



# Feinberg Graduate School

Graduates 2023



מכון ויצמן למדע  
WEIZMANN INSTITUTE OF SCIENCE



The Feinberg Graduate School of the Weizmann Institute of Science  
cordially invites you to the

**Graduation Ceremony for the conferment  
of MSc and PhD degrees  
and the awarding of prizes for academic excellence**

Wednesday, May 31, 2023  
7:00 p.m.  
David and Fela Shapell Family Holocaust Memorial Plaza  
Weizmann Institute of Science, Rehovot

מדרשת פיינברג של מכון ויצמן למדע  
מתכבדת להזמין

**לטקס הענקת תארי מוסמך ודוקטור לפילוסופיה  
ולהכרזה על פרסים למצטיינים**

יום רביעי, י"א בסיוון תשפ"ג, 31 במאי 2023  
בשעה 19:00  
בכיכר הזיכרון לשואה ע"ש משפחת דוד ופלה שאפל  
מכון ויצמן למדע, רחובות

**Greetings:**

**פרופ' אלון חן**  
נשיא מכון ויצמן למדע  
President, Weizmann Institute of Science

**פרופ' גילד פריז**  
Dean, Feinberg Graduate School

**פרופ' מאיה שולדינר**  
Chair, Scientific Council of the Weizmann Institute of Science

**Guest of honor:**

**פרופ' מונא ח'ורי**  
Vice President for Strategy and Diversity  
The Hebrew University of Jerusalem

**On behalf of the graduates:**

**ד"ר עדי מילמן**  
Department of Molecular Genetics

**Music:**

**Libi Panker**

**ברכות:**

**פרופ' אלון חן**  
נשיא מכון ויצמן למדע

**פרופ' גלעד פריז**  
דקן מדרשת פיינברג, מכון ויצמן למדע

**פרופ' מאיה שולדינר**  
י"ר המועצה המדעית, מכון ויצמן למדע

**אורחת כבוד:**

**פרופ' מונא ח'ורי**  
סגנית נשיא לאסטרטגיה ומגוון  
האוניברסיטה העברית בירושלים

**דברים בשם הבוגרים:**

**ד"ר עדי מילמן**  
המחלקה לגנטיקה מולקולרית

**מוסיקה:**

**ליבי פנקר**

**לתשומת לב המוזמנים:**

- הגעה באמצעות : חניית קימל, מכון ויצמן, רחובות.
- הכניסה מותנית בהצגת אישור הרישום לאירוע.
- אורחים הזקוקים לסיוע בגישות לאירוע מתבקשים לתאם מראש את הגעתם עם המודרשה (08-934-4170).
- הכניסה לאחר האירוע ולמתחם המושבים תתאפשר מהשעה 18:15 עד 18:55.
- לצפייה בשידור הישיר של הטקס, למי שנבצר ממנו להשתתף [נא ללחוץ כאן](#).

**Please note the following:**

- location: Kimmel Parking, Weizmann Institute, Rehovot.
- Guests are required to present confirmation of their registration to the event.
- To make arrangements for guests with special access needs, please contact FGS in advance (08-934-4170).
- Guests will be permitted to enter the plaza from 6:15 p.m.-6:55 p.m.
- For those unable to attend the ceremony, a live broadcast can be viewed [here](#).

**Feinberg Graduate School  
in The David Lopatie Hall of Graduate Studies**

Weizmann Institute of Science, P.O. Box 26, Rehovot 76100, Israel  
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[www.weizmann.ac.il/pages/he/feinberg-graduate-school](http://www.weizmann.ac.il/pages/he/feinberg-graduate-school)

Production: Tal Eizman, Adi Kaszas-Zehavi, Gili Vainer, Raanan Yaacobi

Design: [www.dio-olamot.com](http://www.dio-olamot.com)

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[With gratitude to the supporters of the Feinberg Graduate School at the Weizmann Institute of Science](#)

# The Weizmann Institute of Science

The Weizmann Institute of Science is one of the world's leading institutions of basic scientific research in all disciplines of natural and exact sciences: mathematics and computer sciences, physics, chemistry, biochemistry and biology. Its scientists conduct studies in fields that are on the cutting edge of science and that serve to enrich human knowledge about the world around us and our role in the universe. The Institute's unique character encourages numerous multidisciplinary collaborations in all areas of research. Weizmann Institute investigations greatly further the development of new technologies and alternative sources of energy and the invention of new materials, medicines, and state-of-the-art medical treatment. Nearly 4,000 scientists, students, technicians, and administrative staff make up the Weizmann community on campus. The Institute also invests considerable efforts and resources in science education and literacy for school-age children. The budget of the Weizmann Institute is approximately one billion shekels—a quarter of which is granted by the Israeli government, with the remainder originating from grants won by the Institute's scientists as well as from donations and scholarships.





# The Feinberg Graduate School



The Feinberg Graduate School is the academic arm of the Weizmann Institute of Science. It was founded in 1958 with the support of the United States government. The Graduate School is named for Abraham Feinberg LLB (USA) founder and first chair of its Board of Trustees. The main goal of the Feinberg Graduate School (FGS) is the advanced training of the next generation of creative and original researchers in the natural sciences and mathematics, who will go on to become scientific leaders.

The Graduate School offers Master of Science (MSc) and Doctor of Philosophy (PhD) programs in physics, chemistry, life sciences, mathematics and computer science, and science teaching. Interdisciplinary programs are widespread and encouraged.

Since its founding, FGS has been an accredited institution of higher learning in Israel. It later received an absolute charter granted by the Board of Regents of the State of New York. The instructors and advisors of the Graduate School are members of the scientific staff of the Weizmann Institute of Science. Currently, there are over 1,100 graduate students, with a student-teacher ratio of 4:1, enabling considerable individual attention. The official language of instruction is English, which allows foreign students to participate fully in all of the Graduate School's programs. The only criteria for acceptance to FGS are academic excellence and scientific integrity. Admission to all programs and activities is granted without regard to race, gender, sexual orientation, religion, or nationality. All students are directly involved in the research conducted at the Weizmann Institute, and receive scholarships that allow them to devote all their energies to research and study. There are no tuition fees.

The Graduate School consists of five Research Schools: the Solo Dwek and Maurizio Dwek Research School of Chemical Science, the Ekard Research School of Biological Science, the Lorry I. Lokey Research School of Biochemical Science, the Moross Research School of Mathematics and Computer Science, and the André Deloro Research School of Physical Science.

These schools provide an extra boost to the students' immersion into scientific research, supporting them in their becoming mature scientists. The Research Schools also offer students a wide range of opportunities for personal development, such as scientific travel grants to facilitate expanded contacts with the international research community, and greater exposure to world leaders in their fields. Each Research School is headed by a Director appointed by the Dean of FGS, and each Director is assisted by a Board of Studies that coordinates all activities in the relevant discipline.

The Feinberg Graduate School is responsible for the administrative and academic aspects of postdoctoral training at the Weizmann Institute of Science. FGS also coordinates the Kupciner-Getz International Summer Science School for outstanding international undergraduate students.

The Feinberg Graduate School is headed by a Dean, assisted by the Academic Secretary of the School and by a steering committee consisting of the Directors of the Research Schools. The Graduate School Office coordinates all the general administrative operations of FGS.





**Prof. Alon Chen**  
President,  
Weizmann Institute of Science



Dear graduates and proud family members,

At this juncture in your lives, when you are about to bloom and bear fruit, it's worth remembering how everything started. How the children that you were didn't stop asking questions, and didn't settle for partial answers that the world was able to provide you with at the time.

In a certain sense, it's important that we all continue to retain and to cultivate within ourselves the children that we once were. These children will keep us curious and optimistic, and it is they who will know how to connect us to the students who will join us in the future.

Ups and downs await you on the winding road that you are embarking on now, along with failures, achievements, and successes. At low points, don't despair. When successes and recognition arrive – and they will arrive – don't let them get to your head. It's important to continue on the road, and to remember the objective of the journey: we want to understand the world, among other things because the new understandings that we achieve will improve our lives in the future.

A few words to the proud parents and family members: The Institute's graduates are first and foremost your children. You educated them, and you imparted principles and values to them, to which we have added scientific knowledge, and methods to develop this knowledge. You are our senior partners, and we thank you for the privilege that you gave us to be your partners in success.

At the current time, it is impossible to refrain from making a principled, apolitical statement. It is important that we know and understand: there is no academia, and there is no scientific research, without democracy, without freedom of expression, and without minority rights. In the history of science, we know of many cases in which it was precisely the minority, and even a handful of people who went against the stream, who led to breakthroughs that later improved the lives of everyone. It is important to remember this, and to internalize it in all areas of life.

Dear graduates, we are proud of you and wish you a journey that will lead to pinnacles of fulfilling dreams. You are the ones bringing the message of science to the future. Go out into the world, and make it a better place for all of us.

Thank you everyone.

A handwritten signature in blue ink, appearing to be 'Alon Chen'.



**Prof. Gilad Perez**  
Dean,  
Feinberg Graduate School

Dear graduates and families, I would like to highlight and celebrate one special aspect of your journey here: freedom. Now, why should we talk about freedom? After all we are an Institute for the study of natural and exact science.

The first connection to freedom is making a choice. We all know that you're among the most talented of your generation. We know that there are so many material options out there, pulling you into more practical paths, paths with much greater immediate material rewards. Yet you chose to come to the Weizmann Institute of Science with no guaranteed outcome, often outside of your comfort zone, away from your alma mater (and possibly country) – this is almost by definition a manifestation of free will.

Secondly, the whole essence of the Weizmann Institute of Science is being the beacon of uncompromising truth. We fight fiercely to enable our scientists and students to ask whatever question they find interesting, and pursue the research path that follows from these questions– and this is the very definition of freedom! The fact that you are here means that you underwent this experience, obtained new results and/or discoveries, and earned your Master and Ph.D. degrees, something worth celebrating.

Inside the Weizmann Institute of Science, there is a wonderful boutique university called the Feinberg Graduate School – and we are now celebrating its 65th anniversary.

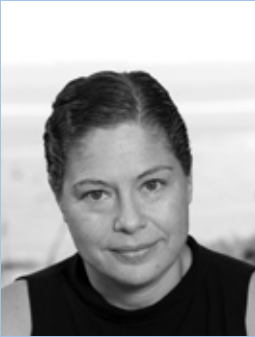
Over 2,500 master's degree students, and over 5,000 doctoral students, have graduated from the Feinberg Graduate School, including 400 founders and CEOs of startups, and over 500 professors in academia, and today you are joining this elite group of the brand "graduate of the Weizmann Institute of Science."

Feinberg Graduate School is essential to produce truly groundbreaking science – and you are the definitive proof of this. Now, when the need for true conceptual and tangible freedom is especially important, you, our 319 graduates, have additional responsibility and significance, as the new ambassadors of our special family.

We hope that the joy of freedom of thought, and the ability to ask sharp questions without compromise that led you in your research, will accompany you in your next steps.

A handwritten signature in dark ink, appearing to read 'Gilad Perez'.

Prof. Gilad Perez



**Prof. Maya Schuldiner**  
Chair,  
Scientific Council

Dear graduates,

It is an honor to stand here with you today.

I am excited to see each and every one of you, because I know that you are not only graduates, but also heroes. Because I know that what you have done in order to stand here today is something unique. Maybe you think that this is something that each of you has discovered, another small piece of truth about nature – something that no one knew before. Something that adds another puzzle piece to human knowledge. But it's not only that.

I am excited because I know that in order to stand here today, you had to do something incomparably brave. You had to stand up again after you failed over and over, because that is what happens when you stand at the boundary of knowledge and want to march into the unknown. And every time you fell, you needed to fight your demons. Am I good enough? Am I smart enough? Will I succeed, or will I fail, and then people will think that I am not worthy? Will I disappoint myself and those dear to me? You fought your demons, and you won the battle. You discovered that the hardest thing you had to do to get the degree is not a course, or an equation, or a lab exercise – but to face your own fears. But despite all of this, you marched forward along the paths of science and contributed something of your own to the edifice of human knowledge. Well done!

And you here in the audience – families, friends, advisors – you were happy and proud of our students, but you also embraced and encouraged them when necessary, and therefore you were partners in the journey of discovery. Without your support, it would have been harder for them, sometimes even impossible. So thank you for being there for them on the path.

To our dear international graduates – I know from my own experience how hard it is to make this journey, or even just parts of it, in a foreign country – displaced from your support system and your loved ones. For you, the journey was even harder, yet you made it.

So what next? Regardless of what life path you continue on, I wish you all the same thing. That you dare to make the difficult choices, and not just the easy ones – to leave your comfort zone, and to set your eye on lofty goals. Because whether you did a degree in physics, math, computer science, science education, chemistry, or biology – if there is one thing that I know that you all learned here with us, in your years here, on this journey – it is who you are. That you are heroes. And just as you achieved your degree, you can achieve whatever you wish to achieve, that you have the power to succeed. So go out and succeed, and many congratulations on your amazing achievement today.

A handwritten signature in dark ink, appearing to read 'M. Schuldiner'.

Prof. Maya Schuldiner





**Yael Goren-Wegman**

Executive Director  
Israeli Friends Association  
& Alumni Organization  
Weizmann Institute of  
Science

Dear graduates,

On behalf of the Alumni Organization, I would like to welcome you to the alumni community of the Weizmann Institute of Science. By choosing to pursue an advanced science degree at Weizmann, you followed your passion and curiosity and demonstrated a true commitment to conduct research to the benefit of humanity.

