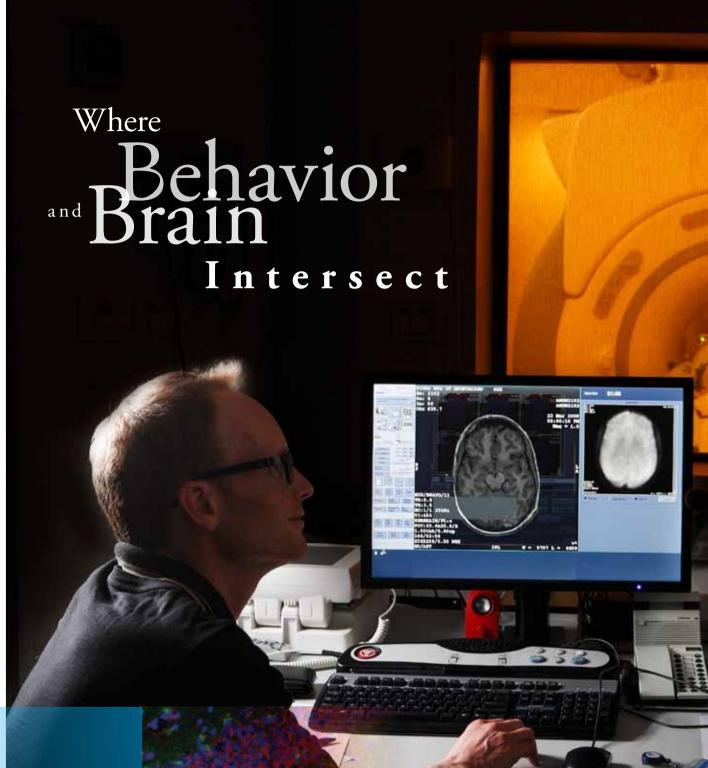
Two more top University priorities are highlighted in this issue: promoting entrepreneurship – both on campus and in the community; and globalizing our campus further, through the new Sofaer Family International MBA Program, the International Master's in Conflict Resolution and Mediation, and several more newly launched English-language programs.

On a sad note, the TAU community mourns the passing of our long-time Vice President, Yehiel Ben-Zvi. His contribution to the University's development was unparalleled and his warm personality will be greatly missed.

Yours sincerely,

Professor Joseph Klafter

TAU President



Prof. Talma
Hendler in
the lab with
TAU medical
school
graduate
and PhD
candidate, Dr.
Avner Thaler



CANCER, EMOTIONS, SCHIZOPHRENIA AND THE HUMAN SOUL MAY SEEM UNRELATED TO ONE ANOTHER AS FIELDS OF STUDY, BUT THEY ALL HAVE ONE THING IN COMMON: THE HUMAN MIND. BY INTEGRATING PSYCHOLOGY INTO BRAIN STUDIES AND OTHER DISCIPLINES, TAU RESEARCHERS ARE REVEALING THE INNERMOST WORKINGS OF THE MIND AND REDEFINING THE FIELD FOR FUTURE **GENERATIONS OF SCIENTISTS.**

Only one thing about the human soul is certain: No one has found it with a microscope. But with the use of advanced tools, scientific research is increasingly being employed to discover what was once considered unknowable. By analyzing brain activity through an MRI scan, scientists are pursuing age-old questions about consciousness - how it can be defined in biological terms, and how our emotions manifest in the brain.

Then philosophers step in, and ask: Can we truly define consciousness from a scientific perspective?

TAU is advancing this debate with an interdisciplinary BA study track in consciousness research, a collaboration of the Lester and Sally Entin Faculty of Humanities with the George S. Wise Faculty of Life Sciences. This advanced track designated for particularly talented students consists of a double major in biology and philosophy, with a concentration on the theme of conscious-

This is just one of several new interdisciplinary frameworks at TAU that expand the limits of the traditional social science field of psychology to incorporate ideas and technologies from six other faculties – humanities,

arts, life sciences, medicine, exact sciences and engineering.

"Mind and brain are not the same thing," stresses Prof. Ehud Gazit, Vice President for Research and Development at TAU. "They are entirely different conceptual frameworks. That is what is so special about our approach at TAU. We are searching for the deepest connections between the two - on the philosophical, biological, molecular and atomic levels."

Psychobiology: Key to unlocking disease

Emerging as a cutting-edge interdisciplinary field, psychobiology is instrumental in the development of revolutionary treatments for mental illness and cancer, as well as new ways of analyzing mechanisms in the brain. Prof. Daphna Joel, head of TAU's Psychobiology Program and a former head of the PhD Program in Neuroscience, says, "Through our research, we try to strip down the connection between behavior and the brain to its biological nuts and bolts."

In the area of schizophrenia, for example, the first behavioral signs of the disorder are being investigated at TAU using magnetic resonance imaging (MRI) technology to view the accompanying changes that occur in the brain. Groundbreaking research conducted by Prof. Ina Weiner of the Department of Psychology and her doctoral student Yael Piontkewiz, in collaboration with Dr. Yaniv Assaf of the Raymond and Beverly Sackler School of Chemistry, has shown that with timely intervention, the onset of schizophrenia could be halted before it even begins.

One of the most debilitating mental illnesses, schizophrenia may strike without warning during or after adolescence. "The trajectory of schizophrenia is different from other neurodevelopmental disorders, which begin early in life. Schizophrenia is unique in that it begins late," says Weiner, who is a former dean of the Gershon H. Gordon Faculty of Social Sciences. "The harm is caused early, most likely in utero, but the symptoms only emerge after many years. So with these years providing a 'window of opportunity,' the question we asked is whether we can use this opportunity to prevent the disorder."

Using MRI to analyze the changes that occur in the structure of the brain from puberty to adulthood,

can prevent them from happening at all. The findings were published in Biology Psychiatry.

The main challenge now is finding a drug that is effective but with few side effects. The schizophrenia drug used in the study, clozapine, cannot be justifiably administered to individuals who have not yet manifested psychotic symptoms, says Weiner. "In our latest experiments, we used very low doses of another drug, risperidone, and it worked. We also observed that it doesn't damage the brain. Still, a lot of work has to be done to discover drugs with little or no side effects.

"We envision a preventive drug that is safe and can be given to everyone, like omega-3," she says. "As long Fellowships in Brain Research and Social Sciences, have elucidated new treatment directions for schizophrenia. Segev Barak has researched treatments for associated attention disorders, and Michal Arad has researched the beneficial effects of estrogen on women at risk for the disorder.

Living productively with schizophrenia

While there are many treatments for the psychotic behavior associated with schizophrenia, there are no medications specifically directed at the cognitive impairment that accompanies the disorder and that prevents schizophrenics from performing the tasks of daily life. Neurobiologist Illana Gozes of the



We envision a preventive drug for schizophrenia that is safe and can be given to everyone like omega-3."

as the drugs are not completely safe, though, we will have to combine neuroimaging with other methods to find out who is prone to psychosis."

Weiner concludes: "This is the

first demonstration that brain deterioration can be prevented, which opens exciting new opportunities for revolutionizing the treatment of schizophrenia."

In addition to this devel-

opment, two PhD students working under the supervision of Prof. Weiner, both recipients of the Joseph Sagol

Department of Human Molecular Genetics and Biochemistry, Sackler Faculty of Medicine, has developed a compound, which is already in human trials, that may offer relief and treat the most debilitating symptoms of schizophrenia - those which pertain to daily functioning.

"For schizophrenics, basic tasks like going to the grocery store, writing a check or taking a bus are still challenging, even if you treat the psychosis," explains Prof. Gozes, who is Director of the Adams Super-Center for Brain Studies and incumbent of the Lily and Avraham Gildor Chair for the Investigation of Growth Factors at TAU.

Gozes studies the innermost structure of brain cells and how they interconnect with one another. "All the cells in the brain make connections with each other – that's how the brain



Prof. Daphna

mentor Prof.

Ina Weiner

Joel (left) and her



Weiner discovered that a drug administered just before those structural changes occur, before puberty,

coordinates what the body does," she says. "It's important for this interconnected structure to remain stable, as it forms a kind of railway system for materials to be transported among brain cells. What happens in schizophrenia is that proteins associated with this transport system may change, and the stability of the system is then disrupted."

Gozes discovered a compound, called davunetide, that stabilizes the system and could potentially improve schizophrenic patients' life skills.

Allon Therapeutics, the Canada-based company which Prof. Gozes founded together with Ramot, TAU's technology transfer company, is currently conducting clinical trials of the drug with substantial financial support from the National Institutes of Health (NIH) of the US. "If we succeed," she says, "this could become the first approved treatment for cognitive impairment associated with schizophrenia."

Gozes sees no contradiction between her previous basic science work and its current, psychology-related outcome. "When you work on the molecular genetics and biochemistry of the brain," she says, "you have to look at behavior because it represents the final outcome. You have to be able to connect the molecules to specific behaviors of human beings."

Beat the stress, beat the spread of cancer

Everyone knows that, if you feel sick, stressing about it only makes it worse. But in what has proved to be a deadly link, says Prof. Shamgar Ben-Eliyahu, psychological and physiological stress responses to cancer surgery can contribute to the progression of metastasis.

"Approximately 30 to 50 percent of colon cancer patients will have metastasis following surgery to remove

ENVISIONING THE MIND WITH MRI

TAU is the largest center of neural imaging research in Israel.

Many of the recent breakthroughs achieved at TAU were made possible by the university's new MRI facility, which is supported by the Alfredo Federico Strauss Center for Computational



Neuroimaging, the Raymond and Beverly Sackler Institute for Biophysics and the Israel Science Foundation. About 20 teams from five faculties – Social Sciences, Life Sciences, Exact Sciences, Medicine and Engineering – use the powerful and non-invasive MRI to see what they were unable to see before: images of activity in various parts of the brain.

"Our research is pushing the limits of MRI technology," says Prof. Yoram Cohen of the Raymond and Beverly Sackler School of Chemistry, who spearheaded the initiative to build the facility, and who promotes MRI techniques as a cornerstone of neuroscientific research.

"Yoram is 'Mr. MRI' on campus," affirms colleague Gil Navon, a professor emeritus at the school. "He was the one who pushed for purchasing advanced experimental MRI equipment – and now the machine works day and night. People can barely find a time slot to use it."

Adds Dr. Yaniv Assaf, Cohen's former PhD student: "The greatest power of the MRI unit is that it has united scientists from five disciplines under one roof, where they collaborate on important studies." Assaf, the Director of the Strauss Center and recipient of the Sieratzki-Korczyn Prize for Advances in Neuroscience at TAU, is one of several new faculty recruits at TAU who were picked for their expertise in MRI. The wave of recruitment, he says, has turned TAU into a "powerhouse of neural imaging."

Just recently Prof. Cohen and Dr. Assaf established the CONNECT consortium for imaging brain connectivity together with 10 additional groups from the UK, Italy, Germany, France, Denmark and Switzerland. The consortium received a grant of 2.4 million euros for the two-year research program.

tumors, and the majority of them will die," says Ben-Eliyahu, who heads TAU's Psycho-Neuroimmunology Laboratory and serves as Chairperson of the Department of Psychology.

It begins in the brain, when the stress of surgery triggers the release of hormones like adrenaline, prostaglandins and cortisol. These stress hormones suppress the immune system at the very moment when it is needed most, significantly increasing the likelihood that the cancer will spread. Additionally, these hormones directly affect the malignant tissue, promoting its growth and metastatic capacity.

Ben-Eliyahu believes he has found a potential treatment: By blocking the release of the stress hormones with drugs administered before, during and after surgery, the rate of metasta-



Prof. Yoram Cohen (left) with Dr. Yaniv Assaf in the experimental MRI facility at TAU



Prof. Shamgar Ben-Eliyahu



sis drops and the patient's chances of recovery sign i fi c a n t l y improve. The drugs used

are generic medications currently on the market that are inexpensive, relatively safe, and often prescribed for other conditions such as pain. The findings were published in the *Journal* of *Immunity* this year.

"Ours is among the first studies to show that psychological fear may be no less important than real physiological tissue damage in suppressing immune competence," Ben-Eliyahu says.

Ben-Eliyahu won a five-year, million dollar grant from the NIH for his work in the emerging field of psycho-neuroimmunology, which addresses the interactions between the nervous system, the brain and the immune system. "Any intervention that reduces the risk of metastasis could mean a lot in terms of saving lives, especially when you consider that colon cancer is the second-most common cancer afflicting the Western world," he says.

Getting to the root of trauma

Can't handle the stress? The proof of it may be in your MRI scan.

By using neuroimaging to predict who is most likely to develop severe mental disorders following a traumatic incident, Prof. Talma Hendler could make possible the preventive treatment of trauma victims.

"Currently there's a big problem with post-trauma psychopathology. We don't really understand why some people develop mental disorders and others don't," says Hendler, who conducts research and supervises graduate students at TAU's Levie-Edersheim-Gitter Institute for Functional Brain

Imaging, a joint venture between TAU and its affiliated hospital complex, the Tel Aviv Sourasky Medical Center.

"If 10 people experience the same traumatic situation, only two will come out pathological. We think this is due to an underlying biological mechanism of vulnerability in the brain," she says.

Hendler is working in close collaboration with the IDF, which is eager to help soldiers cope with military stress. Using an MRI machine, Hendler scans the activity and structure of the brains of healthy combat paramedics before and after they enter army service. She compares the scan results from before conscription,

"

We are searching for the deepest connections between brain and mind – on the philosophical, biological, molecular and atomic levels."

when the new soldiers are relatively stress-free, to a year-and-a-half later, following the stressful ordeal of combat. The findings are clear-cut: Some people's brains are more vulnerable to stress, she says.

Subjects who, prior to stress, show more activity in the amygdala, a central node of emotional processing in the brain, often display more symptoms of stress in the second, postcombat scan. This suggests that a brain marker – or biological signpost – for predisposition to being affected negatively by stress is already present at the time of the first scan.

Subjects with higher levels of stress also show more changes in the activity of the hippocampus, a critical region for effective processing of memories, and Hendler believes this could indicate that their coping abilities are hampered. The findings were published in 2009 in the *Proceedings of the National Academy of Sciences* (PNAS).

But there is hope in this research, Hendler points out. The changes in the hippocampus indicate that the brain is flexible and plastic, or in other words, that it can be changed. This in turn means that early, brainfocused treatments could be used to counteract the negative effects of life trauma.

In collaboration with Dr. Noam Shomron, a TAU graduate and newly recruited faculty member at the Sackler Faculty of Medicine, Hendler now seeks a biomarker – an indication in the blood cells of a predisposition to stress. "We're searching for a correlation between what we see in the blood and what we see in the brain," she explains. This analysis might clarify whether susceptibility to stress is genetic, and whether it could be influenced through customized treatment.

"The study will help us identify those individuals who are the most sensitive to trauma," says Hendler, "so that we can predict, prevent or better treat trauma-related mental distress."

