



THE HEBREW UNIVERSITY OF JERUSALEM
BOARD OF GOVERNORS 2025

THE KAYE INNOVATION AWARDS



DREAMING. CREATING. INNOVATING.
Since 1925





ISAAC KAYE

Isaac Kaye is a pharmaceutical chemist who has been very successful at translating novel ideas into profit-generating products.

He established Norton Healthcare, a substantial generic pharmaceutical company in the UK, which later merged with the IVAX Corporation of the USA. Teva, Israel's biggest company completed its acquisition of IVAX in 2006, creating the world's largest generics company.

After retiring from IVAX, he turned his attention to venture capital and together with partners founded Israel Healthcare Ventures (IHCV), a provider of capital to early- and expansion-stage Israeli companies. IHCV focuses exclusively on healthcare and life sciences.

Isaac Kaye's passion for medical innovations that advance human healthcare is matched by a number of other interests, including his love of Israel and its people and his enthusiasm and support for The Hebrew University of Jerusalem and the principles upon which it is based.

Fortunately for The Hebrew University, Isaac Kaye's interests in pharmacology, new chemical entities and medical devices are very much in line with areas in which the University has considerable expertise and which it is eager to develop.

In 1995, the Isaac and Myrna Kaye Chair in Immunopharmacology at the School of Pharmacy was established, providing much needed research funds in this field. In 2005, Kaye established five annual fellowships for outstanding graduate and post-doctoral students. "The Kaye-Einstein Fellowships" encourage recipients to continue their studies at The Hebrew University for a minimum of three years, helping to prevent the University's finest scholars from being

recruited by other leading institutions. Subsequent to the first program of scholarships, five additional three year scholarships were awarded in 2010, and another five in 2013. Yet another five commenced in 2016.

Isaac Kaye established the annual Kaye Innovation Awards in 1993. The awards have earned an esteemed reputation highlighting innovations with potential for income generation, principally through royalties for the University. Applications must be well-focused and accompanied by recommendations, but unlike grant proposals, anyone from the most senior to the most junior staff may apply.

Students are always encouraged to submit proposals. The winners demonstrate not only good science, but also a focus on commercial viability and the benefits this brings to the University.

Isaac Kaye has always been active on behalf of The Hebrew University. He has served as Chairman of the South African Friends organization and became an active member of the University's Board of Governors. Following his move to the UK, Isaac Kaye joined the British Friends and continued as a member of the Board of Governors. He is currently Chairman of the British Friends.

Our University is deeply indebted to both Isaac and Myrna for their deep involvement and devotion to this institution.



PIONEERING THE FUTURE:

Honoring the Innovators Shaping Science, Technology, and Medicine

Hebrew University is marking a historic milestone this year — 100 years of groundbreaking research, academic excellence, and global impact. As we reflect on a century of achievements, it is clear that innovation remains at the heart of our institution.

Over the past year and a half, despite significant challenges in the Middle East, our researchers have continued to push boundaries, refusing to give in to negative forces. As Martin Buber, a renowned philosopher and one of the university's first professors who contributed to shaping the university's academic vision once said, "The world is not comprehensible, but it is embraceable: through the embracing of one of its beings." This idea reflects the essence of scientific discovery—while we may never fully understand the complexities of the universe, we make progress by focusing on specific challenges and working toward solutions. This philosophy is what drives our researchers to engage deeply to solve pressing global issues.

For nearly three decades, the Kaye Innovation Awards ceremony has recognized outstanding breakthroughs with significant commercial potential—transforming academic research into real-world solutions. Established by visionary entrepreneur Isaac Kaye, the award honors Hebrew University scientists whose work makes a tangible impact, reinforcing the vital connection between academia, industry, and commercial success. The Kaye family's enduring partnership with the university continues to support this mission, and this year's recipients exemplify that vision, pushing the boundaries of medicine, technology, and scientific discovery.

Prof. Yinon Ben-Neriah: Revolutionizing Cancer Treatment

For years, cancer research has been shaped by the pursuit of targeted therapies—treatments that can attack cancer cells while sparing healthy tissue. Few have made as profound an impact in this area as Prof. Yinon Ben-Neriah. His pioneering work in oncology led to the discovery of kinase inhibitors, a game-changing class of cancer drugs that continue to be at the forefront of treatment today.

Now, he has done it again. His latest breakthrough—a new class of anti-leukemia drugs—is showing unprecedented results in clinical trials. By targeting specific components in the Wnt signaling pathway, these small-molecule inhibitors are proving remarkably effective against several tumor types. One of these compounds, A51, has already advanced to Phase II clinical trials for acute myeloid leukemia (AML) and solid tumors. The potential impact? A transformational shift in cancer treatment, offering new hope for patients worldwide.

Prof. Nadav Katz: One Small Step for a Scientist, One Giant Leap for Israel's Quantum Future

The world is on the brink of a quantum computing revolution, and Prof. Nadav Katz is helping to lead Israel into this new frontier. As CTO of Qhipu Quantum LTD, he has played a central role in designing and developing Israel's first-ever 20-qubit superconducting quantum processor (QPU). This achievement positions Hebrew University—and Israel as a whole—as a major player in the future of quantum technology.

Unlike traditional computers, which process information in binary (ones and zeros), quantum computers leverage qubits to perform calculations at unprecedented speeds. The applications of this technology are immense—ranging from drug discovery to artificial intelligence to cryptography. With Prof. Katz at the helm, Israel is staking its claim in a race that is set to define the future of computing.

Prof. Yossi Buganim: The Future of Regenerative Medicine

The ability to reprogram cells—turning one type of cell into another—has been a dream of regenerative medicine for decades. Prof. Yossi Buganim has not only made this a reality but has also surpassed the limitations of traditional stem cell techniques. While Nobel laureate Shinya Yamanaka's discovery of induced pluripotent stem cells (iPSCs) transformed the field, these cells come with major risks—chief among them, a high potential for tumors.

Prof. Buganim's lab has developed a new, safer approach, using non-Yamanaka factors to convert fibroblasts into placental stem cells (TSCs). This discovery is poised to revolutionize regenerative medicine and could have profound applications in anti-aging therapies, regenerative treatments, and even the future of organ growth for transplantation. His technology has already been commercialized through Ananda Labs, a startup dedicated to bringing these innovations to market.

Dr. Omer Deutsch: Transforming Diagnostics with Saliva- Based Testing

Sometimes, the simplest ideas have the power to change the world. That is precisely what Dr. Omer Deutsch, a former PhD student within the Lab of Prof. Aharon Palmon at The Institute of Biomedical

and Oral Research, Hebrew University, has done. His breakthrough in saliva-based diagnostics is making medical testing faster, easier, and more accessible than ever before.

By developing a method to selectively remove alpha-amylase from saliva samples, Dr. Deutsch dramatically improved the accuracy and reliability of rapid diagnostic tests. This innovation, patented by Yisum, has already been commercialized into a CE- and UKCA-approved product, now available in major UK retail chains like Boots. What started as a Ph.D. project has now become a global healthcare solution—a shining example of how academic research can translate into real-world impact.

At Yisum, we take immense pride in being the driving force behind these groundbreaking discoveries—helping Hebrew University researchers turn their ideas into commercial success stories that benefit society. The Kaye Awards remind us each year that the brightest minds, with the right support and collaboration, can make an enormous impact on the world.

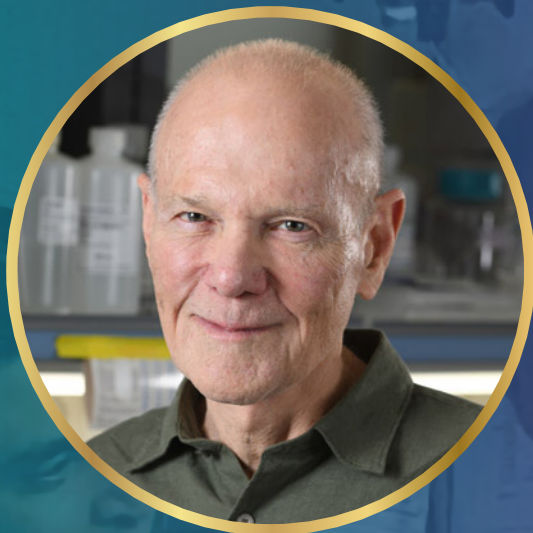
We extend our deepest gratitude to the Kaye family, whose unwavering commitment to innovation continues to inspire and empower our research community. Congratulations to this year's winners—your achievements not only shape the future but also inspire fellow researchers to pursue bold ideas and change the world.