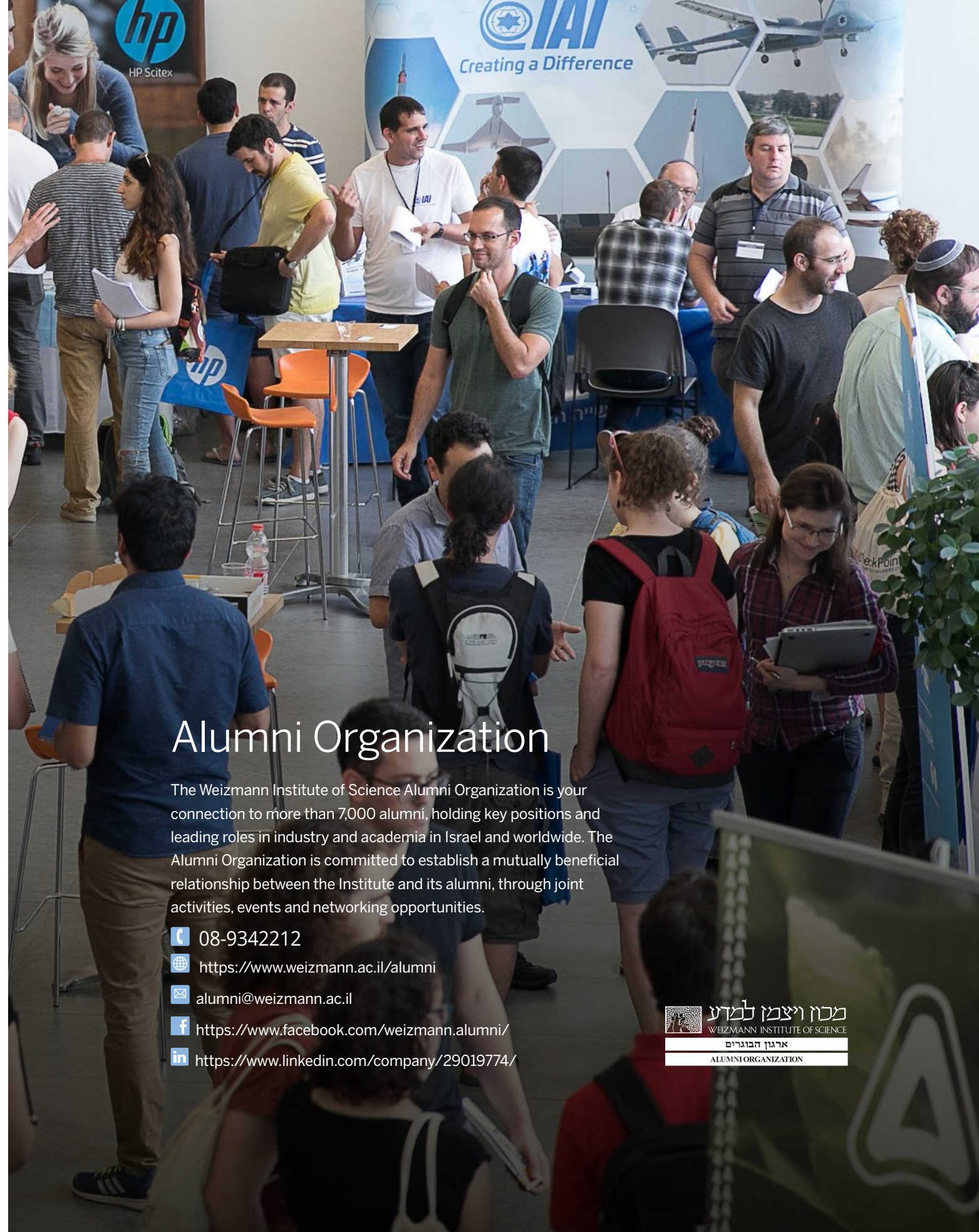
This year, the COVID vaccines have enabled us to meet face to face to celebrate your graduation in a festive event thanks to years of dedicated work of scientists who continue to work tirelessly to find solutions that allow a pandemic life routine. As young scientists, from now on, you will be taking part in the efforts to harness technology and innovation to help the world cope with such local and global challenges.

Our lifetime connections with our graduates have become a tradition of the Weizmann family, and we encourage you to keep in touch with us and let us be part of your professional journey. The Alumni Organization holds face-to-face and online activities, and we will be happy to hear about your experience and facilitate your networking. By connecting to our exclusive alumni platforms, you can interact with fellow graduates working in various Israeli and international companies and attend career-related lectures and events. To benefit from our resources, you can access our LinkedIn, Facebook, and Instagram pages. The Weizmann experience opens numerous doors and paths for further research, innovation, and entrepreneurship, and we wish you success and fulfillment in your professional life, whether in academia, in the industry, or at the intersection of the two. As Weizmann graduates, you will always be part of a leading community that plays a vital role in promoting our values and paving the way to the success of the next Weizmann generations.

Every discovery begins with curiosity, questions, and doubts. This is the foundation of scientific research, and it is here that your journey begins. May it be interesting and fulfilling!

יגל גורן-וֶגְמָן

Yael Goren-Wegman



## Alumni Organization

The Weizmann Institute of Science Alumni Organization is your connection to more than 7,000 alumni, holding key positions and leading roles in industry and academia in Israel and worldwide. The Alumni Organization is committed to establish a mutually beneficial relationship between the Institute and its alumni, through joint activities, events and networking opportunities.

☎ 08-9342212

🌐 <https://www.weizmann.ac.il/alumni>

✉ [alumni@weizmann.ac.il](mailto:alumni@weizmann.ac.il)

📘 <https://www.facebook.com/weizmann.alumni/>

🌐 <https://www.linkedin.com/company/29019774/>





**Prof. Mona Khoury**

Vice President for Strategy  
and Diversity  
The Hebrew University of  
Jerusalem

Good evening everyone. Thank you very much for the invitation. I am excited to speak here in front of you, dear graduates, in front of your dear families and the dear staff of the Weizmann Institute of Science.

I am happy to have the opportunity to share with you my professional experience, and my strong belief regarding the way we must act so that our institutions will be diverse and inclusive. When I speak of diversity, I mean all of the populations that are underrepresented in higher education, especially Arabs, Haredim, Ethiopian-Israelis, first generation students, and people with disabilities. In addition, we also deal with the LGBT community. While this is the only group I mentioned that is not underrepresented, it copes with challenges that are mainly connected to attitudes towards them, and to their difficulty in fully expressing their identity.

I am happy to tell you that in the past year we reached 21 percent Arab students compared to 17 percent the previous year. I could give details on the rest of the groups, but I would like to take advantage of the short time I have to share with you one of the many mistakes that we make, usually unconsciously. I'm referring to how people relate to a case like mine. As Shibel described, I came from a neighborhood of poverty and crime in Haifa. Even though my parents didn't have any education, I succeeded in reaching the rank of Full Professor at a university, and to be appointed Vice President.

I am not the only one who has walked such a path. On many occasions, we have heard about the Ethiopian Israeli physician, the math professor who didn't learn core studies in his childhood, the visually impaired person who completed his studies with honors, and more. What is the problem with these instances?

The problem here is that we take the exceptions and make them into the rule. And then we say, "if they succeeded, anyone could succeed, as long as they want to." There is a great danger here. The danger is evading our responsibility as a society towards groups that live in disadvantaged conditions, whose personal, socioeconomic, and even political life circumstances are a barrier to them. Alongside each success story, we must stop and think about all those who wanted with all their might, who tried, but did not succeed. We must not forget those others when it comes to determining the institution's policy.

I ask that with every step and initiative, with every intake of faculty and creation of a curriculum, we also see all of the excellent people, from all population groups, who want to but have difficulty, and not because of a lack of motivation or capabilities, but because of the many barriers that exist in society.

I call on all of us to display initiative, to reach out, to reach those students and faculty members from unrepresented groups, and to allow all of them to be part of our institution.

I'll briefly mention some of the things we do in order to advance this worldview. Our ability to reach diverse populations began with the understanding that we wouldn't be able to use the same marketing methods on them that are suitable for the general population. For example, in order to recruit Arab students, we go to schools, communities, parents, school counselors and expose them to the university. First generation students are another group that is underrepresented, there are talented, smart and highly capable people in it, but unfortunately they do not always reach academia, or the leading institutions in it. Today we are advancing our activity to recruit candidates who are first generation students through extensive activity with civil society organizations that work in communities in which there are high rates of graduates who are first generation. With regard to the academic faculty, we created a pool of candidates, postdoctoral researchers from the Arab community, which we shared with all of the institutions, including the Weizmann Institute. We did this in order to convey to the candidates that Israeli academia is interested in them.

We are translating all of the signs at the university into three languages, Hebrew, Arabic and English. Positions for administrative faculty are published in Arabic and Hebrew. In addition, we are promoting several activities whose common denominator is the message that "we want you at our institution." We also work to help you integrate, accompany you on the way in, and don't settle for the fact that "our door is open to all."

Opening the door is a necessary but not a sufficient condition for diversity, because many of these groups are in an entirely different neighborhood that doesn't see this door. Just like Waze helps us get from place to place, we need to help all of these candidates make their way and get to be part of the university community. We are proud to lead these processes, happy about the partnership between us and other institutions, and thankful for the mutual learning. We still have a long way to go in order to fulfill our mission of being diverse and inclusive institutions. But the moment we do this, the impact will be not only on the university community – the universities – but on Israeli society in general.

Congratulations to all of the graduates – Mabrouk! [congratulations in Arabic]



**On behalf of the graduates**  
**Dr. Adi Millman**

Department of Molecular  
Genetics

Gerty Cori, together with her husband, Carl, won the Nobel Prize in Physiology or Medicine in 1947. Cori was the first woman who won this important recognition. Cori described the joy of scientific discovery thus:

For scientists, the unforgettable moments in their lives are those rare moments that come after years of hard work, when they suddenly see the veil lift over nature's secrets, and what seemed dark and chaotic suddenly appears as a bright and clear pattern.

I was a computer programmer in the army, I very quickly understood that computer programming wasn't for me, something there was missing. But when I came to the Weizmann Institute, I received an opportunity to use the abilities that I had acquired in the army in order to understand and reveal the beauty in nature. And in fact, hardly a day went by in the lab without me being amazed by the creativity and the resourcefulness of the bacteria that I studied.

I came to the Weizmann Institute looking for the “eureka!” moments, those that Cori mentioned. The moment when the penny drops, when you understand that you've discovered something that no one else knows yet. Happily, my fellow graduates and I have had the privilege of experiencing the joy of discovery. There is an enormous sense of pride in this, knowing that these discoveries of ours, large and small, join the pool of human knowledge that the science of the future will be built on.

Now is an amazing time in which to engage in scientific research. Technologies are advancing with giant steps, and in our time, we have witnessed real revolutions: mathematicians prove theorems with the help of a computer, advanced telescopes provide us with pictures of a black hole for the first time, and artificial intelligence completely changes the rules of the game – from algorithms that have solved longstanding questions in biology to language processing systems such as chatGPT that maybe, or maybe not, helped write these lines...

At the Weizmann Institute of Science, we have had the privilege of engaging in innovative scientific research, in a unique and creative atmosphere of academic excellence. At the Institute, we have been exposed to groundbreaking scientists, guest lecturers from around the world, leaders in their fields. But it's not only them – we have met artists, writers, musicians and dancers, each of whom, in his own way, taught us about creativity, and who contributed to shaping our worldview as researchers. In his book *The World as I See It*, Einstein wrote: "The most beautiful experience we can have is the mysterious. It is the fundamental emotion which stands at the cradle of true art, and true science." Indeed, art goes hand in hand with science, and it too expands our thought.

We, the graduates, are proud to be part of the Institute, which also takes upon itself social responsibility. In addition to initiatives to contribute to the local community, the Institute quickly mobilized and took part in the response to the COVID-19 crisis, took in scientists and students from the Ukraine and Russia who were forced to leave their homes and flee from the war zone, and today, it loudly and clearly supports Israeli democracy.

It is a great honor to stand here today on behalf of my fellow graduates, and to express our thanks to the Weizmann Institute for having granted us an exceptional platform on which to fulfill our dreams. We would like to thank all of those who supported us over the years, the heads of our research groups, for their direction and guidance, the scientists on the faculty, our colleagues in the labs, and the entire staff of the Institute for their support of our research, and the staff of the Feinberg Graduate School for the enriching curriculum. Thank you to our dear families who supported us along the way and were always there for us, and for everyone who gave us inspiration to be the best that we can be. And speaking of inspiration, I can't help but think of my mother, who was not able to accompany me to the finish line. Mom, this degree is dedicated to you.

My fellow graduates, during this journey, we sometimes felt that our path is a bit less paved, that it's a bit windier on our road, but nevertheless, we did it! We are standing on the shoulders of the giants who blazed the way for us in the past, and here too, at the Institute, we have had the privilege of learning from inspiring scientists, and I am hopeful that we will see more scientists here in the near future.

In conclusion, my fellow graduates, we have reached a significant achievement; these were beautiful and exciting years. I hope that we will all be fortunate enough to discover more of the secrets of nature, and to enjoy science, in whatever direction we choose.



# Prizes for outstanding PhD students

## The John F. Kennedy Prize

The John F. Kennedy Memorial Prizes are sponsored by the Fund that was established at the Institute in memory of the late US President John F. Kennedy.

**Mr. Erez Urbach**

Advisor: Prof. Micha Berkooz, Department of Particle Physics and Astrophysics

**Ms. Inbar Savoray**

Advisor: Prof. Gilad Perez, Department Particle Physics and Astrophysics

**Dr. Efrat Resnick**

Advisor: Prof. Nir London, Department of Chemical and Structural Biology

**Dr. Tatyana Nazaretsky**

Advisor: Dr. Giora Alexandron, Department of Science Teaching

**Mr. Alejandro Aguilera Castrejon**

Advisor: Prof. Jacob (Yaqub) Hanna, Department of Molecular Genetics

## The Dimitris N. Chorafas Prize

Dr. Dimitris Chorafas (1926-2014) advisor, author, thinker and philanthropist, established a foundation that awards scientific prizes for outstanding work in selected fields. Each year the foundation accepts candidates from a small number of selected prestigious universities from around the world, including the Weizmann Institute of Science.

**Ms. Avigail Stokar-Avihail**

Advisor: Prof. Rotem Sorek, Department of Molecular Genetics

**Ms. Gal Yona**

Advisors: Prof. Guy Rothblum and Prof. Irit Dinur, Department of Computer Science and Applied Mathematics

## The Prof. Israel Dostrovsky Memorial Prize

The Weizmann Institute of Science and the Israel Atomic Energy Commission jointly award an annual prize for excellence in memory of Prof. Israel Dostrovsky who served as the Director of the IARC and as the 5th President of the Weizmann Institute of Science.

**Dr. Keren Milner**

Advisor: Prof. Yohai Kaspi, Department of Earth and Planetary Sciences

## The Ruth and Prof. Abraham (Edek) Blaugrund Prize

After joining the Weizmann Institute in the 1950's, Prof. Abraham Blaugrund made significant contributions to the field of plasma physics. The Ruth and Prof. Abraham (Edek) Blaugrund Prize was established by the Blaugrund family, and it is awarded to outstanding PhD students in Physics.

