

ADAMS
מלגות אדמס
Fellowships

האקדמיה הלאומית הישראלית למדעים
المجمع الوطني الإسرائيلي للعلوم والآداب
THE ISRAEL ACADEMY OF SCIENCES AND HUMANITIES



סמינר תש"ף | Seminar 2020

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Adams Seminar

2020

סמינר אדמס תש"ף

Guest Lecturer

Prof. Daniel A. Chamovitz

Professor of Plant Pathology
President, Ben-Gurion University of the Negev

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ADAMS

Fellowships מלגות אדמס

The Adams Fellowships is a joint program of the late Mr. Marcel Adams of Canada and the Israel Academy of Sciences and Humanities.

Chartered by law in 1961, the Israel Academy of Sciences and Humanities acts as a national focal point for Israeli scholarship in both the natural sciences and the humanities and social sciences. The Academy consists of approximately 135 of Israel's most distinguished scientists and scholars, who, with the help of the Academy's staff and committees, monitor and promote Israeli intellectual excellence, advise the government on scientific planning, fund and publish research of lasting merit, and maintain active contact with the broader international scientific and scholarly community.

For more information, please send an e-mail to batsheva@academy.ac.il or call 972-2-5676207. Visit our website: adams.academy.ac.il

The Israel Academy of Sciences and Humanities
expresses its enduring appreciation for the legacy of

Mr. Marcel Adams

who passed away shortly after his 100th birthday.

His generosity in promoting higher education
in Israel lives on.



Marcel Adams

Hebrew-speaking philanthropist Marcel Adams, who escaped from a forced-labor camp in Romania in 1944, fought in Israel's War of Independence and made his fortune in Montreal, has endowed the Adams Fellowship Program to support Israel's brightest doctoral students in the natural and exact sciences each year.

Marcel Adams (Abramovich) was born in Piatra-Neamt, Romania, in 1920. The anti-Semitic regime in Romania during the Holocaust interrupted his studies, triggering a lifelong quest for learning and a zest for the life of the mind. An active member of Hanoar Hazoni in Bucharest, Adams survived forced labor, food shortages and arbitrary harassment by the authorities.

After coming to Israel with the Jewish Agency's help in 1944, Adams settled in Pardes Hanna and participated in the War of Independence. He moved to Canada in 1951 and worked as a tanner before going into real estate. He eventually developed dozens of properties, mostly in eastern Canada, including Galeries de la Capitale, the largest shopping mall in the province of Quebec. With his late wife Annie, he established Tel Aviv University's Adams Institute for Business Management Information Systems and endowed the university's Adams Super Center for Brain Research. Marcel Adams was a Montreal resident, the proud father of four and grandfather of eleven. After a lifetime full of energy and promoting young scientific minds, he passed away shortly after the celebration of his 100th birthday.

Adams officially signed an agreement to establish the Adams Fellowships with the Israel Academy of Sciences and Humanities in Jerusalem in May 2005. The fund is large enough to provide \$1 million annually to outstanding Ph.D. students, covering their full tuition and living expenses throughout four years of study and including funds for attending scientific conferences abroad. Most recipients are aged 26 to 34.

The easy way would have been to hand over a check, but Adams wished to pay back his 1944 debt to the Jewish people, which gave him a new identity and hope for rebuilding from the ashes of Europe. And so he endowed a fellowship program to enable talented young men and women to thrive intellectually, scientifically and technologically, and in turn to carry the flag for the next generation and for future generations.

A professional committee at the Academy reviews applications from doctoral students and chooses the awardees, for study in such fields as organic chemistry, molecular biology, chemistry, mathematics, engineering, physics, genetics, computer science and brain research.

Marcel Adams wished to help the best and brightest academics, those with tremendous potential for growth, who have demonstrated excellence in both quality of mind and personal character.

This year's newly appointed Adams Fellows represent the Sixteenth Cycle of the Adams Fellowship Program.



Prof. Nili Cohen

President of the Israel Academy

I am very pleased to greet our new Adams Fellows for 2020–2021 here at the Israel Academy of Sciences and Humanities. Since the inauguration of the Adams Fellowship Program in May 2005, 135 Adams Fellows, PhD students of the highest academic standing, have been inducted. Many of them now hold research and teaching positions in major universities and research centers and in the high-tech and biotech industries. We are happy to introduce this year's seven new fellows briefly in this brochure.

Adams Fellows enjoy sustained financial support for three to four uninterrupted years of doctoral study. The amount of the grant has been increased to compensate for inflation and currency fluctuation and to maintain the prestige of the Adams Fellowships. The Fellows also enjoy two privileges unique to this graduate student support program. Each Adams Fellow is eligible for an annual international study grant of \$3,000, to be used for active participation in international scientific conferences/workshops, for laboratory study abroad, for international scientific collaboration or to interview for a postdoctoral position.

Adams Fellows are also given the opportunity to interact with one another and to form a small science community of their own, through initiatives such as invited lectures by renowned scientists at annual seminars and conferences, science communication workshops and field trips. We are confident that the Adams Fellowships constitute a meaningful contribution to the encouragement and training of excellent scientists in Israel and that our Adams Fellows will be capable of rising to the new challenges, such as the current Coronavirus Pandemic, that confront science today.

I would like to express my heartfelt admiration and appreciation for the vital role played by Mr. Marcel Adams for the support of Israel's brilliant young scientists. I was privileged to meet Marcel Adams and his dear late wife Annie while I was rector of Tel Aviv University, and I marveled then at their vision and commitment to the advancement of science. Since getting to know his family personally, I have been extremely impressed by their steadfast devotion to the promotion of science. We are deeply grateful to the Adams family and are honored by their ongoing generous support.



Prof. Daniel Chamovitz

President, Ben-Gurion University of the Negev

Guest Lecturer on

WHY WE CARE ABOUT WHAT PLANTS KNOW

Prof. Daniel Chamovitz is the seventh President of Ben-Gurion University of the Negev. Previously he was a professor at Tel Aviv University, where he served as Dean of the George S. Wise Faculty of Life Sciences and founded the Program in Food Safety and Security.

Chamovitz grew up in Aliquippa, PA, and studied both at Columbia University and at The Hebrew University of Jerusalem, where he received his PhD in Genetics. He did postdoctoral research at Yale University with the support of fellowships from the European Molecular Biology Organization and the Human Frontier Science Research Program. He returned to Israel on the prestigious Alon Fellowship awarded by the Council for Higher Education in Israel to outstanding young researchers. Chamovitz has also held positions as a visiting scientist at the Fred Hutchinson Cancer Research Center in Seattle and as a visiting professor at Peking University. His scientific career has been characterized by novel and field-defining research on plant biology, biochemistry, developmental biology and systems biology. He has published numerous peer-reviewed research articles and is on the editorial boards of several scientific journals.