Alon Natanson
CEO, Yisum

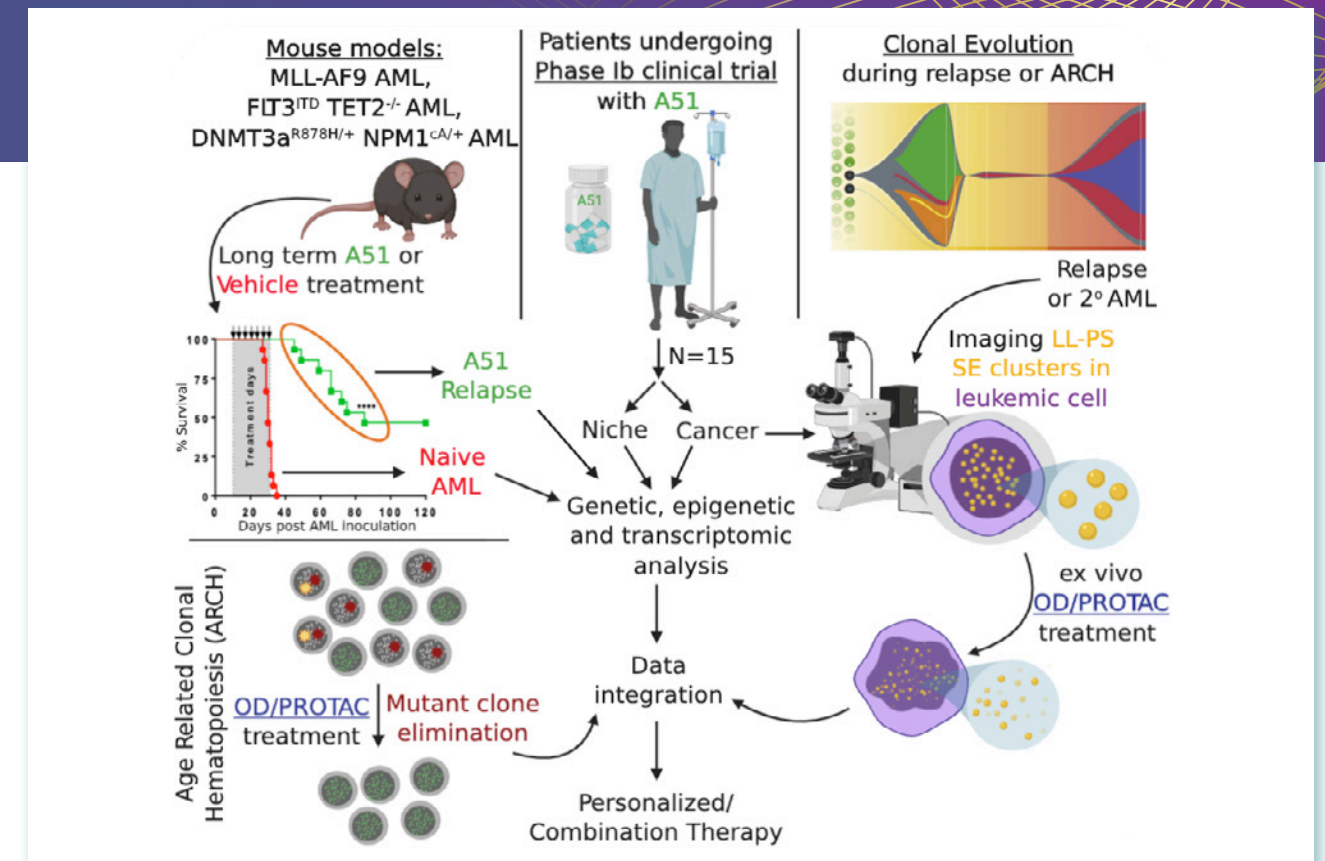


RESEARCHER PRIZE



PROF. YINON BEN-NERIAH

Prof. Yinon Ben-Neriah is a professor of immunology and cancer research at the Hebrew University of Jerusalem. Yinon is an EMBO member, elected fellow of the European Academy of Cancer Sciences and recipient of various Israeli prizes for biomedical research—Landau, Teva Founders, Rappaport, EMET and the Israel Prize for Medical Research. Yinon studies cancer development and therapy. His main achievements include determination of the structure of the CML oncoprotein Bcr-Abl and developing a prototype targeted cancer therapy for its inhibition; deciphering key components in the NF-κB and Wnt signaling pathway with major impact in cancer; identifying NF-κB as the first molecular link between inflammation and cancer; elucidating mechanisms for WNT and mutant p53 activation and developing a new class of small molecule kinase inhibitors with profound therapeutic effects in preclinical and early clinical studies in several cancer types.



RESEARCH DESCRIPTION

Acute myeloid leukemia (AML) is one of the most aggressive, yet also one of the most interesting types of cancer. It is still considered a disease with unmet therapy needs and the 5-year survival rate of patients is only 20%. Following an intensive research and development effort our research team succeeded in developing a biological drug, curing up to 50% of model mice of poor risk human leukemia and eradicating human leukemia cells transplanted to model mice. Leukemia cells produce many proteins which are barely made in normal blood cells, working in concert to provide the leukemic cell growth and chemotherapy protection. Unlike most modern cancer drugs, our newly developed drug works like a cluster bomb that attacks simultaneously many leukemic proteins, making it difficult for the leukemia cell to evade the therapy. Based on our preclinical studies at the Lautenberg Center, our drug A51 received FDA approval and successfully completed a Phase I clinical trial at three major cancer centers in the US. A significant proportion of AML patients, who have a particular, common mutation and were resistant to multiple

previous treatments benefited from treatment with our drug, some showing complete response, although with a short duration. Based on these clinical results, we have already started a Phase 2 combination trial of A51 with several drugs used in the clinic to treat AML, which by themselves don't benefit patients enough, and in addition, clinical trials in two incurable solid cancers are in progress.

Our current aim is to explore therapy options that complement the therapeutic efficacy of A51, both in AML and in solid tumors. We have already identified one promising combination option, based on an epitranscriptomics study, an emerging arena in cancer therapy. We found an RNA methylation inhibitor that enhances significantly the therapeutic effect of A51 in AML preclinical models and plan a clinical trial of A51 with the methylation inhibitor in refractory AML patients.

RESEARCHER PRIZE

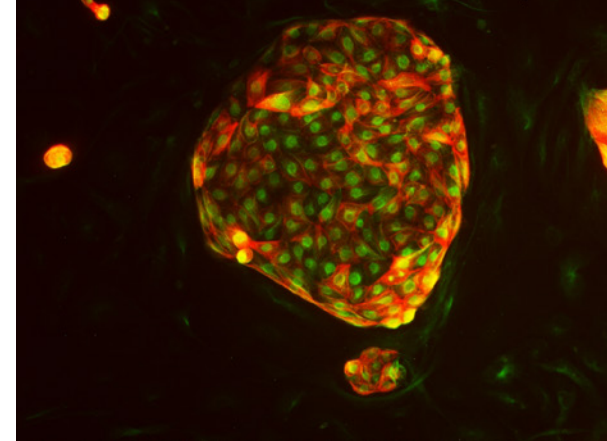


PROF. YOSSI BUGANIM

Yossi Buganim is an HHMI International Research Scholar and Associate Professor at the Faculty of Medicine at the Hebrew University of Jerusalem. He is a leading expert in nuclear reprogramming, pioneering breakthroughs in regenerative medicine and sustainable food technologies. His groundbreaking innovations rejuvenate aging cells to treat age-related diseases and enable the production of non-Yamanaka iPSCs for human therapies and bovine applications in food tech. As CSO and co-founder of Ananda Labs and EternalStem, and a consultant and external contractor for Aleph Farms, he drives innovation across these fields. His contributions have earned him numerous prestigious honors, including awards from HHMI, ERC, EMBO, and the Science magazine "Stem Cell and Regenerative Medicine" award.

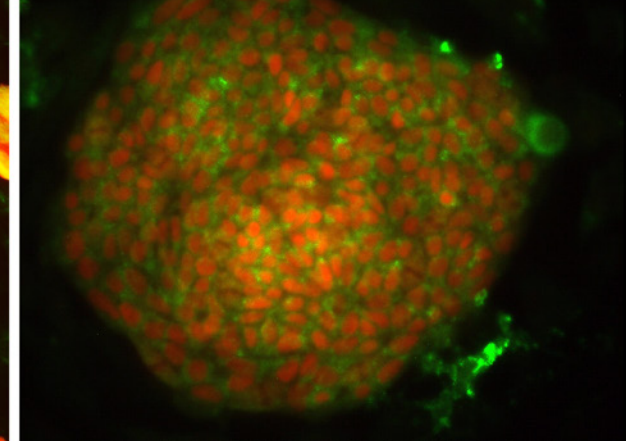
Regenerative medicine

iTSCs derived from human elderly cells



Food-tech industry

iPSCs derived from bovine cells



RESEARCH DESCRIPTION

The groundbreaking discovery by Nobel laureate Shinya Yamanaka, which involves the conversion of adult cells into induced pluripotent stem cells, or iPSCs, has revolutionized both the field of regenerative medicine and the food-tech industry. iPSCs possess all the properties of embryonic stem cells without the ethical concerns associated with sacrificing embryos.

Building upon this technology, numerous companies have emerged aiming to harness its potential for cellular rejuvenation. However, Yamanaka's factors are highly tumorigenic and lead to rapid loss of cell identity. Recognizing these limitations, my lab has spent the past decade developing various novel technologies to convert cells into iPSCs and other stem cell types, using our own developed sets of factors. We are proud to have pioneered the conversion of fibroblasts into placental stem cells, known as trophoblast stem cells (TSCs), making us the first in the world to achieve this milestone. Our patented combination of factors has enabled us to rejuvenate elderly cells and enhance their cellular function to a greater extent than Yamanaka factors, while minimizing the risk of oncogenicity.

Building upon this success, we founded Ananda Labs, dedicated to addressing aging-related diseases using our innovative technologies.

In parallel, I co-founded EternalStem, a company dedicated to long-term storage and the production of cost-effective, safe, and high-quality iPSCs using non-Yamanaka factors for regenerative medicine.

Our work has also garnered significant interest from the food-tech industry, with companies like Aleph Farms seeking our assistance in producing iPSCs from bovine cells. After three years of collaboration, we have successfully achieved this goal, with a patent currently being drafted by Yisum and Aleph Farms.

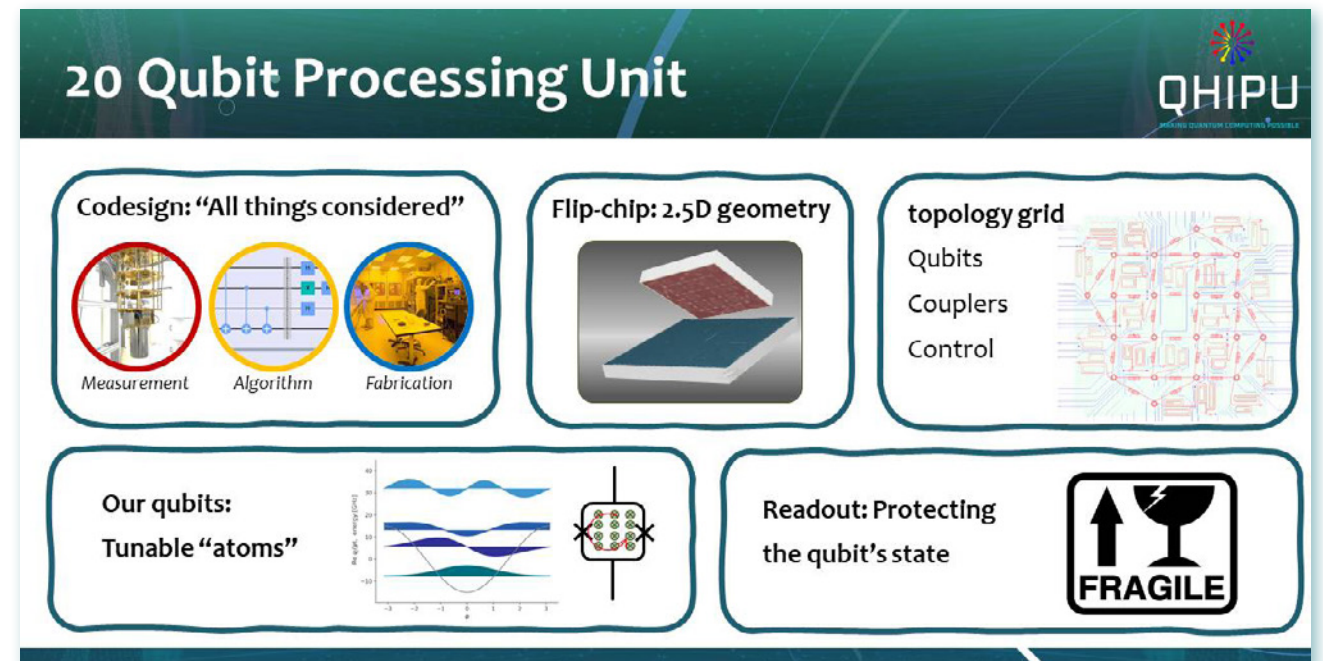
Across all these endeavors, I hold shares, serve as CSO, or have licensing agreements in place. Collectively, these projects have already brought significant revenue to the Hebrew University and Yisum.