**Mr. Gal Shavit**

Advisor: Prof. Yuval Oreg, Department of Condensed Matter Physics

## The Elchanan E. Bondi Memorial Prize

Dr. Elchanan Bondi died in 1971. Elchanan did his doctoral thesis in the Department of Biophysics while suffering from a kidney disease.

**Dr. Ron Melcer**

Advisor: Prof. Moty Heiblum, Department of Condensed Matter Physics

## The Dov Elad Memorial Prize

Prof. Dov Elad died in 1979. Dov was a professor of chemistry and chaired the Board of Studies in Chemical Sciences. He contributed significantly to the Institute and to the Graduate School.

**Mr. Raz Slutsky**

Advisor: Prof. Tsachik Gelerand, Department of Mathematics

## The Shimon Reich Memorial Prize

Prof. Shimon Reich died in 2010. Shimon was a professor in the Department of Materials and Interfaces, of the Faculty of Chemistry, at the Weizmann Institute of Science for forty years.

**Dr. Noam Bar**

Advisor: Prof. Eran Segal, Department of Computer Science and Applied Mathematics

**Dr. Michael Jaroszewicz**

Advisor: Prof. Lucio Frydman, Department of Chemical and Biological Physics

# Prizes for outstanding PhD students

## The Gad Resheff Memorial Prize

Gad Resheff was killed in 1973 during the Yom Kippur War while serving as the commander of an outpost at the Suez Canal. He was awarded the Medal of Valor posthumously. Gad was a doctoral student in the Department of Biophysics.

**Mr. Julius Gemen**

Advisor: Prof. Rafal Klajn, Department of Molecular Chemistry and Materials Science

## The Giora Yoel Yashinski Memorial Prize

Giora Yoel Yashinski was killed in action in 1971 in an air force plane that crashed on the Sinai coast. Giora completed his studies towards a Master’s Degree in the Department of Chemical Physics.

**Dr. Nava Reznik**

Advisor: Prof. Deborah Fass, Department of Chemical and Structural Biology

## The Daniel Brenner Memorial Prize

Daniel Brenner was killed during the 1982 Lebanon War: Operation Peace for Galilee in the Battle of Sidon. Daniel was a doctoral student in the Department of Chemical Physics.

**Mr. Amichay Afriat**

Advisor: Prof. Shalev Itzkovitz, Department of Molecular Cell Biology

## The Lady Anne Chain Memorial Prize

Lady Anne Chain was a noted researcher and friend of the Weizmann Institute of Science for many years.

**Dr. Nir Cohen**

Advisor: Prof. Maya Schuldiner, Department of Molecular Genetics

## The Esther Hellinger Memorial Prize

Dr. Esther Hellinger was born in England. She joined the staff of the Daniel Sieff Research Institute upon its establishment in 1934 and worked with Dr. Chaim Weizmann.

**Ms. Yael Oran**

Advisor: Prof. Ilan Lampl, Department of Brain Sciences

## The Haim Holtzman Memorial Prize

Haim Holtzman was killed in 1969. Haim was an air force pilot. He died while trying to land his burning plane, beyond the residential area of northern Rehovot.

**Ms. Rony Chanoch**

Advisor: Dr. Itay Tirosh, Department of Molecular Cell Biology

## The Menashe Milo Memorial Prize

Menashe Milo completed his studies in Physics as part of the academic reserves. During the Yom Kippur War, Menashe fought in the Golan Heights as a tank commander. Menashe died suddenly in 1981.

**Ms. Maya Ron**

Advisor: Prof. Igor Ulitsky, Department of Immunology and Regenerative Biology

## The Lonia and Jose Roth Memorial Prize

The prize is awarded for outstanding Ph.D. thesis research combined with excellence in writing in English. Lonia and Jose M. Roth were Holocaust survivors who admired both the natural sciences and fine writing. This Prize is in memory of their lifelong support of the Weizmann Institute and of Israel.

**Dr. Sarah Rubin**

Advisor: Prof. Elazar Zelzer, Department of Molecular Genetics

## The Dean’s Prize for PhD Students

**Mr. Elyashev Leibtag**

Advisor: Prof. Uri Bader, Department of Mathematics



Prizes for  
outstanding  
MSc  
students

The Susan Sapir Memorial Prize for MSc students

Susan Sapir worked for many years at the Weizmann Institute of Science in various position and with great devotion. The most senior of these was the Head of the Research Grants and Projects Office.

**Mr. Raz Ben-Uri**

Advisor: Dr. Leeat Yankielowicz-Keren, Department of Molecular Cell Biology

The Dean's Prize for outstanding MSc students

**Mr. Tomer Amit**

Advisor: Dr. Sivan Refaely-Abramson, Department of Molecular Chemistry and Materials Science

**Mr. Michael Glasner**

Advisor: Prof. Uri Bader, Department of Mathematics

**Mr. Yotam Kadish**

Advisor: Prof. Gregory Falkovich, Department of Physics of Complex Systems

**Ms. Maya Levy Greenberg**

Advisor: Prof. Ernesto Joselevich, Department of Chemical and Biological Physics

**Mr. Amit Pando**

Advisor: Prof. Nir Davidson, Department of Physics of Complex Systems

**Ms. Maya May Salomon Hazut**

Advisor: Dr. Michal Ramot, Department of Brain Sciences

**Mr. Elad Tzalic**

Advisor: Dr. Ran Tessler, Department of Computer Science and Applied Mathematics

**Ms. Daniella Van Der Boom**

Advisor: Dr. Doron Kushnir, Department of Biological Regulation

**Mr. Omer Yaniv**

Advisor: Prof. Shahar Dobzinski, Department of Computer Science and Applied Mathematics

**Mr. David Schwerdt**

Advisor: Prof. Vered Rom-Kedar, Department of Computer Science and Applied Mathematics



Competitive  
Fellowships  
for outstanding  
PhD students

- Clore Scholars Program
- Adams Fellowships Program
- Azrieli Fellows program
- Ariane de Rothschild Fellowship Program for Women
- Israel Ministry of Science and Technology Fellowship Program
- Israel Council for Higher Education and the Planning and Budgeting Committee Fellowship programs

Competitive  
Fellowships  
for outstanding  
MSc students

- David Lopatie Fellows Program
- Israel Council for Higher Education and the Planning and Budgeting Committee Fellowship programs





PhD  
Recipients







Dr. Amit Agrawal  
Dr. Noa Aharon-Hefetz  
Dr. Iakov Aizenberg  
Dr. Michal Arie  
Dr. Maor Asher  
Dr. Matan Atzmon  
Dr. Serkalem Ayanaw  
Dr. Nitsan Bar  
Dr. Noam Bar  
Dr. Yinon Moise Bar-On  
Dr. Daniela Ben-Tov  
Dr. Mattias Birman  
Dr. Rotem Broday-Dvir  
Dr. Rachel Bruch  
Dr. Dalit Carmi  
Dr. Nir Cohen  
Dr. Noy Cohen Saban  
Dr. Tal Dahan-Meir  
Dr. Oz Davidi  
Dr. Agostina Di Pizio  
Dr. Yiftach Divon  
Dr. Diana Drago-Garcia  
Dr. Ido Dromi  
Dr. Tom Dror-Schwartz  
Dr. Lee Drori  
Dr. Yochai Edlitz  
Dr. Tamir Eliav  
Dr. Eshkol Eytan  
Dr. Inbal Farkash Paskal  
Dr. Vadim Fedyuk  
Dr. Tal Feldman  
Dr. Yaara Finkel  
Dr. Leviel Fluhr  
Dr. Alexander Genzelinakh  
Dr. Omri Gilhar  
Dr. Gily Ginosar  
Dr. Gil Goffer  
Dr. Jonathan Gropp







Dr. Renan Gross  
Dr. Niv Haim  
Dr. Olga Halfin  
Dr. Tal Havkin Solomon  
Dr. Meta Heidenreich  
Dr. Ori Heyman  
Dr. Jagoda Jablonska  
Dr. Michael Jaroszewicz  
Dr. Aaron Javitt  
Dr. Gabriel Javitt  
Dr. Yair Judkovsky  
Dr. Mor Kenigsbuch  
Dr. Dan Klein  
Dr. Shelley Klompus  
Dr. Aditya Kshirsagar  
Dr. Julie Laffy  
Dr. Avner Leshem  
Dr. Eyal Leviatan  
Dr. Rosalie Lipsh  
Dr. Gur Lubin  
Dr. Gilad Margalit  
Dr. Baruch Margulis  
Dr. Svetlana Markman  
Dr. Sedi Medina  
Dr. Zohar Meir  
Dr. Oran Melanker  
Dr. Ron Melcer  
Dr. Matan Menahem  
Dr. Adi Millman  
Dr. Keren Milner  
Dr. Avraham Moriel  
Dr. Saptaparna Mukherjee  
Dr. Debakshi Mullick  
Dr. Liat Nakar  
Dr. Tanya Nazaretsky  
Dr. Nurit Papismadov  
Dr. Sigal Peled-Leviatan  
Dr. Daniel Petukhin

Dr. Ricardo Pinto Enes Martinho  
Dr. Ouri Poupko  
Dr. Harikrishnan Rajendran  
Dr. Tamar Reitich-Stolero  
Dr. Efrat Resnick  
Dr. Nava Reznik  
Dr. Ori Roethler  
Dr. Lior Roitman  
Dr. Jonathan Emanuel Ron  
Dr. Gili Rosenberg  
Dr. Sarah Rubin  
Dr. Chandamita Saikia  
Dr. Golokesh Santra  
Dr. Kakali Santra  
Dr. Arunachalam Sekar  
Dr. Ron Sender  
Dr. Aviv Shalit  
Dr. Oren Shatz  
Dr. Michal Shavit  
Dr. Liron Sheintuch  
Dr. Jonathan Shlomi  
Dr. Raman Singh  
Dr. Tomer Solberg  
Dr. Didi-Andreas Song  
Dr. Reut Stahi-Hitin  
Dr. Serafima Stroganov  
Dr. Alona Strugatski Faktor  
Dr. Ichiko Sugiyama  
Dr. Asya Svirinovsky  
Dr. Tal Tamir  
Dr. Livia Testa  
Dr. Maxim Varenik  
Dr. Eran Vos  
Dr. Huanhuan Wang  
Dr. Nancy - Sarah Yacovzada  
Dr. Adam Yalin  
Dr. Ran Yehuda  
Dr. Eran Zafrani

Dr. Iris Daphne Zelnik  
Dr. Meytar Zemer Schocken  
Dr. Naama Zioni  
Dr. Guy Zoltsman



		
<b>ד"ר מאור אשר</b> <b>Dr. Maor Asher</b>	<b>ד"ר מיכל אריה</b> <b>Dr. Michal Arie</b>	<b>ד"ר תמיר אליאב</b> <b>Dr. Tamir Eliav</b>
המחלקה לפיסיקה כימית וביולוגית בהדרכת ד"ר עומר יפה	המחלקה לאימונולוגיה ורגנרציה ביולוגית בהדרכת פרופ' עמי נבון	המחלקה למדעי המוח בהדרכת פרופ' נחום אולנובסקי
Department of Chemical and Biological Physics Advisor: Dr. Omer Yaffe	Department of Immunology and Regenerative Biology Advisor: Prof. Ami Navon	Department of Brain Sciences Advisor: Prof. Nachum Ulanovsky
<b>Thesis:</b> Specific phonon coupling in organic semiconductors	<b>Thesis:</b> Mutating a conserved phenylalanine residue reveals structure-function relationship within the AAA ATPase complex p97/Cdc48	<b>Thesis:</b> Nonoscillatory phase coding and multiscale representation of very large environments in the bat hippocampus
		
<b>ד"ר נועם בר</b> <b>Dr. Noam Bar</b>	<b>ד"ר דניאלה בן טוב</b> <b>Dr. Daniela Ben-Tov</b>	<b>ד"ר מתיאס בירמן</b> <b>Dr. Mattias Birman</b>
המחלקה למדעי המחשב ומתמטיקה שימושית בהדרכת פרופ' ערן סגל	המחלקה למדעי הצמח והסביבה בהדרכת פרופ' אברהם לוי	המחלקה לפיסיקה של חלקיקים ואסטרופיסיקה בהדרכת ד"ר שקמה ברסלר
Department of Computer Science and Applied Mathematics Advisor: Prof. Eran Segal	Department of Plant and Environmental Sciences Advisor: Prof. Avraham Levy	Department of Particle Physics and Astrophysics Advisor: Dr. Shikma Bressler
<b>Thesis:</b> Mining the uncharted variability landscape of multifactorial diseases	<b>Thesis:</b> The fate of DNA DSBs in somatic cells: From induction to repair	<b>Thesis:</b> Data-driven searches for physics beyond the Standard Model in high energy collision data using the emu-symmetry method

		
<b>ד"ר נועה אהרון-חפץ</b> <b>Dr. Noa Aharon-Hefetz</b>	<b>ד"ר יוחאי אדליץ</b> <b>Dr. Yochai Edlitz</b>	<b>ד"ר עמית אגרוול</b> <b>Dr. Amit Agrawal</b>
המחלקה לגנטיקה מולקולרית בהדרכת פרופ' יצחק פלפל	המחלקה למדעי המחשב ומתמטיקה שימושית בהדרכת פרופ' ערן סגל	המחלקה לביולוגיה מולקולרית של התא בהדרכת פרופ' ולרי קריזנובסקי
Department of Molecular Genetics Advisor: Prof. Yitzhak Pilpel	Department of Computer Science and Applied Mathematics Advisor: Prof. Eran Segal	Department of Molecular Cell Biology Advisor: Prof. Valery Krizhanovsky
<b>Thesis:</b> Deciphering the role of translation supply and demand in human physiology	<b>Thesis:</b> Research of genetics and environmental factors impact on disease onset	<b>Thesis:</b> The role of immune system in maintenance of homeostasis of senescent cells
		