Chamovitz is a sought-after speaker and science commentator. He has lectured worldwide on issues of global food security. He represented the Israel Academy of Sciences and Humanities in the Food and Nutritional Security and Agriculture Program of the Association of Academies and Scientific Societies of Asia (AASSA), and in the Inter-Academy Partnership. His 2012 book *What a Plant Knows* has been translated into 18 languages and was featured in the world press and media. While serving as President of Ben-Gurion of the Negev, Chamovitz retains his passion for teaching and lectures to groups about the role of plant biology in feeding a growing world. His on-line MOOC class has been attended by more than 100,000 students from all over the world.



Prof. Moshe Oren

Academy Member; Chair, Adams Fellowships Steering and Approval Committee

Warm greetings to all our Adams Fellows, Adams Alumni, Adams Committee Members, Academy President Prof. Nili Cohen, Academy Vice-President Prof. David Harel, Academy Members, and, last but surely not least, dear members of the Adams family, whose continuous generosity has enabled this unique program to promote scientific excellence in Israel for fifteen years.

Marcel Adams, who established the Adams Fellowships program, was born in 1920 and lived in Europe through the years of the Second World War and the Holocaust. With the help of the Jewish Agency, he was able to escape from Europe in 1944 and come to what was at that time still Palestine. Although he moved to Montreal, Canada, in 1951, he has always remained loyal to the young state of Israel. Marcel Adams never had a chance to complete his formal education, but this only increased his passion for learning and his admiration for human knowledge. It therefore came naturally to him, as a visionary who cares about the future of this country, to invest in advancing knowledge in Israel. And as a person with a track record of making wise choices, he decided to invest in our future generation of scientific leaders.

This entrusts you, Adams Fellows, with a special mission: You are expected not only to advance your own careers, but also to fulfil a dream – Marcel’s dream of making Israel a hub of scientific excellence and a powerhouse of human knowledge. We members of the Adams Committee make every effort to ensure that we pick the best of the best. You, in turn, should prove that we made the right choices.

And this is perhaps a good time to sound a word of caution. These days, many “basic” discoveries are rapidly transformed into startups; after all, we are the “startup nation.” This is a blessing, but also a danger. Mixing pure academic research with business considerations may lead us to refrain from sharing our knowledge with colleagues, lest they “steal our secrets” and outcompete us. That goes against the spirit of pure science and slows down our journey to better understand our universe and everything therein. Don’t be afraid to share. Scientific research is not a one-person game anymore. I believe that, in this world, collaboration is the best guarantee of accelerated progress. We are experiencing unusual times, when many brains are being put together in a global

effort to accelerate solutions to the COVID-19 crisis. It is in your hands, as future research leaders, to ensure that this collaborative spirit does not fade out when that crisis recedes. And, most importantly: never lose your curiosity and your passion for knowledge!

And when your time comes to mentor the next generation of students, please make every effort to keep their passion as intense as yours, to ensure that they remain driven by curiosity and not by convenience. It is a particular joy to us Adams Committee members to see new Adams Fellows whose mentors are former recipients of Adams Fellowships. I hope that, when the time comes, the future Chair of the Adams Committee will be greeting your students. In the meantime, let me wish you all a lot of satisfaction in your scientific endeavors and in moving successfully to the next stages of your careers.



Professor Moshe Oren judging the poster competition at the Annual Adams Conference in January 2020



ADAMS Fellowships Steering & Approval Committee



Prof. Moshe Oren
Chair



Prof. Naama
Barkai



Prof. Yoav
Benjamini



Prof. Gedeon
Dagan



Prof. Shmaryahu
Hoz



Prof. Gil
Kalai



Prof. Jacob
Klein



Prof. Elon
Lindenstrauss



Prof. Hermona
Soreq

Former Committee Members

Prof. Moti Segev, Immediate Past Chair

Prof. Amiram Grinvald, Past Chair

Prof. Itamar Willner, Past Chair

Prof. Chaim Cedar, Past Chair

Prof. Yoram Groner, Founding Chair

Prof. Yakir Aharonov

Prof. Noga Alon

Prof. Moshe Moshe

Prof. Moty Heiblum

Prof. David Kazhdan

Prof. Avraham Nitzan

Prof. Yosef Shiloh

Prof. Igal Talmi

Prof. Jacob Ziv

ADAMS Fellows 2020–2021

Dalya Baron

PhD student of Prof. Hagai Netzer, Department of Astrophysics, School of Physics and Astronomy, Tel Aviv University

Dissertation topic: The Role of Active Galactic Nuclei Feedback in Different Evolutionary Stages of Their Host Galaxies

Dalya Baron is the daughter of Russian immigrants who immigrated to Israel when the Soviet Union disbanded. She was raised in Beit Shemesh and matriculated at the Johanna Jabotinsky Youth Village, concentrating in physics and computer science.



She completed three and a half years of military service, a year of which she spent in the IDF's Pilots' Course and the rest in an elite technological unit in the intelligence corps. Dalya enrolled for a dual BSc in physics and electrical engineering at Tel Aviv University. During her undergraduate studies, she worked as a research assistant with Prof. Dovi Poznanski in the Astrophysics Department. Her research focused on the properties of gas and dust in the Milky Way and other galaxies, and the development and application of machine learning tools to large astronomical datasets. These studies led to five first-author scientific papers, published in first-tier astrophysics journals.

For her MSc and PhD, under the supervision of Prof. Hagai Netzer, Dalya has been studying the relations between supermassive black holes and their host galaxies. She uses first-class telescopes and instruments to observe these black holes and then constructs physical models to quantify their effects on their environment. She is also still working on various aspects of the development and application of machine learning tools in astronomy (and beyond).

Gil Bashan

PhD student of Prof. Avi Zadok, Faculty of Engineering, Bar-Ilan University

Dissertation topic: Opto-Mechanical Sensing Outside Standard Optical Fibers

Gil Bashan was born in 1987 and grew up in Givatayim, Israel. He lives with his wife, Yaara, and their four children in Petah Tikva. He studied Torah in the Birkat Moshe Yeshiva and in Beit Midrash Givat Shmuel. During his period of Torah study, in the Hesder Yeshiva track, Gil also did military service in the Infantry. He completed his BSc, *summa com laude*, in the dual Physics and Electrical Engineering program at Bar-Ilan University in 2016. During his undergraduate studies, Gil received the Dean's Award in three different years, and his senior-year final engineering project was chosen as the best project in the electro-optics track.



Gil continues his studies at Bar-Ilan University in the direct MSc-PhD program in Electrical Engineering. His research interests are in the fields of nonlinear optics and opto-mechanics. He obtained his MSc, *cum laude*, in 2018, and in the same year he received Bar-Ilan University's Rector's Award for Excellence in Graduate Studies. He enjoys the basic and fundamental physics of research problems, as well as the challenge of bringing first-principle physical phenomena to applicative platforms. For example, during his PhD research he developed a new paradigm for distributed sensing of media outside the boundaries of optical fibers, where light cannot reach.