RESEARCHER PRIZE



PROF. NADAV KATZ

Prof. Nadav Katz is an experimental physicist specializing in superconducting circuits for quantum computing. His research focuses on coherence-enhancing protocols, measurement techniques and new materials and designs for qubits. He founded the Hebrew University quantum center in 2012 and is currently the Chair of the Racah Institute of Physics. He is a member of the board of the Israeli Physical Society and the Israeli Energy Forum. He is the founder and CTO of Qhipu Quantum LTD, a full-stack quantum computing company. Nadav enjoys science fiction, chess and hiking. He is married with 4 children and lives in Jerusalem.



RESEARCH DESCRIPTION

As the CTO of Qhipu Quantum LTD, Nadav led the design, integration, testing and calibration of the first 20-qubit Israeli superconducting quantum processor (QPU). This processor is based on a complex multi-chip assembly, and was carefully designed by full RF simulation of the complex structures, and a novel subsequent quantum analysis.

The design of the QPU was based on a unique application driven approach. The QPU topology of connectivity between the qubits was optimized by benchmarking a specific quantum algorithm and its performance on different connectivity maps. This unique co-design approach was led by Katz and the Qhipu team.

Katz has been designing, fabricating and testing innovative superconducting devices for over 15 years, and notably succeeded in building and patenting a high-kinetic inductance quantum-limited amplifier. Such amplifiers are a critical path-innovation for scaling to larger quantum computers.

STUDENT PRIZE



DR. OMER DEUTSCH

Dr. Omer Deutsch, DMD, PhD, is one of the co-founders and CEO of Salignostics, a company pioneering saliva-based diagnostics. He completed his PhD under the supervision of Prof. Aaron Palmon and Prof. Doron Aframian at the Faculty of Dental Medicine of the Hebrew University. His thesis, "Examination of Proteomic Pretreatment Strategies for Increased Diagnostic Value of Human Oral Fluids in Health and Disease," focused on improving the clinical utility of saliva through proteomics. He has authored peer-reviewed publications and is a co-inventor on several patents. Omer has received international recognition for research excellence, including the Canadian Friends of the Hebrew University Prize for Excellence. He occasionally lectures at the Hebrew University and other academic institutions on dental medicine, salivary diagnostics, and academic tech entrepreneurship. Since founding Salignostics, he has led its strategic and scientific development.

Core Technologies

Saliva Concentrator
Amplification buffer
Unmasking capabilities filter out blocking agents
Metered collection for standardization of volume



Salignostics

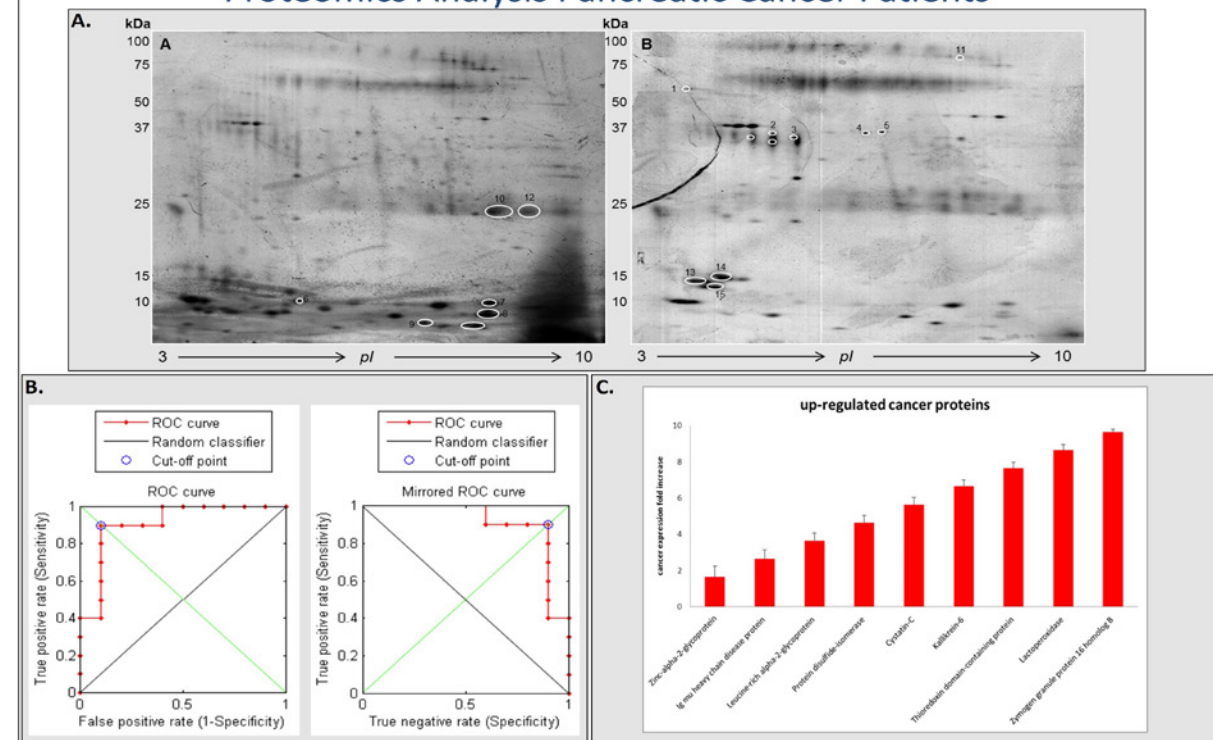
Our Platform Technology



Salignostics



Proteomics Analysis Pancreatic Cancer Patients



RESEARCH DESCRIPTION

The research originated at the Hebrew University's Faculty of Dental Medicine, in a multidisciplinary effort to enhance the diagnostic value of human oral fluids. Early work focused on overcoming a major barrier in salivary proteomics: the masking effect of high-abundance proteins such as amylase, albumin, and immunoglobulins. By developing effective pretreatment strategies to deplete these proteins, it became possible to reveal and analyze low-abundance salivary biomarkers relevant to systemic diseases.

These technologies enabled the identification of potential protein signatures for complex conditions such as pancreatic cancer and Sjögren's syndrome—diseases that currently lack simple, non-invasive diagnostic tools. The research demonstrated that saliva, when properly processed, can serve as a reliable diagnostic medium with distinct advantages over blood or tissue sampling.

This foundational work evolved into a broader diagnostic platform, transferred through Yissum—the Hebrew University's tech transfer company—and

expanded within Salignostics. The company was co-founded by researchers from Prof. Aaron Palmon's lab, including Prof. Palmon, Dr. Guy Krief, Dr. Yoav Neumann, Dr. Raluca Cohen, and Dr. Omer Deutsch. Together, they translated academic research into scalable diagnostic products.

Among the flagship innovations are Salicov, a rapid saliva-based Covid-19 test developed in part under the prestigious NIH RADx program. Salicov was one of only 28 products to reach the full-scale industrialization stage through the accelerator, selected from thousands of applicants worldwide. Another key product is Salistick, the world's first saliva-based pregnancy test to receive CE, AMAR, and TGA approvals. In 2023, TIME Magazine named Salistick one of the Best Inventions of the Year.

Salignostics' platform combines optimized collection, filtration, and assay integration, forming the basis for a versatile and scalable system for future saliva-based diagnostics worldwide.

KAYE – EINSTEIN SCHOLARSHIPS

3RD YEAR

2024–2025



Carla Azar, Ph.D. Candidate in Medicine
Faculty of Medicine

Zahala Bar On, Ph.D. Candidate in Medicine
Faculty of Medicine

Lutfi Hodali, Ph.D. Candidate in Medicine
Faculty of Medicine

Meray Kadee, Ph.D. Candidate in Agriculture
The Robert H. Smith Faculty of Agriculture, Food and Environment

Evyatar Sar-Shalom, Ph.D. Candidate in Agriculture
The Robert H. Smith Faculty of Agriculture, Food and Environment

PREVIOUS WINNERS

2024

INVENTOR: PROF. OFRA BENNY

The School of Pharmacy, Institute for Drug Research
Faculty of Medicine

Invention: Microfluidic Chips and Systems

INVENTOR: PROF. ZVI PELEG

Department of Biochemistry, Food and Nutrition
The Robert H. Smith Faculty of Agriculture, Food and Environment

Invention: Develop a novel genetic approach for sesame weed control and enhance yields

INVENTOR: PROF. YOSHI TAM

The School of Pharmacy, Institute for Drug Research
Faculty of Medicine

Invention: Novel Translational Approach: Peripherally Restricted CB1 Antagonists for Metabolic Health

INVENTOR: MR. TOMER BABU

The School of Pharmacy, Institute for Drug Research
Faculty of Medicine

Invention: A Platform for Development of Novel Classes of Multi-Targeting Anticancer Prodrugs

2023

INVENTOR: DR. LIOR NISSIM

The Department of Biochemistry and Molecular Biology
Faculty of Medicine

Invention: Proprietary synthetic biology platforms.