Rewiring the brain to overcome Parkinson's

What if defective parts of the brain, such as those involved in Parkinson's disease or epilepsy, could be replaced with a micro-electronic device? That is the goal that Prof. Matti Mintz, along with a team of scientists at TAU and from the European Union, have set for themselves.

Mintz, a professor of psychobiology, seeks to replace very small, damaged circuits of the brain with an electronic chip that would restore normal

functioning. Currently, he's working together with engineering specialists on a circuit of the brain that controls very basic motor learning, such as blinking in anticipation of a blow to the eye area.

"We're beginning with a circuit that is simple enough that we can claim we understand it, but is still complex enough to be attractive for research because it has a cognitive function and can learn things," says Mintz. Using this particular circuit, the brain learns the right timing to perform various motor functions based on visual and auditory cues. If the circuit is damaged, this ability to learn and carry out basic motor functions is lost.

"Our goal is to correct the brain's dysfunction by designing a silicon chip that performs as well as the oncenormal circuitry," explains Mintz.

Using electrodes, the researchers record brain activity from the inputs

of the damaged

circuit

and

play it back to the output of the damaged circuit through the replacement chip, thereby making a connection between the healthy circuits in the brain and bypassing the damaged circuit. In fact, Mintz points out, the process is similar to a cardiac bypass.

As simple a task as this may sound, it is in fact so complex that many scientists believe it can't be done at all, and the project has pulled in teams from across continents. In Israel, Mintz's collaborators are Professors Yosi Shacham and Hagit Messer-Yaron, and Dr. Mira Marcus-Kalish, all of TAU.

Mintz is confident that eventually their mission will be accomplished, and that practical applications of their research could include permanent treatments for Parkinson's and other neurodegenerative disorders.

"This development won't occur hundreds of years in the future, but rather in the next decade or two," he says. "It's unclear whether man-

made circuits can ever replace the sites that control complex cognitive functions such as language, but we strongly believe they can when it comes to simpler motor and sensory processes. We're on the right track."

Face forward

In our lifetime we encounter hundreds of thousands of people, so how do we recognize the faces we know? It turns out that although it usually takes only several milliseconds to recognize a face, we do so via a specialized and exceptionally complex mechanism in the brain.

Combining MRI and electrophysiology techniques, Dr. Galit Yovel of TAU's Department of Psychology and her PhD student Boaz Sadeh study the biology of facial recog-

nition. Yovel has discovered that the way the brain processes faces is entirely different from the way it processes inanimate objects or other body parts.

What makes the process of facial recognition so unique, Yovel says, is that it is holistic. "When we look at a face, we don't usually try to recognize the individual features separately. Instead we see it as one integrated object."

Because of this holistic process, people are easily fooled by a new haircut or glasses, as Yovel and another of her PhD students, Vadim Axelrod, discovered by showing test subjects pictures of faces with the same basic facial features (eyes, nose and mouth) but varying external features.

"The brain's being influenced by external features demonstrates its holistic processing," comments Yovel. "It takes in all the bits of information together, so that facial features interact with one another – they're not processed independently."

Part of this process is shaped by individual experience; for example,







Neuroscientists of the Future: The PhD Program

Ten outstanding students are selected each year for one of the most prestigious and competitive doctoral programs at TAU – the interdisciplinary PhD Program in Neuroscience. Coming from a wide array of academic backgrounds, including math, psychology, biology, computer science and medicine, students bring their diverse skills to bear on studies of the brain. They're also given a special opportunity to widen their knowledge base, and get exposure to unfamiliar disciplines and methods, by completing at least two labora-



Neuroscience PhD students Boaz Barak and Ayelet Levy together with Prof. Uri Ashery (right) tory rotations at different departments or at TAU-affiliated hospitals

One such student is Talia Brandman, who is combining her background in psychobiology, a stint in a computer laboratory, and MRI techniques to study the brain's recognition of human bodies. Other students are pursuing topics such as neuron miscommunication in schizophrenia and Alzheimer's, the neuro-genetic basis of autism, and the use of neuro-imaging to map emotions in the brain. Co-head of the PhD Program in Neuroscience, Prof. Uri Ashery of the Department of Neurobiology, Wise Faculty of Life Sciences, says: "The Program already has a thriving research milieu, with students establishing their own labs. In the long run, we aim to produce a new generation of scientists in Israel and in the field itself." The additional co-heads of the program are Prof. Ina Weiner and Prof. Bernard Attali of the Sackler Faculty of Medicine.

people become more adept at recognizing faces that they are accustomed to seeing. It is for this reason, Yovel points out, that people of unfamiliar ethnicities all look alike to an outsider. "All faces are actually very similar, so we need both experience and the machinery to distinguish between them," she says. "Our studies show that it is not the quantity of faces we encounter but the quality of the interaction we have with them that determines our face recognition abilities."

Yovel's main goal in her studies is to understand how the brain works, but there may be benefits to law enforcement as well. Eyewitness testimony, which often involves recognition of a perpetrator, can be heavily influenced by misleading external features such as facial hair.

"When the police ask witnesses to reconstruct faces based on individual features, this does not reflect normal brain processing," says Yovel. "Our findings could be incorporated into the current practice for more accurate results."

Changing our minds, literally

Can the structure of our brains be changed? That is the question being pursued by Dr. Yaniv Assaf, a neuroscientist at TAU's George S. Wise Faculty of Life Sciences, who in collaboration with the Department of Psychology is studying the plasticity of the brain, or how susceptible it is to change. By mapping the activity of the brain before and after a task sequence, Assaf has discovered that areas in the brain can change after learning new information and visual cues.

One reason this study is unique is that, unlike other studies of the brain's plasticity, it is non-invasive, relying on MRI.

Using a methodology called diffusion imaging, Assaf scans the brains of human subjects in an MRI machine, and then gives them a computer car racing game which they are asked to complete as fast as they can. They play the same game several

times during the course of two hours. Each time, participants complete the game much faster as they learn the curvature of the track and the location of obstacles.

After the game, subjects are once again scanned in the MRI machine, revealing minute structural changes to regions of the brain that are related

NEHAMA VERBIN: THE SOUL OF THE MATTER

Leading an advanced BA study track that combines philosophy and biology is Dr. Nehama Verbin, who was recruited two years ago from Cambridge University to TAU's Department of Philosophy. The interdisciplinary program – which is open only to outstanding students – explores the intersections between the two seemingly contradictory fields of study, with an emphasis on consciousness.



to the skills they utilized in the game, such as memory, spatial learning and motor learning.

"The changes probably fade over time," clarifies Assaf. "It depends on the intensity of the experience." It also depends on how many times someone engages in a specific task: In the process of learning, the brain forms new connections that can either fade or be refreshed over the course of time by repeated use.

"We're now attempting to find out how persistent the structural change is," says Assaf. "When we re-test our subjects with the same racing game a week later, it takes them some time to achieve the score they made a week earlier."

One of the possible implications of Assaf's research is that scientists may one day be able to predict an individual's future susceptibility to neurodegenerative diseases by identifying a deficiency of plasticity in their brain at a young age.

A Meeting of Minds: Philosophy and Psychotherapy

The philosopher asks: What's it all about? The therapy patient asks - not unsurprisingly - the very same thing,

says Prof. Shlomo Mendelovich, Head of the Psychotherapy Program at TAU.

"The meaning of things, the meaning of being, the importance of suffering in human existence - these are topics of concern to both philosophy and psychology, which makes them ideally suited to be studied in an interdisciplinary manner," Mendelovich says. "In a sense, psychotherapy is like practical philosophy."

In a popular interdisciplinary course this year, master's students in philosophy at the Entin Faculty of Humanities and graduates of the Psychotherapy Program at the Sackler Faculty of Medicine jointly explored the concept of truth and its relationship with tradition and memory. The course, "Readings in Freud: Moses and Monotheism," was co-organized by Prof. Shlomo Biderman, Dean of Humanities, and Dr. Rina Lazar of the Psychotherapy Program, and was held under the auspices of the School of Philosophy. Prominent TAU professors of philosophy and psychotherapy were invited to give lectures.

"The two disciplines don't quite speak the same language," notes Lazar, "which makes the course a very provocative and evocative experience. We learn from them, they learn from us. In psychotherapy, we clinicians want to help people who are suffering. Philosophers want to introspect, retrospect, try to understand. Yet I think there's a shared thread, because when patients suffer, they ask existential questions."

The course sprang from an annual joint conference in psychotherapy and philosophy that has been flourishing at TAU for the past decade, attracting hundreds of participants every year. Over 500 attended the most recent conference on "The Secret."

"The issue of secrecy intersects with the quest for self-awareness," says Prof. Menachem Lorberbaum, former chair of the Department of Jewish Philosophy. "The trust that the patient has in the therapist that he or she can reveal, and even flaunt, innermost secrets, knowing that they're safeguarded by the therapist, is crucial for the possibility of our opening up to ourselves."

"The study of philosophy is often very rarified," adds Lorberbaum. "That we can have such important and fruitful meetings with hundreds of psychologists and laypeople is testimony to the resonance of our university work and its impact on the surrounding community."



Students participate in advanced courses specially designed for them, and in monthly seminars taught by specialists who deal with consciousness from different angles, including biologists, mathematicians, memory experts and scholars of Maimonides and of Buddhism. Verbin describes how philosophy and biology simultaneously conflict with and reinforce one another. "If we want to know what it is to have an emotion, such as love, and who is in love, do we seek biological evidence for what happens in people's bodies, or do we look at the concept of love and how we apply it?" she asks. "Biologists investigate the

physical processes that characterize falling in love, while philosophers examine how the concept of love is used." But a mystery even deeper than love is the soul: does it exist, and how it can be understood? "The question is whether to be human is to have a soul, or whether we can make do with bodies. And if we don't have a soul, are we like matter in that all our actions are predetermined? Is our free will nothing but a useful illusion?" asks Verbin. "We deal with questions that involve many philosophical puzzles, incorporating the insights of current research in biology," she says.



Verbin



From left:
Mohamad
Ismail, David
Ickowicz,
Tanja
Kisseleff,
Nomo
Khumalo
and Martin
Niyomwungeri



Bringing World the World into the Classroom

TAU'S NEW INTERNATIONAL STUDENTS PROVE THE EDUCATIONAL VALUE OF A CULTURALLY DIVERSE CAMPUS

When Nomo Khumalo, a South African, was looking for an MBA program that could give him international exposure, Israel quickly captured his attention. "If you look at the start-ups and inventions that come out of Israel, the stats just jump out at you," he says. "It seems like a place I could learn more from than anywhere else."

Khumalo is a student in the new Sofaer Family International MBA program at the Faculty of Management— Leon Recanati Graduate School of Business Administration, which, along with the International Master's in Conflict Resolution and Mediation at the Gershon H. Gordon Faculty of Social Sciences, is one of two new English-speaking international programs at TAU. Eighty-seven students from 30 countries enrolled in the 2009-2010 academic year.

The new programs join the growing catalog of TAU's English-language degree offerings, such as the MA program in Middle Eastern History, the Adler-Buchmann International Program for Outstanding Foreign Students at TAU's Buchmann-Mehta School of Music, a planned graduate program in law at the Zvi Meitar Center for Advanced Legal Studies, and planned international master's programs in trauma and crisis studies; diplomacy and security; Israeli politics; and environmental studies. In addition, the highly-reputed School for Overseas Students at TAU runs semester, year-long and summer

programs for students from around the world.

"International programs demonstrate how education builds bridges," says Vice President for Development and Public Affairs Dr. Gary Sussman. "Having students from countries such as South Africa and India helps to produce goodwill ambassadors for Israel in these countries," he adds.

Diversifying the learning environment

David Ickowicz, a Costa Rican-Israeli with a background in industrial engineering, says that as part of the Sofaer IMBA, he is learning things just by watching people approach the same problems from different perspectives.

"In a globalized economy, you do business with people from practically every country in the world," he says. "It's easier to understand a nation's culture once you have met someone from that country."





Prof. Simon Benninga, who directs the Sofaer IMBA and holds the Max and Steffi Perlman Chair in Financial Economics, says: "The Sofaer program, taught in English by the best professors from Tel Aviv and abroad, reaches out to outstanding international and Israeli students, who in turn give added value to the class dynamics of the program."

Dr. Shawna Novak, a physician from Canada and a master's candidate in the Conflict Resolution and Mediation Program, has years of experience in public and international health, but believes there is a "lot of value in studying in a diverse and international group." In learning from one another's experiences, she notes, she and her classmates can more effectively contribute to the resolution process in conflict zones across the world.

This cross-cultural perspective was one of the main goals of the International Master's in Conflict

Resolution and Mediation, which was born out of the highly successful Hebrew-language Evens Program in the same field. Courses delve into all aspects of conflict resolution, including international law, negotiation, the ecological impact of conflict and much more. The head of the program, Prof. Ephraim Ya'ar, a former director of TAU's Tami Steinmetz Center for Peace Research, believes that the interdisciplinary curriculum "will lead graduates to assume prominent positions across countless fields of practice."

Novak, who works to alleviate health care disparities as a way to build bridges between populations, thinks that her MA will provide her with a new toolkit to take her diplomacy work further. She expects to use the techniques she's learned at TAU to "establish larger projects in the health diplomacy field that work more fluidly."

Learning from the landscape

For each of these programs, Israel provides an unparalleled backdrop.

"An MBA class interacts with the environment that it's in," says Khumalo, whose studies are supported by Gary Lubner of London, CEO of plate glass manufacturer Berlon. "I get to meet people that I wouldn't anywhere else - innovators, academics and business leaders from the region."

Ickowicz agrees. "The IMBA teachers have the unique characteristic of having a lot of contacts in the industry," he says. "They organize workshops, speeches, lectures and meetings with high profile industry leaders. That opens the doors for all the students participating in the program to start business relationships inside and outside of Israel."

Recognizing how much Tel Aviv gives to them, the Sofaer students are volunteering in their adoptive community. IMBA student Tanja Kisseleff, a Swiss citizen born in the Philippines, has gotten involved with "MBA Cares," a TAU student-driven program that is currently working with two organizations - Save a Child's Heart, and Shekulo Tov, which helps mentally handicapped people find work.

IN THE RIGHT SPIRIT

Students in the Conflict Resolution and Sofaer IMBA programs took part in the SPIRIT conference at the United Nations headquarters in New York this April. SPIRIT -Students Participating in Resolving International Tension - is a peacebuilding initiative sponsored by Columbia University and the UN. The TAU students presented their plans for the development of large-scale fish farms in the Gaza Strip, entitled "Nets of Peace."

"I think it's all about balance," says Kisseleff. "I'm getting a lot out of this MBA, and this is a way of giving back."

Importing experience

Every one of these students arrives at TAU with more than just suitcases in tow – each brings their unique set of experiences to enrich the classroom.

Kisseleff comes to TAU with a background in hotel management and a resume that lists a variety of locales such as Thailand, India and, most recently, the United Arab Emirates. "The Emirates is a very new country, and so it's interesting for us in the classroom to look at how they have

other student in the program, Aneke Bartholemew of Nigeria, are funded by Anne Merrin Heyman and Seth Heyman, US-based philanthropists who have established the Agahozo Shalom Youth Village for orphaned children in Rwanda.