Dana Binyamin

PhD student of Dr. Omry Koren, Azrieli Faculty of Medicine, Bar-Ilan University

Dissertation topic: The Fountain of Youth: How the Gut Microbiota Shapes Host Aging through the Epigenome

Dana Binyamin was born and raised in Tiberias, where she now lives with her husband and their 2-year-old daughter Noya. Immediately after completing her National Service, Dana started her BSc at Bar-Ilan University in the Faculty of Life Sciences. During the third year of her degree, she became especially interested in microbiology and began studying antibiotic resistance in *Helicobacter pylori* in the bacteriology lab at Poria Hospital in Tiberias.



Dana pursued her MSc in Bar-Ilan University's Azrieli Faculty of Medicine under the supervision of Dr. Avi Peretz and Dr. Omry Koren. She continued to explore the field of antibiotic resistance, now focusing on *Clostridium difficile*. She developed an interest in bacterial communities – the microbiome – and began looking at the microbiome of patients with *Clostridium difficile* infections. After graduating with honors, she decided to continue for a PhD in the lab of Dr. Omry Koren. Her research now focuses on the microbial changes occurring in the elderly and how these changes might influence the aging process.

Yonadav Barry Ginat

PhD student of Prof. Vincent Desjacques and Prof. Hagai Perets, Physics Department, Technion – Israel Institute of Technology

Dissertation topic: Astrophysical and Cosmological Progenitors of Gravitational-Wave Sources and Their Environments



Barry Ginat grew up in Haifa, Israel. From an early age, he was fascinated with science and in particular with physics: He wanted to understand the most fundamental constituents of reality. Barry did his BSc in mathematics and physics at the Technion, in the framework

of the physics honors program there. He graduated *summa cum laude* and first in his class, and in his second year he published his first research paper, on super-massive black holes, with Prof. Noam Soker. He then moved to Oxford to study a Taught Master's in theoretical and mathematical physics, as a Frost Scholar. In his prize-winning dissertation on device-independent quantum random number generation, supervised by Prof. Artur Ekert, he investigated the concept of certified randomness.

Barry then returned to the Technion for a PhD in astrophysics, under the joint supervision of Profs. Vincent Desjacques and Hagai Perets. He is studying gravitational-wave physics and how one might use it to learn about the universe, on both astrophysical and cosmological scales. For example, his latest paper investigates the probability distribution of the stochastic gravitational-wave background, which is the cumulative effect of all gravitational radiation emitted by every pair of black holes, white dwarves or neutron stars in the cosmos. An accurate understanding of this background is crucial for the discovery of gravitational waves from physical phenomena beyond the standard model.

Noam Lifshitz

PhD student of Prof. Gil Kalai, Institute of Mathematics, The Hebrew University of Jerusalem

Dissertation topic: Analytic Methods in Probability and Combinatorics

Noam Lifshitz completed his undergraduate studies at Bar-Ilan University at the age of 19. After that he was recruited into the army, but he still managed to complete his MSc two years later, by dedicating most of his weekends to research.



Noam's MSc research at Bar-Ilan University, under the supervision of Prof. Nathan Keller, concentrated on two main fields: extremal combinatorics, known to contain a variety of beautiful open problems; and analysis of Boolean functions, which offer a variety of potentially powerful tools. Together with his collaborators, he used the tools present in the analysis of Boolean functions to make substantial progress in the field of extremal combinatorics.

Noam is now studying for his PhD at the Hebrew University under the supervision of Prof. Gil Kalai. He continues to find new applications for his "junta method" and is trying to master, enrich and improve the available tools in the field of analysis of Boolean functions.

Dan Liraz

PhD student of Prof. Nir Tessler, Electrical Engineering Department, The Sara and Moshe Zisapel Nano-Electronic Center, Technion – Israel Institute of Technology

Dissertation topic: Physical Processes in Photo-Electric Devices Based on Organic Materials and Solution-Processed Ones



Dan was born and raised in Haifa, where he currently lives with his wife, Aviya. As a student in high school, he studied chemistry at the Technion and twice won first place in the Israeli National Chemistry Olympics. He also took part in the National Astrophysics

Olympics, in which he won third place. Studying math on his own, he took the matriculation examination a year before his classmates, an advantage that helped him free up time to learn physics, computer science and Arabic while still studying chemistry at the Technion. During his military service in the 8200 Unit – the Israeli signals intelligence unit – Dan won the 8200 Prize for outstanding achievements and creativity in the field of intelligence. After completing his military service, Dan started upon his degrees in Electrical Engineering and Physics at the Technion, while studying in the Emet excellence program of the Electrical Engineering Department and completing his studies in the Chemistry Department. He graduated in 2016, ranked first in his class for each of the three degrees.

Dan immediately began studying for his MSc under the supervision of Prof. Nir Tessler and switched after his first year to a direct PhD program. He is studying physical processes in photo-electric devices, based on organic materials and solution-processed ones. His research focuses on modeling and fabricating novel organic solar cells and trying to understand how to improve their power conversion efficiency. In his scant spare time, Dan enjoys traveling, especially to archeological sites. He loves learning history, particularly of Israel and the Middle East.

Noam Shahar

PhD student of Prof. Iftach Yacoby, School of Plant Wise Sciences and Food Security, The George S. Weiss Faculty of Life Sciences, Tel Aviv University

Dissertation topic: Designing Synthetic Operons in Chloroplasts: Utilizing Operons for the Production of Biofuels and Other Foreign Pathways in Microalgal Plastids

Noam Shahar, who is 30 years old, grew up in the Jezreel Valley and now lives in Tel Aviv with his wife, Tal, and their two sons.



His project deals with synthetic biology in plants, and specifically in microalgae, a group of photosynthetic microorganisms that have recently emerged as promising hosts for biotechnology industries, such as the production of biofuels, food additives, protein therapeutics and even vaccines. Despite their biotechnological potential, synthetic biology in microalgae (and in plants in general) is currently lagging far behind that of the model organisms of bacteria and yeast. There are many reasons for this, but, to summarize, “plants don’t like us playing with their DNA.” Luckily for us, plants and microalgae also possess another important genome found uniquely in photosynthetic organisms: the chloroplast genome.

The chloroplast organelle is responsible for one of the most important processes in our world: photosynthesis, which provides us with oxygen and food. Amazingly, this organelle contains its own genome, which in many respects can much more easily be manipulated for our purposes. Nevertheless, as of today, the genetic toolbox of chloroplasts available for researchers is relatively poor. Noam's project therefore has two interrelated goals: The first is to develop synthetic biology platforms and tools for optimizing expression of genes in chloroplasts of microalgae, and the second is to utilize these methods to produce engineered strains of microalgae with improved abilities for producing non-fossil biofuels – a resource urgently required for our future.