<b>ד"ר אשכול איתן</b> <b>Dr. Eshkol Eytan</b>	<b>ד"ר סרקאלם איינאו</b> <b>Dr. Serkalem Ayanaw</b>	<b>ד"ר יעקב אייזנברג</b> <b>Dr. Iakov Aizenberg</b>
המחלקה למדעי כדור הארץ וכוכבי הלכת בהדרכת פרופ' אילן קורן	המחלקה לאימונולוגיה ורגנרציה ביולוגית בהדרכת פרופ' סטפן יונג	המחלקה לפיסיקה של חלקיקים ואסטרופיסיקה בהדרכת פרופ' אלכסנדר מילוב
Department of Earth and Planetary Sciences Advisor: Prof. Ilan Koren	Department of Immunology and Regenerative Biology Advisor: Prof. Steffen Jung	Department of Particle Physics and Astrophysics Advisor: Prof. Alexander Milov
<b>Thesis:</b> The cloud twilight zone: From entrainment to small clouds and humidity pockets	<b>Thesis:</b> Defining cell-type specific Stat3 enhancers and their role in IBD development	<b>Thesis:</b> Search for the heavy ion physics signatures in small collision systems with the ATLAS detector at the LHC



ד"ר גילי גינוסר  
Dr. Gily Ginosar

המחלקה למדעי המוח  
בהדרכת פרופ' נחום אולנובסקי

Department of Brain Sciences  
Advisor: Prof. Nachum Ulanovsky

**Thesis:**  
3D space in the mammalian brain:  
Neuronal representation in flying bats and  
spatial perception in humans



ד"ר עמרי גילהר  
Dr. Omri Gilhar

המחלקה למדעי הצמח והסביבה  
בהדרכת פרופ' אסף אהרוני  
ד"ר אילנה קולודקין-גל

Department of Plant and Environmental  
Sciences  
Advisors: Prof. Asaph Aharoni  
Dr. Ilana Kolodkin-Gal

**Thesis:**  
Arabidopsis thaliana induces  
multigenerational stress tolerance  
and increased competitiveness in the  
symbiotic bacterium Bacillus subtilis



ד"ר גיל גופר  
Dr. Gil Goffer

המחלקה למתמטיקה  
בהדרכת פרופ' יצחק גלנדר

Department of Mathematics  
Advisor: Prof. Tsachik Gelander

**Thesis:**  
On invariable generation in infinite groups  
and on groups of almost automorphisms  
of trees



ד"ר רותם ברודאי-דביר  
Dr. Rotem Broday-Dvir

המחלקה למדעי המוח  
בהדרכת פרופ' רפאל מלאך

Department of Brain Sciences  
Advisor: Prof. Rafael Malach

**Thesis:**  
Neural mechanisms of internally and  
externally oriented cognitive states



ד"ר ינון מואיז בר-און  
Dr. Yinon Moise Bar-On

המחלקה למדעי הצמח והסביבה  
בהדרכת פרופ' רון מילוא

Department of Plant and Environmental  
Sciences  
Advisor: Prof. Ron Milo

**Thesis:**  
A quantitative view of the biosphere



ד"ר ניצן בר  
Dr. Nitsan Bar

המחלקה לפיסיקה של חלקיקים ואסטרופיסיקה  
בהדרכת פרופ' יוסף ניר  
פרופ' כפיר בלום

Department of Particle Physics and  
Astrophysics  
Advisors: Prof. Yosef Nir  
Prof. Kfir Blum

**Thesis:**  
Astrophysical probes of dark matter



ד"ר יונתן גרופ  
Dr. Jonathan Gropp

המחלקה למדעי כדור הארץ וכוכבי הלכת  
בהדרכת פרופ' איתי הלוי

Department of Earth and Planetary  
Sciences  
Advisor: Prof. Itay Halevy

**Thesis:**  
Modeling the stable isotopic composition  
of microbial methane



ד"ר רנן גרוס  
Dr. Renan Gross

המחלקה למתמטיקה  
בהדרכת פרופ' רונן אלדן

Department of Mathematics  
Advisor: Prof. Ronen Eldan

**Thesis:**  
Boolean functions and Brownian motion



ד"ר אלכסנדר גנזלינאח  
Dr. Alexander Genzelinakh

המחלקה לביולוגיה מולקולרית של התא  
בהדרכת פרופ' אלדד צחור

Department of Molecular Cell Biology  
Advisor: Prof. Eldad Tzahor

**Thesis:**  
Dystrophic hearts use compensatory  
mechanisms to maintain normal tissue  
function in young mice



ד"ר מיכאל ג'רסביץ  
Dr. Michael Jaroszewicz

המחלקה לפיסיקה כימית וביולוגית  
בהדרכת פרופ' לוסיו פרידמן

Department of Chemical and Biological  
Physics  
Advisor: Prof. Lucio Frydman

**Thesis:**  
Advanced methods for nuclear magnetic  
resonance spectroscopy in liquids and  
solids



ד"ר אהרון ג'ביט  
Dr. Aaron Javitt

המחלקה לאימונולוגיה מערכתית  
בהדרכת פרופ' יפעת מרבלי  
פרופ' ניר פרידמן

Department of Systems Immunology  
Advisors: Prof. Yifat Merbl  
Prof. Nir Friedman

**Thesis:**  
Investigating the effects of protein  
modification and degradation on cancer  
progression and immunogenicity



ד"ר רחל ברוך  
Dr. Rachel Bruch

המחלקה לפיסיקה של חלקיקים ואסטרופיסיקה  
בהדרכת פרופ' אבישי גל-ימים

Department of Particle Physics and  
Astrophysics  
Advisor: Prof. Avishay Gal-Yam

**Thesis:**  
Observational study of infant Hydrogen  
rich supernovae circumstellar material  
interaction at early time and flash  
ionization features





ד"ר מטה היידנרייך  
Dr. Meta Heidenreich

המחלקה לביולוגיה מבנית וכימית  
בהדרכת פרופ' עמנואל לוי

Department of Chemical and Structural  
Biology  
Advisor: Prof. Emmanuel Levy

**Thesis:**  
Probing principles of protein self-assembly and proteome regulation through synthetic and systems biology in living cells



ד"ר לי דרורי  
Dr. Lee Drori

המחלקה לפיסיקה של מערכות מורכבות  
בהדרכת פרופ' עופר פירסטנברג

Department of Physics of Complex  
Systems  
Advisor: Prof. Ofer Firstenberg

**Thesis:**  
Quantum vortices of strongly interacting photons mediated by cold Rydberg atoms



ד"ר תם דרור-שוורץ  
Dr. Tom Dror-Schwartz

המחלקה למדעי כדור הארץ וכוכבי הלכת  
בהדרכת פרופ' אילן קורן

Department of Earth and Planetary  
Sciences  
Advisor: Prof. Ilan Koren

**Thesis:**  
On the properties of greenCu: Continental, organized shallow clouds



ד"ר אגוסטינה די פיזיו  
Dr. Agostina Di Pizio

המחלקה למדעים ביומולקולריים  
בהדרכת פרופ' מייק פייניזילבר

Department of Biomolecular Sciences  
Advisor: Prof. Mike Fainzilber

**Thesis:**  
Stretch-induced growth in the nervous system



ד"ר עוז דוידי  
Dr. Oz Davidi

המחלקה לפיסיקה של חלקיקים ואסטרופיסיקה  
בהדרכת פרופ' גלעד פרז

Department of Particle Physics and  
Astrophysics  
Advisor: Prof. Gilad Perez

**Thesis:**  
Searches for new physics beyond the Standard Model



ד"ר טל דהן-מאיר  
Dr. Tal Dahan-Meir

המחלקה למדעי הצמח והסביבה  
בהדרכת פרופ' אברהם לוי

Department of Plant and Environmental  
Sciences  
Advisor: Prof. Avraham Levy

**Thesis:**  
Temporal and spatial genetic diversity of a wild wheat population over 36 years



ד"ר מקסים ורניק  
Dr. Maxim Varenik

המחלקה לכימיה מולקולרית ומדע החומרים  
בהדרכת פרופ' איגור לובומירסקי

Department of Molecular Chemistry and  
Materials Science  
Advisor: Prof. Igor Lubomirsky

**Thesis:**  
Electromechanical anomalies in anelastic ceramics



ד"ר הואנהואן וונג  
Dr. Huanhuan Wang

המחלקה למדעי כדור הארץ וכוכבי הלכת  
בהדרכת פרופ' דן יקיר

Department of Earth and Planetary  
Sciences  
Advisor: Prof. Dan Yakir

**Thesis:**  
Linking ecophysiological processes to remote sensing signals of a semi-arid forest



ד"ר אורי הימן  
Dr. Ori Heyman

המחלקה לאימונולוגיה ורגנרציה ביולוגית  
בהדרכת ד"ר רועי אברהם

Department of Immunology and  
Regenerative Biology  
Advisor: Dr. Roi Avraham

**Thesis:**  
Paired single-cell host profiling with multiplex-tagged bacterial mutants reveals intracellular virulence-immune networks



ד"ר עידו דרומי  
Dr. Ido Dromi

המחלקה למדעים ביומולקולריים  
בהדרכת פרופ' צבי ליבנה

Department of Biomolecular Sciences  
Advisor: Prof. Zvi Livneh

**Thesis:**  
Molecular dissection of the translesion DNA synthesis (TLS) mechanism in mammalian embryonic stem cells



ד"ר דיאנה דרגו-גרסיה  
Dr. Diana Drago-Garcia

המחלקה לאימונולוגיה ורגנרציה ביולוגית  
בהדרכת פרופ' יוסף ירדן  
פרופ' איתן דומאני

Department of Immunology and  
Regenerative Biology  
Advisors: Prof. Yosef Yarden  
Prof. Eytan Domany

**Thesis:**  
Role of OVOL1 in breast cancer epithelial-mesenchymal transition and metastasis



ד"ר יפתח דיבון  
Dr. Yiftach Divon

המחלקה לפיסיקה כימית וביולוגית  
בהדרכת פרופ' רועי חיים בר זיו

Department of Chemical and Biological  
Physics  
Advisor: Prof. Roy Bar-Ziv

**Thesis:**  
Towards an "artificial cell" – synthesis and assembly of multi-protein complexes on a chip



ד"ר ליביה טסטסה  
Dr. Livia Testa

המחלקה לגנטיקה מולקולרית  
בהדרכת פרופ' ג'פרי גרסט  
פרופ' דוד ולך

Department of Molecular Genetics  
Advisors: Prof. Jeffrey Gerst  
Prof. David Wallach

**Thesis:**  
Identifying additional regulators of  
Necroptosis affecting RIPK3 and MLKL



ד"ר טל טמיר  
Dr. Tal Tamir

המחלקה למדעי המוח  
בהדרכת פרופ' אלעד שניידמן

Department of Brain Sciences  
Advisor: Prof. Elad Schneidman

**Thesis:**  
Dynamics of neural representations  
in populations of neurons within and  
between multiple cortical regions



ד"ר אולגה חלפין  
Dr. Olga Halfin

המחלקה לביולוגיה מבנית וכימית  
בהדרכת פרופ' דוד מרגוליס

Department of Chemical and Structural  
Biology  
Advisor: Prof. David Margulies

**Thesis:**  
Artificial protein-protein communication  
with bifunctional molecules that exchange  
binding partners



ד"ר יאיר יודקובסקי  
Dr. Yair Judkovsky

המחלקה למדעי כדור הארץ וכוכבי הלכת  
בהדרכת פרופ' עודד אהרונסון

Department of Earth and Planetary  
Sciences  
Advisor: Prof. Oded Aharonson

**Thesis:**  
Orbital dynamics of extrasolar multi-  
planetary systems



ד"ר רן יהודה  
Dr. Ran Yehuda

המחלקה למדעים ביומולקולריים  
בהדרכת פרופ' צבי ליבנה

Department of Biomolecular Sciences  
Advisor: Prof. Zvi Livneh

**Thesis:**  
Molecular analysis of translesion DNA  
synthesis under hypoxia



ד"ר יגודה יבלונסקה  
Dr. Jagoda Jablonska

המחלקה למדעים ביומולקולריים  
בהדרכת פרופ' דן תופיק  
פרופ' איתי הלוי

Department of Biomolecular Sciences  
Advisors: Prof. Dan S. Tawfik  
Prof. Itay Halevy

**Thesis:**  
De novo emergence of enzymes in light of  
the major biogeochemical transitions



ד"ר מיתר זמר שוקן  
Dr. Meytar Zemer Schocken

המחלקה למדעי המוח  
בהדרכת פרופ' יניב זיו

Department of Brain Sciences  
Advisor: Prof. Yaniv Ziv

**Thesis:**  
Neural representation of memory in the  
hippocampus and prefrontal cortex



ד"ר גיא זולצמן  
Dr. Guy Zoltzman

המחלקה לביולוגיה מבנית וכימית  
בהדרכת ד"ר רינה רוזנצויג

Department of Chemical and Structural  
Biology  
Advisor: Dr. Rina Rosenzweig

**Thesis:**  
Conspiring with the enemy: A unique  
mechanism in Class A JDPs stabilizes  
oncogenic p53



ד"ר תומר זולברג  
Dr. Tomer Solberg

המחלקה לפיסיקה של חלקיקים ואסטרופיסיקה  
בהדרכת פרופ' עופר אהרוני

Department of Particle Physics and  
Astrophysics  
Advisor: Prof. Ofer Aharony

**Thesis:**  
Understanding higher-spin gravity and  
the Froissart bound through holography



ד"ר ניב חיים  
Dr. Niv Haim

המחלקה למדעי המחשב ומתמטיקה שימושית  
בהדרכת פרופ' מיכל אירני

Department of Computer Science and  
Applied Mathematics  
Advisor: Prof. Michal Irani

**Thesis:**  
Training set reconstruction and single-  
video generation



ד"ר טל חבקין סולומון  
Dr. Tal Havkin Solomon

המחלקה למדעים ביומולקולריים  
בהדרכת פרופ' רבקה דיקשטין

Department of Biomolecular Sciences  
Advisor: Prof. Rivka Dikstein

**Thesis:**  
Selective translation control by 40S  
ribosomal proteins mRNA binding















ד"ר ערן זפראני  
Dr. Eran Zafrani

המחלקה להוראת המדעים  
בהדרכת פרופ' ענת ירדן







Department of Science Teaching  
Advisor: Prof. Anat Yarden







**Thesis:**  
Constraints and affordances for the  
implementation of dialogic argumentation  
in science classrooms







		
<b>ד"ר רוזלי ליפש</b> <b>Dr. Rosalie Lipsh</b>	<b>ד"ר איל לויתן</b> <b>Dr. Eyal Leviatan</b>	<b>ד"ר גור לובין</b> <b>Dr. Gur Lubin</b>
המחלקה למדעים ביומולקולריים בהדרכת פרופ' ישראל פליישמן	המחלקה לפיסיקה של חלקיקים ואסטרופיסיקה בהדרכת ד"ר דוד מרוס	המחלקה לפיסיקה של מערכות מורכבות בהדרכת פרופ' דן אורון
Department of Biomolecular Sciences Advisor: Prof. Sarel Fleishman	Department of Particle Physics and Astrophysics Advisor: Dr. David F. Mross	Department of Physics of Complex Systems Advisor: Prof. Dan Oron
<b>Thesis:</b> Design of enzyme repertoires	<b>Thesis:</b> Bridging coupled-wire models and field theories of exotic phases and transitions	<b>Thesis:</b> Heralded spectroscopy: A new probe for nanocrystal multiexciton photophysics
		