Overcoming Obstacles

For Mohamad Ismail, a Palestinian-American student born in Jerusalem and educated in the United States, joining the International Master's in Conflict Resolution and Mediation was an exercise in overcoming his preconceptions about the Palestinian-Israeli conflict.

After completing degree in finance at the University of Nebraska, Ismail returned to the Middle East to work with the Palestinian Authority a GIS (geographic formation

systems) specialist. His role was to analyze the effectiveness of government spending, and he worked closely with the ministries of transportation, housing and others.

The experience opened his eyes to the intricacies of the conflict, and specifically the human aspect of each side. "I realized that the politics and daily life had nothing to do with what was on TV," he explains.

Moving forward, Ismail, whose studies at TAU are supported by the Marc Rich Foundation, Sir Ronald Cohen and TAU Governor Leslie Wolfson, wants to help facilitate better communication between both sides, and he's been sharing his expe-

rience as a refugee with his classmates in the spirit of positive dialogue.

Homeward bound

Although some of the international students at TAU will make Israel their home, most will return to their home countries, taking with them the knowledge they've acquired here.

"One of the reasons I'm here is to form linkages with the rest of the world," says Khumalo, who ultimately plans on making use of his IMBA back home in South Africa. "There is a lot of development opportunity going on there," he explains. "I think there is a moral responsibility to go back, but I also think it's the place where I can most clearly recognize good prospects for me."

Conflict resolution students Ismail and Niyomwungeri hope to use their newfound skills to serve their communities. "I want to build on the connections I've made here," says Ismail. "My ideal is to contribute to a civil society model in Palestine that is about sustainable development, education and community empowerment."

Niyomwungeri says that by observing the Israeli-Palestinian conflict, he is learning techniques to implement in Rwanda. "We are now in the process of reconciliation after war and genocide." he says. "I think I could help in that process."

Prof. David Menashri, Dean of Special Programs at TAU concludes: "The world is a smaller place because of technological innovation and globalization. At TAU we are dedicated to attracting talented international students and providing them with meaningful educational experiences and social opportunities that they will carry with them throughout their lives. It is through such positive experiences that the State of Israel is able to create a diverse network of informal ambassadors worldwide."

ISRAELI-INDIAN-IRISH SOFAER TEAM WINS BIG

The students of the Sofaer Family IMBA have already proven their business prowess with a first-place win in a recent national case study competition. Approximately 1,500 students from 12 higher education institutions took part in *TheMarker/*Dan David competition, which asked the 40 participating teams to create innovative and economically sound solutions to real-life problems faced by four leading Israeli companies. The team that represented TAU's Sofaer International MBA was comprised of Raphael Mazuz, an American-Israeli, Amitava Mittra from India and David McGeady of Ireland. The Dan David Foundation, which also awards the Dan David Prize headquartered at TAU, was one of the supporters of the contest.

developed in comparison to Israel," she explains.

For Martin Niyomwungeri of Rwanda, 12 years of experience working with victims of the genocide as part of the Red Cross ultimately motivated him to pursue conflict resolution studies. He has seen first-hand the grim realities of conflict gone too far. Niyomwungeri feels that like the Israeli-Palestinian conflict, what happened in Rwanda was "a conflict between brothers."

"There are many students who are interested in what happened in Rwanda, and what is happening in Africa. I bring a different perspective," he notes. Both Niyomwungeri and an-

The relationship between the buildup of amyloid-beta protein – a kind of plaque in the brain - and Alzheimer's disease is well known. Eliminating the protein has been the focus of almost all drug research on the devastating neurodegenerative disease. Now, findings by new faculty recruit Dr. Inna Slutzky and students Efrat Abramov and Iftah Dolev of the Sackler Faculty of Medicine are challenging some of the basic assumptions of Alzheimer's researchers until now, and may further the development of a cure for the disease.

In a paper published in Nature Neuroscience, Slutzky and her team revealed that amyloid-beta protein plays an important role in the proper transfer of information in neural networks. They argued that too little of the protein could be as dangerous as too much.

The TAU team showed that an optimal amount amyloid-beta of in the protein healthy brain is important physiologically. It serves as a regulator for normal synaptic transmission the hippocampus, a brain region in-



volved in learning and memory function. The researchers found that if this precise balance is even slightly disturbed, the effectiveness of information transfer between neurons is impaired.

Slutzky compares the synapse to a computer memory unit. "As long as the division of work between the many units is balanced, the computer works. In the case of people, when the balance in the brain is upset and there's increased background activity in some of the synapses, like noise in an electronic system, the brain becomes damaged. We think that increased synaptic activity in the human brain may be the earliest sign of the onset of Alzheimer's disease, causing a reduction in neuronal plasticity and with it memory and learning." The researchers believe that this information will help in the early detection of Alzheimer's.

Slutzky was recruited to TAU's Department of Physiology and Pharmacology from MIT, where she completed her post-doctoral work in cellular mechanisms that maintain memory function. In 2008 Slutzky received a Rosalinde and Arthur Gilbert Foundation New Investigator Award in Alzheimer's disease.

Slutzky sees returning to Israel as a very important step in her scientific career: "Israel is one of the strongest centers for neuroscience in the world. I am proud to be part of it and to transfer knowledge to the next generation of young and very talented TAU students," she says.

Upending **Textbook** Science

A destructive protein associated with Alzheimer's is also essential for normal brain functioning, finds newly-arrived TAU researcher Inna Slutsky



Dr. Inna Slutzky (center) with PhD student Iftah Dolev and MSc student Efrat Abramov

UK FAMILY "ADOPT" A SCIENTIST

New scholarships generously donated by the Sheila and Denis Cohen Charitable Trust of the UK will assist students investigating the mechanisms that cause Alzheimer's disease at the TAU laboratory of Dr. Inna Slutzky. The Trust, which primarily supports education and social welfare in the UK and Israel, commemorates the late Denis Cohen, a successful businessman, philanthropist and ardent Zionist since his youth, and

his wife Sheila, a remarkable woman who was incapacitated by vascular dementia in the last years of her life. It is presently managed by their children: Lucy Silver and David Cohen, an international businessman and Zionist who is married to an Israeli.





Denis and Sheila Cohen

by Gil Zohar

Taking High Tech to the Periphery

Kellogg-Recanati Executive MBA graduate blazes a high-tech path to Nazareth in northern Israel

Inas Said, the head of Galil Software in Nazareth and the first Arab CEO of an Israeli high-tech company, is using his Tel Aviv University education to bring the entrepreneurial spirit to the Arab employment sector.

After two decades of executive experience in Berlin, Düsseldorf, and Boston, Said, today 44, decided to abandon his fast-track American career in order to raise his two US-born daughters in his family's home town of Nahef, in the Galilee. He enrolled in the Kellogg-Recanati International Executive MBA program at TAU to increase his chances of finding suitable work. The program, which has produced 14 graduating classes whose elite alumni serve

Administration and the top ranked Kellogg School of Management at Northwestern University in Illinois, USA.

Said was part of a diverse, multinational student body with backgrounds ranging from law to publishing. He himself has expertise in optical electronics and a master's degree in electrical engineering and electronics. "Kellogg-Recanati helped me take a more business-oriented approach to my work. If you don't have a business background, you're an amateur."

Said was approached by a group of investors setting up Galil Software, and in December 2007 was appointed CEO of the start-up, located not far from Nazareth's landmark Basilica of the Annunciation. The company, whose investors, founders and staff are all Israeli, today employs 80 engineers, most of them Arab, and half of whom were hired in 2009 - when other Israeli high-tech firms were laying off staff. Galil Software provides high-end software development and testing services for high-tech companies in the country's center. Under Said's stewardship, the privatelyowned company has doubled in size in the last two years, and has surpassed the revenue break-even point.

"Building core competencies and moving the company forward at a safe pace – this is what I leaned in the MBA program. If we look at the mission of the company, we've created high value jobs," he notes with pride.

While English is the lingua franca at Galil Software, Arabic, Hebrew and Circassian are also routinely heard at the water cooler. It's a multicultural workplace environment akin to what Said encountered in America, and which he introduced in Nazareth.

Said is well aware of the bleak economic situation of Arab computer engineers, 2,000 of whom are unemployed in Israel today. "The reasons relate both to the candidates themselves and to industry," he believes. "Due to cultural and linguistic factors, Arabs tend to undersell themselves in interviews. Yet these people are highly motivated and often brilliant.

"I see in Galil Software a company that will grow to 300 or 400 engineers in the next five years. My dream is to lay down the foundation for Arab high tech, which will be part of the Israeli high-tech success story. This is the right approach to closing the social gap," Said says.

TAU Dean of Management Prof. Asher Tishler says, "We put the 'up' in start-up nation, offering a finishing school as it were for some of the country's best and brightest entrepreneurial talent." Indeed nearly a third of the CEOs of Israel's 100 largest publicly traded companies are graduates of TAU's various faculties, including business, law and accounting.

Said is only one of a group of Kellogg-Recanati alumni involved in Galil Software. Eran Kaufman from the class of 2009 is the company's VP for Sales, while graduate Ze'ev Bregman, currently CEO of Nice Systems, is an active investor and board member.



Inas Said



as leaders in Israel's rapidly growing economy, is a joint program of TAU's Faculty of Management—Leon Recanati Graduate School of Business

Start-Up University

A new emphasis on entrepreneurship at TAU is providing academia with "real world" opportunities in business and industry

Oren Simanian, 27, is a TAU undergraduate studying economics and accounting, and a member of the Student Council. He is also the founder and leader of StarTau, a new student center designed to give young people studying on campus entrepreneurial opportunities.

"Let's say I want to open a small company with three of my friends. Even if I were an MBA student, I probably still wouldn't know how to do this. Academic courses give me the tools to think, but I also need the practical tools to do things," Simanian explains. "StarTau will be a one-stop shop for students and other entrepreneurs who want to develop new ideas and start their own companies. We'll put them together with ex-



perts and people in industry who can help develop and promote their ideas.

Simanian has already been busy making contacts. He has visited several venture capital companies that deal with high-tech startups and legal firms specializing in patents. "I got them to be part of our network of business angels willing to help students develop their ideas." Simanian says also that many other business people have voiced their support for the idea of giving TAU students the practical knowledge and busiCarl Hoffman By ness skills they need to commercialize. Among the companies involved in the initiative are IBM, KPMG, Rheinhold Cohn and Manpower. At StarTau's initiative 30 students are presently enrolled in a new TAU course, Entrepreneurship for Young People, with leaders in business and industry serving as guest lecturers.

And how does the university administration feel about this student-

money!!!"

Says co-founder Nadav Eylath, a 27 year-old student in industrial engineering and management, "We started the Beehive a year ago with a pilot group of 35 students from different degree programs." From the beginning, the group members decided to direct their efforts toward generating a spirit of entrepreneurship on campus, and providing students with

supportive environment that enables people to develop courage along with their new ideas."

Passionate commitment

Vice President Gazit's enthusiastic support of these clubs reflects both a growing emphasis on student entrepreneurship at TAU as well as his own personal passion. "It goes back to my background. My field is nanotechnology, and I am an entrepreneur myself," Prof. Gazit explains.

"When I became the VP for Research and Development a little more than a year ago, I decided that one of the unique things about Tel Aviv University is its spirit of innovation," he continues. "I really want to position TAU as a place where creativity and entrepreneurship are a major focus – for undergraduate students, graduate students, faculty members and administrative staff. I think this is a central part of Israeli culture, and something well suited to TAU. This is something that I would really like to promote."



led, grassroots grab for entrepreneurial success? Says Prof. Ehud Gazit, TAU Vice President for Research and Development: "This club exemplifies the Tel Aviv entrepreneurial spirit we'd like to foster on campus and beyond, and it has the full support of my office."

Bee creative

BeehiveTAU, another student entrepreneurship club on campus, asks the following question on its website: "Out of all the creative, innovative ideas that buzz in your head, how many have actually become a reality," and declares, "Like wildflowers in the spring, TAU students have millions of fascinating ideas. The Beehive is here to help students unleash all the sweet nectar inside each flower and turn it into honey and possibly even

practical skills and resources. The Beehive sponsors lectures and casestudy presentations by entrepreneurs and leaders in industry, as well as professional workshops on intellectual property law, patents, presentation of ideas, and the first steps toward creating a start-up company. They also promote the national BizTech innovative idea competition on campus. Eylath says, "Competing in this contest helps develop practical skills, and there's also the possibility of students winning prizes of NIS 100,000 (about \$27,000) for their initiatives."

Ultimately, however, the leaders of BeehiveTAU hope that their major contribution is instilling courage. "That's probably the main thing," Eylath says. "A lot of people have ideas but are too timid to do anything about them. We want to create a

Building on strong foundations

Various opportunities for entrepreneurship are already available on campus. Ramot, TAU's technology transfer company, manages all activities relating to the protection and commercialization of inventions and discoveries made by TAU faculty, students and other researchers. It provides the TAU community with a bridging mechanism between innovation and industry, and follows through on promising new business opportunities.

A major initiative of Ramot was TAU-Tech, begun in 2003. Ramot raised \$8.5 million from private investors in the US to fund the development of seven TAU technologies in varying fields that were not yet

mature enough to be commercialized. TAU-Tech was designed as a kind of incubator for "growing" these technologies to the point where outside companies would be interested in taking on their further development. By 2007, TAU-Tech's efforts had successfully resulted in major licensing deals for almost all of the projects, including drug candidates for Alzheimer's disease and diabetes, a cancer-targeted drug delivery system, a lung fluid monitoring system for congestive heart failure patients, optical micro-biosensors for biomedical diagnosis, fuel cells for mobile electronics and industrial applications, and a micro-battery on a chip. A new round, already dubbed "TAU-Tech II," is being planned.

Spreading the message

A major focus of the TAU administration is to broaden opportunities for greater numbers of students - both on and off TAU's campus. "We have a strong commitment to carry the message of entrepreneurship around the country, to different audiences, both geographic and socioeconomic," Prof.

Gazit says. One example of this is a program for nine groups of high school students in the city of Bat Yam designed to promote innovative thinking. Run by TAU's Unit for Social Involvement at the Ruth and Allen Ziegler

Student Services Division; the Bat Yam Municipality; and Ta'asiyeda, the educational branch of the Israel Manufacturers Association, the program is facilitated by TAU undergraduates, who receive scholarships for their community work. The message of the program is that every idea can be turned into something, as each

student is helped to conceptualize and create a "product." The object is to turn the young students into budding entrepreneurs.

Inspiring tomorrow's Bill Gates

Another facet of this social commitment is TAU's growing association with the Sami Shamoon College of Engineering (SCE) in Beersheba, where plans are underway to put together teams composed of students from both institutions for national idea competitions, as well as joint TAU-SCE faculty entrepreneurship projects.