ADAMS

Fellows

2005–2020

2019–2020



Roie Dann

PhD student of Prof. **Ronnie Kosloff**, Fritz Haber Center for Molecular Dynamics, Institute of Chemistry, Faculty of Sciences and Mathematics, The Hebrew University of Jerusalem.

Dissertation topic: Dynamical Perspectives of Quantum Thermodynamic Resources and Their Utility



Ron Efrat

PhD student of Dr. **Oded Berger-Tal**, Marco and Louise Mitrani Department of Desert Ecology (MDDE), Sde-Boker Campus, Ben-Gurion University of the Negev

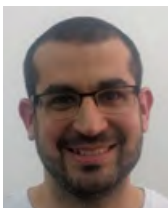
Dissertation topic: The Effects of Learning and Experience on the Survival and Migration Proficiencies of Captive-Bred and Wild Vultures



Renan Gross

PhD student of Dr. **Ronen Eldan**, Faculty of Mathematics and Computer Science, The Weizmann Institute of Science

Dissertation topic: Regularity and Mean-Fields Gibbs Distributions



Aviv Karnieli

PhD student of Prof. **Ady Arie**, Department of Physical Electronics, School of Electrical Engineering, Tel Aviv University

Dissertation topic: Quantum Effects of Photons and Electrons



Yaron Laufer

PhD student of Prof. **Sharon Gannot**, Faculty of Engineering, Bar-Ilan University

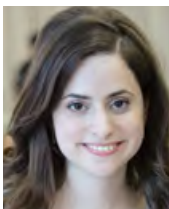
Dissertation topic: Bayesian Methods in Speech Processing



Lior Rotem

PhD student of Prof. **Gil Segev**, Rachel and Selim Benin School of Computer Science and Engineering, The Hebrew University of Jerusalem

Dissertation topic: Foundations and Applications of Cryptography for Messaging Platforms



Aseel Shomar

PhD student of Prof. Naama Brenner, The Wolfson Department of Chemical Engineering, and Prof. Omri Barak, The Rappaport Faculty of Medicine, Technion – Israel Institute of Technology

Dissertation topic: Cell States and Transitions in Development and Cancer: Insights from Learning Theory



Shai Tseses

PhD student of Prof. Guy Bartal, Andrew & Erna Viterbi Faculty of Electrical Engineering, Technion – Israel Institute of Technology

Dissertation topic: Topology and Angular Momentum Transfer Between Light and Matter in Nanoscale Photonic Systems

2018–2019



Adar Adamsky

PhD student of Dr. Inbal Goshen, Edmond and Lily Safra Center for Brain Sciences (ELSC), The Hebrew University of Jerusalem

Dissertation topic: Dynamic Changes in Long-Term Memory Network Organization Underlie Systems Consolidation



Ayelet Arazi

PhD student of Prof. Ilan Dinstein, Department of Brain and Cognitive Sciences, Ben-Gurion University of the Negev

Dissertation topic: Neural Variability and Its Relationship with Perception, Attention and Working Memory



Yaron Ben-Ami

PhD student of Asst. Prof. Avshalom Manela, Faculty of Aerospace Engineering, Technion – Israel Institute of Technology

Dissertation topic: Effect of Thermal Boundary Conditions on Heat and Mass Transfer Processes in Rarefied Gas Flows



Anael Ben-Asher

PhD student of Prof. Nimrod Moiseyev, Schulich Faculty of Chemistry, Technion – Israel Institute of Technology.

Dissertation topic: Non-Hermitian Quantum Scattering Theory for Cold Molecular Collision Experiments



Yoav Levine

PhD student of Prof. **Amnon Shashua**, School of Computer Science and Engineering, The Hebrew University of Jerusalem

Dissertation topic: Bridging Deep Learning and Many-Body Physics via Tensor Networks



Itai Linial

PhD student of Prof. **Re'em Sari**, Racah Institute of Physics, Faculty of Sciences and Mathematics, The Hebrew University of Jerusalem

Dissertation topic: Common-Envelope Evolution of Binary Stars and Planetary Dynamics



Eran Lustig

PhD student of Prof. **Mordechai (Moti) Segev**, Faculty of Physics, Technion – Israel Institute of Technology

Dissertation topic: Topological Photonics – Finding and Describing Topological Phases in Classical and Quantum Optical Systems



David Mass

PhD student of Prof. **Tali Kaufman**, Department of Computer Science, Bar-Ilan University

Dissertation topic: High-Dimensional Expanders in the Theory of Computation

2017–2018



Leon Anavy

PhD student of Prof. **Zohar Yakhini**, Computer Science Department, Technion – Israel Institute of Technology

Dissertation topic: Computational Challenges in Synthetic Biology



Evgeniy Boyko

PhD student of Prof. **Moran Bercovici** and Prof. **Amir D. Gat**, Faculty of Mechanical Engineering, Technion – Israel Institute of Technology

Dissertation topic: Non-Uniform Electroosmotic Flow in Rigid and Elastic Microfluidic Configurations



Shachar Carmeli

PhD student of Dr. **Dmitry Gourevitch**, Department of Mathematics, Weizmann Institute of Science

Dissertation topic: Harmonic Analysis on Spherical Spaces



Tuvia Gefen

PhD student of Prof. **Alex Retzker**, Racah Institute of Physics, Faculty of Sciences and Mathematics, The Hebrew University of Jerusalem

Dissertation topic: Quantum Metrology and Computing with NV Centers and Trapped Ions



Bracha Laufer-Goldshtein

PhD student of Prof. **Sharon Gannot** (Bar-Ilan) and Prof. **Ronen Talmon** (Technion), Faculty of Electrical Engineering, Bar-Ilan University

Dissertation topic: Manifold Learning Techniques for Source Localization and Array Processing



Ofer Neufeld

PhD student of Prof. **Oren Cohen**, Department of Physics, Technion – Israel Institute of Technology

Dissertation topic: Generation of High Harmonics with Fully Tunable Polarization



Inbal Oz

PhD student of Prof. **Oded Hod** and Prof. **Avraham Nitzan**, School of Chemistry, Faculty of Exact Sciences, Tel Aviv University

Dissertation topic: Simulating Non-Equilibrium Thermodynamics in Open Quantum Systems



Or Yair

PhD student of Prof. **Ronen Talmon**, Viterbi Faculty of Electrical Engineering, Technion – Israel Institute of Technology

Dissertation topic: Geometric Learning for Data-Driven Analysis of Dynamical Systems

2016–2017



Angelica Elkan

PhD student of Prof. Boris Rybtchinski, Department of Organic Chemistry, Weizmann Institute of Science

Dissertation topic: Hybrid Materials Based on Organic Nanocrystals and Carbon Nanotubes (CNTs)