INVENTOR: PROF. NURIT ARGOV

Department of Animal Sciences
The Robert H. Smith Faculty of Agriculture, Food and Environment

Invention: Milk - production of milk components that are unique to milk, which cannot be produced nor obtained from other sources.

INVENTOR: DR. HAITHAM AMAL

The School of Pharmacy, Institute for Drug Research
Faculty of Medicine

Invention: A Novel Integrative Blood/Microbiome Platform for the Diagnosis and Therapy of Autism Spectrum Disorder

INVENTOR: PROF. ROIE YERUSHALMI

The Institute of Chemistry and the Harvey M. Krueger Center for Nanoscience and Nanotechnology
Faculty of Sciences

Invention: High-performance composite materials enabled by atomic and molecular layer deposition.

INVENTOR: MS. ADI AMAR-SCHWARTZ

The Department of Biochemistry and Molecular Biology
Faculty of Medicine

Invention: Modulation of m6A RNA modification to inhibit mRNA degradation in genetic diseases and cancer

INVENTOR: MS. ORTAL YERUSHALMY

The Institute of Biomedical and Oral Research (IBOR)
Faculty of Dental Medicine

Invention: IPB – Israeli Phage Bank

PREVIOUS WINNERS

2022

INVENTORS: PROF. ITAMAR GATI

School of Education

DR. MICHAL PHILIPS – BERENSTEIN

School of Education

Invention: Reducing Dropout from Higher Education by Assessing Psychosocial Readiness for College

INVENTOR: PROF. RAMI I. AQEILAN

The Lautenberg Center for Immunology and Cancer Research,

Faculty of Medicine

Invention: AAV-Mediated Delivery in WWOX-Related Human Neurological Diseases

INVENTOR: PRF. ZVI HAYOUKA

Institute of Biochemistry, Food Science and Nutrition

The Robert H. Smith Faculty of Agriculture, Food and Environment

Invention: Random Antimicrobial Peptide Mixture to Tackle Bacterial Contamination in Various Technologies

INVENTOR: MR. NADAV WALLIS

Ph.D. student in Prof. Joel Yisraeli's lab at the Department of Developmental Biology and Cancer Research, in the Institute for Medical Research, Israel–Canada Faculty of Medicine

Invention: IGF2BP Inhibitors as a Novel Target for Cancer Therapy

INVENTOR: MS. AVANTHIKA VENKATACHALAM

Doctoral candidate in Prof. Yinon Ben Neriah's lab.

The Lautenberg Center for Immunology and Cancer Research

Faculty of Medicine

Invention: Targeting Cancer Vulnerabilities in Acute Leukemia

INVENTOR: DR. HIBA NATSHEH

Postdoctoral fellow in Prof. Elka Tuitou's laboratory of the Innovative Dermal, Transdermal, and Transmucosal Drug Delivery

Institute for Drug Research

Faculty of Medicine

Invention: A New Nanotechnology for Enhanced Drug Delivery to the Brain

2021

INVENTOR: PROF. DAVID NAOR

The Lautenberg Center for Immunology and Cancer Research

Faculty of Medicine

Invention: Synthetic 5-MER peptide (MTADV), recognizing Serum Amyloid A (SAA), alleviates chronic inflammation models, including IBD: A new potential drug (MTADV) and a new target (SAA) for chronic inflammations.

INVENTOR: PROF. ROTEM KARNI

Diabetes Research Center

Faculty of Medicine

Invention: Translating findings into new therapies for cancer and other genetic diseases.

INVENTOR: PROF. LIOZ ETGAR

The Institute of Chemistry

Faculty of Sciences

Invention: Green energy by recoverable fully printable perovskite solar cells.

INVENTOR: PROF. FRANCESCA LEVI-SCHAFER

School of Pharmacy

Faculty of Medicine

Invention: Identify new targets for prophylaxis/treatment of allergic disease such as asthma, atopic dermatitis, allergic rhinitis and conjunctivitis by specifically studying the two main effector cells of these conditions, the mast cells and the eosinophils.

INVENTOR: DR. VLAD SHUMEIKO

Completed his Ph.D. under the supervision of Prof. Oded Shoseyov

The Robert H. Smith Faculty of Agriculture, Food and Environment

Invention: An artificial optical nose system for smells detection and classification.

2020

INVENTOR: PROF. AMOS NUSSINOVITCH

Department of Biochemistry, Food Science and Nutrition

The Robert H. Smith Faculty of Agriculture, Food and Environment

Invention: Developing edible protective films to extend postharvest shelf life of fresh and processed fruit and vegetable

INVENTOR: PROF. ELKA TOUITOU

School of Pharmacy, Institute for Drug Research

Faculty of Medicine

Invention: Breakthrough technology of delivery systems for pharmaceutical cannabinoid products

INVENTOR: PROF. RUTH GALLILY

The Lautenberg Center for General and Tumor

Immunology

Faculty of Medicine

Invention: The discovery that CBD is a powerful anti-inflammatory and analgesic and that it is also useful in diabetes and obesity

INVENTOR: ORIT BERHANI

Ph.D. Student in Prof. Ofer Mandelboim's lab at the

Lautenberg Center for Immunology and Cancer Research

Faculty of Medicine

Invention: A new immunotherapy involving Natural Killer cells and Bi-and tri-specific antibodies

INVENTOR: AMIJAI SARAGОВI

Completed his Ph.D. under the supervision of Dr. Michael Berger

Faculty of Medicine

Invention: Devised a novel strategy that enable T cells to exclusively utilize alternative carbon source to glucose

2019

INVENTOR: PROF. YOSHI PALTIEL

The Quantum Nano Engineering Laboratory, Applied Physics Department

Invention: A generic way to synthesize and separate chiral enantiomers

INVENTORS: PROF. GABRIEL NUSSBAUM

MD PhD. Expertise in innate immune signaling in infection and autoimmunity. Institute of Dental Sciences.

PROF. AMNON HOFFMAN

PhD. Expertise in bio-pharmaceutics, drug delivery and clinical pharmacy. Institute of Drug Research.

PROF. CHAIM GILON

PhD. World renowned expert in peptide chemistry, inventor of the backbone cyclization concept for peptide drug design and development. Institute of Chemistry.

Invention: MyR-c(MyD 4-4), a novel cyclic peptide drug lead for autoimmune disease and cancer therapy

INVENTOR: PROF. OREN TIROSH

Redox Biology Lab.

Institute of Biochemistry, Food Science and Nutrition, Robert H. Smith Faculty of Agriculture, Food and Environment

Invention: Novel approach for safe preservation of meat products

INVENTOR: MR. JOSHUA MOSS

MD-PhD student under the mentorship of Prof. Yuval Dor at the Faculty of Medicine and Prof. Tommy Kaplan at the School of Computer Science and Engineering

Invention: A blood test to detect and localize cell death

INVENTOR: MS. BAT-EL COHEN

PhD student in Prof. Lioz Etgar's research lab

The Institute of Chemistry

Invention: Incorporation of 2D perovskite towered enhanced efficiency and stability in solar cells



PREVIOUS WINNERS

2018

INVENTOR: PROF. URIEL LEVY

Department of Applied Physics, Faculty of Science
The Harvey M. Krueger Family Center for Nanoscience & Nanotechnology

Invention: CMOS Compatible Low Cost Photodetection in the Short Wave Infrared (SWIR)

INVENTOR: PROF. YAAKOV NAHMIAS

Department of Bioengineering, The Selim and Rachel Benin School of Engineering and Computer Science
The Alexander Silberman Institute of Life Sciences, Faculty of Science

Invention: Liver on a Chip Technology (Tissue Dynamics)

INVENTOR: PROF. RAM REIFEN

The School of Nutritional Sciences
The Robert H. Smith Faculty of Agriculture, Food and Environment

Invention: ChickP- The New Vegetarian Protein

INVENTOR: MS. ADI RECHES

Department of Immunology
Lautenberg Center for General and Tumor Immunology
Faculty of Medicine

Invention: Blocking Antibodies against Nectin4 as Cancer Immunotherapy

INVENTOR: MRS. SIVAN NIR-LUZ

Department of Chemistry, Institute of Chemistry
Faculty of Science

Invention: Simple Peptide Particles with Dual Antifouling and Antimicrobial Activity

2017

INVENTORS: PROF. YUVAL DOR AND DR. RUTH SHEMER

Department of Developmental Biology and Cancer Research,
Institute for Medical Research Israel-Canada
Hebrew University-Hadassah Medical School.

Invention: Noninvasive Detection of Tissue Damage

INVENTOR: PROF. BERTA LEVAVI-SIVAN

Department of Animal Science,
The Robert H. Smith Faculty of Agriculture, Food and Environment

Invention: Growth and Reproduction in Aquaculture

INVENTOR: PROF. AMIRAM GOLDBLUM

Institute for Drug Research, School of Pharmacy,
Faculty of Medicine

Invention: A Novel Generic Algorithm Applied for Discovering Highly Active Drug Candidates

INVENTOR: MR. IDO SAGI

Department of Genetics Alexander Silberman Institute for Life Sciences,
Faculty of Science

Invention: Haploid Human Embryonic Stem Cells and Somatic Cells

INVENTOR: MS. SUAAD ABD-ELHADI

Department of Biochemistry and Molecular Biology,
Institute for Medical Research Israel-Canada,
Hebrew University-Hadassah Medical School

Invention: Lipid's ELISA: A Highly Sensitive Diagnostic Assay for Parkinson's Disease

2016

INVENTOR: PROF. YOEL SASSON

Casali Institute of Applied Chemistry
Institute of Chemistry, Faculty of Science

Invention: Novel Reagent for Purification of Oil-Contaminated Soil

INVENTOR: DR. MEITAL RECHES

Institute of Chemistry, Faculty of Science

Invention: Biocompatible and Environmentally-Friendly Antifouling Materials

INVENTORS: PROF. REUVEN REICH, PROF. ELI BREUER, PROF. AMNON HOFFMAN

Institute for Drug Research
School of Pharmacy, Faculty of Medicine

Invention: Novel Carbamoylphosphonate-Based Compounds for the Treatment and Prevention of Metastatic Diseases