The two schools held a conference in Beersheba last December, culminating in an idea competition in which two TAU students won top prizes. Omer Dotan, 38, an MA student in the history of Latin America, won first prize, and Naor Porat, a 14 year-old student in TAU's Adi Lautman Interdisciplinary Program for Outstanding Students, won free legal assistance toward applying for a patent. While neither student is willing to disclose his winning idea

Like wildflowers in the spring, TAU students have millions of fascinating ideas."

> before receiving a patent, Naor says, "My invention is revolutionary in the field of medicine, and will prevent certain kinds of serious injuries." Describing himself as "amazed and honored" when he heard the judges' decision, Naor says, "I want to devote my life toward making inventions for the betterment of mankind and using some of the profits to solve social problems, like Bill Gates."

A hotbed getting hotter

Back on campus, evidence of TAU's burgeoning entrepreneurial spirit seems to be turning up everywhere. The MIT Enterprise Forum of Israel, housed at TAU's Faculty Management—Leon Recanati Graduate School of Business Administration, holds a wide range of activities designed to enable fledgling high-tech entrepreneurs to consult with experienced entrepreneurs and leading specialists in their respective fields. Thanks to the MIT Forum, TAU students were able to participate in Global Entrepreneurship Week last November, a diverse array of conferences, seminars and special events around Israel. In another project, graduate students and faculty members are benefiting from a program conducted by the GKH law firm in Tel Aviv, consisting of intensive, fivesession workshops in business entrepreneurship, including legal aspects.

TAU also hosted the semifinal round of NovaTech 2009, the European contest of innovative entrepreneurial ideas in information technology. The contest, held last October, pitted 15 teams against each other from Bulgaria, Rumania, Slovakia, Hungary, Poland, Turkey and Israel. Protcare, a team from Turkey, won the first place prize of \$20,000 while Vizmo, from Israel, won second place and \$10,000.

TAU's emphasis on entrepreneurship will no doubt continue to grow. As StarTau founder Oren Simanian says, "Tel Aviv University is the best university in Israel. We're one of the major brainstorming centers in the world. We must also be the leader in innovation and entrepreneurship, for both faculty and students."

Hikers know that moss on a tree trunk always points north. According to new research by a TAU scientist and his colleagues, this plant, with an ancestry of 450 million years, may also provide a new "compass" for stem cell research, helping scientists understand better how to program stem cells for medical purposes.

Dr. Nir Ohad of the Department of Plant Sciences at TAU's George S. Wise Faculty of Life Sciences, together with Prof. Ralf Reski of the University of Freiburg, Germany, have discovered that the polycomb (PcG) group of proteins plays an important role in regulating stem cell

Moss Points the Way

Common moss could play a role in the success of stem cell therapies

differentiation in moss, which is the point at which a stem cell "decides" to become a leaf or a shoot, for example. This mechanism, apparently an ancient one controlling genetic expression, is common to plants and humans alike.

"We may not yet have found the switch that turns stem cells into tis-

sue," Ohad said, "but we have found a key component that makes this switch work properly and that might be utilized to keep stem cell reprogramming from going awry."

The study, which was reported in the journal *Development*, was funded by the German-Israeli Foundation (GIF).

Portable X-Ray Device Aids Archaeologists



Prof. Yuval Goren

Prof. Yuval Goren, Head of TAU's Laboratory for Comparative Microarchaeology at the Jacob M. Alkow Department of Archaeology and Ancient Near Eastern Civilizations, is pictured here using a portable X-ray fluorescence (XRF) spectrometer to analyze a Hittite

A TAU-developed tool for analyzing ancient clay tablets is shedding new light on the history of the ancient Near East

cuneiform clay tablet in the Berlin Museum of the Ancient Near East. The tool, which is widely used in materials science and geology, was adapted by Goren for determining the provenance of ancient clay tablets without the need to extract samples from them.

The hand-held device allows archaeologists to study the chemical composition of artifacts on location rather than ship them abroad, thereby bypassing stringent regulations imposed by museums in countries where the export of archaeological materials is prohibited.

The pictured tablet is one of 110 in the Berlin museum from Boğazköy-Hattuŝa, Turkey, the capital of the Hittite Empire in the late Bronze Age, being studied by Goren as part of a collaborative project with Prof. Jörg Klinger of the Free University, Berlin, with support by the German-Israel Fund.

Goren and his colleagues are using the device to study cuneiform tablets dating from the second millennium BC – the heyday of the great empires of the ancient Near East. "Revealing the origin of the documents can shed new light on the geographical history, diffusion of writing, language and literature, scribal habits and narratives of ancient cultures," says Goren.

According to Goren, the project is helping to answer questions that have occupied researchers for years. An example is the so called "Silver Treaty," a peace treaty signed between the kings of Egypt and Hatti after the Qedesh battle of 1275 BCE and thought to be the first peace treaty ever recorded. While the original agreement was written on a silver plate that did not survive, the Egyptian version of the treaty was found as a cuneiform tablet in Boğazköy-Hattuŝa. "Using the XRF analysis, we found that the tablet was written locally, that copies of this treaty were made by both partners," he says.



The first-ever sighting of a mushroom coral dining on jellyfish was captured in this intriguing photograph taken by TAU PhD student Omri Bronstein while investigating the species on reefs off the coast of Eilat. While corals typically feed on plankton and other microscopic organisms, this was the first time scientists have witnessed a coral devouring an animal almost its own size. According to Bronstein, who is a stu-

dent of TAU marine biologist Prof. Yossi Loya, incumbent of the Robert Raynor Chair in Environmental Conservation at the George S. Wise Faculty of Life Sciences, the mushroom coral took advantage of a sea-



sonal bloom of moon jellyfish to stock up on valuable protein and gain an edge over other coral life.

Bornstein believes that the corals may be responding to changes in their underwater climate due to global

More than a Mouthful for Predatory Coral

warming. As an "indicator species," he notes, sensitive coral have been among the first to die as the marine environment heats up. They may be fighting back by radically changing their diets - to the dismay, perhaps, of their jellyfish neighbors.

The images have been published on the websites of the BBC, Discovery Channel, National Geographic and Popular Science, and as Picture of the Month by Scientific American.

Keeping on Track

TAU joins international research project to make train travel safer

Millions of people around the world travel by train each day, but this popular mode of transportation may not be as safe as it seems. According to Dr. Lev Eppelbaum, Associate Professor at the Department of Geophysics and Planetary Sciences of the Raymond and Beverly Sackler Faculty of Exact Sciences, thousands of train accidents are reported yearly. Many of the more devastating ones are caused by environmental factors such as earthquakes, mudslides and the collapse of tunnels.

Dr. Eppelbaum is working in collaboration with European scientists to provide comprehensive surveillance of the geophysical environment surrounding transit networks and to predict potential dangers

The international team is developing a monitoring system that uses electric, electromagnetic and optical sensors. Dr. Eppelbaum says the sensors will monitor three main dangers: geodynamic activity which may herald an earthquake; environmental indicators of threats such as rock slides, the development of underground caves and water movement; and possible terrorist activity such as the presence of explosives along the train

The system utilizes underground, surface, satellite and geophysical observations as well as measurements obtained by unmanned aircraft technology.

The TAU team, for its part, is responsible for developing advanced algorithms for analyzing all the geophysical data. They are developing a system that can generate a comprehensive report on the potential dangers facing a particular railway line. Several of the algorithms developed by the team have proven successful in processing the physical data.

The three-year project is being carried out in cooperation with scientists from Italy, France, Romania, Sweden, Norway and England, and is funded by a grant from the European Union's Seventh Framework Program.





Analysts at TAU identify security threats from emerging technologies that could be used maliciously by terrorists or criminals

"Imagine the year 1991, in the early days of the World Wide Web," says Dr. Aharon Hauptman, a Senior Research Fellow at the Interdisciplinary Center for Technology Analysis and Forecasting (ICTAF) at TAU. "Would we have been able to foresee that something like 'Google Earth' and 'Street View' would help terrorists to plan an attack in Mumbai in 2008?"

The malevolent use of emerging technologies is the topic of ICTAF's new interdisciplinary project, Foresight of Evolving Security Threats posed by Emerging Technologies, or FESTOS (www.festos.org.il).

The project, which is co-funded by the European Commission, with participation from leading research centers in Europe, identifies and assesses future threats posed by the abuse of evolving science and technology knowledge. Examples could include the development of new infectious bacteria or viruses resistant to known medical treatments, or the invention of materials with camouflaging properties for covert activity.

Dr. Yair Sharan, Director of ICTAF and head of the project, stresses that terrorists will increasingly make use of innovative technology to threaten society and cause maximum damage. "The terrorist of the future will be more 'technological' and exposed to the latest scientific developments," he says. "There is a need to try to foresee the development of future threats in order to be better prepared when they appear."

The FESTOS project will scan major fields in science and technology for potential security threats: information and communication technologies, nanotechnologies, biotechnology, robotics, new materials and convergence technologies.

There are many examples of

sraeli and Jewish aid organizations should work to increase their efforts to help developing countries, says Aliza Belman-Inbal, Senior Pears Fellow for International Development at TAU's Harold Hartog School of Government and Policy, Gordon Faculty of Social Sciences.

In recently published reports, Belman-Inbal looks into Israeli and Jewish aid around the globe. Although aid projects are wide ranging, including geographically, Belman-Inbal notes a sharp decline in Israel's aid budget since the early days of the state.

Belman-Inbal's findings suggest that increasing Israel's aid budget could both improve the country's international standing and provide economic opportunities for Israeli in-

Israel and the Developing World

TAU Hartog School researcher analyzes Israel's foreign aid and Jewish engagement with the developing world

novators in fields like food security, alternative energy and water. Israel's early aid program fostered positive attention for Israel's achievements. Belman-Inbal believes that Israel should not only build up its aid budget again, but also provide incentives for Israeli research and development in fields of importance to the developing world.

The studies were completed under the International Development Policy Research Program, a strategic partnership between TAU and the Pears Foundation that works with the government and NGOs in Israel and the Jewish world to enhance aid given to developing countries.

Charles Keidan, Director of the Pears Foundation, said: "Our partnership with Tel Aviv University's Hartog School is leading to breakthroughs in Israeli and Jewish involvement with the developing world. International development was always foundational to the Jewish State's vision and this research is supporting a renaissance in thinking about these issues."

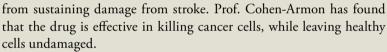
emerging technology that can be morphed into a threat. "A particularly interesting trend is 'swarm robotics,' whereby, inspired by the behavior of swarms in nature, large numbers of robots are programmed to coordinate their activities with one another," says Dr. Hauptman, who notes that robots could become a standard terrorist weapon, even replacing the suicide bomber.

In the coming months, FESTOS will survey international experts in the fields of interest in order to identify areas of concern and create a model for monitoring scientific advancements. One long-term objective of the program is to produce a database of ongoing scientific developments and potential future risks. According to Dr. Sharan, "this database will not only act as an 'early warning system' which identifies potential threats to society, but it will also help assess preventative measures that might keep valuable information from those who seek to harm society, aiding in the creation of future EU security policy."

Targeting Cancer Cells

TAU researchers uncover cancer-killing properties of an anti-stroke drug

TAU scientists have tapped into a promising new cancer treatment through research involving a decade-old drug. Prof. Malka Cohen-Armon of TAU's Sackler School of Medicine and her team of researchers have discovered a new use for a compound that was originally developed to prevent nerve cells



Prof. Cohen-Armon was researching this anti-stroke drug to determine its effect on signal transmission within the cell nucleus, and decided to examine the compound's effect on cell division.

Experimentation showed that the compound blocks cell multiplication in both normal and cancer cells. However, healthy cells are able to recover, while cancer cells die out. "We've found a molecular triggering mechanism in cancer cells that, when set off, causes the cancer cells to die – they just stop multiplying," explains Prof. Cohen-Armon. "Normal, healthy body cells are only temporarily arrested by the same mechanism. They overcome this cell cycle arrest within 12 hours and continue to proliferate."

Prof. Cohen-Armon says that many human cancer cells the team has tested in the lab were eradicated by this compound, including breast, lung, colon, pancreas and ovary cancers. This discovery could lead to an entirely new class of cancer treatment. "If we can specifically target cancer cells, we will be able to produce a drug that destroys these cells without worrying about harming the patient's normal tissue."

Prof. Cohen-Armon's team was joined in this research by Asher Kastiel, a PhD student in Prof. Shai Izraeli's team at the Department of Human Molecular Genetics and Biochemistry at the Sackler School of Medicine and the Institute for Cancer Research at the Sheba Medical Center.





Prof. Malka Cohen-Armon



TAU Inside

Research findings made at TAU have helped in the development of the revolutionary X4™ technologies that are incorporated into some of the largest-capacity 64 gigabit flash chips. Mass production of the product, which is manufactured by global leader SanDisk Corporation, began in the second half of 2009.

Key elements of the product are based on advanced flash signal processing technology utilizing contributions by Prof. Simon Litsyn of TAU's Iby and Aladar Fleischman Faculty of Engineering, which are exclusively licensed to SanDisk by Ramot. The innovative technology holds four bits of data in each memory cell, up to twice as much as the cells in conventional multi-level cell memory chips. The product contains two

components: larger flash memory together with a new controller that makes use of Litsyn's innovation to help prevent errors in data output.

"As demand grows for mobile devices that handle bigger graphic files, the challenge is to produce lower-cost chips with a larger memory capacity," says Litsyn. He envisions flash memory as replacing hard discs in laptop computers within the next few years. This will make the laptops faster, more reliable and more energy efficient, he predicts.

Dr. Ze'ev Weinfeld, CEO of Ramot, notes that the technology took more than five years of development at SanDisk, and the finished product is "a testament to the hard work and collaboration of the parties involved. This project highlights the benefit commercial companies may

gain from cooperation with TAU, building on our pool of talent and expertise."

Championing cancer treatments

A potential cure for cancer being developed in the laboratory of Prof. Beka Solomon of the Department of Biotechnology at TAU's George S. Wise Faculty of Life Sciences has been licensed by Ramot to Champions Biotechnology, a US oncology drug company. The agreement encompasses the development and commercialization of TAR-1, a single-chain antibody fragment in preclinical development that may have an advantage in treating cancer.

Prof. Solomon, incumbent of the Chair of Biotechnology of Neurodegenerative Diseases, has identified that the TAR-1 antibody binds with and reproduces the normal activity of mutant p53, a highly frequent protein in cancer, leading to in vivo inhibition of tumor growth. Given the high frequency of mutant p53 in cancer, TAR-1 has the potential to treat a broad range of tumors in humans.

Using its proprietary BioMerk Tumorgraft™ preclinical platform, Champions will evaluate the activity of TAR-1 and determine the best path forward for the compound in regards to indication, patient population and potential drug combinations. Ramot will receive an upfront payment and will be eligible to receive milestone payments and royalties if Champions chooses to continue the license terms.

"We are excited to be working with Champions Biotechnology," said Dr. Weinfeld. "They are an ideal candidate to move TAR-1 forward into the clinic and on the path to commercialization."