Hezi Grisaro

PhD student of Prof. Avraham N. Dancygier, Faculty of Civil and Environmental Engineering, Technion – Israel Institute of Technology

Dissertation topic: Response of a Structural Element to Combined Loading of Explosion and Fragmentation Impacts



Yael Korem

PhD student of Prof. Uri Alon, Department of Molecular Cell Biology, Weizmann Institute of Science

Dissertation topic: Optimal Division of Labor in Cells and Tissues



Gali Noti

PhD student of Prof. Noam Nisan, School of Computer Science & Engineering and the Center for the Study of Rationality, The Hebrew University of Jerusalem

Dissertation topic: Behavioral Algorithmic Game Theory



Avia Raviv Moshe

PhD student of Prof. Yaron Oz, School of Physics and Astronomy, Faculty of Exact Sciences, Tel Aviv University

Dissertation topic: Lifshitz Quantum Field Theories, Gravity and Hydrodynamics



Asael Roichman

PhD student of Prof. Haim Cohen, Faculty of Life Sciences, Bar-Ilan University

Dissertation topic: Sirtuins in Aging and Metabolism



Alexander Shleyfman

PhD student of Prof. Carmel Domshlak, Faculty of Industrial Engineering and Management, Technion – Israel Institute of Technology

Dissertation topic: Symmetry Breaking and Operator Pruning in Classical Planning and Beyond



Amitai Yuval

PhD student of Prof. Jake Solomon, Department of Mathematics, The Hebrew University of Jerusalem

Dissertation topic: Geodesics of Positive Lagrangians in Almost Calabi-Yau Manifolds

2015–2016



Omri Azencot

PhD student of Prof. Mirela Ben-Chen, Computer Science Department, Technion – Israel Institute of Technology

Dissertation topic: Operator Representations in Geometry Processing



Izchak Baruch Goldshtein

PhD student of Prof. Moshe Lewenstein and Prof. Ely Porat, Department of Computer Science, Bar-Ilan University

Dissertation topic: Polynomial Lower Bounds on Algorithms and Data Structures



Barak Hirshberg

PhD student of Prof. Benny Gerber, School of Chemistry, The Hebrew University of Jerusalem

Dissertation topic: Structure, Interactions and Dynamics of Many-Atom Systems



Michael Kalyuzhny

PhD student of Prof. Ronen Kadmon, Department of Ecology, Evolution and Behavior, The Hebrew University of Jerusalem, and Prof. Nadav Shnerb, Department of Physics, Bar-Ilan University

Dissertation topic: A Theoretical and Empirical Analysis of Factors Affecting the Dynamics and Structure of Ecological Communities.



Michal Natan

PhD student of Prof. Ehud Banin and Prof. Shlomo Margel,
Institute of Nanotechnology and Advanced Materials, Bar-Ilan University

Dissertation topic: Synthesis of Rechargeable N-halamine Nanoparticles and Determination of Their Antibacterial and Antibiofilm Activities



Eran Sagi

PhD student of Prof. Yuval Oreg, Department of Condensed Matter Physics,
Weizmann Institute of Science

Dissertation topic: Strongly Interacting Topological Phases



Ido Sagi

PhD student of Prof. Nissim Benvenisty, Azrieli Center for Stem Cells and Genetic
Research, The Hebrew University of Jerusalem

Dissertation topic: Genetic and Epigenetic Regulation in Human Pluripotent Stem Cells



Yinon Spinka

PhD student of Prof. Ron Peled, Department of Pure Mathematics,
Tel Aviv University

Dissertation topic: Mathematical Models of Statistical Mechanics

2014–2015



Rivka Bekenstein

PhD student of Prof. Mordechai Segev, Faculty of Physics,
Technion – Israel Institute of Technology

Dissertation topic: Gravitational Phenomena and Complex Wavepackets in Nonlinear Optical Systems



Sharon Fleischer

PhD student of Dr. Tal Dvir, Department of Molecular Microbiology and Biotechnology,
Faculty of Life Science, Tel Aviv University

Dissertation topic: Engineering 3D Cardiac Stem Cell Based Patches for Treating Heart Disease



Yannai A. Gonczarowski

PhD student of Prof. Sergiu Hart and Prof. Noam Nisan, Institute of Mathematics, School of Computer Science & Engineering and Center for the Study of Rationality, The Hebrew University of Jerusalem

Dissertation topic: Aspects of Complexity and Simplicity in Economic Mechanisms



Ouri Karni

PhD student of Prof. Gadi Eisenstein, Faculty of Electrical Engineering, Technion – Israel Institute of Technology

Dissertation topic: Ultra-Fast Non-Linear Dynamic Processes in Nanometric Semiconductor Lasers and Optical Amplifiers



Jonathan Mosheiff

PhD student of Prof. Sharon Gannot (Bar-Ilan) and Prof. Ronen Talmon (Technion), Faculty of Electrical Engineering, Bar-Ilan University

Dissertation topic: Forbidden Induced Subgraphs and their Structural Implications



Omri Ram

PhD student of Prof. Oren Sadot, Department of Mechanical Engineering, Ben-Gurion University of the Negev

Dissertation topic: Experimental Study of Shock and Blast Wave Interaction with a Rigid Porous Medium



Einat Seidel Posner

MD/PhD student of Prof. Ofer Mandelboim, Lautenberg Center for Immunology and Cancer Research, The Hebrew University of Jerusalem

Dissertation topic: Viral Immune Evasion Mechanisms



Eliran Subag

PhD student of Prof. Ofer Zeitouni, Department of Mathematics, Weizmann Institute of Science

Dissertation topic: Extreme Values and Extremal Processes of Gaussian Fields

2013–2014



Ariel Afek

PhD student of **Dr. David Lukatsky**, Department of Chemistry,
Ben-Gurion University of the Negev

Dissertation topic: Design Principles and Consequences of Nonconsensus
Protein-DNA Binding



Yoav Bauman

PhD student of **Prof. Ofer Mandelboim**, Lautenberg Center for Immunology and
Cancer Research, The Hebrew University of Jerusalem

Dissertation topic: Pathogen Recognition by Natural Killer Cells



Ronen Dar

PhD student of **Prof. Meir Feder** and **Prof. Mark Shtaf**,
School of Electrical Engineering, Tel Aviv University

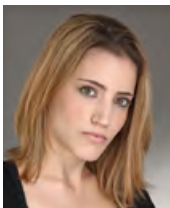
Dissertation topic: Information Theory in Optical-Fiber Communications



Anna Frishman

PhD student of **Prof. Gregory Falkovich**, Department of Physics of Complex Systems,
Weizmann Institute of Science

Dissertation topic: A Search for Statistical Laws in Turbulent Systems



Livnat Jerby Arnon

PhD student of **Prof. Eytan Rupp**, School of Computer Science,
Tel Aviv University