<b>ד"ר סדי מדינה</b> <b>Dr. Sedi Medina</b>	<b>ד"ר זוהר מאיר</b> <b>Dr. Zohar Meir</b>	<b>ד"ר אבנר לשם</b> <b>Dr. Avner Leshem</b>
המחלקה למדעי המוח בהדרכת פרופ' מיכל אייזנבך-שוורץ	המחלקה למדעי המחשב ומתמטיקה שימושית בהדרכת פרופ' עמוס תנאי פרופ' יובל אשד	המחלקה לאימונולוגיה מערכתית בהדרכת פרופ' ערן אלינב
Department of Brain Sciences Advisor: Prof. Michal Schwartz	Department of Computer Science and Applied Mathematics Advisors: Prof. Amos Tanay Prof. Yuval Eshed	Department of Systems Immunology Advisor: Prof. Eran Elinav
<b>Thesis:</b> Deciphering non-neuronal cells contribution to Alzheimer's disease pathology using high throughput transcriptomic and proteomic methods	<b>Thesis:</b> Emergence and maintenance of epigenetic commitments in mammalian and plant cells	<b>Thesis:</b> Host-microbiome interactions in inflammatory bowel disease and metabolic surgery







		
<b>ד"ר ניר כהן</b> <b>Dr. Nir Cohen</b>	<b>ד"ר ננסי - שרה יעקובזדה</b> <b>Dr. Nancy - Sarah Yacovzada</b>	<b>ד"ר אדם ילין</b> <b>Dr. Adam Yalin</b>
המחלקה לגנטיקה מולקולרית בהדרכת פרופ' מאיה שולדינר	המחלקה לגנטיקה מולקולרית בהדרכת פרופ' ערן הורנשטיין פרופ' ערן סגל	המחלקה לאימונולוגיה מערכתית בהדרכת פרופ' עידו עמית
Department of Molecular Genetics Advisor: Prof. Maya Schuldiner	Department of Molecular Genetics Advisors: Prof. Eran Hornstein Prof. Eran Segal	Department of Systems Immunology Advisor: Prof. Ido Amit
<b>Thesis:</b> Cellular protein distribution: From protein topology and translocation to organelle communication and ultrastructure	<b>Thesis:</b> Machine Learning, multi-omics, and electronic health records for studying treatment response, and biomarkers for disease diagnosis and prognosis	<b>Thesis:</b> Dissecting the immune system complexity in tumors and pregnancy: From resistance pathways to mechanisms governing immunotherapy success
		
<b>ד"ר ג'ולי לאפי</b> <b>Dr. Julie Laffy</b>	<b>ד"ר דלית כרמי</b> <b>Dr. Dalit Carmi</b>	<b>ד"ר נוי כהן סבן</b> <b>Dr. Noy Cohen Saban</b>
המחלקה לביולוגיה מולקולרית של התא בהדרכת ד"ר איתי תירוש	המחלקה למדעים ביומולקולריים בהדרכת פרופ' צבי ליבנה	המחלקה לאימונולוגיה מערכתית בהדרכת ד"ר רוני דהן
Department of Molecular Cell Biology Advisor: Dr. Itay Tirosh	Department of Biomolecular Sciences Advisor: Prof. Zvi Livneh	Department of Systems Immunology Advisor: Dr. Rony Dahan
<b>Thesis:</b> Dissecting high-grade gliomas by single-cell RNA-sequencing	<b>Thesis:</b> Analysis of the division of labor between translesion DNA synthesis and homology-dependent repair in embryonic stem cells	<b>Thesis:</b> Fc glycoengineered PD-L1 antibody harnesses FcRs for increased antitumor efficacy















		
<b>ד"ר ברוך מרגוליס</b> <b>Dr. Baruch Margulis</b>	<b>ד"ר מתן מנחם</b> <b>Dr. Matan Menahem</b>	<b>ד"ר רון מלצר</b> <b>Dr. Ron Melcer</b>
המחלקה לפיסיקה כימית וביולוגית בהדרכת פרופ' אדוארדס נרייביצ'יוס פרופ' אורן טל	המחלקה לפיסיקה כימית וביולוגית בהדרכת ד"ר עומר יפה	המחלקה לפיסיקה של חומר מעובה בהדרכת פרופ' מוטי הייבלום
Department of Chemical and Biological Physics Advisors: Prof. Ed Narevicius Prof. Oren Tal	Department of Chemical and Biological Physics Advisor: Dr. Omer Yaffe	Department of Condensed Matter Physics Advisor: Prof. Moty Heiblum
<b>Thesis:</b> Tomography of Feshbach resonance states	<b>Thesis:</b> Lattice dynamics and Raman scattering in perovskite single crystals	<b>Thesis:</b> The quantum thermal Hall effect
		
<b>ד"ר טניה נזרצקי</b> <b>Dr. Tanya Nazaretsky</b>	<b>ד"ר סבטלנה מרקמן</b> <b>Dr. Svetlana Markman</b>	<b>ד"ר גלעד מרגלית</b> <b>Dr. Gilad Margalit</b>
המחלקה להוראת המדעים בהדרכת ד"ר גיורא אלכסנדרון	המחלקה לגנטיקה מולקולרית בהדרכת פרופ' אלעזר זלצר	המחלקה לפיסיקה של חומר מעובה בהדרכת פרופ' יובל אורג פרופ' בינגהיי יאן
Department of Science Teaching Advisor: Dr. Giora Alexandron	Department of Molecular Genetics Advisor: Prof. Elazar Zelzer	Department of Condensed Matter Physics Advisors: Prof. Yuval Oreg Prof. Binghai Yan
<b>Thesis:</b> Learning analytics for personalization in blended learning environments for science teaching	<b>Thesis:</b> Single-cell atlas of mouse limb development reveals a complex spatiotemporal dynamics of skeleton formation	<b>Thesis:</b> New directions for topological superconductivity in 2D

		
<b>ד"ר אברהם מוריאל</b> <b>Dr. Avraham Moriel</b>	<b>ד"ר ספטארנה מוקהרג'י</b> <b>Dr. Saptaparna Mukherjee</b>	<b>ד"ר דבקשי מוליק</b> <b>Dr. Debakshi Mullick</b>
המחלקה לפיסיקה כימית וביולוגית בהדרכת פרופ' ערן בוכבינדר	המחלקה לביולוגיה מולקולרית של התא בהדרכת פרופ' משה אורן	המחלקה לפיסיקה כימית וביולוגית בהדרכת פרופ' מיכאל אלבאום
Department of Chemical and Biological Physics Advisor: Prof. Eran Bouchbinder	Department of Molecular Cell Biology Advisor: Prof. Moshe Oren	Department of Chemical and Biological Physics Advisor: Prof. Michael Elbaum
<b>Thesis:</b> Mechanically-induced structural and geometrical changes in complex systems: From glasses to tissues	<b>Thesis:</b> Understanding the impact of p53 mutations by interrogating its protein interacting network	<b>Thesis:</b> Ultrastructural investigation of essential cellular processes in Plasmodium falciparum using Cryo-STEM Tomography (CSTET)
		
<b>ד"ר אורן מלאנקר</b> <b>Dr. Oran Melanker</b>	<b>ד"ר קרן מילנר</b> <b>Dr. Keren Milner</b>	<b>ד"ר עדי מילמן</b> <b>Dr. Adi Millman</b>
המחלקה למדעים ביומולקולריים בהדרכת פרופ' גדעון שרייבר	המחלקה למדעי כדור הארץ וכוכבי הלכת בהדרכת פרופ' יוחאי כספי	המחלקה לגנטיקה מולקולרית בהדרכת פרופ' רותם שורק
Department of Biomolecular Sciences Advisor: Prof. Gideon Schreiber	Department of Earth and Planetary Sciences Advisor: Prof. Yohai Kaspi	Department of Molecular Genetics Advisor: Prof. Rotem Sorek
<b>Thesis:</b> The evolution of non-specific protein- protein interactions	<b>Thesis:</b> Deep atmospheric jets and circulation on giant planets	<b>Thesis:</b> Uncovering the bacterial defense arsenal







		
<b>ד"ר ראמאן סינג</b> <b>Dr. Raman Singh</b>	<b>ד"ר אלונה סטרוגצקי פקטור</b> <b>Dr. Alona Strugatski Faktor</b>	<b>ד"ר סרפימה סטרוגנוב</b> <b>Dr. Serafima Stroganov</b>
המחלקה לגנטיקה מולקולרית בהדרכת פרופ' ג'פרי גרסט	המחלקה למדעי המחשב ומתמטיקה שימושית בהדרכת פרופ' שמעון אולמן	המחלקה לאימונולוגיה ורגנרציה ביולוגית בהדרכת פרופ' מיכל נאמן
Department of Molecular Genetics Advisor: Prof. Jeffrey Gerst	Department of Computer Science and Applied Mathematics Advisor: Prof. Shimon Ullman	Department of Immunology and Regenerative Biology Advisor: Prof. Michal Neeman
<b>Thesis:</b> Specialized ribosomes and their control of yeast cell physiology	<b>Thesis:</b> Producing structural descriptions for images by guided sequential bottom-up-top-down processing	<b>Thesis:</b> The role of the placenta in oxygen transport during gestation and embryo development
		
<b>ד"ר קאקאלי סנטרה</b> <b>Dr. Kakali Santra</b>	<b>ד"ר גולוקש סנטרה</b> <b>Dr. Golokesh Santra</b>	<b>ד"ר רון סנדר</b> <b>Dr. Ron Sender</b>
המחלקה לפיסיקה כימית וביולוגית בהדרכת פרופ' רון נעמן פרופ' אורן טל	המחלקה לכימיה מולקולרית ומדע החומרים בהדרכת פרופ' גרשום מרטין	המחלקה למדעי הצמח והסביבה בהדרכת פרופ' רון מילוא
Department of Chemical and Biological Physics Advisors: Prof. Ron Naaman Prof. Oren Tal	Department of Molecular Chemistry and Materials Science Advisor: Prof. Gershon Martin	Department of Plant and Environmental Sciences Advisor: Prof. Ron Milo
<b>Thesis:</b> Spin-Dependent interactions of chiral molecules with ferromagnetic substrates	<b>Thesis:</b> Next-generation 'Fifth-Rung' density functional methods for general chemistry, molecular spectroscopy, homogenous catalysis, and chemical biology	<b>Thesis:</b> A quantitative view of the cells in the human body







		
<b>ד"ר איציקו סוגיאמה</b> <b>Dr. Ichiko Sugiyama</b>	<b>ד"ר צ'נדמיטה סאיקיה</b> <b>Dr. Chandamita Saikia</b>	<b>ד"ר ליאנת נקר</b> <b>Dr. Liat Nakar</b>
המחלקה למדעי כדור הארץ וכוכבי הלכת בהדרכת פרופ' איתי הלוי	המחלקה למדעים ביומולקולריים בהדרכת פרופ' איתן ראובני	המחלקה להוראת המדעים בהדרכת פרופ' מיכל ארמוני
Department of Earth and Planetary Sciences Advisor: Prof. Itay Halevy	Department of Biomolecular Sciences Advisor: Prof. Eitan Reuveny	Department of Science Teaching Advisor: Prof. Michal Armoni
<b>Thesis:</b> Exploring the effects of ferrihydrite and green rust on metal and phosphate budgets in modern and ancient environments	<b>Thesis:</b> Peptide toxins as a tool to explore ion channel structure and function	<b>Thesis:</b> Pattern-oriented instruction, its practical application, and the connection to various manifestations of abstraction in computer science
		
<b>ד"ר רעות סטאחי-חיטין</b> <b>Dr. Reut Stahi-Hitin</b>	<b>ד"ר דידי אנדרס סונג</b> <b>Dr. Didi-Andreas Song</b>	<b>ד"ר אסיה סווירינובסקי</b> <b>Dr. Asya Svirinovsky</b>
המחלקה להוראת המדעים בהדרכת פרופ' ענת ירדן	המחלקה למדעים ביומולקולריים בהדרכת פרופ' מייק פיינזילבר	המחלקה לכימיה מולקולרית ומדע החומרים בהדרכת ד"ר מיכל לסקס
Department of Science Teaching Advisor: Prof. Anat Yarden	Department of Biomolecular Sciences Advisor: Prof. Mike Fainzilber	Department of Molecular Chemistry and Materials Science Advisor: Dr. Michal Leskes
<b>Thesis:</b> Religious tensions surrounding evolution education in Israel: Experiences and thoughts from the field	<b>Thesis:</b> Axonuclear signaling in neuronal growth and regeneration.	<b>Thesis:</b> Pushing the envelope of high field DNP-NMR methodology towards functional materials





		
<b>ד"ר סיגל פלד-לויטן</b> <b>Dr. Sigal Peled-Leviatan</b>	<b>ד"ר יערה פינקל</b> <b>Dr. Yaara Finkel</b>	<b>ד"ר ריקרדו פינטו אנס מרטינו</b> <b>Dr. Ricardo Pinto Enes Martinho</b>
המחלקה למדעי המחשב ומתמטיקה שימושית בהדרכת פרופ' ערן סגל ד"ר לירן שלוש	המחלקה לגנטיקה מולקולרית בהדרכת פרופ' נעם שטרן-גינסאר	המחלקה לפיסיקה כימית וביולוגית בהדרכת פרופ' לוסיו פרידמן
Department of Computer Science and Applied Mathematics Advisors: Prof. Eran Segal Dr. Liran Shlush	Department of Molecular Genetics Advisor: Prof. Noam Stern-Ginossar	Department of Chemical and Biological Physics Advisor: Prof. Lucio Frydman
<b>Thesis:</b> Computational methods for analyzing the interaction of the human microbiome and the immune system	<b>Thesis:</b> Mapping functional components of viral infection	<b>Thesis:</b> Development and application of novel Magnetic Resonance techniques to enhance detection of metabolites in vitro and in vivo
		