Technology Transfer

Improved flash memory and a potential cure for cancer are two recent successful commercial ventures being brought to the marketplace by Ramot, TAU's technology transfer company



Three TAU Faculty Receive 2010 Israel Prizes



Prof. Yair Aharoni – Israel Prize for Management and Administration Science

Prof. Yair Aharoni is among the founders of the field of business administration in Israel and is recognized worldwide for his innovative contributions to international business theory and to political economy theory. He forged new pathways in the understanding of the foreign investment decision-making process, business-government relations, the emerging high-tech economy and the multinational service industry. Prof. Aharoni developed new academic in-

stitutions in Israel and abroad, serving as the first dean of TAU's Faculty of Management-Leon Recanati Graduate School of Business Administration, and establishing the Faculty's Israel Institute of Business Research and Top Executive Program. Prof. Aharoni is a fellow of the Academy of International Business and of the International Academy of Management. Born and raised in Israel, Prof. Aharoni earned his DBA degree at Harvard Business School.

Prof. Abraham Nitzan - Israel Prize for Chemistry

Prof. Abraham Nitzan is a world leader in the field of theoretical physical chemistry. His outstanding scientific contributions have laid the foundations for the research fields of molecular electronics, nanoscience and nanotechnology. He has also promoted the development of quality academic research and teaching in the State of Israel. Prof. Nitzan is incumbent of TAU's Riwka (nee Schechter) and Iser Kodesz Chair of Chemical Dynamics, Head of the Mortimer and



Raymond Sackler Institute of Advanced Studies, and a former Dean of Exact Sciences. He is a member of the Israel Academy of Sciences and Humanities, a foreign honorary member of the American Academy of Arts and Sciences and a fellow of the American Association for the Advancement of Science and the American Physical Society.



Prof. Abraham Tal – Israel Prize for Hebrew Linguistics

Professor Emeritus Abraham Tal has attained outstanding achievements in the study of Samaritan traditions and ancient Aramaic translations of the Bible, and in his lexicographical work as editor-in-chief of the *Historical Dictionary of the Hebrew Language*. He was incumbent of TAU's Yaakov and Shoshana Schreiber Chair in the History of the Hebrew Language and, until recently, Vice President of the Academy of the Hebrew Language. He is a recipient of the

Mifal Hapayis Award and the Ben-Zvi Award. Born in Romania, Tal emigrated to Israel in 1950 and, after completing his military service, began his academic studies at TAU, where he earned his BA. From 1964 until his retirement in 1999, he was a member of the TAU faculty, serving as Chairman of the Department of Hebrew Language and Head of the Chaim Rosenberg School of Jewish Studies.

Appointments: • Prof. David Andelman, Exact Sciences, Head of the Raymond and Beverly Sackler Institute of Biophysics • Prof. Shmuel Carmeli, Exact Sciences, Head of the Maiman Institute of Proteome Research • Prof. Daniel Chamovitz, Life Sciences, Director of the Manna Center for Plant Biosciences • Prof. Amos Fiat, Exact Sciences, incumbent of the Chair in the Analysis of Algorithms • Prof. Arie Ruzin, Engineering, Head of the Max and Betty Kranzberg Research Institute of Electronic Devices • Prof. Yaacov Shavit, Humanities, incumbent of the Geza Roth Chair of Modern Jewish History

Honors: • Fellow of the Forum of Young Humanities and Social Sciences Researchers of the Israel Academy of Sciences and Humanities, **Dr. Adi Efal**, Arts • Uhlig Award from NACE International, **Prof. Noam Eliaz**, Engineering • Weizmann Prize for Research in Exact Sciences, Prof. Tsevi Mazeh, Exact Sciences • 2010 Rothschild Prize, Prof. Ariel Rubinstein, Social Sciences • UCLES/ILTA Lifetime Achievement Award for 2010, Prof. Elana Shohamy, Social Sciences

EUROPEAN CONFERENCE

Unique Rome Experience Captivates Governors

Tel Aviv University's 19th European Conference was held for the first time in Rome, home to one of the oldest Jewish communities in the world. The program led the 102 participants – board members and dear friends of TAU – on a fascinating discovery tour of Rome's rich artistic and cultural heritage as well as of the history of Roman Jewry.

The conference's welcoming reception was held at the historic Protomoteca Hall at the Rome City Council, hosted by Mayor of Rome Gianni Alemanno, who received the Chair of History and Philosophy of Science, took part in a Christian-Jewish dialogue; Dr. Uzi Rabi, Chairman of the Department of Middle Eastern and African



From left: organizing committee members, Vittorio Pavoncello, Mirella Petteni Haggiag and Gabriela David



TAU President Joseph Klafter (left) and Mayor of Rome Gianni Alemanno



Participants enjoy a carriage

ride through

Rome

Dan David Prize last year at TAU on behalf of the city of Rome. Greetings were delivered by Alemanno, Israeli Ambassador to Italy Gideon Meir and TAU President Prof. Joseph Klafter. TAU supporter and native Roman, Ariel David, served as moderator of the event.

Conference participants toured the Jewish Quarter, the Jewish Museum and the Great Synagogue, where they were greeted by the Chief Rabbi of Rome Shmuel Riccardo Di Segni and President of the Jewish Community Riccardo Pacifici.

On Friday night participants attended a Kabbalat Shabbat dinner, where Israeli Deputy Prime Minister Dan Meridor reviewed current affairs and TAU benefactor Gabriela David gave Scripture readings. Saturday morning featured a stimulating program of lectures: Prof. Menachem Fisch, who holds the Joseph and Ceil Mazer

History, spoke on the changing Middle East power structure; and Prof. Martin Kupiec, incumbent of the Pasha Gol Chair for Applied Microbiology and Genetics, spoke on personalized medicine.

During the conference, TAU Rector Dany Leviatan signed a historic cooperation agreement between TAU and La Sapienza University in Rome for the exchange of students and professors as well as joint research projects.

"This event was outstanding in every respect," said Prof. Klafter. "It afforded TAU's most involved supporters rare access to Italian personalities and places, as well as to fascinating lectures. The weekend was impeccably planned, and I would like to give special thanks to Vittorio Pavoncello, Mirella Pettini Haggiag, Gabriela David and the other members of the Organizing Committee for making this event unforgettable."



STEINHARDT COLLECTIONS

A Home for Natural History

The new building to be constructed at TAU for the National Collections of Natural History was propelled forward by the first meeting of its

Scientific-Public Council on the TAU campus. Council members, including the project's primary donor Michael

Steinhardt, former chairman of TAU's Board of Governors from 2000 to 2006 and recipient of both an honorary doctorate and the President's Award from the university, were greeted by TAU President Joseph Klafter and Rector Dany Leviatan, and received a project update by Prof. Tamar Dayan,



Director of the Collections. The meeting was chaired by former TAU Executive Council member Dr. Itamar Borowitz.

Additional Israeli members comprise Nobel Prize laureate Prof. Aaron Ciechanover, Vice President of the Israel Academy of Sciences and Humanities Prof. Ruth Arnon, General Director of the Ministry of Education and former TAU Executive Council member Shimshon Shoshani,

> former Israeli Supreme Court justice Yaakov Turkel, Chairperson of the Tel Aviv City Council Yael Dayan, Executive Director of Yad Hanadiv Ariel Weiss, former Member of Knesset Gedalia Gal, former President of the Weizmann Institute Prof. Ilan Chet, Prof. Yehudith Birk of the

Hebrew University, author Meir Shalev, business magnates Samuel Hayek and Ami Federmann, and artist and advertiser Shony Rivnay.

Overseas members are Dan David Prize founder and major TAU benefactor Dan David, and Australian philanthropist Brian Sherman.



From left: Prof. Tamar Dayan, Michael Steinhardt, TAU President Joseph Klafter and Rector Dany Leviatan

SCIENTIFIC PARTNERSHIP

Promoting UK-Israel Research Ties

The Britain-Israel Research and Academic Exchange (BIRAX) Partnership program, a new initiative largely funded by the Pears Foundation, now enables scientists from Israel and the UK to work together on a range of advanced, carefully chosen research projects.

"Our foundation has Jewish roots, and we are very driven by what we perceive as Jewish values," says Charles Keidan, chairman of Pears, which is a UK-based charitable foundation supporting human rights, education and international development, with a special affinity for projects in Israel. "This identity has led to a strong attachment to Israel and a desire to contribute to its prosperity, and to promote Israel's contribution to the wider world."

The partnership program, launched in 2008 by the

prime ministers of both countries, aims to strengthen academic cooperation between the UK and Israel as well as their knowledge economies. It is managed by the British Council – the UK's international organization for cultural relations and educational opportunities.

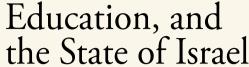
On the Israeli side of the partnership, it was Tel Aviv University that won the day with eight out of a total of 15 grants. The remaining seven were shared among four other Israeli institutions. The new TAU-UK collaborations include research in a wide range of areas: biomedicine, neurobiology, cellular biology, bioengineering, electrical engineering, particle physics and archaeology.

The Chairman of the Scottish Group of the TAU Trust in Great Britain, Leslie Wolfson, describes BIRAX as "one of the most imaginative and promising initiatives in recent years promoted by the British Council."

The Pears Foundation has extended generous support for educational, arts-related and community initiatives at Tel Aviv University for several years, including sponsorships of TAU conferences and of British Trust events.

PROFILE: DAVID LEVIN, UK TRUST CHAIRMAN

A Passion for Excellence,





David Levin

"Universities have the potential to transform lives and change societies," affirms David Levin, the new Chairman of TAU's British Trust, with a conviction that stems from personal experience. "My own education opened new worlds for me. It made me the person I am today. That's why I do as much as I can to contribute back to higher education, and TAU is a more than worthy cause."

Born in Zimbabwe in the early 1960s, Levin grew up in London, nurtured from infancy on an ideological staple of human rights and global politics. He studied philosophy, politics and economics at Oxford, followed by an MBA enriched by drama studies at Stanford University. This provided him with a broad and solid infrastructure for an impressive multinational business career. Today he serves as CEO of UBM (United Business Media), a leading global business media company.

Alongside his professional evolution, Levin has led an active "extracurricular life," as he calls it. For several years

he was a trustee of OneVoice, a grassroots movement aiming to amplify the voice of Israeli and Palestinian moderates who favor a two-state solution. "I'm a passionate believer in Israel and in the values expressed in its Declaration of Independence," he says. "Israel's success and resilience make me proud as a Jew, and yet I must ask: Is Israel achieving all it can? Is it true to its founding principles? Can I make a difference?" A main channel he has chosen for contributing his own abilities is the new but deep involvement with TAU.

"I have always wanted to be associated with excellence," he says. "TAU struck me with its amazingly high quality. So many centers of excellence in one place, all created literally from nothing. TAU stands for the values I believe in, the values of modern, globalized Israel: openness, inclusion, vitality and diversity."

Hoping to strengthen the impact of TAU's British Trust, Levin finds the challenges exciting and notes how fortunate he is "to build on the excellent foundations" his predecessor David Mellor created. "Now, we are building a database of the many TAU alumni who reside in the London area, aiming to recruit young, fresh and energetic alumni," he says. "And we are looking for ways to raise the university's profile in the UK, and develop our fundraising activities. We also intend to combat the international academic boycott of Israel's universities, which is a real and tangible threat, spreading much further and faster than Israelis seem to realize."

SACKLER FRIENDS

Medicine Gets Friendly

A new Friends organization was established at the Sackler

School of Medicine, initiated by Prof. Yoseph Mekori, Dean of Medicine, and Prof. Dan Oppenheim, CEO of the Herzliya Medical Center. The organization – the Friends of the Sackler School of Medicine (FSSM) – was launched at a special board meeting of the FSSM attended by Prof. Joseph Klafter, TAU President; Dr. Gary Sussman, Vice President for Development and Public Affairs; and Amos Shapira, President of the Israeli Friends of TAU.

Members of the FSSM Board include prominent Israeli public and business figures including Danny Ayalon, Deputy Foreign Minister and former Ambassador to the US; Yoram Baumann, Chairman of Baumann Ber Rivnay Saatchi & Saatchi; Orly Danker; Roni Milo, former Minister of Health and former Mayor of Tel Aviv-Jaffa; Elyezer Shkedy, El Al President and CEO; Shimon Topor, Managing Director, Steinhardt Management Company LLC; Shlomo Yanai, President and CEO of Teva Pharmaceutical Industries Ltd.; and Dov Weissglas, Chairman of the FSSM board, a former advisor and Chief of Staff to Prime Minister Ariel Sharon.

Initiatives Summer 2010 tau



BRENDER-MOSS LIBRARY

Students Enjoy Inviting Study Rooms

Two new study rooms were inaugurated at the Brender-Moss Library for Social Sciences and Management, originally established in 1990 by TAU honorary doctors Joseph Brender and Sam Moss, business partners from Australia's clothing and textile industry. The library was renovated in 2006. The inauguration was attended by Mr. Brender and his wife, Gerda; Ziva Lahat – the library's first director, who held the position for 35 years; and the late TAU Vice

President Yehiel Ben-Zvi.

The modern study rooms offer students a comfortable environment with elegant furnishings, convenient PC stations, direct wireless internet access and an LCD screen that connects to any laptop or PC.



From left: Joseph and Gerda Brender, Ziva Lahat and the late Vice President Yehiel Ben-Zvi

ABBA EBAN DOCTORAL SCHOLARSHIP

Azrieli Foundation Promotes Diplomacy and Law at TAU

The Azrieli Foundation established a new award this year: the Abba Eban Doctoral Scholarship for Diplomacy and Law. Commemorating the legendary statesman and diplomat of the Zionist movement and the State of Israel, the award was presented in the presence of his widow Suzy Eban to Olga Frishman of the Buchmann Faculty of Law, for her work on "The Globalization of Legal Thought."

"I belong to a generation that remembers Abba Eban, recognizes his importance in the life of the Jewish nation, and regrets his absence," said TAU benefactor David Azrieli at the ceremony. Dean of Law Prof. Hanoch Dagan said he was "proud that Suzy Eban and David Azrieli chose the Buchmann Faculty to commemorate this important man," stressing that the new Abba Eban scholarship is a most valuable addition to the faculty's PhD programs, "which have acquired considerable momentum in recent years, particularly thanks to the establishment of the Zvi Meitar Center for Advanced Legal Studies — a true competitive alternative to advanced legal studies at the world's finest universities." Welfare and Social Services Minister Isaac Herzog, a nephew



of Abba Eban, spoke of his uncle's crucial contribution to the state's establishment in the historical UN vote in 1947, and discussed the importance of international law in present day politics.

In other Azrieli news, two fellowships were awarded to TAU students by the prestigious national Azrieli Fellows Program. The two are Michal Bleicher-Kugler, an MA student in the Program for Interdisciplinary Studies in the Arts, who is working in the field of sustainable conservation, and Guy Cohen, a PhD student in chemistry whose research could play a crucial part in molecular electronics and nanotechnology. There are currently seven students receiving Azrieli Fellowships at TAU.