Dissertation topic: Genome-Scale Modeling of Cancer Genetics and
Metabolism Toward the Identification of Selective Anticancer Treatments



Assaf Manor

PhD student of **Prof. Carmel Rotschild**, Faculty of Mechanical Engineering,
Technion – Israel Institute of Technology

Dissertation topic: Thermodynamic Light Management for Third
Generation Photovoltaics



Sivan Refaely-Abramson

PhD student of Prof. **Leeor Kronik**, Department of Materials and Interfaces, Weizmann Institute of Science

Dissertation topic: A Generalization of the Optimally-Tuned Range-Separated Hybrid Scheme to the Solid-State



Liran Rotem

PhD student of Prof. **Vitali Milman**, School of Mathematical Sciences, Tel Aviv University

Dissertation topic: Asymptotic Geometric Analysis: Log-Concavity, α -Concavity, Quasi-Concavity



Eitan Schechtman

PhD student of Prof. **Hagai Bergman**, The Interdisciplinary Center for Neural Computation (ICNC), The Hebrew University of Jerusalem

Dissertation topic: The Neural Correlates of Basal Ganglia Abnormalities in the Chronic Phencyclidine (PCP) Primate Model of Schizophrenia



Avishay Tal

PhD student of Prof. **Ran Raz**, Department of Computer Science and Applied Mathematics, Weizmann Institute of Science

Dissertation topic: Analysis of Boolean Functions in Theoretical Computer Science

2012–2013



Tslil Ast

PhD student of Dr. **Maya Schuldiner**, Department of Molecular Genetics, Weizmann Institute of Science

Dissertation topic: Uncovering the Translocation and Quality Control Mechanisms of Glycosylphosphatidylinositor (GPL) Anchored Proteins



Assaf Ben Moshe

PhD student of Prof. **Gil Markovich**, Department of Chemical Physics, Tel Aviv University

Dissertation topic: Chiroptical Effects Induced in Metal and Semiconductor Nanoparticles



Miri Krupkin

PhD student of Prof. Ada Yonath, Department of Structural Biology,
Weizmann Institute of Science

Dissertation topic: Towards the Determination of the Structure of the Mycobacterium
Smegmatis Ribosome and Studies on the Properties of the Prebiotic Ribosome



Nir Lazarovich

PhD student of Prof. Michah Sageev, Department of Mathematics,
Technion – Israel Institute of Technology

Dissertation topic: Non-Positively Curved Homogeneous Polygonal Complexes



Or Ordentlich

PhD student of Prof. Uri Erez, School of Electrical Engineering,
Tel Aviv University

Dissertation topic: Robust Lattice Schemes for Multi-User
Communication Networks



Liel Sapir

PhD student of Prof. Daniel Harries, Institute of Chemistry and The Fritz Haber Research
Center, The Hebrew University of Jerusalem

Dissertation topic: Modeling Osmolyte-Induced Conformational Changes in
Biomacromolecules



David Tsivion

PhD student of Prof. Ernesto Joselevich, Department of Materials and Interfaces,
Weizmann Institute of Science

Dissertation topic: Guided Growth of Horizontal Nanowires



Erez Zohar

PhD student of Prof. Benni Reznik, School of Physics and Astronomy,
Tel Aviv University

Dissertation topic: Quantum Simulations of Quantum Field Theories

2011–2012



Dmitry Batenkov

PhD student of Prof. Yosef Yomdin, Department of Mathematics,
Weizmann Institute of Science

Dissertation topic: Algebraic Reconstruction of Geometric Models from Integral Measurements



Avraham Braun

PhD student of Prof. Jeffrey Gordon, Department of Solar Energy and
Environmental Physics, Ben-Gurion University of the Negev

Dissertation topic: The Physics of High Carrier Injection Rates in
Concentrator Photovoltaics



Sophia Buhbut

PhD student of Prof. Arie Zaban, Institute of Chemistry, Bar-Ilan University

Dissertation topic: FRET Mechanism Based on Nanomaterials in Dye-Sensitized
Solar Cells: Synthesis, Characterization and Applications



Amir Erez

PhD student of Prof. Yigal Meir, Department of Physics,
Ben-Gurion University of the Negev

Dissertation topic: Superconductor to Insulator Transition in Thin Films



Daphna Nachmani

PhD student of Prof. Ofer Mandelboim, Lautenberg Center for Immunology and Cancer
Research, The Hebrew University of Jerusalem

Dissertation topic: MicroRNAs in Immune Regulation:
Viral Mimicry of Host Mechanisms



Amir Nevet

PhD student of Prof. Meir Orenstein, Department of Electrical Engineering,
Technion – Israel Institute of Technology

Dissertation topic: Two-Photon Processes in Micro and Nano Semiconductor Structures



Doron Puder

PhD student of Prof. Nati Linial, Einstein Institute of Mathematics,
The Hebrew University of Jerusalem

Dissertation topic: The Combinatorial, Algebraic and Topological Aspects of Word Maps



Eran Small

PhD student of Prof. Yaron Silberberg, Department of Physics of Complex Systems,
Weizmann Institute of Science

Dissertation topic: Statistical Properties of Light Propagating in Non-Linear Systems



Hadas Soifer

PhD student of Prof. Nirit Dudovich, Department of Physics of Complex Systems,
Weizmann Institute of Science

Dissertation topic: Probing Electronic Wavefunctions via High Harmonic Generation



Amir Wand

PhD student of Prof. Sanford Ruhman, Department of Chemistry, The Hebrew University of Jerusalem

Dissertation topic: Investigation of the Photochemistry of Retinal Proteins and Model Systems Using Novel Techniques of Ultrafast Spectroscopy: Resolving the Dynamics as Well as Structural Information of the Excited States

2010–2011



Avital Adler

PhD student of Prof. Hagai Bergman, Interdisciplinary Center for Neural
Computation (ICNC), The Hebrew University of Jerusalem

Dissertation topic: Value Encoding in the Striatum in View of Serotonin Neurotransmission



Leonid Barenboim

PhD student of Prof. Michael Elkin, Department of Computer Science,
Ben-Gurion University of the Negev

Dissertation topic: Efficient Network Utilization in Locality-Sensitive Distributed Algorithms



Arren Bar-Even

PhD student of Prof. Ron Milo, Department of Plant Sciences,
Weizmann Institute of Science

Dissertation topic: The Design, Analysis and Testing of Synthetic
Carbon Fixation Cycles



Omer Bobrowski

PhD student of Prof. Robert J. Adler, Department of Electrical Engineering,
Technion – Israel Institute of Technology

Dissertation topic: Some Topics in the Algebraic Topology of Random Fields



Ronit Bustin

PhD student of Prof. Shlomo Shamai, Department of Electrical Engineering,
Technion – Israel Institute of Technology