<b>ד"ר נורית פפיסמדוב</b> <b>Dr. Nurit Papismadov</b>	<b>ד"ר לביאל פלור</b> <b>Dr. Leviel Fluhr</b>	<b>ד"ר טל פלדמן</b> <b>Dr. Tal Feldman</b>
המחלקה לביולוגיה מולקולרית של התא בהדרכת פרופ' ולרי קריזנובסקי	המחלקה לאימונולוגיה מערכתית בהדרכת פרופ' ערן אלינב	המחלקה לביולוגיה מבנית וכימית בהדרכת פרופ' דבורה פאס
Department of Molecular Cell Biology Advisor: Prof. Valery Krizhanovsky	Department of Systems Immunology Advisor: Prof. Eran Elinav	Department of Chemical and Structural Biology Advisor: Prof. Deborah Fass
<b>Thesis:</b> p21 regulates the extracellular microenvironment of senescent cells and promotes lung fibrosis	<b>Thesis:</b> The role of the gut microbiome in post-smoking weight gain	<b>Thesis:</b> The function of Quiescin Sulfhydryl Oxidase 1 (QSOX1) in Cancer






		
<b>ד"ר ואדים פדיוק</b> <b>Dr. Vadim Fedjuk</b>	<b>ד"ר מתן עצמון</b> <b>Dr. Matan Atzmon</b>	<b>ד"ר ארונצ'לאם סקאר</b> <b>Dr. Arunachalam Sekar</b>
המחלקה לאימונולוגיה ורגנרציה ביולוגית בהדרכת ד"ר אפרת שמע-יעקבי	המחלקה למדעי המחשב ומתמטיקה שימושית בהדרכת פרופ' ירון ליפמן	המחלקה לאימונולוגיה ורגנרציה ביולוגית בהדרכת פרופ' יוסף ירדן
Department of Immunology and Regenerative Biology Advisor: Dr. Efrat Shema	Department of Computer Science and Applied Mathematics Advisor: Prof. Yaron Lipman	Department of Immunology and Regenerative Biology Advisor: Prof. Yosef Yarden
<b>Thesis:</b> Multiplexed single-molecule epigenetic analysis of plasma-isolated nucleosomes for cancer diagnostics	<b>Thesis:</b> Learning algorithms for shape analysis and shape synthesis	<b>Thesis:</b> Prostate cancer: Therapeutic targeting of the glucocorticoid receptor in TMPRSS2-ERG fusion positive tumors
		
<b>ד"ר דניאל פטוחין</b> <b>Dr. Daniel Petukhin</b>	<b>ד"ר אורי פופקו</b> <b>Dr. Ouri Poupko</b>	<b>ד"ר ערן פוס</b> <b>Dr. Eran Vos</b>
המחלקה לפיסיקה כימית וביולוגית בהדרכת פרופ' אורן טל	המחלקה למדעי המחשב ומתמטיקה שימושית בהדרכת פרופ' אהוד שפירא ד"ר טלמון נימרוד	המחלקה למדעי כדור הארץ וכוכבי הלכת בהדרכת פרופ' עודד אהרונסון
Department of Chemical and Biological Physics Advisor: Prof. Oren Tal	Department of Computer Science and Applied Mathematics Advisors: Prof. Ehud Shapiro Dr. Nimrod Talmon	Department of Earth and Planetary Sciences Advisor: Prof. Oded Aharonson
<b>Thesis:</b> Pure spin current and magnetism in atomic scale conductors	<b>Thesis:</b> Computational foundations of decentralized internet-enabled governance	<b>Thesis:</b> Late amazonian physical and chemical evolution of the martian ice reservoirs



		
ד"ר שרה רובין Dr. Sarah Rubin	ד"ר הריקרישנאן רג'נדרן Dr. Harikrishnan Rajendran	ד"ר אדיטיה קשירסגר Dr. Aditya Kshirsagar
המחלקה לגנטיקה מולקולרית בהדרכת פרופ' אלעזר זלצר	המחלקה לפיסיקה של מערכות מורכבות בהדרכת פרופ' עפר פינרמן	המחלקה לגנטיקה מולקולרית בהדרכת פרופ' אורלי ריינר
Department of Molecular Genetics Advisor: Prof. Elazar Zelzer	Department of Physics of Complex Systems Advisor: Prof. Ofer Feinerman	Department of Molecular Genetics Advisor: Prof. Orly Reiner
<b>Thesis:</b> Application of 3D MAPs pipeline identifies the morphological sequence chondrocytes undergo and the regulatory role of GDF5 in this process	<b>Thesis:</b> Dynamics of nest selection and construction by Camponotus ants	<b>Thesis:</b> LIS1 RNA binding orchestrates the mechanosensitive properties at the WNT-RISC axis.
		
ד"ר ליאור רויטמן Dr. Lior Roitman	ד"ר אורי רוטלר Dr. Ori Roethler	ד"ר גילי רוזנברג Dr. Gili Rosenberg
המחלקה לביולוגיה מולקולרית של התא בהדרכת פרופ' ולרי קריזנובסקי	המחלקה למדעי המוח בהדרכת ד"ר איבו שפיגל	המחלקה לאימונולוגיה ורגנרציה ביולוגית בהדרכת ד"ר רועי אברהם
Department of Molecular Cell Biology Advisor: Prof. Valery Krizhanovsky	Department of Brain Sciences Advisor: Dr. Ivo Spiegel	Department of Immunology and Regenerative Biology Advisor: Dr. Roi Avraham
<b>Thesis:</b> Senescent cells promote tumorigenesis and affect behavior	<b>Thesis:</b> The neurobiological function of experience-regulated genomic enhancers: From transcriptional mechanisms to control over synaptic plasticity and sensory processing	<b>Thesis:</b> Adaptation of Salmonella Typhimurium to macrophage metabolic reprogramming during host-pathogen interaction

		
ד"ר איריס דפנה צלניק Dr. Iris Daphne Zelnik	ד"ר נעמה ציוני Dr. Naama Zioni	ד"ר ענבל פרקש פסקל Dr. Inbal Farkash Paskal
המחלקה למדעים ביומולקולריים בהדרכת פרופ' טוני פוטרמן	המחלקה לביולוגיה מולקולרית של התא בהדרכת ד"ר לירן שלוש	המחלקה לאימונולוגיה מערכתית בהדרכת ד"ר רוני דהן
Department of Biomolecular Sciences Advisor: Prof. Tony Futerman	Department of Molecular Cell Biology Advisor: Dr. Liran Shlush	Department of Systems Immunology Advisor: Dr. Rony Dahan
<b>Thesis:</b> Insights into the structure of Ceramide Synthases (CerS)	<b>Thesis:</b> Inflammatory signals from fatty bone marrow supports the early stages of DNMT3a driven clonal hematopoiesis	<b>Thesis:</b> Role and structure of antibodies' Fc in cancer, vaccination, and infection with COVID-19
		
ד"ר מור קניגסבוכן Dr. Mor Kenigsbuch	ד"ר דן קליין Dr. Dan Klein	ד"ר שלי קלומפוס Dr. Shelley Klompus
המחלקה למדעי המוח בהדרכת פרופ' מיכל אייזנבך-שוורץ פרופ' עידו עמית	המחלקה לפיסיקה של חומר מעובה בהדרכת ד"ר קרן מיכאלי	המחלקה למדעי המחשב ומתמטיקה שימושית בהדרכת פרופ' ערן סגל
Department of Brain Sciences Advisors: Prof. Michal Schwartz Prof. Ido Amit	Department of Condensed Matter Physics Advisor: Dr. Karen Michaeli	Department of Computer Science and Applied Mathematics Advisor: Prof. Eran Segal
<b>Thesis:</b> Deciphering non-neuronal cells fate in Alzheimer's disease by next- generation transcriptomics	<b>Thesis:</b> Spin selective transport through chiral molecules and thermoelectric applications	<b>Thesis:</b> Unraveling the antibody-mediated immune response against gut microbiota

		
<b>ד"ר אביב שליט</b> <b>Dr. Aviv Shalit</b>	<b>ד"ר יונתן שלומי</b> <b>Dr. Jonathan Shlomi</b>	<b>ד"ר לירון שינטוך</b> <b>Dr. Liron Sheintuch</b>
המחלקה לפיסיקה של חלקיקים ואסטרופיסיקה בהדרכת פרופ' גלעד פרז	המחלקה לפיסיקה של חלקיקים ואסטרופיסיקה בהדרכת פרופ' עילם גרוס	המחלקה למדעי המוח בהדרכת פרופ' יניב זיו
Department of Particle Physics and Astrophysics Advisor: Prof. Gilad Perez	Department of Particle Physics and Astrophysics Advisor: Prof. Eilam Gross	Department of Brain Sciences Advisor: Prof. Yaniv Ziv
<b>Thesis:</b> Aspects of CP violation and ultra-light dark matter physics	<b>Thesis:</b> Constraining the Higgs coupling to charm quarks with the ATLAS detector at the LHC	<b>Thesis:</b> Emergent collective coding properties in hippocampal neuronal population activity
		
		<b>ד"ר אורן שץ</b> <b>Dr. Oren Shatz</b>
		המחלקה למדעים ביומולקולריים בהדרכת פרופ' זבולון אלעזר
		Department of Biomolecular Sciences Advisor: Prof. Zvulun Elazar
		<b>Thesis:</b> Balanced activity of Atg2 and Atg24 regulates opening of the autophagic isolation membrane rim

		
<b>ד"ר נאוה רזניק</b> <b>Dr. Nava Reznik</b>	<b>ד"ר אפרת רזניק</b> <b>Dr. Efrat Resnick</b>	<b>ד"ר יונתן עמנואל רון</b> <b>Dr. Jonathan Emanuel Ron</b>
המחלקה לביולוגיה מבנית וכימית בהדרכת פרופ' דבורה פאס	המחלקה לביולוגיה מבנית וכימית בהדרכת פרופ' ניר לונדון	המחלקה לפיסיקה כימית וביולוגית בהדרכת פרופ' ניר גוב
Department of Chemical and Structural Biology Advisor: Prof. Deborah Fass	Department of Chemical and Structural Biology Advisor: Prof. Nir London	Department of Chemical and Biological Physics Advisor: Prof. Nir Gov
<b>Thesis:</b> The role of mucins in copper homeostasis	<b>Thesis:</b> Novel covalent technologies for challenging protein targets	<b>Thesis:</b> One dimensional cell motility patterns
		
	<b>ד"ר מיכל שביט</b> <b>Dr. Michal Shavit</b>	<b>ד"ר גבריאל שביט</b> <b>Dr. Gabriel Javitt</b>
המחלקה לפיסיקה של מערכות מורכבות בהדרכת פרופ' גרגורי פלקוביץ	המחלקה לביולוגיה מבנית וכימית בהדרכת פרופ' דבורה פאס	המחלקה למדעי המוח בהדרכת פרופ' רוני פז
Department of Physics of Complex Systems Advisor: Prof. Gregory Falkovich	Department of Chemical and Structural Biology Advisor: Prof. Deborah Fass	Department of Brain Sciences Advisor: Prof. Rony Paz
<b>Thesis:</b> Vortices, waves and models of hydrodynamic type	<b>Thesis:</b> Disulfide bonding in protein complex assembly and in enzyme electron Transfer Reactions	<b>Thesis:</b> Valence-based learning in primate amygdala single-neurons

MSc  
Recipients

Dan Aizik  
Tomer Amit  
Leah Amit  
Michal Amrani  
Mark Aperstein  
Sivan Arad  
Michal Arieli  
Ron Asherov  
Noam Avidan  
Asad Awadallah  
Danielle Amit Awaskar  
Nofar Azulay  
Avshalom Badash  
Chaya Barbolin  
Shahar Barkai  
Gilad Ben Uziahu  
Eynav Ben Zikry  
Raz Ben-Uri  
Linor Bengal  
Elisheva Berent-Barzel  
Einav Berin  
Ori Berman  
Yacov Nir Breitstein  
Max Bringmann  
Dror Brook  
Itamar Burger  
Petro Busko  
Edaan Byle  
Daniel Chausovsky  
Benjamin Cohen  
Stav Dan  
Elad David  
Yalin Divinsky  
Svetlana Doroshev (Maslov)  
Ameera Egbaria  
Gal Elyasaf  
Dror Ettlinger  
Aliza Fedorenko

Oz Frank  
Nadav Frenkel  
Noga Frenkel  
Elad Gaver  
Chaim Giladi  
Atar Gilat  
Liad Glanz  
Tali Goldman  
Tom Gome  
Natan Gordon  
Sharon Grinstein  
Tal Hadad  
Tsofnat Hagin Metzger  
Sergey Hazanov  
Ella Herzog  
Idan Hochner  
Yahel Horowicz  
Ziv Huppert  
Shahaf Igelka Oren  
Neta Ilan  
Achinoam Isaacson  
Noya Itzhak  
Nir Joffe  
Dana Joffe  
Carine Joubran  
Yotam Kadish  
Rishir Kalepu  
Itamar Karbi  
Bar Karov  
David Kenigsberger  
Alisa Kinzel  
Edo Kiper  
Shai Kiriati  
Noy Klaider  
Jonathan Kogman  
Yasmin L Bohak  
Ben Labbel  
Maayan Lavie

Michal Levi  
Maya Levy Greenberg  
Michael Majer  
Tahel Malka  
Dvij Mankad  
Naama Meller  
Ilya Merkulov  
Orr Avi Meron  
Heloise Mimoun Weiss  
Vladimir Mindel  
Sameeha Mittwali  
Hanan Mordechai  
Roye More  
Natasha Morris Barth  
Ron Mosenzon  
Shiri Moshe  
Noa Anna Nairner  
Yohai Nirenberg  
Orin Noori Malka  
Tomer Novikov  
Shimon Nowik  
Yael Noy  
Chen Ochayon Tal  
Dolev Ofri-Amar  
Yuval Oren  
Noam Ottolenghi  
Amit Pando  
Keshav Pareek  
Lior Peer  
Asaf Petruschka  
Victoria Poltorak  
Alon Ephraim Rapaport  
Daria Raspopova  
Ofir Raz  
Yael Rich  
Oren Richter  
Omri Ron  
Noa Rosenthal