INVENTOR: DR. PINCHAS TSUKERMAN

Department of Immunology and Cancer Research
Institute for Medical Research Israel-Canada (IMRIC),
Faculty of Medicine

Invention: New Immunotherapy Against Cancer

INVENTOR: MR. OREN BEN DOR

Department of Applied Physics
The Rachel and Selim Benin School of Computer Science and Engineering
Faculty of Science

Invention: Chiral Molecular-Based Spin Devices

2015

INVENTOR: PROF. URI BANIN

Institute of Chemistry and the Harvey M. Krueger Family Center for Nanoscience and Nanotechnology,
Faculty of Science

Invention: Semiconductor Quantum Rods - A Quantum Leap for Displays

INVENTOR: PROF. OFER MANDELBOIM

Department of Immunology and Cancer Research
Institute for Medical Research Israel-Canada (IMRIC),
Faculty of Medicine

Invention: Development of Monoclonal Antibody against NKp46 for the Treatment of Type 1 Diabetes Mellitus (T1D)

INVENTOR: DR. ZVI PELEG

Robert H. Smith Institute of Plant Sciences and Genetics in Agriculture
Robert H. Smith Faculty of Agriculture, Food and Environment

Invention: Development of New Elite Sesame Cultivars Adapted for Mechanical Harvest with Enhanced Yield and Seed Quality

INVENTOR: DR. ELAD HOROWITZ

Department of Immunology and Cancer Research
Institute for Medical Research Israel-Canada (IMRIC),
Faculty of Medicine

Invention: Methods of Predicting Efficacy of an Anti-VEGFA Treatment for Solid Tumors

INVENTOR: MS. GEULA HANIN

Department of Biological Chemistry, Silberman Institute of Life Sciences, Faculty of Science

Invention: Down Regulating miRNA-132 for the Treatment of Lipid Related Disorders

PREVIOUS WINNERS

2014

INVENTOR: PROF. SIMON BENITA & DR. TAHER NASSAR

Institute for Drug Research (IDR)
School of Pharmacy, Faculty of Medicine

Invention: Development of an Original Nano-Delivery Platform for Markedly Improving the Oral Absorption of Poorly Absorbed Drugs and Proteins

INVENTOR: PROF. SHLOMO MAGDASSI

Casali Center for Applied Chemistry
Institute of Chemistry, Faculty of Science

Invention: Transparent Conductive Coffee Rings for Touch Screens

INVENTOR: PROF. MICHAL BANIYASH

Department of Immunology and Cancer Research
Institute for Medical Research Israel-Canada
Hebrew University-Hadassah Medical School

Invention: Novel Prognostic/Diagnostic Biomarkers for Detecting the Immune Status of Patients Suffering from Diseases Characterized by Chronic Inflammation and Associated Immunosuppression

INVENTOR: MICHAEL BRANDWEIN

Biofilm Research Laboratory
Institute of Dental Sciences, Faculty of Dental Medicine

Invention: Novel AntiBiofilm/Antibacterial Polymer for Food Packaging

INVENTOR: YOTAM BAR-ON

Department of Immunology and Cancer Research
Institute for Medical Research Israel-Canada
Hebrew University-Hadassah Medical School

Invention: Development of Novel Antibodies for the Treatment of Influenza Infections

2013

INVENTOR: PROF. ILAN SELA

Robert H. Smith Institute for Plant Sciences and Genetics

Robert H. Smith Faculty of Agriculture, Food and Environment

Invention: Silencing of Bee-Affecting Viral Genes in order to Control CCD

INVENTOR: PROF. AVI DOMB

Institute for Drug Research (IDR)
School of Pharmacy, Faculty of Medicine

Invention: Maze Water Purification System

INVENTOR: PROF. RAYM OND KAEMPFER

Department of Biochemistry and Molecular Biology
Institute for Medical Research Israel-Canada (IMRIC)
Hebrew University-Hadassah Medical School, Faculty of Medicine

Invention: Reduction of Inflammatory Disease Symptoms with Short Peptides that Inhibit Signaling through CD28

INVENTOR: URI BEN-DAVID

Department of Genetics
Silberman Institute of Life Sciences, Faculty of Science

Invention: PluriSIns – Pluripotent Specific Inhibitors

INVENTOR: MARGANIT COHEN-AVRAHAMI

Institute of Chemistry, Faculty of Science

Invention: Transdermal Delivery Vehicles for NSAIDs: The Combination of Liquid Crystals with Cell-Penetrating Peptides

INVENTOR: NOA KAYNAN

Department of Immunology and Cancer Research
Institute for Medical Research Israel-Canada (IMRIC)
Hebrew University-Hadassah Medical School, Faculty of Medicine

Invention: Generation of 'Super' Fc Antibody for Improving Medical Treatments

2012

INVENTOR: PROF. RAPHAEL (RAFFI) GOREN

The Robert H. Smith Faculty of Agriculture, Food and Environment

Invention: The Search for a Novel Water-Soluble Cyclopropene Derivative Antagonist (CPAS) of Ethylene Action in Agricultural Crops

INVENTOR: PROF. SAUL YEDGAR

Department of Biochemistry and Molecular Biology
Institute for Medical Research Israel-Canada (IMRIC),
Faculty of Medicine

Invention: A Novel Class of Multi-Functional Anti-Inflammatory Drugs (MFAIDs) for the Treatment of Inflammatory/Allergic Diseases

INVENTOR: PROF. HAYA LORBERBOUM -GALSKI

Department of Biochemistry and Molecular Biology
Institute for Medical Research Israel-Canada (IMRIC),
Faculty of Medicine

Invention: Cell and Organelle-Directed Protein Replacement Therapy for Mitochondrial and other Metabolic Diseases

INVENTOR: LITAL MAGID

Institute for Drug Research, Faculty of Medicine

Invention: Novel Cannabinoid Receptor Type 2 Selective Agonists for the Treatment of Inflammatory Conditions and Acute Central Nervous System Injury

INVENTOR: IDIT SAGIV-BARFI

Alexander Silberman Institute of Life Sciences, Faculty of Science

Invention: Novel T Cells Proliferation Inhibitors

INVENTOR: CHAMUTAL GUR, M.D.

Ph.D. student under the supervision of Prof. Ofer Mandelboim
Mandelboim Lautenberg Center for General and Tumor Immunology
Institute for Medical Research Israel-Canada (IMRIC),
Faculty of Medicine

Invention: Generation of Anti-NKp46 mAb for the Treatment of Type 1 Diabetes

2011

INVENTOR: PROF. HAIM D. RABINOWITCH

Robert H. Smith Institute of Plant Sciences and Genetics in Agriculture

Robert H. Smith Faculty of Agriculture, Food and Environment

Invention: Genetic Innovations in Vegetable Crops: The Cornerstone of Israel's Prominence in Hi-BioTech Seed Industries

INVENTOR: PROF. DAN GAZIT

Skeletal Biotech Laboratory, Faculty of Dental Medicine

Invention: Novel Technologies for Adult Stem Cell Manipulation and Applications in Tissue Engineering and Regenerative Medicine

INVENTOR: DR. RAANAN FATTAL

Benin School of Computer Science and Engineering, Faculty of Science

Invention: Second-Generation Wavelet-Based Image Enhancement

INVENTOR: MS. KATY MARGULIS-GOSHEN

Casali Institute of Applied Chemistry, Faculty of Science

Invention: Formation of Organic Nanoparticles from Microemulsions: Enhancing Water Solubility for Improved Biological Performance in Pharmaceuticals, Agriculture and Cosmetics

INVENTOR: MR. YFTAH TAL-GAN

Institute of Chemistry, Faculty of Science

Invention: Development of New Peptide-Based Inhibitors of Protein Kinase B (PKB) as Potential Drugs for Cancer

INVENTOR: MS. ADA GRIN

Institute for Drug Research, Faculty of Medicine

Invention: Tissue Regeneration Membrane

PREVIOUS WINNERS

2010

INVENTOR: PROF. NISSIM BENVENISTY

Silberman Institute of Life Sciences, Faculty of Science

Invention: Technologies to Enable Directed Differentiation of Human Embryonic Stem Cells

INVENTOR: PROF. ODED SHOSEYOV

The Robert H. Smith Institute of Plant Sciences and Genetics in Agriculture

The Robert H. Smith Faculty of Agriculture, Food and Environment

Invention: Molecular Farming of Human Recombinant Collagen in Transgenic Tobacco Plants

INVENTOR: PROF. SHMUEL PELEG

Benin School of Computer Science and Engineering, Faculty of Science

Invention: Video Synopsis: Summarizing and Indexing Surveillance Video

INVENTOR: PROF. ALEXANDER VAINSTEIN

The Robert H. Smith Institute of Plant Sciences and Genetics in Agriculture

The Robert H. Smith Faculty of Agriculture, Food and Environment

Invention: Towards Tailor-Made Crops and Compounds

INVENTOR: MS. MICHAL ISAACSON

Ph.D. student of Dr. Noam Shoval, Department of Geography, Faculty of Social Sciences

Invention: A Novel System for Tracking and Analyzing Human Spatial Behavior by Monitoring People's Mobility for Tourism, Town Planning and Healthcare Applications

INVENTOR: MR. AVIAD HAI

Ph.D. student of Prof. Micha Spira Department of Neurobiology Alexander Silberman Institute of Life Sciences Faculty of Science

Invention: In-cell Recordings and Stimulation: A Fundamental Breakthrough Concept and Technology for Neuroprosthetics

INVENTORS: MR. EZEQUIEL WEXSELBLATT

Ph.D. Supervisor: Prof. Jehoshua Katzhendler Institute for Drug Research, School of Pharmacy, Faculty of Medicine

MR. ROEE VIDAUSKI

Ph.D. Supervisor: Prof. Gad Glaser Department of Developmental Biology and Cancer Research Institute for Medical Research Israel-Canada (IMRIC) Faculty of Medicine

Invention: Compounds for Treating Bacterial Infections

INVENTOR: MR. MICHAEL GROUCHKO

Ph.D. student of Prof. Shlomo Magdassi Casali Institute of Applied Chemistry, Institute of Chemistry Faculty of Science