Dissertation topic: The I-MMSE Approach for Multi-Terminal Problems in the
Gaussian Regime



Klim Efremenko

PhD student of Prof. Amnon Ta-Shma and Prof. Oded Regev, Department of
Computer Science, Tel Aviv University

Dissertation topic: Algebraic Constructions in Computational Complexity



Yoav Livneh

PhD student of Prof. Adi Mizrahi, Department of Neurobiology,
The Hebrew University of Jerusalem

Dissertation topic: Adult Neurogenesis: From Synapse Formation
Through Sensory Coding to Animal Behavior



Itai Roffman

PhD student of Prof. Eviatar Nevo and Prof. Avraham Ronin,
The International Graduate Center of Evolution, University of Haifa

Dissertation topic: Studying Suite of *Homo* Traits in *Pan*: Supporting Cultural
and Genetic Evidence for their Inclusion in the *Homo* Genus



Yoav Oved Rosenberg

PhD student of Prof. Jiwchar Ganor, Department of Geological and Environmental Sciences, Ben-Gurion University of the Negev

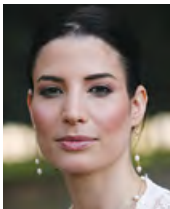
Dissertation topic: The Fate of Radium in Evaporitic Systems



Osip Schwartz

PhD student of Prof. Dan Oron, Department of Physics of Complex Systems, Weizmann Institute of Science

Dissertation topic: Nonlinear Microscopy with Nanoparticles



Adi Sheinfeld

PhD student of Prof. Avishay Eyal, Electrical Engineering, Tel Aviv University

Dissertation topic: Optical Detection of Alzheimer's Disease Via Ocular Spectroscopy

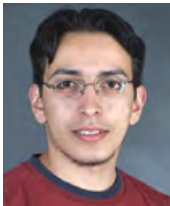


Avital Swisa

PhD student of Prof. Yuval Dor, Department of Developmental Biology and Cancer Research, Faculty of Medicine, The Hebrew University of Jerusalem

Dissertation topic: Role of LKB1 in Pancreatic Beta Cell Dynamics

2009–2010



Monther Abu-Remaileh

PhD student of Prof. Yehudit Bergman, Department of Genetics, The Hebrew University of Jerusalem

Dissertation topic: Understanding the Molecular Mechanism of Oct-3/4 Oncogenicity



Danny Ben-Zvi

PhD student of Prof. Naama Barkai and Prof. Ben-Zion Shilo, Department of Molecular Genetics, Weizmann Institute of Science

Dissertation topic: Scaling and Robustness in Embryonic Development



Oded Berger-Tal

PhD student of Prof. David Saltz, Department of Desert Ecology,
Ben-Gurion University of the Negev

Dissertation topic: Movement Ecology of Persian Fallow Deer



Ronen Gabizon

PhD student of Prof. Assaf Friedler, Institute of Chemistry,
The Hebrew University of Jerusalem

Dissertation topic: Activating Proteins by Shifting their Oligomerization
Equilibrium: A New Approach to Drug Design



Alex Hayat

PhD student of Prof. Meir Orenstein, Faculty of Electrical Engineering,
Technion – Israel Institute of Technology

Dissertation topic: Applications of Multi-Photon Processes for Semiconductor
Quantum Photonics



Efrat Mashiach

PhD student of Prof. Haim Wolfson and Prof. Ruth Nussinov, School of Computer
Science, Tel Aviv University

Dissertation topic: Structural Bioinformatics: Flexible Molecular Docking



Or Meir

PhD student of Prof. Oded Goldreich, Department of Computer Science and Applied
Mathematics, Weizmann Institute of Science

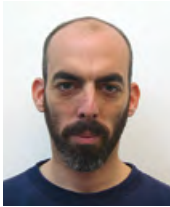
Dissertation topic: Combinatorial Construction of Probabilistic Proof Systems



Moshe Mishali

PhD student of Prof. Yonina Eldar, Faculty of Electrical Engineering,
Technion – Israel Institute of Technology

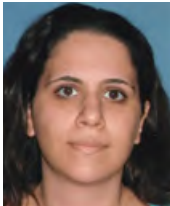
Dissertation topic: Compressive Processing of Analog Signals



Uri Roll

PhD student of Prof. Lewi Stone, Department of Zoology,
Tel Aviv University

Dissertation topic: Spatial Perspectives of Epidemiological and Ecological Problems



Sivan Sabato

PhD student of Prof. Naftali Tishby, School of Computer Science and Engineering, The Hebrew University of Jerusalem.

Dissertation topic: Supervised Learning with Partial Information



Efrat Shema

PhD student of Prof. Moshe Oren, Department of Molecular Cell Biology,
Weizmann Institute of Science

Dissertation topic: RNF20 as a Novel Tumor Suppressor: Exploring its Roles in Transcriptional Regulation, Formation and Progression of Cancer, Senescence and Development

2008–2009



Keren Censor

PhD student of Prof. Hagit Attiya, Computer Science Department,
Technion – Israel Institute of Technology

Dissertation topic: Probabilistic Methods in Distributed Computing



Emanuele Dalla Torre

PhD student of Dr. Ehud Altman, Department of Condensed Matter Physics,
Weizmann Institute of Science

Dissertation topic: Strongly Correlated States in Ultra-Cold Atoms



Noam Gross

PhD student of Prof. Lev Khaykovich, Department of Physics,
Bar-Ilan University

Dissertation topic: Nonlinear Dynamics and Interactions of Bright Matter-Wave Solitons in a Bose-Einstein Condensate.



Ishay Haviv

PhD student of Prof. Oded Regev, School of Computer Science,
Tel Aviv University

Dissertation topic: Combinatorics and Theoretical Aspects of Computer Sciences:
Complexity of Lattice Problems



Amir Ingber

PhD student of Prof. Meir Feder, School of Electrical Engineering,
Tel Aviv University

Dissertation topic: Coding Methods and Bounds for the Bandwidth -
Limited Regime



Mor Mordechai Peretz

PhD student of Prof. Shmuel Ben-Yaakov, Department of Electrical & Computer
Engineering, Ben-Gurion University of the Negev

Dissertation topic: Time Domain Design of Digital Controllers for PWM Converters



Michael Orlov

PhD student of Prof. Moshe Sipper, Department of Computer Science,
Ben-Gurion University of the Negev

Dissertation topic: Evolutionary Computation



Eran Segev

PhD student of Prof. Eyal Buks, Faculty of Electrical Engineering,
Technion – Israel Institute of Technology

Dissertation topic: Back-Reaction Cooling and Quantum Phenomena in
Nanomechanical Resonators



Gil Segev

PhD student of Prof. Moni Naor, Department of Computer Science and Applied Mathematics,
Weizmann Institute of Science