Omri Rosner  
Vered Roussio  
Mai Sadeh  
Maya May Salomon Hazut  
Tamir Scherf  
Shakked Schwartz  
Natasha Segal Ben Isti  
Dan Segev  
Shoshana Sernik  
Miriam Sernik  
Talia Shaler  
Bat-Or Shalom  
Neta Shaul  
Nofar Shemen  
Ben Shenhar  
Arie Shkolnikov  
Yael Shtechman  
Avner Shultzman  
Lior David Silberberg  
Yoel Silverman  
Yakim Silverman  
Ayshi Sindiani-Bsoul  
Tal Skverer  
Yahel Sofer Rimalt  
Yuval Wasserman  
Roni Stok  
Guy Tadmor  
Eyal Toutian  
Narek Tumanyan  
Elad Tzalik  
Daniella van der Boom  
Phillip Vershinin  
Yeari Vigder  
Guy Voscoboynik  
Nathan Wainstein  
Yuval Steinberg  
Tal Wasserman  
Navve Wasserman

Meir Weissman  
Tal Weizman  
Chen Weller  
Shira Werman  
Eli Windwer  
Yotam Wolf  
Sapir Wolff  
Jiewen Xiao  
Noa Yaffe  
Nadav Yahalom  
Omer Yaniv  
Paz Yedidim  
Sapir Yevdayev  
Ohad Yogev  
Itay Yona  
Shiri Zaltzman  
Michal Zamberg Elad  
Marlon Steven Zambrano Mila  
Irad Zehavi  
Arieh Zimmerman  
Jonathan Zin  
Leith Znaimer





שחף איגלקה אורן  
Shahaf Igelka Oren

המחלקה למדעי החיים  
בהדרכת פרופ' סטפן יונג

Department of Life Sciences  
Advisor: Prof. Steffen Jung

**Thesis:**  
Characterization of pathogenic Th17 cell differentiation following EAE induction and definition of the cellular source of IL-23



דרור אטלינגר  
Dror Ettlinger

המחלקה למדעי הכימיה  
בהדרכת פרופ' בריאן ברקוביץ

Department of Chemical Sciences  
Advisor: Prof. Brian Berkowitz

**Thesis:**  
Modeling and quantification of water flow and chemical transport in integrated catchment-groundwater systems



נופר אזולאי  
Nofar Azulay

המחלקה למדעי החיים  
בהדרכת ד"ר ליאת פני ינקלביץ קרן

Department of Life Sciences  
Advisor: Dr. Leeat Yankielowicz-Keren

**Thesis:**  
Establishment of computational pipeline for the analysis of MIBI-TOF images of acute graft versus host disease



אמירה אגבאריה  
Ameera Egbaria

המחלקה למדעי החיים  
בהדרכת פרופ' איגור אוליצקי

Department of Life Sciences  
Advisor: Prof. Igor Ulitsky

**Thesis:**  
The effect of different viral proteins on the nuclear export of long RNAs



דניאל עמית אבסקאר  
Danielle Amit Awaskar

המחלקה למדעי הכימיה  
בהדרכת פרופ' איגור לובומירסקי  
פרופ' מאיר להב

Department of Chemical Sciences  
Advisors: Prof. Igor Lubomirsky  
Prof. Meir Lahav

**Thesis:**  
Electro-freezing of super-cooled water within electrolytic cells



נעם אבידן  
Noam Avidan

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת ד"ר רתם ארנון פרידמן

Department of Mathematics and  
Computer Science  
Advisor: Dr. Rotem Arnon Friedman

**Thesis:**  
Partition and Glue: Conditional max-entropy lower bound for conditional min-entropy



נטע אילן  
Neta Ilan

המחלקה למדעי הפיסיקה  
בהדרכת ד"ר יובל רונן

Department of Physical Sciences  
Advisor: Dr. Yuval Ronen

**Thesis:**  
Shot noise measurements of quasi-particle charge in graphene-based quantum point contacts (QPC) devices, operating in the integer quantum Hall effect regime



דן אייזיק  
Dan Aizik

המחלקה למדעי החיים  
בהדרכת פרופ' סטפן יונג

Department of Life Sciences  
Advisor: Prof. Steffen Jung

**Thesis:**  
Investigating murine monocyte heterogeneity in homeostasis and following challenge



אחינועם איזקסון  
Achinoam Isaacson

המחלקה למדעי החיים  
בהדרכת ד"ר רות שרץ-שובל

Department of Life Sciences  
Advisor: Dr. Ruth Scherz-Shouval

**Thesis:**  
RARRES2 is a novel cancer-associated fibroblast protein that affects macrophages in breast cancer



יובל אורן  
Yuval Oren

המחלקה למדעי החיים  
בהדרכת פרופ' עמי נבון

Department of Life Sciences  
Advisor: Prof. Ami Navon

**Thesis:**  
Targeting LC3 by small molecules; From virtual screen to cell-based validation



נועם אוטולנגי  
Noam Ottolenghi

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' דוד טנור

Department of Physical Sciences  
Advisor: Prof. David Tannor

**Thesis:**  
Complex trajectory simulation of high harmonic generation: Reconstruction of the Coulomb ground state



חן אוחיון טל  
Chen Ochayon Tal

המחלקה למדעי החיים  
בהדרכת פרופ' אסף אהרוני

Department of Life Sciences  
Advisor: Prof. Asaph Aharoni

**Thesis:**  
Deciphering the role of acylsucrose acyltransferase 4 and his paralog genes in root exudation from Solanum lycopersicum roots and the impact on microbial community dynamics



איתמר בורגר  
Itamar Burger

המחלקה למדעי החיים  
בהדרכת ד"ר איבו שפיגל

Department of Life Sciences  
Advisor: Dr. Ivo Spiegel

**Thesis:**  
Dissecting how experience-induced cell-type specific transcriptional programs regulate specific synaptic inputs



פטרו בוסקו  
Petro Busko

המחלקה למדעי החיים  
בהדרכת ד"ר אורי אבינעם

Department of Life Sciences  
Advisor: Dr. Ori Avinoam

**Thesis:**  
The role of CD9-p1 in extracellular vesicles biology



יסמין ל בוהק  
Yasmin L Bohak

המחלקה למדעי הכימיה  
בהדרכת פרופ' דן יקיר

Department of Chemical Sciences  
Advisor: Prof. Dan Yakir

**Thesis:**  
Addressing caveats towards the application of carbonyl sulfide as a tracer for photosynthetic fluxes



סיון ארד  
Sivan Arad

המחלקה למדעי החיים  
בהדרכת פרופ' מאיה שולדינר

Department of Life Sciences  
Advisor: Prof. Maya Schuldiner

**Thesis:**  
Searching for novel localization factors of peripheral proteins to the endoplasmic reticulum in yeast



מארק אפרשטיין  
Mark Aperstein

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' איתן דומאני  
פרופ' יוסף ירדן

Department of Physical Sciences  
Advisors: Prof. Eytan Domany  
Prof. Yosef Yarden

**Thesis:**  
Modelling Infectious Disease spread and optimizing hospital resource allocation with two-regimes compartment model



גל אליסף  
Gal Elyasaf

המחלקה למדעי החיים  
בהדרכת פרופ' אילן למפל

Department of Life Sciences  
Advisor: Prof. Ilan Lampl

**Thesis:**  
A novel theoretical framework for simultaneous measurement of excitatory and inhibitory conductances



גלעד בן עוזיהו  
Gilad Ben Uziahu

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' אוריאל פייגה

Department of Mathematics and Computer Science  
Advisor: Prof. Uriel Feige

**Thesis:**  
fair allocation of indivisible goods to submodular agents



עינב בן זכרי  
Eynav Ben Zikry

המחלקה למדעי הכימיה  
בהדרכת פרופ' מילקו אריק ואן דר בום  
ד"ר מיכל להב

Department of Chemical Sciences  
Advisors: Prof. Milko E. van der Boom  
Dr. Michal Lahav

**Thesis:**  
Morphological anomalies: Dissolution of crystal cores to generate empty ellipses



עידן בייל  
Edaan Byle

המחלקה למדעי הכימיה  
בהדרכת פרופ' אליזבטה בוארטו

Department of Chemical Sciences  
Advisor: Prof. Elisabetta Boaretto

**Thesis:**  
Pollen fossil taxa sorting by flow cytometry for accurate radiocarbon dating and paleoenvironmental reconstruction



אבשלום בדש  
Avshalom Badash

המחלקה למדעי הפיסיקה  
בהדרכת ד"ר דורון קושניר

Department of Physical Sciences  
Advisor: Dr. Doron Kushnir

**Thesis:**  
Advanced methods to reduce memory requirements in Type Ia supernovae simulations.



רון אשרוב  
Ron Asherov

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' אירית דינור

Department of Mathematics and Computer Science  
Advisor: Prof. Irit Dinur

**Thesis:**  
Bipartite unique neighbour expanders via Ramanujan graphs



מיכל אריאלי  
Michal Arieli

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' אפרים אפרתי

Department of Physical Sciences  
Advisor: Prof. Efi Efrati

**Thesis:**  
Tessellations of an infinite plane by frustrated polygons



אלישבע ברנט - ברזל  
Elisheva Berent-Barzel

המחלקה למדעי החיים  
בהדרכת פרופ' אלעזר זלצר

Department of Life Sciences  
Advisor: Prof. Elazar Zelzer

**Thesis:**  
Regulation of the development of tendon-to-bone attachment unit by mechanical signals at single-cell resolution



אורי ברמן  
Ori Berman

המחלקה למדעי הכימיה  
בהדרכת ד"ר מורן בן עמי

Department of Chemical Sciences  
Advisor: Dr. Moran Shalev-Benami

**Thesis:**  
Exploration and design of bi-stable rhodopsins as optogenetic tools



מקס ברינגמן  
Max Bringmann

המחלקה למדעי החיים  
בהדרכת פרופ' רוני פז

Department of Life Sciences  
Advisor: Prof. Rony Paz

**Thesis:**  
The influence of sleep on the formation of memory and generalization



חיה ברבולין  
Chaya Barbolin

המחלקה למדעי החיים  
בהדרכת ד"ר איתי תירוש

Department of Life Sciences  
Advisor: Dr. Itay Tirosh

**Thesis:**  
The transcriptional patterns of intrer-tumor heterogeneity across a thousand tumors



לינור בנגל  
Linor Bengal

המחלקה למדעי החיים  
בהדרכת פרופ' אלון חן

Department of Life Sciences  
Advisor: Prof. Alon Chen

**Thesis:**  
Ankrd55 as a novel regulator of the central stress response: Anatomical, expression, behavioral and metabolic characterization



רז בן-אורי  
Raz Ben-Uri

המחלקה למדעי החיים  
בהדרכת ד"ר ליאת פני ינקלביץ קרן

Department of Life Sciences  
Advisor: Dr. Leeat Yankielowicz-Keren

**Thesis:**  
Escalating high-dimensional imaging using channel multiplexing and deep learning



אלעד גבר  
Elad Gaver

המחלקה למדעי הכימיה  
בהדרכת פרופ' מילקו אריק ואן דר בום  
ד"ר מיכל להב

Department of Chemical Sciences  
Advisors: Prof. Milko E. van der Boom  
Dr. Michal Lahav

**Thesis:**  
Self-assembly of superstructures in imidazole-based metal-organic frameworks



קארין ג'ובראן  
Carine Joubran

המחלקה למדעי החיים  
בהדרכת פרופ' יעקב חנא

Department of Life Sciences  
Advisor: Prof. Jacob (Yaqub) Hanna

**Thesis:**  
Functional characterization of novel naive pluripotency protein Nanog neighbor



שחר ברקאי  
Shahar Barkai

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' עדי שטרן

Department of Physical Sciences  
Advisor: Prof. Ady Stern

**Thesis:**  
Gapless superconductivity in proximitized graphene



עינב ברין  
Einav Berin

המחלקה למדעי הפיסיקה  
בהדרכת ד"ר הילל אהרוני

Department of Physical Sciences  
Advisor: Dr. Hillel Aharoni

**Thesis:**  
A local extension approach to the inverse design problem for smart fabrics



יעקב ניר בריטשטיין  
Yacov Nir Breitstein

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' עופר אהרוני

Department of Physical Sciences  
Advisor: Prof. Ofer Aharony

**Thesis:**  
Tests of the charge convexity conjecture in fermionic conformal field theories



דרור ברוק  
Dror Brook

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' עמוס תנאי

Department of Mathematics and Computer Science  
Advisor: Prof. Amos Tanay

**Thesis:**  
Estimating and removing ambient noise in scRNA-seq data using a metacell-based model





סבטלנה דורושב (מסלוב)  
Svetlana Doroshev (Maslov)

המחלקה למדעי החיים  
בהדרכת פרופ' אורלי ריינר

Department of Life Sciences  
Advisor: Prof. Orly Reiner

**Thesis:**  
LIS1 RNA-binding orchestrates the pluripotency of embryonic stem cells in AGO2-dependent and independent ways



אלעד דוד  
Elad David

המחלקה למדעי הכימיה  
בהדרכת פרופ' עודד אהרונסון

Department of Chemical Sciences  
Advisor: Prof. Oded Aharonson

**Thesis:**  
The effect of ground ice redistribution on the Martian paleo-CO2 cycle



שרון גרינשטין  
Sharon Grinstein

המחלקה למדעי החיים  
בהדרכת פרופ' שרגא שוורץ

Department of Life Sciences  
Advisor: Prof. Schraga Schwartz

**Thesis:**  
Systemic redirection of RNA modification enzymes towards novel targets



נתן גורדון  
Natan Gordon

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' ברק דיין

Department of Physical Sciences  
Advisor: Prof. Barak Dayan

**Thesis:**  
Experimental study of optical interaction with single atoms close to SiO2 microresonators surface



תום גומא  
Tom Gome

המחלקה למדעי החיים  
בהדרכת פרופ' עמוס תנאי  
פרופ' יעקב אברמסון

Department of Life Sciences  
Advisors: Prof. Amos Tanay  
Prof. Jakub Abramson

**Thesis:**  
Promiscuous, mimetic and Aire-dependent gene regulation in medullary epithelial thymus cells



טלי גולדמן  
Tali Goldman

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' רונן אלדן

Department of Mathematics and Computer Science  
Advisor: Prof. Ronen Eldan

**Thesis:**  
A spectral algorithm for deterministic low rank matrix completion



עידן הוכנר  
Idan Hochner

המחלקה למדעי הכימיה  
בהדרכת ד"ר זיו מאיר

Department of Chemical Sciences  
Advisor: Dr. Ziv Meir

**Thesis:**  
The molecular beam machine: A cold molecular ion generator



סתיו דן  
Stav Dan

המחלקה למדעי החיים  
בהדרכת פרופ' שלו איצקוביץ

Department of Life Sciences  
Advisor: Prof. Shalev Itzkovitz

**Thesis:**  
Distal fecal wash host transcriptomics identifies inflammation throughout the colon and terminal ileum



ילין דיוינסקי  
Yalin Divinsky

המחלקה למדעי החיים  
בהדרכת פרופ' אלדד צחור

Department of Life Sciences  
Advisor: Prof. Eldad Tzahor

**Thesis:**  
Investigation of TIMP1 as an autocrine growth factor of myofibroblasts in cardiac cold fibrosis



חיים גלעדי  
Chaim Giladi

המחלקה למדעי החיים  
בהדרכת פרופ' יואב סואן

Department of Life Sciences  
Advisor: Prof. Yoav Soen

**Thesis:**  
Analysis of the genome-wide emergent changes occurring through adaptation to de-novo stress within a lifetime