From left: David Azrieli, Dean of Law Hanoch Dagan, Suzy Eban and Minister Isaac Herzog

SWEDISH FRIENDS

Wallenberg Scholarship Promotes Human Rights Research



From left: Head of the Stephen Roth Institute for the Study of Contemporary Anti-Semitism and Racism, Prof. Dina Porat; Dr. Isaac Lubelsky; Deputy Head of Mission and Charge d'Affaires, Embassy of Sweden Ms. Annika Ben-David; and TAU Vice President Dr. Gary Sussman The annual Raoul Wallenberg Prize in Human Rights and Holocaust Studies, recently augmented through the generosity of the Swedish Friends of TAU, was awarded to Dr. Isaac Lubelsky of the Entin Faculty of Humanities.

The award was presented by Ms. Annika Ben David, Deputy Head of Mission and Charge d'Affaires at the Swedish Embassy in Israel, at an event entitled "Remembering Wallenberg: The Role of Diplomacy in Addressing Anti-Semitism." Organized by TAU's Stephen Roth Institute for the Study of Contemporary Anti-Semitism and Racism and the American Jewish Committee (AJC) Jerusalem, the event was moderated by institute Head Prof. Dina Porat, incumbent of the Alfred P. Slaner Chair in Anti-Semitism and Racism Endowed by Ruta and Felix Zandman, and attended by TAU Vice President Dr. Gary Sussman as well as

Berg was born in London in 1905 in humble circum-

stances: his father was a rabbinical scholar and his mother a

laundress, both recent immigrants from Russia. When Berg

was still a young boy the family moved to the United States,

friends and ambassadors from 25 countries. Dr. Lubelsky received the prize for his intended post-doctoral study on the attitudes of British society toward Muslim and Hindu immigrants. The prize is awarded each year on or around January 17th, the date of Wallenberg's disappearance.

Justice, history and the law were never far from the mind of David Berg (1905-1999), a man of broad interests and many passions. These threads have now come together at the new Institute for Law and History established by the David Berg Foundation and bearing his name.

The institute, a part of TAU's Buchmann Faculty of Law, promotes innovative interdisciplinary research into the law and its historical roots. In an effort to preserve and document the history of law in Israel, the institute is currently focused on tracking down

and collecting historically significant legal materials from the periods of the British Mandate and early Statehood, says institute head Prof. Ron Harris. Researchers are also creating a database incorporating all publications on the subject of the history of law in Israel.

"The new institute promises to enrich academic discourse on an international level and to attract world-leading schol-

ars in the field and top students to TAU," says Dean of Law Prof. Hanoch Dagan.



The Uplifting Power of the Law

where he attended the University of Pittsburgh and then Harvard Law School. In the years that followed Berg be-

came a successful real estate developer, but he never forgot where he came from, and never abandoned his belief in the power of the law to uplift and improve. When he established his charitable foundation in 1994 he made sure that a large portion of the funds would support community legal services for the poor.

"David Berg was a great supporter of Israel, and his commitment was unwavering," says Michelle Tocci, President of the David Berg Foundation. "Over the years, the foundation has given generously to many Israeli institutions including the Tel Aviv Museum, Yad Sarah and Beit Hatefutsot (Diaspora Museum) on the TAU campus.



Prof. Ron Harris



Five outstanding doctoral students in mathematics and computer science at TAU's Raymond and Beverly Sackler Faculty of Exact Sciences will be able to rapidly complete their PhD work and embark on promising careers - thanks to generous scholarships donated by David and Sara Farajun of Toronto.

Farajun, himself a technological entrepreneur - he is founder and CEO of Asigra, a company specializing in advanced computer backup and recovery solutions – feels that this financial support is imperative. "I believe that PhD stu-

DAVID AND SARA FARAJUN SCHOLARSHIPS

dents deserve all the assistance we can give them at this critical point of launching their careers."

Modern Science, **Ancient Ancestry**

In choosing recipients,

Farajun gave preference to candidates of Sephardic origins, akin to his own ancestry. He proudly traces his own name back to the great Expulsion of the Jews from Spain in 1492. Settling in Safed in the Galilee, his father's family lived there for 18 generations, while his mother's family, Kalroi, never left the Land of Israel, moving to the Galilee after the destruction of the Second Temple. Farajun was born and raised in Haifa and is an ardent supporter of scientific research in Israel.

Farajun continues to initiate inventive ventures, linking past and present: he now plans to establish a center of scientific research at a grand historical hostel that once belonged to his family in Safed.

David and Sara Farajun (center) with Rector Dany Leviatan (third from right) and scholarship recipients

GOTTESMAN SCHOLARSHIPS

Enhancing the Arts

Talented students at TAU's Yolanda and David Katz Faculty of the Arts are benefiting from a special five-year scholarship program funded by Israeli arts and culture patrons Ruthi and Yoav Gottesman. In the present academic year - the program's first year - the beneficiaries are the eight members of the Vocal Octet at TAU's Buchmann-Mehta School of Music, and the creators of nine student films at the Department of Film and Television.

Octet member and aspiring pianist Zvika Vogel says, "The donation allows me to concentrate on my studies and reduces my financial stress. I'm improving my playing skills, and coming closer to realizing my musical ambitions."

"Culture is the heart and soul of a country and its society," asserts Gottesman. "We are greatly impressed with the achievements of young Israeli artists, and feel strongly that they should be supported."

SACKLER SUPPORT

Jortner Chair Honors Illustrious TAU Scientist

A chair named after Prof. Joshua Jortner established in 2007 by TAU benefactors Dr. Raymond and Beverly Sackler was inaugurated within the framework of the 2009 Distinguished Lectures in Chemistry series supported by the Sacklers. Incumbent of the chair is Prof. Uzi Even of the Raymond and Beverly Sackler School of Chemistry.

Prof. Jortner, a distinguished scientist and academic leader at TAU and in Israel, is the winner of several prizes, including the Israel Prize in Chemistry and EMET Prize in Exact Sciences. He is a former president of the Israel Academy of Sciences and Humanities and a former Vice President and Vice Rector of TAU. At the ceremony, he thanked the Sacklers for their generous support, noting Dr. Sackler's role in "shaping the standards and values of

TAU and the State of Israel." He also noted the contribution of chair incumbent, Prof. Even, to TAU's excellence in scientific research.



From left: Prof. Joshua Jortner, Prof. Dany Leviatan, Prof. Uzi Even and Prof. Abraham Nitzan, coordinator of the Sackler Distinguished Lectures in Chemistry.





From left:
Dr. Christer
Fuglesang,
ESA/NASA
astronaut;
Prof. Colin
Price; Stella
Joseph; Rona
Ramon; and
Dr. Diane
Evans of
NASA

Colonel Ilan Ramon, the Israeli astronaut who died in the Columbia space shuttle disaster in 2003, and the late Prof. Joachim Joseph, a leading TAU researcher of the MEIDEX scientific project carried aboard the Columbia, were commemorated together in the new computer classroom donated by the Canadian Friends of TAU at the Department of Geophysics and Planetary Sciences of TAU's Raymond and Beverly Sackler Faculty of Exact Sciences. The dedication ceremony, marking seven years since the Columbia mission, was attended by the two widows, Rona Ramon and Stella Joseph, as well as NASA representatives Dr. Diane Evans and Dr. Christer Fuglesang. The honored guests were welcomed by the Department's chairperson, Prof. Colin Price.

CANADIAN FRIENDS

Ilan Ramon Classroom Dedicated

The joint commemoration befits these two accomplished men, who collaborated closely in their lifetime. Their unique relationship was publicized when Prof. Joseph gave Ilan Ramon the Torah scroll he had received for his Bar Mitzvah in the Bergen Belsen concentration camp – to take into space on the Columbia.

The Department of Geophysics and Planetary Sciences together with the David Azrieli School of Architecture also jointly initiated a competition for planning and erecting a memorial installation for Col. Ramon and Prof. Joseph. The participants in the competition were students from the Azrieli School, and first prize went to Israel Biton and Nir Levy, students in the final stages of their studies. Each of them will receive a tuition scholarship for one semester and a medallion in memory of Ilan Ramon. The selected memorial is a three-dimensional structure attached to the ceiling, with a curved bench at its base, intended for seating. It will be set up in the entrance lobby of the Department.

ZEEV VERED DESK

Promoting Tolerance in the Middle East

The Zeev Vered Desk for the Study of Tolerance and Intolerance in the Middle East, established by Sara Vered of Ottawa, Canada, in memory of

her late husband Zeev Vered, was inaugurated at TAU's Stephen Roth Institute for the Study of Contemporary Anti-Semitism and Racism.

Sara, who fought with the Palmach in Israel's War of Independence, later became a leading figure in the Canadian Jewish community, contributing to numerous institutions in

Canada and Israel. She founded the desk to commemorate her late husband, engineer, real estate entrepreneur and philanthropist Zeev Vered, who received the Order of Canada and an honorary doctorate from Ottawa University.

"We are one nation, contending with intolerance at all times, and Israel's relations with its neighbors are of crucial importance to all of us," says Ms. Vered. "I

believe that research on contemporary tolerance issues in the Middle East is of inestimable value to the State of Israel and the Jewish nation."

Head of the initiative, Dr. Esther Webman of the Roth Institute and the Moshe Dayan Center for Middle Eastern and African Studies, said at the inauguration ceremony, "The Jewish faith is the universal source of many fundamental values of modern democracy. One of these is tolerance and the respect for others, their rights and their views." The Vered Desk will promote in-depth research on the multifaceted tension between the Jewish and Arab worlds, aiming to advance mutual acceptance.

TAU Rector Dany Leviatan, Dayan Center Director Prof. Eyal Zisser and Sara's son, Gilad, delivered greetings, and former TAU President Itamar Rabinovich gave the keynote lecture on "Reception and Tolerance in the Middle East Mosaic." The event was chaired by Prof. Dina Porat, Head of the Roth Institute.

Sarah Vered (right), son Gilad and granddaughter Dana

argentina

🜟 Punta 2010

More than 1,800 people attended the traditional annual conference in Punta del Este, Uruguay, organized by the Argentinean Friends with the participation of the Brazilian and Uruguayan Friends of TAU. The meeting began with a celebratory event marking the 100th anniversary of the city of Tel Aviv. A video especially prepared for the occasion by the Argentinean Friends, which included a message from Member of Knesset Rabbi Michael Melchior, was screened.

Among the panelists at the conference, entitled "Reflections on Our Time: Certainties and Uncertainties in a Changing World," were Dr. Marcos Aguinis, writer, psychoanalyst



Rabbi Bergman (left) and Dr. Marcos Aguinis

and TAU honorary doctor; and Rabbi Sergio Bergman, a leading Jewish community figure in Argentina. During the conference a special tribute was paid to two TAU governors, Miriam Smolarz and Elba Cuenca.

Young Members Welcome TAU Faculty



Miriam Smolarz (left) and Elba Cuenca

"Next"- young members of the Argentinean Friends of

Tel Aviv University - hosted Prof. Ranaan Rein, former TAU Vice Rector and Director of the S. Daniel Abraham

Center for International and Regional Studies, and Dr.

Marcelo Ehrlich of TAU's Department of Cell Research and

Immunology, George S. Wise Faculty of Life Sciences.

canada

MONTREAL

* New President for Montreal Chapter

Theodore (Teddy) Goloff (pictured) has been appointed President of the Montreal and Eastern Region, replacing the Hon. Herbert Marx. Goloff is a highly respected labor lawyer with the Montreal law firm Sheppard Shapiro and is the senior member of the Labor and Employment Law Group. He and his wife, Donna, became



involved with CFTAU when their daughter, Naomi, attended the Sackler School of Medicine. Goloff is past president of the Lord Reading Society and is a former board member of Congregation Shaare Zedek. Born and raised in Montreal, he is a graduate of the McGill Faculty of Law and was the Chief Justice Greenshield's Scholar.

Ruests at an operatic evening

Merle and Bernard Stotland hosted an operatic evening at their home for leading Montreal philanthropists, who were entertained by TAU graduate Guy Mannheim and Ms. Sharon Azrieli.



Bernard and

Merle Stotland, Guy Mannheim,

Sharon Azrieli,

President Judge

Barbara Seal

Donald Seal and CFTAU

National

***** Canadian Friends Sponsor Leading Faculty

- Prof. Illana Gozes of TAU's Sackler Faculty of Medicine, Director of the Adams Super-Center for Brain Studies and incumbent of the Lily and Avraham Gildor Chair for the Investigation of Growth Factors, was hosted to brunch by Grace Alter and Rosa Fineston. The event was in support of the establishment of a Montreal Friendship Circle for Alzheimer's Disease Research.

Margaret and Sylvan Adams opened up their home for a Middle East briefing by Prof. Asher Susser, former Director of the Moshe Dayan Center for Middle Eastern and African Studies. Prof. Susser also visited Ottawa at the invitation of Sara Vered. In cooperation with the Ottawa JCC and the Vered Cultural Program, Prof. Susser addressed over 100 members of the Jewish community, met with Ottawa leaders and spoke at Ottawa University to a full audience which included Hillel youth.

🛊 Presidential Visit

TAU President Prof. Joseph Klafter was welcomed by the Canadian Friends at a brunch hosted by Eva and Herbert Marx. He later attended the annual General Meeting of the Montreal Chapter of the Canadian Friends.

australia

MELBOURNE

* Cocktails and Culture

A cultural evening that coincided with the late TAU Vice President Yehiel Ben-Zvi's visit to Melbourne was hosted by Miriam and Ted Berman at their home. The guest speakers were the Hon. Rod Kemp, former Australian Minister for Arts and Sport, and Danielle Kemp, a journalist and broadcaster with Melbourne's leading ethnic radio station and Executive Producer of their French Language Program.

germany

Dr. h.c. Petra Roth bestows

the Frankfurt

Badge of Honor on Dr.

Mati Kranz

Mati Kranz Receives High Honor

TAU's representative in Germany for almost 30 years, Dr. Mati Kranz, was honored with the Ehrenplakette der Stadt Frankfurt (Badge of Honor of the City of Frankfurt). Lord Mayor of Frankfurt Dr. h.c. Petra Roth, a TAU honorary doctor, bestowed the medal on Dr. Kranz for his important contribution to German-Jewish reconciliation and German-Israeli academic and cultural cooperation. Dr. Kranz was cited for promoting the partnership between Tel Aviv University and



Johann Wolfgang Goethe-University in Frankfurt, and for his personal achievement in the establishment of the Marcel Reich-Ranicki Chair in German Literature at TAU, which aims to expose young Israelis to the German literary tradition.

"Thanks to his inventiveness, negotiating skills and enormous commitment, Dr. Matityahu Kranz has shaped the cultural relations between the partner cities Tel Aviv and Frankfurt for many years," Mayor Roth read out from the certificate.

* Events Benefiting Karin Brandauer Chair at TAU

- Frankfurt: Following the award ceremony for Dr. Mati Kranz, Dr. h.c. Petra Roth hosted a charity event at Frankfurt City Hall. Entertainment was provided by actor and producer Klaus Maria Brandauer and the piano duo Grau and Schumacher. - Frankfurt: The Board of Directors of the Helaba-Landesbank Hessen-Thüringen held a dinner with the participation of Klaus Maria Brandauer. Johann Berger, Vice Chairman of the Board of Directors, welcomed the audience.