Dissertation topic: The Complexity of Resilient Sketches



Reut Shema

PhD student of Prof. Yadin Dudai, Department of Neurobiology,
Weizmann Institute of Science

Dissertation topic: The Role of PKMzeta in Long Term Memory Storage in
the Rat Brain

2007–2008



Avraham Ben-Aroya

PhD student of Prof. Oded Regev and Prof. Amnon Ta-Shma,
School of Computer Science, Tel Aviv University

Dissertation topic: Quantum Computation and Quantum Information



Shai Carmi

PhD student of Prof. Shlomo Havlin, Department of Physics,
Bar-Ilan University

Dissertation topic: Complex Networks: Theory and Applications



Chen Davidovich

PhD student of Prof. Ada Yonath, Department of Structural Biology,
Weizmann Institute of Science

Dissertation topic: Ribosome Structure and Function



Shahar Dobzinski

PhD student of Prof. Noam Nisan, School of Computer Science and Engineering,
The Hebrew University of Jerusalem

Dissertation topic: The Power of Approximations in Mechanism Design



Moshe Goldstein

PhD student of Prof. Richard Berkovits, Department of Physics,
Bar-Ilan University

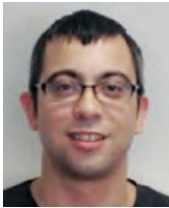
Dissertation topic: Interference Effects in Interacting Mesoscopic Systems



Amir Goren

PhD student of Prof. Gil Ast, Department of Human Molecular Genetics and Biochemistry, Tel Aviv University

Dissertation topic: Inferring Regulatory Elements of Splicing Using Comparative Genomics



Dan Hermelin

PhD student of Prof. Gad M. Landau, Department of Computer Science, University of Haifa

Dissertation topic: Algorithmic Challenges in RNA Comparative Analysis



Yoav Lahini

PhD student of Prof. Yaron Silberberg, Faculty of Physics, Weizmann Institute of Science

Dissertation topic: Disordered Nonlinear Systems



Guy Ron

PhD student of Prof. Eliezer Piasetzky, Department of Physics, Tel Aviv University

Dissertation topic: Measurement of the Proton Elastic Form Factors at Low Q²



Avraham Saig

PhD student of Prof. Ehud Ahissar and Dr. Amos Arieli, Department of Neurobiology, Weizmann Institute of Science

Dissertation topic: Guiding Principles for Sensory Substitution: From Vision to Touch

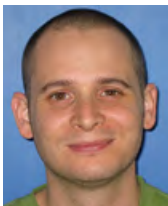


Alexander Sodin

PhD student of Prof. Vitali Milman, School of Mathematical Sciences, Tel Aviv University

Dissertation topic: Probabilistic Methods in Asymptotic Geometric Analysis

2006–2007



Haim Beidenkopf

PhD student of Prof. Eli Zeldov, Faculty of Physics,
Weizmann Institute of Science

Dissertation topic: Vortex Thermodynamics in High-Temperature Superconductors



Liat Benmoyal Segal

PhD student of Prof. Hermona Soreq, Department of Biological Chemistry,
and Prof. Hagai Bergman, Department of Physiology, The Hebrew University of Jerusalem

Dissertation topic: The Role of the Cholinergic System in the Pathogenesis of Parkinson's Disease



Yael Elbaz

PhD student of Prof. Shimon Schuldiner, Department of Biological Chemistry,
The Hebrew University of Jerusalem

Dissertation topic: Structure-Function Study of Multidrug Transporters



Olga Khersonsky

PhD student of Prof. Dan Tawfik, Faculty of Chemistry,
Weizmann Institute of Science

Dissertation topic: Mechanistic Enzymology: From Classical Tools to Directed Evolution



Dana Moshkovitz

PhD student of Prof. Ran Raz, Faculty of Mathematics and Computer Science,
Weizmann Institute of Science

Dissertation topic: Probabilistically Checkable Proofs



Ariel Procaccia

PhD student of Prof. Jeffrey S. Rosenschein, School of Computer Science and Engineering,
The Hebrew University of Jerusalem

Dissertation topic: The Theoretical Foundation of Multi-Agent Systems (MAS)



Carmel Rotschild

PhD student of Prof. Moti Segev, Physics Department,
Technion – Israel Institute of Technology

Dissertation topic: Soliton Interactions in Nonlocal Nonlinear Media



Ofer Shayevitz

PhD student of Prof. Meir Feder, School of Electrical Engineering,
Tel Aviv University

Dissertation topic: Universal Communications with Feedback



Amir Shlomai

PhD student of Prof. Yosef Shaul, Faculty of Biochemistry,
Weizmann Institute of Science

Dissertation topic: Metabolic Alterations in the Liver and Hepatitis B Virus Gene Expression

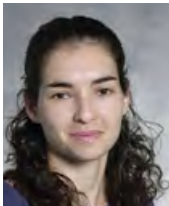


Noam Stern

PhD student of Prof. Ofer Mandelboim, Lautenberg Center for Immunology and
Cancer Research, The Hebrew University of Jerusalem

Dissertation topic: Natural Killer (NK) Cells

2005–2006



Yael Eshed-Eisenbach

PhD student of Prof. Elior Peles, Department of Molecular Cell Biology,
Weizmann Institute of Science

Dissertation topic: Neuro-Glial Interactions



Nathan Keller

PhD student of Prof. Gil Kalai, Einstein Institute of Mathematics,
The Hebrew University of Jerusalem

Dissertation topic: Probabilistic Combinatorics and Its Relations with Harmonic Analysis



Tal Lev-Ami

PhD student of Prof. Shmuel Sagiv, School of Computer Science,
Tel Aviv University

Dissertation topic: Efficient Transformers for the Verification of Heap
Manipulating Programs



Raz Palty

PhD student of Dr. Israel Sekler, Department of Physiology and Cell Biology,
Ben-Gurion University of the Negev

Dissertation topic: Characterization of the Novel Exchanger NCLX – A FLJ2233
Gene Product



Sharon Shwartz

PhD student Prof. Moti Segev, Physics Department,
Technion – Israel Institute of Technology

Dissertation topic: Nonlinear Optics in CZT:V



Marcel Adams'

7 Principles for Success*

- (1) Knowledge
- (2) Priorities
- (3) Perseverance
- (4) Passion
- (5) Innovation
- (6) Ethics
- (7) Self-Evaluation

Followup if you did something against principles 1–6.

* As dictated to Batsheva Shor on the way back from visiting Adams Fellows at the Technion – Israel Institute of Technology, 2008.
Above: Marcel Adams and family at his 90th birthday celebration, Adams Seminar 2010.

האקדמיה הלאומית הישראלית למדעים
المجمع الوطني الإسرائيلي للعلوم والآداب
THE ISRAEL ACADEMY OF SCIENCES AND HUMANITIES



The Israel Academy of Sciences and Humanities

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