Invention: Air Stable Copper Nanoparticles: Conductive Inks for Printed Electronics

2009

INVENTOR: PROF. ABRAHAM HOCHBERG

Department of Biological Chemistry, Faculty of Science

Invention: From a Noncoding Oncofetal RNA to Cancer Therapy: Personalizing Medicine with H19

INVENTOR: PROF. SHLOMO SASSON

Department of Pharmacology & Experimental Therapeutics, School of Pharmacy

Invention: Novel D-Xylose Derivatives: A New Class of Antihyperglycemic Compounds

INVENTOR: PROF. DAPHNE ATLAS

Department of Biological Chemistry, Faculty of Science

Invention: Development of Small Molecules for the Treatment of Neurodegenerative Diseases

INVENTOR: PROF. ARIEH GERTLER

Institute of Biochemistry, Food Science and Nutrition, Robert H. Smith Faculty of Agriculture, Food and Environment

Invention: Development of Leptin Antagonists and their Potential Use as Therapeutic Modalities

INVENTOR: MR. SHAY SELA

Ph.D. student of Prof. Eli Keshet, Institute for Medical Research Israel-Canada, Faculty of Medicine

Invention: The Identification of a Novel Prognostic and Diagnostic Marker of Preeclampsia

INVENTOR: MR. DIMA LIBSTER

Ph.D. student of Prof. Nissim Garti and Prof. Gil Shoham, Casali Institute of Applied Chemistry, Faculty of Science

Invention: Lyotropic Hexagonal Liquid Crystals as Carriers of Therapeutic Peptides for Transdermal Administration: Solubilization and Structural Characterization

INVENTOR: MR. SHAUL LAPIDOT

Ph.D. student of Prof. Oded Shoseyov, Smith Institute for Plant Sciences and Genetics in Agriculture Robert H. Smith Faculty of Agriculture, Food & Environment

Invention: Compositions Comprising Fibrous Polypeptides and Polysaccharides

INVENTOR: MS. NETA PESSAH

Ph.D. student of Prof. Meir Bialer and Prof. Boris Yagen, School of Pharmacy

Invention: α -Fluoro and α -Chloro 2,2,3,3-Tetramethycyclopropylcarboxamide: Two Novel Chemical Entities for the Treatment of Epilepsy and Other Disorders



PREVIOUS WINNERS

2008

INVENTOR: PROF. DANIEL COHN

Casali Institute of Applied Chemistry, Institute of Chemistry, Faculty of Science

Invention: Tailor-made Biodegradable Polymers for the Prevention of Post-surgical Adhesions

INVENTOR: PROF. HERMONA SOREQ

Department of Biological Chemistry, Silberman Institute of Life Sciences, Faculty of Science

Invention: Engineered Human Cholinesterases and RNA-Targeted Agents to Suppress Their Functioning

INVENTORS: DR. ARIE DAGAN AND PROF. SHIMON GATT

Department of Biochemistry, Faculty of Medicine

Invention: Development of Novel Anti-cancer Drugs

INVENTOR: MR. YANIV SEMEL

Ph.D. student under the supervision of Prof. Dani Zamir

The Robert H. Smith Institute of Plant Sciences and Genetics in Agriculture

Faculty of Agricultural, Food and Environmental Quality Sciences

Invention: Phenom Networks: A Web-based System for the Analysis of Quantitative Phenotypes on Both Plants and Animals for Breeding and Research

INVENTOR: MR. NADAV KIMELMAN- BLEICH

Ph.D. and DMD student under the supervision of Prof. Dan Gazit

Skeletal Biotechnology Laboratory, Faculty of Dental Medicine

Invention: Scaffolds with Oxygen Carriers and Their Use in Tissue Engineering

INVENTOR: MR. DIMA SHEYNI

Ph.D. student of Prof. Dan Gazit, Skeletal Biotechnology Laboratory, Faculty of Dental Medicine

Invention: Ultrasound-based Non-viral Gene Delivery Induces Bone Formation In Vivo

INVENTOR: MR. MATAN RAPOPORT

Ph.D. student under the supervision of Prof. Haya Lorberboum-Galski

Department of Cellular Biochemistry and Human Genetics, Faculty of Medicine

Invention: Enzyme Replacement Therapy for Mitochondrial Disorders: Lipoamide Dehydrogenase Deficiency as a Proof-of-principle

2007

INVENTOR: PROF. DANI ZAMIR

Smith Institute of Plant Sciences and Genetics in Agriculture

Faculty of Agricultural, Food and Environmental Quality Sciences

Invention: Improving Plant Breeding Using Exotic Genetic Libraries

INVENTORS: PROF. MEIR BIALER AND PROF. BORIS YAGEN

Departments of Pharmaceutics, and Medicinal Chemistry and Natural Products

School of Pharmacy, Faculty of Medicine

Invention: Design and Development of Valnoctamide: A New Drug with Stereoselective CNS Activities

INVENTOR: PROF. LEO JOSKOWICZ

School of Engineering and Computer Science, Faculty of Science

Invention: An Image-guided System with a Miniature Robot for Precise Positioning and Targeting in Keyhole Neurosurgery

INVENTOR: MR. YANIV LINDE

Student of Prof. Chaim Gilon, Department of Organic Chemistry, Faculty of Science

Invention: A Novel Oral Anti-obesity Drug Candidate: Reduction of Food Consumption by Melanocortin-4 Peptide Agonist

INVENTOR: MR. EREZ PODOLY

Student of Prof. Hermona Soreq, Department of Biological Chemistry, Faculty of Science

Invention: A Natural Brain Protein Protection from Alzheimer's Disease

INVENTOR: MR. MORAN FARHI

Student of Prof. Alexander Vainstein and Dr. Hagai Abeliovich

Smith Institute of Plant Sciences and Genetics in Agriculture

Faculty of Agricultural, Food and Environmental Quality Sciences

Invention: Engineering Saccharomyces Cerevisiae for the Production of Methylbenzoate and Resistance to Benzoic Acide for Uses in the Food Industry

INVENTOR: MR. YUVAL AVNIR

Student of Prof. Yechezkel Barenholz, Department of Biochemistry, Faculty of Medicine

Invention: Liposomal Glucocorticoids for Treating Inflammatory States

PREVIOUS WINNERS

2006

INVENTOR: DR. YONATAN ELKIND

Smith Institute of Plant Sciences and Genetics in Agriculture
Faculty of Agricultural, Food and Environmental Quality Sciences

Invention: Breeding of Pepper Varieties Adapted for Protected Cultivation under Mild Winter Conditions

INVENTOR: PROF. ELKA TOUITOU

Department of Pharmaceutics, School of Pharmacy, Faculty of Medicine

Invention: Ethosome Innovative Technology

INVENTOR: PROF. MOSHE KOTLER

Department of Pathology, Faculty of Medicine

Invention: A Prophylactic Vaccine Preventing a Mortal Viral Disease of Koi Fish and Carps

INVENTORS: PROF. MEIR BIALER AND PROF. BORIS YAGEN

Departments of Pharmaceutics, and Medicinal Chemistry and Natural Products, School of Pharmacy, Faculty of Medicine

Invention: Design and Development of a New Drug with Enantioselective CNS Activities – Propylisopropyl Acetamide (PID)

INVENTOR: MS. ELENA KHAZANOV

Student of Prof. Yechezkel Barenholz, Department of Biochemistry, Faculty of Medicine

Invention: Tumorsuppressive Therapy by Liposome Containing both Doxorubicin and Ceramide

INVENTOR: MR. YEHOSHUA MAOR

Student of Prof. Raphael Mechoulam, Department of Medicinal Chemistry and Natural Products, School of Pharmacy, Faculty of Medicine

Invention: Novel Anti-hypertensive Agents based on Cannabis Constituent with Anti-inflammatory Properties-synergistic - Beneficial Cardiovascular Effects

INVENTOR: MR. NIR QVIT

Student of Prof. Chaim Gilon, Department of Organic Chemistry, Faculty of Science

Invention: SIB: Small Integrated Building Blocks

INVENTOR: MS. KHULOUD TAKROURI

Student of Prof. Morris Srebnik
Department of Medicinal Chemistry and Natural Products, School of Pharmacy, Faculty of Medicine
Invention: Synthesis and Anti-microbial Activity of a Novel Series of Alkyldimethylamine Cyanoboranes and their Derivatives

2005

INVENTORS: PROF. SHLOMO MAGDASSI AND DR. YELENA VINETSKY

Casali Institute of Applied Chemistry, Faculty of Science

Invention: Ceramic Ink Jets for Digital Printing on Glass

INVENTOR: DR. ZEHAVA UNI

Department of Animal Sciences, Faculty of Agricultural, Food and Environmental Quality Sciences

Invention: Enhancement of Development of Oviparous Species by In Ovo Feeding – Feeding Eggs with Natural Nutrient Supplements Before They Hatch to Produce More Robust Chicks

INVENTOR: PROF. SIMON BENITA

Department of Pharmaceutics, School of Pharmacy, Faculty of Medicine

Invention: Cationic Emulsions for Ophthalmic Drug Delivery

INVENTOR: PROF. URI BANIN

Department of Physical Chemistry and Center for Nanoscience and Nanotechnology, Faculty of Science

Invention: Semiconductor Nanocrystals for Optical, Electronic, Imaging and Biological Applications

INVENTOR: MR. TALEB MOKARI

Student of Prof. Uri Banin
Department of Physical Chemistry and Center for Nanoscience and Nanotechnology, Faculty of Science
Invention: Semiconductor Nanocrystals with Conductive Zone

INVENTOR: MR. ADEL JABBOUR

Student of Prof. Doron Steinberg and Prof. Morris Srebnik
Department of Medicinal Chemistry and Natural Products, School of Pharmacy and Institute of Dental Sciences, Faculty of Dental Medicine

Invention: Interfering in Bacterial Cross-talk: A Novel Means to Influence Pathogenicity of Biofilms

INVENTOR: MS. NATALYA KOGAN

Student of Prof. Raphael Mechoulam, Department of Medicinal Chemistry and Natural Products, School of Pharmacy, Faculty of Medicine

Invention: Cancer Drug – Use of Quinonoid Derivatives of Cannabinoids and Such Novel Compounds in the Treatment of Malignancies