- Munich: More than 500 invited guests attended a performance of Shakespeare's A Midsummer Night's Dream organized by the German Friends and held at the Jewish Community Center of Munich and Upper Bavaria. Dr. h.c. Charlotte Knobloch, President of the Central Council of Jews in Germany, Vice President of the German Friends and a TAU honorary doctor, delivered greetings.

Klaus Maria **Brandauer** and Dr. h.c. Charlotte Knobloch. Photograph: Miryam Guembel



mexico

* Dr. Arie Dorenbaum (pictured) has been appointed President of the Mexican Friends of Tel Aviv University. Dr. Dorenbaum studied at TAU's Sackler School of Medicine and is a specialist in plastic



surgery. During the time he lived in Israel he served as a doctor in the Golani Brigade of the Israel Defense Forces. He also worked at Tel Hashomer Hospital and the Edith Wolfson Hospital.

Middle East Talk by Prof. Itamar Rabinovich

Past TAU President and former Israeli Ambassador to the US, Prof. Itamar Rabinovich, gave a lecture on "Israel, the Arab World and Iran 2009 -A Chance for Peace or Danger of War?" at an evening organized by



Prof. Itamar Rabinovich (left) with Prof. Dr. Rainer Klump, Vice President of Johann Wolfgang Goethe University. Photograph: Rafael Herlich, Frankfurt

the German Friends Association and Johann Wolfgang Goethe University in Frankfurt.

Hanover Leadership Regroups

After the passing of Prof. Dr. Marek Fischel, TAU Governor and member of the executive committee of the German Friends Association, the local committee of the German Friends in Hanover announced the reappointment of Dr. Hebert Schmalstieg, former Lord Mayor of Hanover, as chairman of the committee, and of Dr. Joachim Pieper and Dietmar Alhoff as Vice Chairmen.

sweden

🍁 New Chairman for the Swedish Friends

Prof. Peter Seideman (pictured) has been appointed Head of the Swedish Friends Association. Born



in Stockholm, Seideman holds a BA in Psychology, an MD and a PhD. He is a specialist in rheumatology and is the Head of the Division of Rheumatology at Sabbatsberg Hospital, Chairman of the EveCenter Stockholm and Chairman of the Medisob real estate company.



israel

Business Academic Club Hosts Barak, Olmert

At the opening session of their 2010 program of activities, the Business Academic Club of the Israeli Friends of Tel Aviv University hosted Minister of Defense Ehud Barak to a dialogue on the security agenda of the State of Israel



From left: Amos Shapira, Ehud Barak, Prof. Joseph Klafter and Prof. Itamar Rabinovich

with former TAU President, incumbent of the Yona and Dina Ettinger Chair in Contemporary History of the Middle East and former Israeli Ambassador to the US, Prof. Itamar Rabinovich. Participants included TAU Executive Council member Alfred Akirov. Chairman of Alrov; TAU President Joseph Klafter and leading Israeli executives and TAU officials.

In a second event, Ehud Olmert was hosted by the Business Academic Club in what was his first public appearance since his departure from the Prime Minister's office in February 2009. Olmert talked about his negotiations with the Palestinians, noting that during his tenure the Israeli government offered Abu Mazen a proposal which could have led to a settlement.



From left: Amos Shapira, Ehud Olmert and Prof. Joseph Klafter

Shaping the Managers of Tomorrow

A conference on "The Figure of the Manager in the 21st Century: Mutual Responsibility of Academia and the Business World" was organized by the Israeli Friends Association in conjunction with TAU's Department of Labor Studies at the Gordon Faculty of Social Sciences. It was attended by human resource managers from leading companies. Amos Shapira, CEO of Cellcom and President of the Israeli Friends of the University, described the rationale for greater academic-business interaction: "Studies in business administration do not train a person for real life because the changes taking place in modern society are so fast. Therefore we should be teaching people how to think, to learn, and to know how to distinguish what is important from what is not. All this can be learned through Bible studies, literature and philosophy."

switzerland

TAU Tax Expert Presents Investment Overview

Prof. Yoram Margalioth of TAU's Buchmann Faculty of Law, a specialist in taxation, tax policy and tax and welfare, lectured on "The Flexibility of the Israeli Tax Regime and Its Impact on Individual and Trust Investment from Switzerland," at an event organized at the Hotel Park Hyatt, Zurich, by the Zurich Chapter of the Swiss Friends. As part of his lecture, Prof. Margalioth gave an overview of the Israel's economic growth and tax system, with a focus on two recent laws aimed at attracting foreign activity and investment. David Zollinger, representing the sponsor of the event, Bank Wedelin & Co., spoke about different aspects of due dilligence in connection with private banking between Israel and Switzerland. The lectures were followed by a Q & A session.

south africa

New Chairman for the South African Friends Association

Jonathan Osrin (pictured) has been appointed Chairman of the TAU South African Friends Association. Osrin earned a degree in Economics from the University of Capetown. He worked in the asset management subsidiary of Old Mutual International as manager of its branch in Israel, subsequently



becoming responsible for managing the company's high net worth individual private portfolio service. Osrin joined Stenham in 1998, where he now heads the newly formed client services division and is responsible for new business generation and client reporting.

🏶 Vice President for Development and Public Affairs Dr. Gary Sussman visited the South African Friends Association and met with communal leaders and potential supporters.

usa

From left: Joseph Gil,

Shahram

Prof. Menashri,

Yaghoubzadeh and Fred

Ohebshalom

NORTHEAST REGION

* NY: Can Iran Be Stopped?

More than 500 guests overflowed Manhattan's Park East Synagogue to hear an expert panel's answers to a pressing question: "Can Iran Be Stopped?" AFTAU's roundtable featured *New York Times* columnist Roger Cohen, *Wall Street Journal* columnist



Bret Stephens, and Director of TAU's Center for Iranian Studies and incumbent of the Parviz and Pouran Nazarian Chair in Modern Iranian Studies, Prof. David Menashri. The moderator was Gary Rosenblatt, editor and publisher of *The Jewish Week*, America's largest Jewish weekly paper. AFTAU members, including Jon Gurkoff, Caren Constantiner, Erika Stein, and Varda and Shalom Yoran were invited to a private reception with the panelists.

NY: Israeli Innovation: Leading the World

AFTAU's series celebrating Israeli innovation drew a standing-room-only crowd of more than 200 guests to each of its first two cocktail receptions. "Israeli Innovation in Medical Engineering" showcased Chemi Peres, co-founder of Israel's largest venture



From left: Peter Kash, Gil Breiman, Oren Heiman, Yacov Levy, Jon Gurkoff, Chemi Peres, Shmuel Einav and Richard Sincere

capital firm, Pitango Venture Capital; Peter Kash, best-selling author and president of RiverBank Capital Securities; and Prof. Shmuel Einav, a TAU expert in bioengineering. They explored the two essential halves of the innovation partnership – pure science and investment acumen. For the "Art of Innovation," RAD Data Communications' chairman and co-founder Zohar Zisapel highlighted the qualities shared by successful inventors, explorers, artists and high-tech entrepreneurs. He was joined by Prof. Amiram Yehudai, head of TAU's Blavatnik School of Computer Science.



From left: Oren Heiman, Lia Levy, Yariv Kafri, AFTAU President Roni Krinsky and Eric Topchik

* NY: Alumni Cocktail Party

TAU alumni and friends met in Manhattan to toast the 5770 New Year, at a party planned by AFTAU's Northeast Alumni Leadership committee chair Oren Heiman and committee members Moran Alon, Yosi BenLevi, Nava Feineizen, Kobi Kastiel, Maura Milles, Yaniv Shapira, Alon Waks, and Dafna Zarai.

uk

London: TAU Trust Presents University Faculty

- Dr. Julia Kempe of the Blavatnik School of Computer Science spoke on "Quantum Technologies for the Future" at events hosted by TAU trustee Anthony H. Yadgaroff at Allenbridge Investments and TAU Trust Chairman David Levin at United Business Media. - Dr. Yaniv Assaf of TAU's Department of Neurobiology spoke on "The Need for Speed: How Fast Our Brain Can Change," at an event hosted by Jonathan Morris, a partner with the law firm Berwin Leighton Paisner. Dr.

Assaf also gave a talk at London's Israeli Business Club, hosted by Leora Torn-Hibler.

- Prof. Karen Avraham of TAU's Sackler Faculty of Medicine was a guest at a roundtable discussion hosted by Edward Misrahi of Eton

Park International LLP on "The Impact of Genetics: Will It Tell Us Our Future?"

- Prof. Asser Susser, former Director of TAU's Moshe Dayan Center for Middle Eastern and African Studies, gave several talks in London at events hosted by Stephen Massey and David Bearman of Eden Financial; TAU Trust Chairman David Levin; Craig Pollack of SJ Berwin; TAU trustee Anthony H. Yadgaroff; Cantor Fitzgerald; TAU trustee Edwin Wulfsohn, and Ashley Reeback and Jonathan Feldman of

> the law firm Finer Stevens Innocent.



Prof. Asher Susser (right) with Steven Kave



WESTERN REGION

usa

NY: Sunday at the Movies

As part of the 24th Israel Film Festival co-sponsored by AFTAU, American Friends enjoyed a private screening of two short films by students from TAU's award-winning Department of Film and Television. A highlight of the event was a discussion with director Amikam Kovner, who spoke warmly of his experiences at Tel Aviv University.

Roston: "Fantastic Voyage" into **Next-Generation Cancer Treatment**

Dozens of doctors, scientists, business leaders and attorneys took a futuristic voyage through the promising field of nanotechnology led by cancer researcher Dr. Dan Peer of TAU's Department of Cell Research and Immunology. The dessert reception at the Boston law offices of Burns & Levinson was hosted by TAU alumnus Gil Breiman, with a Q&A session moderated by TAU alumnus Yacov Levy.

***** Beverly Hills:

Reception Introducing President Klafter

An intimate group of American Friends gathered at the Beverly Hills Hotel to meet TAU's president, Prof. Joseph Klafter. The cocktail reception was hosted by three prominent couples in California's Jewish community - Diane and Guilford Glazer, Doretta and Jona Goldrich, and Anna and Max Webb, and guests included the Hon. Jacob Dayan, Consul General of Israel.





Prof. Klafter (left) with Diane and **Guilford Glazer**

Jona Goldrich (left) with Max Webb

Beverly Hills: LA-TAU Exchange

American Friends gathered at the home of Jean and Jerry Friedman to celebrate the Sukkot holiday and toast the inauguration



of the Los Angeles-Tel Aviv University Cultural Exchange, a project to strengthen cultural and artistic ties between Israel and the Diaspora. The first event of the exchange, introduced by the Hon. Jacob Dayan, Consul General of Israel, featured Prof. Freddie Rokem, incumbent of

From left: Jerry Friedman, Ruth Weisberg, Jean Friedman and Prof. Freddie Rokem

the Emanuel Herzikowitz Chair for 19th and 20th Century Art and former Dean of TAU's Katz Faculty of the Arts, in conversation with artist Ruth Weisberg, Dean of the Roski School of Fine Arts at USC and a host of the event.

SOUTHEAST REGION

* Fort Lauderdale: Lansky Theater Party and Reception

More than 130 American Friends met at the famed Parker Playhouse to attend Mike Burstyn's virtuoso solo performance as the infamous gangster Meyer Lansky in Lansky: The Brains Behind

the Mob. Later in the evening, at a private cocktail reception chaired by Gaby Brill and Yemmy Strum and sponsored by the South Florida AFTAU leadership, the star shared his special affection for TAU, observing that "there is no better place in Israel for a student ... to open the door for great opportunity and success later in life."



From left: Dina Benari, Chaim Katzman, Mike Burstyn, Dr. Shulamit Rozen-Katzman, Shoshana Schecter and Theona Burstyn



Claudio Nijamkin (left) and the Hon. Ofer Bavly

* Aventura, FL: Consul General's Reception

At the oceanfront residence of the Hon. Ofer Bayly, Israel's Consul General to Florida and Puerto Rico, American Friends from South Florida's Latin American community met with TAU economist Prof. Leonardo Leiderman, Chief Economic Advisor of Bank Hapoalim. Guests heard Prof. Leiderman, who was born in Argentina and spoke in Spanish, provide an expert analysis of the US and world economy.

Boca Raton: Securing Your Financial Future

AFTAU's popular lunch-and-learn financial planning series drew overflow audiences from Northern Broward and Palm Beach country to all four of its informative programs. Under the leadership of AFTAU's Southeast Region planned giving advisor Alan Topchik, the series' programs featured national and local experts Thomas O. Katz, Alan Topchik, James C. Riggio and Neal Myerberg.

From New Delhi TO TEL AVIV

TAU hosts second annual India-Israel Forum to promote bilateral relations

Following the success of last year's meeting in New Delhi, this year's India-Israel Forum, "India-Israel Relations in a Global Age," held jointly by



From left:

Israel Makov. Chairman of

Netafim and

Given Imaging: Prof. Stanley

Fischer; and Dr.

Gary Sussman

TAU's Harold Hartog School of Government and Policy and the Confederation of Indian

Industry (CII), brought together business people, experts and academics to further discuss collaborations between the two countries in the areas of trade, agriculture, economics, real estate, technology, education and more. Guests of honor at the event were Minister of Finance and TAU



graduate Dr. Yuval Steinitz, National Infrastructure Minister Dr. Uzi Landau and Governor of the Bank of Israel Prof. Stanley Fischer. In addition, the delegation visited the President of the State of Israel Shimon Peres in his Jerusalem residence.

The co-chairs included Stanley M. Bergman, CEO and Chair of Henry Schein; Tarun Das, President of the Aspen Institute India and Chief Mentor of the CII; Aharon Fogel, Chairman of Migdal Insurance, Financial Holdings Ltd. and Ness Technologies; and Hari Bhartia, Vice President of the CII and Co-chairman and Managing Director of Jubilant Organosys Ltd. In a message to this year's delegates, they wrote that they "aim to build on last year's event, thereby serving to further strengthen bilateral relations between India and Israel."

Tarun Das (left) with Shimon Peres



Since last year's meeting, said Navtej Sarna, India's Ambassador to Israel, two-way trade between the countries crossed the \$4 billion mark for the first time, a significant achievement in a depressed economy. He also noted that India is now Israel's third largest trading partner in Asia.

The forum is designed to strengthen ties, increase dialogue, and serve as a networking opportunity. Each session was co-chaired by members of the Israeli and Indian delegations, and dealt with a topic of interest and potential cooperation, such as green energy. This year's gathering was supported by the Stanley and Marion Bergman Family Charitable Trust, the Pears Foundation, the Aimwell Trust, Berwin Leighton Paisner and Ness Technologies.

Mark Sofer, Ambassador of Israel to India, called the forum a "meeting of the minds," and said he was confident that the meeting would reveal "new avenues for economic, technological and academic collaboration."