INVENTOR: MR. RANI POLAK

Student of Prof. Eran Goldin and Dr. Eitan Israeli, Faculty of Medicine

Invention: GourMed – Cooking School that Will Develop Recipes and Run a Course for People with Dietary Limitations due to Chronic Diseases

INVENTORS: STAFF OF PROF. MICHA WEISS

Department of Computerized Information Systems, Computerized Student Course Registration Project Team

Invention: Computerized Student Course Registration Project Team “Smart Raffle”

PREVIOUS WINNERS

2004

INVENTOR: PROF. AMNON SHASHUA

School of Engineering and Computer Science, Faculty of Science

Invention: Monocular Visual Processing for On-board Driving Assistance

INVENTORS: PROF. ITAMAR WILLNER, DR. EUGENII KATZ, DR. FERNANDO PATOLSKY AND MR. YOSSI WEIZMANN

Institute of Chemistry, Faculty of Science

Invention: Optoelectronic Detection of Telomerase in Cancer Cells: Development of a Screening Test for Urinary Bladder in Urine Samples

INVENTORS: PROF. MICHAEL FRIEDMAN AND PROF. AMNON HOFFMAN

Department of Pharmaceutics, School of Pharmacy, Faculty of Medicine
Dr. Eran Lavy

Koret School of Veterinary Medicine, Faculty of Agricultural, Food and Environmental Quality Sciences

Invention: Novel Gastro-retentive Dosage Form (GRDF) – A Means for Sustained Administration of Drugs with Narrow Absorption Window at the Upper Gastrointestinal Tract

INVENTORS: MR. AVIRAM SPERNATH AND MS. IDIT YULI-AMAR

Students of Prof. Nissim Garti, Casali Institute of Applied Chemistry, Faculty of Science

Invention: New Nanosized Vehicles for Triggering and Targeting of Phytochemicals

INVENTOR: MS. AVITAL TORRES-KERNER

Student of Prof. Morris Srebnik, Department of Medicinal Chemistry and Natural Products, School of Pharmacy

Invention: New Natural Sunscreens: UVR Absorbing Compounds from Lichens and Cyanobacteria

INVENTOR: DR. HIJAZI ABU ALI

Student of Prof. Morris Srebnik, Department of Medicinal Chemistry and Natural Products, School of Pharmacy, Faculty of Medicine

Invention: Novel Organoboron Compounds – Synthesis and Biological Activity

INVENTOR: MR. TAREQ JUBETH

Student of Prof. Abraham Rubinstein and Prof. Yechezkel Barenholz, Departments of Pharmaceutics and Biochemistry, Faculty of Medicine

Invention: Targeting the Intestinal Mucosa by Charged Liposomes

INVENTOR: MR. OMRI BEN-ZION

Student of Prof. Amos Nussinovitch
Institute of Biochemistry, Food Science and Nutrition
Faculty of Agricultural, Food and Environmental Quality Sciences

Invention: Novel Method and Apparatus for Testing the Rolling Tack of Pressure-sensitive Adhesive Methods

2003

INVENTORS: PROF. NISSIM GARTI AND DR. ABRAHAM ASERIN

Casali Institute of Applied Chemistry, Faculty of Science

Invention: Nano-sized Self-assembled Structured Liquids

INVENTOR: DR. ABDULLAH HAJ-YEHIA

Department of Pharmaceutics, School of Pharmacy, Faculty of Medicine

Invention: Design, Synthesis, and Biological Activity of Novel Hybrid Drugs

INVENTOR: DR. JONATHAN MIRVIS

Melton Centre for Jewish Education, School of Education

Invention: Florence Melton Adult Mini-School: A Social Franchise Model

INVENTOR: MS. DRORA BALAGA

Smith Institute of Plant Sciences and Genetics in Agriculture,
Faculty of Agricultural, Food and Environmental Quality Sciences

Invention: "TOMATO" Computerized System, Breeding Hybrid Varieties

INVENTOR: ENG. TOM KOEVARY

Casali Institute of Applied Chemistry, Faculty of Science

Invention: The Centre for Process Development: A Platform for Thousands of "Inventors to Order" for Industry

INVENTOR: PROF. ZICHRIA ZAKAY-RONES

Institute of Microbiology, Faculty of Medicine
Invention: Anti-cancer Therapy by Newcastle Disease Virus (NDV)

INVENTOR: MR. ARIE GRUZMAN

Student of Prof. Shlomo Sasson, Department of Pharmacology and Experimental Therapeutics, School of Pharmacy, Faculty of Medicine

Invention: Novel Anti-hyperglycemic Drugs

INVENTOR: MS. AVIVA JOSEPH

Student of Prof. Eli Kedar and Prof. Yechezkel Barenholz, The Lautenberg Center for Immunology and Department of Biochemistry, Faculty of Medicine

Invention: INFLUSOME-VAC, Three Novel, Highly Efficient Influenza Vaccines

INVENTOR: MR. HADI ASLAN

Student of Prof. Dan Gazit, Skeletal Biotechnology Laboratory, Faculty of Dental Medicine

Invention: Novel Methods for Stem Cells Based Therapy

INVENTOR: MR. SHAI SHALEV-SHWARTZ

Student of Prof. Yoram Singer, School of Engineering and Computer Science, Faculty of Science

Invention: A Query Melody System

INVENTOR: MR. MICKEY KOSLOFF

Student of Prof. Zvi Selinger, Silberman Institute of Life Sciences, Faculty of Science

Invention: Drug-assisted Catalysis, Novel Cancer Therapeutics

INVENTOR: MR. ABED AL-AZIZ QUNTAR

Student of Prof. Morris Srebnik, Department of Medicinal Chemistry and Natural Products, School of Pharmacy, Faculty of Medicine

Invention: The Synthesis of Novel Di- and Tri-Vinylphosphonates

PREVIOUS WINNERS

2002

INVENTOR: PROF. SHMUEL BEN-SASSON

Department of Experimental Medicine and Cancer Research, Faculty of Medicine

Invention: Kin-Ace Technology – A Broad Platform Technology for Disease Control via the Interception of Intracellular Signaling

INVENTORS: PROF. MICHAEL SELA AND DR. DORON STEINBERG

Department of Oral Biology, Faculty of Dental Medicine

PROF. MICHAEL FRIEDMAN

School of Pharmacy, Faculty of Medicine

PROF. W. AUBREY SOSKOLNE

Department of Periodontics, Faculty of Dental Medicine

Invention: Periochip-sustained Release Treatment for Periodontal Diseases

INVENTOR: PROF. GERSHON GOLOMB

Department of Pharmaceutics, School of Pharmacy, Faculty of Medicine

Invention: Nanoparticulate Drug Delivery Systems for Restenosis Therapy

INVENTOR: PROF. SHMUEL PELEG

School of Engineering and Computer Science, Faculty of Science

Invention: OMNISTERO: Capturing and Viewing 3D Stereoscopic Panoramic Images

INVENTOR: DR. SHLOMO YITZCHAIK

Department of Inorganic and Analytical Chemistry, Faculty of Science

Invention: Molecular Layer Epitaxy (MLE)

INVENTOR: DR. WILLIAM (BILL) BREUER

Department of Biological Chemistry, Faculty of Science

Invention: A Test for the Detection of Toxic Forms of Iron in Human Plasma

INVENTOR: DR. ITSHAK GOLAN

The Lautenberg Center for Immunology, Faculty of Medicine

Invention: Novel CD44 Variant: Potential Target in the Therapy of Rheumatoid Arthritis

INVENTOR: MR. EYTAN KLAUSNER

Department of Pharmaceutics, School of Pharmacy, Faculty of Medicine

Invention: Novel Gastroretentive Dosage Forms

INVENTOR: MS. NINA ISOHERRAREN

Department of Pharmaceutics, School of Pharmacy, Faculty of Medicine

Invention: New Anti-epileptic Drug

INVENTOR: MR. ALEXEI SHIR

Department of Biological Chemistry, Faculty of Science

Invention: Targeted dsRNA Brain Cancer Therapy

INVENTOR: MR. FERNANDO PATOLSKY

Institute of Chemistry, Faculty of Science

Invention: Creating Multi-stress Resistance in Arabidopsis

INVENTOR: MR. ALEXANDER MAZEL

Department of Plant Sciences, Faculty of Science

Invention: Creating Multi-stress Resistance in Arabidopsis Plants

INVENTOR: MS. LITAL ALFONTA

Institute of Chemistry, Faculty of Science

Invention: An Electronic Sensor to Identify Drug Resistance in HIV Patients

INVENTOR: MR. YOSSI GAFNI

Skeletal Biotechnology Laboratory, Faculty of Dental Medicine

Invention: Vascular Tissue Engineering

INVENTOR: DR. GADI PELLÉD

Skeletal Biotechnology Laboratory, Faculty of Dental Medicine

Invention: Engineering of Complex Hybrid Tissues

2001

INVENTOR: PROF. EDUARDO MITRANI

Silberman Institute of Life Sciences, Faculty of Science

Invention: Micro-organ Technology for Genetically Engineered Bio-pumps

INVENTOR: PROF. SIMON BENITA

Department of Pharmaceutics, School of Pharmacy, Faculty of Medicine

Invention: Drug Delivery through Positively Charged Submicron Emulsions

INVENTORS: MR. DANNY VINITSKY AND MR. EITAN RAZ

Department of Computerized Information Systems

MR. YEHAVI BOURVINE

Computation Center

Invention: Short Message Service (SMS) Supplied by All Cellphone Operators Sending Short Text Messages to Students' Phones

INVENTOR: DR. ANDREW SHIPWAY

Institute of Chemistry, Faculty of Science

Invention: Novel Technology for the Generation of Electronic Circuits Using a Novel Computer-assisted Printing Method

INVENTORS: PROF. YONA CHEN, PROF. YITZHAK HADAR AND MR. AMIR TOAR

Department of Soil and Water Sciences, Faculty of Agricultural, Food and Environmental Quality Sciences

Invention: "RollCom" – A Novel, Simple, and Easy to Operate Composting Apparatus

INVENTOR: PROF. ITAMAR GATI

Department of Psychology, Faculty of Social Sciences, and School of Education

Invention: "Future Directions" Internet Site to Facilitate Career Decision Making

INVENTOR: MS. MIRIAM V. KOTT-GUTKOWSKI

Silberman Institute of Life Sciences, Faculty of Science

Invention: MDRTL Ex-Vivo Kit Measure and Select Effective Multi-drug Resistance Blocker

INVENTOR: MS. SUSANNA TCHILIBON

School of Pharmacy, Faculty of Medicine

Invention: HU-320 Anti-inflammatory Drug

INVENTOR: MR. YEHUDA GIL

The Center for Multimedia-Assisted Instruction

Invention: The Mobile Smart Table-MST Combining Various Multimedia Accessories



PREVIOUS WINNERS

2000

INVENTOR: PROF. MARTA WEINSTOCK-ROSIN

Department of Pharmacology, School of Pharmacy,
Faculty of Medicine

Invention: Development of Exelon: A Drug for the Treatment of Alzheimer's Disease (AD)

INVENTOR: PROF. MEIR BIALER

Department of Pharmaceutics, School of Pharmacy,
Faculty of Medicine

Invention: Valproyl Glycinamide (TV 1901): A New Anti-epileptic (AED) and CNS Drug for the Treatment of Migrane, Neuropathic Pain, and Mania

INVENTORS: PROF. AVNER ADIN AND DR. NICOLAI VESCAN

Assistants: Ms. Rivka Kalbo and Ms. Luba Rubinstein
Division of Environmental Sciences, School of Applied
Science, Faculty of Science

Invention: "Electro-Flocculation" for Water Treatment and Reuse

INVENTOR: DR. BARUCH SCHWARZ

School of Education

Invention: The "Kishurim Project"

INVENTOR: MR. ITAI PELES

Computer Authority, Ein Kerem

Invention: IBTS-Internet Based Testing System to Replace Traditional Questionnaires and Written Tests

INVENTOR: MR. REUVAN AMAR

Computer Authority, Mount Scopus

Invention: HUDAP-Hebrew University Data Analysis Package

INVENTOR: MR. MEIR GLICK

Department of Medicinal Chemistry, School of
Pharmacy, Faculty of Medicine

Invention: Novel Stochastic Algorithm for Use in Life Sciences, Physics, Telecommunications and Economics

INVENTOR: MR. GIL RONEN

Department of Genetics, Silberman Institute of Life
Sciences, Faculty of Science

Invention: Novel Plant Gene "B" and Methods to Genetically Manipulate Color Formulation in Plants

INVENTOR: MR. NIR SITVANI

Department of Animal Sciences, Faculty of
Agricultural, Food and Environmental Quality Sciences

Invention: Antelope-like Stimulating Device to Reduce Stress of Wild Animals in Captivity

1999

INVENTOR: DR. ODED SHOSEYOV

Department of Plant Pathology and Microbiology,
Faculty of Agricultural, Food and Environmental
Quality Sciences

Invention: CBD Technology – Using the CBD Protein to Bind Various Molecules to Cellulose

INVENTOR: PROF. ELISHA TEL-OR

Department of Agricultural Botany and Otto Warburg
Center for Biotechnology in Agriculture
Faculty of Agricultural, Food and Environmental
Quality Sciences

Invention: Azolla Biofilter for Waste Treatment

INVENTOR: PROF. HERMONA SOREQ

Department of Biological Chemistry, Faculty of
Science

Invention: Antisense Technology – To Treat Various Neurodegenerative Syndromes

INVENTORS: MR. YARON BEN-ETZION

Head of Manpower and Payroll

Ms. Chava Spruch

Head of Payroll System, Department for Computerized
Information Systems

Invention: A Solution for BUG 2000

INVENTOR: MR. LEON MARGOLIN

Department of Anatomy and Cell Biology, Faculty of
Medicine

Invention: A Mask for the Treatment of Headaches

INVENTOR: MR. GADI TURGEMAN

Bone Gene Therapy and Molecular Pathology
Laboratory, Faculty of Dental Medicine

Invention: The Reciprocal Differentiation System, Controlling the Level of BMP2 Expression

PREVIOUS WINNERS

1998

INVENTOR: PROF. ITAMAR WILLNER

Institute of Chemistry, Faculty of Science

Invention: Layered Electrically-Contacted Enzyme-Electrodes and Antigen/Antibody Assembles for Electrochemical and Piezoelectrical Biosensors and Immunosensor Devices

INVENTORS: PROF. NISSIM GARTI

Casali Institute of Applied Chemistry, Faculty of Science

DR. YURI FELDMAN

Department of Applied Physics, Faculty of Science

Invention: Time Domain Dielectric Spectrometer (TDDS) for Investigation of Advanced Materials and Medical Systems

INVENTORS: PROF. MICHAEL SCHIEBER, DR. JACOB NISSENBAUM, DR. LEONID MELKHOV AND MS. ASAF ZUCK

School of Applied Science, Faculty of Science

Invention: Polycrystalline Hg 12 X-Ray Detector Plates for Digital Radiology

INVENTORS: PROF. DAVID AVNIR

Institute of Chemistry, Faculty of Science

PROF. SERGEI BRAUN

Silberman Institute of Life Sciences, Faculty of Science

PROF. OVADIA LEV

Division of Environmental Sciences, Faculty of Science

PROF. MICHAEL OTTOLENGHI

Institute of Chemistry, Faculty of Science

Invention: Reactive Organic Sol-gel Ceramic Materials

INVENTOR: PROF. JOSEPH HIRSCHBERG

Silberman Institute of Life Sciences, Faculty of Science

Invention: Genetic Engineering of Astaxanthin Production in Transgenic Plants

INVENTOR: MR. AMIR ZUKER

Kennedy-Leigh Centre for Horticultural Research,

Faculty of Agricultural, Food and Environmental

Quality Sciences

Invention: Transgenic Carnation Plants with Novel Characteristics

INVENTOR: MR. GALEN MARQUIS

Institute of Jewish Studies, Faculty of Humanities

Invention: Production of The Hebrew University of Jerusalem Bible Project

INVENTOR: MR. JEHUDA BASNIZKI

Silberman Institute of Life Sciences, Faculty of Science

Invention: Novel Seed-planted Hybrid Varieties of the Globe Artichoke

INVENTOR: MR. ALEXEY KAMYSHNY

Casali Institute of Applied Chemistry, Faculty of Science

Science

Invention: Form III Aspartame

1997

INVENTORS: PROF. YECHEZKEL BARENHOLZ AND DR. RIVKA COHEN

Department of Biochemistry, Faculty of Medicine

Prof. Alberto Gabizon and Dr. Dorit Goren

Hadassah University Hospital

Invention: DOXIL – Liposomal Doxorubicin for Cancer Treatment

INVENTOR: PROF. DAPHNE AT LAS

Department of Biological Chemistry, Faculty of Science

Science

Invention: A New Anti-Parkinson's Drug

INVENTORS: PROF. NAVA BEN-ZVI

Center for Multimedia Assisted Instruction

MR. DAVID RASHTY

Computation Center

MR. ELI KANAI

Snunit Educational Information System, Faculty of Science

Science

Invention: Snunit Educational Information System

INVENTOR: MR. YOAV SMITH

Faculty of Medicine

Invention: The Dermal Imaging System

INVENTOR: MS. VARDA HERSHKO

Institute of Biochemistry, Food Science and Nutrition,

Faculty of Agriculture

Invention: Hydrocolloid Coatings for Food and Agricultural Products

INVENTOR: MR. SHMARYAHU EZRAHI

Casali Institute of Applied Chemistry, Faculty of Science

Science

Invention: Fire-resistant Hydraulic Fluids

1996

INVENTOR: PROF. SHABTAY DIKSTEIN

School of Pharmacy, Faculty of Medicine

Invention: Development of Topically-applied Drugs for the International Market

INVENTOR: PROF. ABRAHAM

SZTEJNBERG

Department of Plant Pathology and Microbiology,

Faculty of Agriculture

Invention: AQ10: A Novel Biofungicide for the Control of Plant Diseases

INVENTORS: PROF. DAN DAVIDOV AND DR. MICHAEL GOLOSOVSKY

Racah Institute of Physics, Faculty of Science

Invention: High-resolution Millimeter-wave Scanning Microscope

INVENTOR: PROF. CHAIM GILON

Institute of Chemistry, Faculty of Science

Invention: Backbone Cyclization and Cycloscan TM: Novel Technologies for the Fast Discovery of New Peptide Based Drugs

INVENTOR: MR. MICHAEL HOICHMAN

Computer Programmer, Faculty of Medicine

Invention: The "Maestro" Program for Controlling Auditory Experiments

INVENTOR: MR. BARAK HERSHKOVITZ

Faculty of Medicine

Invention: "Biochem Thinker": A New Computer Program to be used by Biochemistry Students as a Tutorial Tool

PREVIOUS WINNERS

1995

INVENTOR: PROF. ITAI BAB

Bone Laboratory, Faculty of Dental Medicine

Invention: Osteogenic Growth Peptide (OGP)

INVENTOR: PROF. NISSIM GARTI

Casali Institute of Applied Chemistry, Faculty of Science

Invention: New Emulsifiers

INVENTOR: PROF. YECHEZKEL BARENHOLZ

Department of Biochemistry, Faculty of Medicine

Invention: A Novel Approach to Obtain Efficient and Stable Remote Drug Loading of Liposomes for Clinical Use

INVENTORS: DR. EUGENII KATZ, MS. AZALIA RIKLIN AND MS. RON BLONDER

Institute of Chemistry, Faculty of Science

Invention: Development of Biosensor and Immunosensor Devices

1994

INVENTORS: DR. B. SCHWARZBURD AND DR. MARCELLO CHAFFER

Department of Animal Sciences, Faculty of Agriculture

Invention: Membrane Vesicles of E. coli as a Potent Non-toxic Vaccine Against Colibacillosis in Poultry

INVENTOR: MR. DUDU RASHTY

Computation Center, Faculty of Science

Invention: The Hebrew University Information Retrieval System

INVENTORS: PROF. HAIM RABINOWITCH AND PROF. NACHUM KEDAR

Department of Field and Vegetable Crops, Faculty of Agriculture

Invention: Development of Long Shelf-life Tomatoes



האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM
الجامعة العبرية في اورشليم القدس



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