"Performance of Musical Angels"

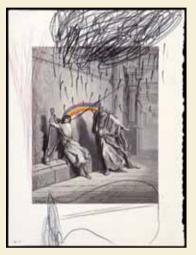
Vice Chairman of the TAU Board of Governors, Dr. h.c. Josef Buchmann (second from left), presented one of ten merit awards to a young orchestra player during a gala concert in Tel Aviv of TAU's Buchmann-Mehta School of Music Symphony Orchestra in cooperation with the Israel Philharmonic Orchestra. The all-Tchaikovsky program was described by the Haaretz music critic, Noam Ben-Zeev, as a "performance of angels." Fifteen of the 95 orchestra members are enrolled in the Adler-Buchmann International



Program for Outstanding Foreign Music Students, and one of them, violinist Petteri livonen of Finland, was personally selected for the soloist's role by conductor Zubin Mehta (second from right), the school's Honorary President. Head of the Buchmann-Mehta School Prof. Zeev Dorman is pictured right.

New Exhibitions

The Michel Kikoïne Foundation of TAU in collaboration with the Genia Schreiber University Art Gallery exhibited the work of four Israeli artists who were inspired by French artist Gustave Doré's famous biblical images. The exhibition included 60



works of photography, engravings and paintings by Rafi Lavi, Michal Heiman, Etti Yaakobi and Yoseph Krispal. Support came from the Carlo and Karin Giersch Chair for Research in Modern Painting and the Jeanette and Yasha Pomernick Foundation.

Another exhibition, put on by the Conservation Studio at the David Azrieli School of Architecture, presented the long and illustrious history of Jerusalem Boulevard in Jaffa.



The exhibition, entitled "The First Boulevard," included architectural surveys of buildings dating from the time of the British mandate.

TURKISH POST-DOC STUDENT OVERCOMES HURDLES TO STUDY AT TAU

When Turkish Muslim student Eda Cetinorgu, 35, first told her supervisors at Cukurova University that she wanted to take a break from her studies to pursue her PhD at Tel Aviv University in Israel, they were astounded. The year was 2004, at the height of the second Palestinian intifada against Israel, and the security situation was tense. Eda aspired to join the laboratory of Prof. Raymond (Reuven) Boxman, a world-renowned expert in semiconductors at TAU's Iby and Aladar Fleischman Faculty of Engineering.

Eda's determination eventually paid off and she joined the TAU laboratory in 2005 as a PhD student with funding from the Israeli government.

For Eda, the payoff was not only academic. She also found herself being drawn close to Israel and Judaism. "I fell in love with the country," says Eda. "I was fascinated by the warm family life here and I loved the Shabbat dinners and religious festivals."

During that time Eda published 15 scientific papers together with mentors Prof. Boxman and the late Prof. Shmuel Goldschmith, and presented her work at prestigious international conferences. Eda's work dealt with the development of new and less expensive coatings for flat panel TVs and computer screens – known technically as plasma deposition of transparent conductive coatings. Prof. Boxman, who holds the Kranzberg Chair in Plasma Engineer-

ing, describes Eda as "one of the best PhD students I have seen anywhere. She learns fast, takes the initiative and brings enormous enthusiasm and energy to every project."

The path to conversion

After completing her PhD studies at TAU, Eda spent two years as a post-doctoral student in Montreal. There, she explored the different

religious streams of Judaism, eventually deciding to undergo a Reform conversion, a step that disappointed family members back in Turkey. "I was raised as a Muslim but I felt more comfortable with Judaism and with the status of women in Judaism," says Eda.

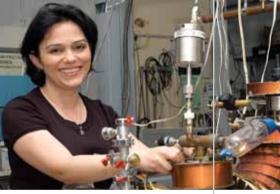
After two years in Montreal, Eda was drawn back to Israel. "When you convert, you accept a nation as your nation. I accepted the Jewish people as my people," she says.

Today, Eda is back in Prof. Boxman's laboratory as a post-doctoral student working on a project sponsored by the European Union to develop low-cost, domestic solar-activated water purification units for countries that lack safe central water supplies.

Meanwhile, Eda keeps kosher, attends synagogue regularly and celebrates Jewish festivals. She's now hoping to find a Jewish partner with whom she can share her traditional values and love of Israel.



Rafi Lavi, Untitled, 1998. Collection of Benno Kadav, Tel Aviv.





Israeli Birdwatching Celebrated by the Knesset

The Knesset recently marked 30 years of birdwatching in Israel at a ceremony organized by the Society for the Protection of Nature in Israel in partnership with TAU and sponsored by Knesset Speaker Ruby Rivlin.

The event was initiated by Dr. Yossi



Leshem of the Department of Zoology at the George S. Wise Faculty of Life Sciences, who heads the TAU-affiliated International Center for the Study of Bird Migration at Latrun.

The event focused on the use of poisons in agriculture and the subsequent damage to the environment. Dr. Leshem noted that there are over 120 reported cases of wildlife poisonings each year.

Dr. Leshem also spoke about a project he initiated that uses barn owls and kestrels as biological pest controllers – natural predators of rodents. A pair of barn owls feeds on 2,000 to 5,000 rodents per year. So far, 1,800 nesting boxes have been erected in agriculture fields. "In this way, we successfully reduce the use of pesticides for the benefit of the environment, human beings and wildlife," he said.

Polish WWII Hero Honored by TAU

A sculpture of Jan Karski, the revered Polish resistance fighter and a Righteous Gentile recognized by the State of Israel, was unveiled at TAU, together with a bench commemorating his name. An eyewitness to the horrors of the Holocaust, Karski was the



first man to report them to the West and its leaders, as early as 1943.

Said Poland's ambassador to Israel, Agnieszka Magdziak-Miszweska (back, seated): "This is only the third monument to Karski erected outside of Poland. It serves to strengthen the ties between Israel and Poland."

The ceremony was attended by Polish Parliament Speaker Bronislaw Komorowski, now acting President of Poland (back row, third from right); TAU Rector Dany Leviatan (back row, second from right); the late TAU Vice President Yehiel Ben-Zvi (back row, right); and young Polish students studying at TAU.

O people

ACADEMIC BUSINESS CLUB HOSTS DEFENSE MINISTER BARAK

Minister of Defense Ehud Barak (pictured) joined TAU President Joseph Klafter, President of the Israeli Friends Amos Shapira and former TAU President Itamar Rabinovich at this year's opening session of the

Academic Business Club of the Israeli Friends of TAU. Barak took part in an open dialogue with his hosts on Israel's security agenda.



President of Panama Honored

TAU President Joseph Klafter (right) is pictured here presenting the TAU President's Award to President of Panama Ricardo Martinelli during



a recent visit to TAU. Mr. Martinelli was recognized for his loyal support of Israel and his warm relationship with the Jewish community in Panama. During the visit he met with senior university officials and heard presentations on nanotechnology and security research.

Australian Entrepreneur Visits TAU

Evan Thornley, entrepreneur, former Cabinet Minister of the Australian Labour Party and CEO of the Australian branch of Better Place, an Israeli company that develops battery-run electric cars, recently visited the TAU campus. He is slated to deliver the annual oration to the Friends of TAU chapter in Melbourne this summer.



TAU President Joseph Klafter (left) with Evan Thornely



Mr. Thornley met with top TAU scientists doing research in his company's area of interest, including faculty members from the Raymond and Beverly Sackler School of Chemistry and the Iby and Aladar Fleischman Faculty of Engineering. TAU President Prof. Joseph Klafter and Vice President for Research and Development Prof. Ehud Gazit also met with Mr. Thornley.

JOE BIDEN SPEAKS ON CAMPUS

US Vice President Joseph R. Biden delivered a major policy speech at Tel Aviv University while on a state visit to Israel. The

Vice President was warmly welcomed by TAU President Joseph Klafter, who expressed the University's pride that he had chosen Israel's leading academic institution from which to deliver his only public address during his visit.



Stressing TAU's deep and extensive ties with top

US universities and agencies, Prof. Klafter noted that the shared understanding "that academic excellence powers a nation's growth is just one of the strong bonds between our two countries."

From the podium of TAU's Miriam and Adolfo Smolarz Auditorium, the Vice President opened his policy speech with warm words of praise for the Jewish state and told the 1,000-strong audience of students, faculty members and dignitaries that the United States has "no better friend than Israel." He concluded his address with a question-and-answer session with students.

While on campus, Biden, escorted by President Klafter and TAU Vice President for R&D Ehud Gazit, met with 15 of Israel's leading entrepreneurs, among them TAU supporters. The meeting in the Kuky and Sergio Grosskopf Family Foyer focused on exciting new developments in Israel in the realm of high tech.



US Vice President Joseph Biden with TAU President Joseph Klafter and Vice President for Research and Development Prof. Ehud Gazit

CONFERENCE DELIBERATES ON MIDDLE EAST

Israeli Deputy Prime Minister Dan Meridor participated in a joint conference of the South African-based Brenthurst Foundation, TAU's Moshe Dayan Center for Middle Eastern and African Studies and the Konrad Adenauer Foundation in Israel. The conference was part of the Foundation's "Fault Lines Project," which studies politics and society in various states in Africa and the Middle East. Meridor addressed the conference on Israel's place in the Middle East.





In the foreground, from left: Dr. Lars Hansel, Representative of the Konrad Adenauer Foundation in Israel; Prof. Eyal Zisser, Director of the Dayan Center; Dan Meridor, Deputy Prime Minister; and Dr. Greg Mills, Head of the Brenthurst Foundation

TAU Hosts African University Heads

A dozen academic leaders of African universities visited the TAU campus recently to learn about higher education in Israel. They were invited by the Ministry of Foreign Affairs. The group Etti Mond toured the Jaime and Joan Constantiner School of Education. (center), the Blavatnik School of Computer Science and the Iby and Ala-Head of the TAU Visitors dar Fleischman Faculty of Engineering; lunched with TAU Vice Office, with President for Development and Public Affairs Dr. Gary Sussman a delegation of African and other university officials; and met with Dr. Galia Sabar-University Friedman, head of TAU's African Studies Program. heads



community

Musical Turning Point

A TAU outreach program initiated by Zubin Mehta encourages the professional aspirations of young Arab musicians in Israel

Yussuf Ateek, 17, a budding pianist from the Israeli Arab town of Nazareth, dreams of one day performing



Zubin Mehta and Yussuf Ateek with a great orchestra – perhaps the Israel Philharmonic Orchestra (IPO). His vision came closer to realization recently when he played a Beethoven sonata in the presence of Zubin Mehta, Honorary President of TAU's Buchmann-Mehta School of Music and Musical Director of the IPO.

Yussuf was one of dozens of Arab and Jewish youth performing at a special evening in the maestro's honor within the framework of Mifneh ("Turning Point") - the Zubin Mehta Program for the Cultivation of Multicultural Musical Leadership in the Central Galilee Region. The program is supervised by the Buchmann-Mehta School in cooperation with the IPO and the Jezreel Valley Center for the Arts and supported by several institutional and private donors. Some 300 Arab and Jewish youth take part in group lessons, master classes, recitals, summer camps and workshops in northern Israel and on the TAU campus.

Closing gaps

Mehta founded the Mifneh program in response to the chronic lack of musical education in the Arab sector of Israel. Only one music conservatory exists for the entire Arab population as opposed to 40 conservatories for the Jewish one, and not a single music study track can be found at an Arab high school, as opposed to 130 at Jewish schools. This, together with the high costs of private lessons and musical instruments, means that there are very few classical musicians among Israel's Arab citizenry.

Mifneh will nurture musical talent among Arab youth, envisions Mehta, as well as bring young Arab and Jewish musicians closer together. "This musical bridge to the Israeli Arab community gives me particular pleasure and great inspiration," says Mehta. "The ultimate step will be reached when we see the first Arab members of the IPO, thus turning it into an all-Israeli orchestra, an orchestra that truly belongs to all the communities living in this country."

All roads lead to TAU

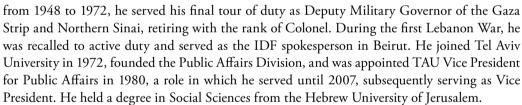
The program fulfills the Buchmann-Mehta School's goal of bringing classical music education to the country's social and geographical periphery. Prof. Tomer Lev, former Head of the school, says, "Mifneh gives a musical answer to the critical challenge of bringing the Galilee and the Negev closer to the center. Those who excel will find a paved road that starts with classes in their home institution, continues with regional master classes given by musicians from the Buchmann-Mehta School and the IPO, and leads to music studies at TAU."

The program is being piloted in the northern towns of Nazareth and Shfar'am and at the Jezreel Valley Center for the Arts. Uri Ben David, who coordinates the program at the Jezreel Center, said at the recital, "The Mifneh program represents the multicultural spirit that we have been cultivating among generations of young musicians. These students will point the way to creating an open and creative society in Israel."

Yehiel Ben-Zvi 1931-2010

Tel Aviv University deeply mourns the passing of Yehiel Ben-Zvi, our dear Vice President. Yehiel leaves a legacy of exceptional achievement during his 36 years of service to the University. Under his guidance and vision, the University prospered and attained a place of prominence in higher education in Israel and the world.

Yehiel was born in Poland and immigrated to Israel as a child. A career officer in the Israel Defense Forces



The honorary fellowship bestowed upon Yehiel by Tel Aviv University in 2008 recognized the enormous contribution he made to the University, and commended his total devotion to its prosperity and development.

Yehiel's personal charm and complete identification with the University drew in benefactors and friends from around the world, who recognized in him the spirit and inspiration of Tel Aviv and Israel. With tireless dedication, he raised hundreds of millions of dollars for the academic and physical advancement of the University, and laid down a network of lifetime friends and supporters.

Yehiel's wise counsel, loyalty and warm friendship will be sorely missed by all who knew him.



Tel Aviv University Lay Leadership Worldwide

ARGENTINA

Polly Mizrahi de Deutsch

President

Argentinean Friends of Tel Aviv University

AUSTRALIA

Vivien Zimmet

President

Australian Friends of Tel Aviv University

Victoria Chapter (Melbourne)

John Landerer AM CBE

President

Australian Friends of Tel Aviv University

New South Wales Chapter (Sydney)

AUSTRIA

Dr. Hannes Androsch

President

Austrian Friends of Tel Aviv University

BRAZIL

Dr. Mario Arthur Adler

President

Brazilian Friends of Tel Aviv University

Sao Paulo Chapter

Eng. Luiz Chor

President

Brazilian Friends of Tel Aviv University

Rio de Janeiro Chapter

Eng. Pedro Simon Gus

President

Brazilian Friends of Tel Aviv University

Porto Alegre Chapter

CANADA

Judge Barbara Seal, CM

National President

Canadian Friends of Tel Aviv University (CFTAU)

Theodore Goloff

Chairman

Canadian Friends of Tel Aviv University

Montreal Chapter

Dr. Norman Halpern

President

Canadian Friends of Tel Aviv University

Toronto Chapter

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

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