ליעד גלנץ  
Liad Glanz

המחלקה למדעי החיים  
בהדרכת פרופ' יעקב אברמסון

Department of Life Sciences  
Advisor: Prof. Jakub Abramson

**Thesis:**  
The role of ameloblast-specific autoantibodies in dental pathologies of APS-1 and Celiac patients



עטר גילת  
Atar Gilat

המחלקה למדעי הכימיה  
בהדרכת פרופ' עמנואל לוי

Department of Chemical Sciences  
Advisor: Prof. Emmanuel Levy

**Thesis:**  
Affinity and specificity in interactions of intrinsically-disordered regions driving phase separation



יערי ויגדר  
Yeri Vigder

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' אורי בדר

Department of Mathematics and  
Computer Science  
Advisor: Prof. Uri Bader

**Thesis:**  
Structure theorem for mu-Stationary G  
-spaces



גיא ווסקובויניק  
Guy Voscoboynik

המחלקה למדעי הכימיה  
בהדרכת ד"ר סיון רפאלי-אברמסון

Department of Chemical Sciences  
Advisor: Dr. Sivan Refaely-Abramson

**Thesis:**  
Fermi-polaron description of excitonic  
scattering processes in layered systems  
from first principles



ספיר וולף  
Sapir Wolff

המחלקה למדעי החיים  
בהדרכת פרופ' אסף טל

Department of Life Sciences  
Advisor: Prof. Assaf Tal

**Thesis:**  
Using 7T 1H-MRS for assessing the  
relation of metabolites' concentrations  
in specific brain regions to memory  
performance of healthy adults



אלה הרצוג  
Ella Herzog

המחלקה למדעי החיים  
בהדרכת ד"ר רוני דהן

Department of Life Sciences  
Advisor: Dr. Rony Dahan

**Thesis:**  
Immune profiling of the tumor  
microenvironment for optimizing Treg-  
targeted antibody-based immunotherapy



יהל הורוביץ  
Yahel Horowicz

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' עופר פירסטנברג

Department of Physical Sciences  
Advisor: Prof. Ofer Firstenberg

**Thesis:**  
Critical dynamics and phase transition of  
a strongly interacting warm spin-gas



זיו הופרט  
Ziv Huppert

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' עופר זיתוני

Department of Mathematics and  
Computer Science  
Advisor: Prof. Ofer Zeitouni

**Thesis:**  
Large deviations principle for the  
empirical measure of roots of Kac  
polynomials



טל ויצמן  
Tal Weizman

המחלקה למדעי החיים  
בהדרכת פרופ' יפעת מרבלי

Department of Life Sciences  
Advisor: Prof. Yifat Merbl

**Thesis:**  
Deciphering patient-specific drug  
response based on Post Translational  
Modifications (PTMs)



מאיר ויסמן  
Meir Weissman

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' עופר אהרוני

Department of Physical Sciences  
Advisor: Prof. Ofer Aharony

**Thesis:**  
The superconformal index of N=4 SYM at  
large N for rational sigma / tau



אלי וינדבר  
Eli Windwer

המחלקה למדעי הכימיה  
בהדרכת פרופ' ינון רודיך

Department of Chemical Sciences  
Advisor: Prof. Yinon Rudich

**Thesis:**  
Characterization of novel optical  
measuring instruments for in-situ  
measurement of aerosols



יותם וולף  
Yotam Wolf

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' בינגהיי יאן

Department of Physical Sciences  
Advisor: Prof. Binghai Yan

**Thesis:**  
Unusual spin polarization in the chirality  
induced spin selectivity and electron para-  
hydrodynamics in metals



נתן ווינשטיין  
Nathan Wainstein

המחלקה למדעי הכימיה  
בהדרכת פרופ' איתי הלוי

Department of Chemical Sciences  
Advisor: Prof. Itay Halevy

**Thesis:**  
An automated search for calcium sulfate  
and calcium sulfite minerals on Mars:  
Testing the role of SO2 on early Mars




דניאלה ואן דר באום  
Daniella van der Boom

המחלקה למדעי הפיסיקה  
בהדרכת ד"ר דורון קושניר

Department of Physical Sciences  
Advisor: Dr. Doron Kushnir

**Thesis:**  
A simple model to estimate the  
radioactive nickel production in the  
collapse of a massive star due to pair-  
Instability




**שירי זלצמן**  
**Shiri Zaltzman**

המחלקה למדעי החיים  
בהדרכת פרופ' עפר יזהר

Department of Life Sciences  
Advisor: Prof. Ofer Yizhar

**Thesis:**  
The effects of post-weaning social isolation on physical and vocal pro-social behavior in adult mice




**ליאור דוד זילברברג**  
**Lior David Silberberg**

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' מריה גורליק

Department of Mathematics and Computer Science  
Advisor: Prof. Maria Gorelik

**Thesis:**  
A queer Kac-Moody construction




**עירד זהבי**  
**Irad Zehavi**

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' עדי שמיר

Department of Mathematics and Computer Science  
Advisor: Prof. Adi Shamir

**Thesis:**  
Installing identity-based backdoors in DNNs using simple weight manipulations




**יובל וסרמן**  
**Yuval Wasserman**

המחלקה למדעי החיים  
בהדרכת פרופ' מיכאל צודיקס  
פרופ' נחום אולנובסקי

Department of Life Sciences  
Advisors: Prof. Michail Tsodyks  
Prof. Nachum Ulanovsky

**Thesis:**  
Dendritic model of binding




**טל וסרמן**  
**Tal Wasserman**

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' אלי וקסמן

Department of Physical Sciences  
Advisor: Prof. Eli Waxman

**Thesis:**  
Supernova wind breakout



**חן ולר**  
**Chen Weller**

המחלקה למדעי החיים  
בהדרכת פרופ' ירדנה סמואלס

Department of Life Sciences  
Advisor: Prof. Yardena Samuels

**Thesis:**  
Impaired translation fidelity induces aberrant peptide presentation in melanoma



**לית' זנאימר**  
**Leith Znaimer**

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' אלי זלדוב

Department of Physical Sciences  
Advisor: Prof. Eli Zeldov

**Thesis:**  
Shot noise in bilayer graphene: Fano factor measurement in the absence of magnetic field



**מרלון סטיבן זמברנו מילה**  
**Marlon Steven Zambrano Mila**

המחלקה למדעי החיים  
בהדרכת פרופ' שרגא שוורץ

Department of Life Sciences  
Advisor: Prof. Schraga Schwartz

**Thesis:**  
Dissecting the basis for differential substrate specificity of ADAR1 and ADAR2




**מיכל זמברג אלעד**  
**Michal Zamberg Elad**

המחלקה למדעי החיים  
בהדרכת ד"ר מיכל רמות

Department of Life Sciences  
Advisor: Dr. Michal Ramot

**Thesis:**  
Pilot study searching for dedicated social cognition network




**פיליפ ורשינין**  
**Phillip Vershinin**

המחלקה למדעי הכימיה  
בהדרכת פרופ' בריאן ברקוביץ  
ד"ר דרור ישי

Department of Chemical Sciences  
Advisors: Prof. Brian Berkowitz  
Dr. Ishai Dror

**Thesis:**  
Electrochemical degradation of fluorinated organic compounds in aqueous solutions




**שירה ורמן**  
**Shira Werman**

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' יונינה אלדר

Department of Mathematics and Computer Science  
Advisor: Prof. Yonina Eldar

**Thesis:**  
3D ultrasound super resolution



**נווה וסרמן**  
**Navve Wasserman**

המחלקה למדעי החיים  
בהדרכת פרופ' מיכל אירני

Department of Life Sciences  
Advisor: Prof. Michal Irani

**Thesis:**  
Functional brain-to-brain transformations with no shared data





אוהד יוגב  
Ohad Yogev

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' עופר פירסטנברג

Department of Physical Sciences  
Advisor: Prof. Ofer Firstenberg

**Thesis:**  
Photon synchronization using atomic quantum memory



נדב יהלום  
Nadav Yahalom

המחלקה למדעי הכימיה  
בהדרכת פרופ' בוריס ריבצ'נסקי

Department of Chemical Sciences  
Advisor: Prof. Boris Rybtchinski

**Thesis:**  
Durable lithium-sulfur batteries based on composite carbon nanotube cathode



פז ידידים  
Paz Yedidim

המחלקה למדעי החיים  
בהדרכת פרופ' אוהד אחישר

Department of Life Sciences  
Advisor: Prof. Ehud Ahissar

**Thesis:**  
Audio-visual context dependence of sensory-motor closed-loop dynamics



סרגיי חזנוב  
Sergey Hazanov

המחלקה למדעי הפיסיקה  
בהדרכת ד"ר סרג' רוזנבלום

Department of Physical Sciences  
Advisor: Dr. Serge Rosenblum

**Thesis:**  
Nonlinear oscillators for quantum information processing



טל חדד  
Tal Hadad

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' אירית דינור

Department of Mathematics and Computer Science  
Advisor: Prof. Irit Dinur

**Thesis:**  
Expander codes yields instances of XOR problems that are hard for SoS



צופנת חגין מצר  
Tsofnat Hagin Metzger

המחלקה להוראת המדעים  
בהדרכת ד"ר אלון פינטו

Department of Science Teaching  
Advisor: Dr. Alon Pinto

**Thesis:**  
How to serve mathematics: A case study of the teaching in a graduate geometry course for practicing teachers



עומר יניב  
Omer Yaniv

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' ורד רוסקידר

Department of Mathematics and Computer Science  
Advisor: Prof. Vered Rom-Kedar

**Thesis:**  
Quantum pseudo-integrable Hamiltonian impact systems



ניר יופה  
Nir Joffe

המחלקה למדעי החיים  
בהדרכת פרופ' אסף ורדי

Department of Life Sciences  
Advisor: Prof. Assaf Vardi

**Thesis:**  
Cell to cell heterogeneity drives host virus coexistence between the Emiliania huxleyi and its specific virus



איתי יונה  
Itay Yona

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' נחום אולנובסקי

Department of Mathematics and Computer Science  
Advisor: Prof. Nachum Ulanovsky

**Thesis:**  
Analysis of multi-dimensional neuronal tuning curves in bat hippocampus in a complex environment



ספיר יבדייב  
Sapir Yevdayev

המחלקה למדעי הפיסיקה  
בהדרכת ד"ר הילל אהרוני

Department of Physical Sciences  
Advisor: Dr. Hillel Aharoni

**Thesis:**  
Wrinkling pattern of a thin elastic sheet- the constitutive relation and the influence of the substrate



נרק טומניאן  
Narek Tumanyan

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת ד"ר טלי דקל

Department of Mathematics and Computer Science  
Advisor: Dr. Tali Dekel

**Thesis:**  
Understanding and harnessing foundation models















אייל טוטיאן  
Eyal Toutian


המחלקה למדעי הכימיה  
בהדרכת פרופ' אורן טל

Department of Chemical Sciences  
Advisor: Prof. Oren Tal

**Thesis:**  
Pure spin current transport in atomic size junctions

		
<b>מיכאל מאיר</b> <b>Michael Majer</b>	<b>בן לייבל</b> <b>Ben Labbel</b>	<b>מיה לוי גרינברג</b> <b>Maya Levy Greenberg</b>
המחלקה למדעי הפיסיקה בהדרכת פרופ' ישראל בר יוסף	המחלקה למדעי החיים בהדרכת פרופ' אסף ורדי	המחלקה למדעי הכימיה בהדרכת פרופ' ארנסטו יוסלביץ
Department of Physical Sciences Advisor: Prof. Israel Bar-Joseph	Department of Life Sciences Advisor: Prof. Assaf Vardi	Department of Chemical Sciences Advisor: Prof. Ernesto Joselevich
<b>Thesis:</b> Inter-layer excitons resistive traps in 2D heterostructure	<b>Thesis:</b> Studying the unknown mechanisms of resistance to viral infection in marine algae	<b>Thesis:</b> “Chiral epitaxy”: Enantioselective growth of chiral semiconductor nanostructures on chiral and asymmetric surfaces
		
<b>נטשה פיי מוריס ברט</b> <b>Natasha Morris Barth</b>	<b>רועי מור</b> <b>Roye More</b>	<b>רון מוסנזון</b> <b>Ron Mosenzon</b>
המחלקה למדעי החיים בהדרכת ד"ר רוני דהן	המחלקה למדעי החיים בהדרכת ד"ר יונתן שטלצר	המחלקה למתמטיקה ומדעי המחשב בהדרכת פרופ' רוברט קראוטגמר
Department of Life Sciences Advisor: Dr. Rony Dahan	Department of Life Sciences Advisor: Dr. Yonatan Stelzer	Department of Mathematics and Computer Science Advisor: Prof. Robert Krauthgamer
<b>Thesis:</b> Elucidating the role of Dendritic Cells during GITR-targeted antibody immunotherapy	<b>Thesis:</b> Studying mechanisms regulating histone exchange In-Vitro and In-Vivo	<b>Thesis:</b> Exact flow sparsification requires unbounded size

		
<b>נויה יצחק</b> <b>Noya Itzhak</b>	<b>נועה יפה</b> <b>Noa Yaffe</b>	<b>דנה יפה</b> <b>Dana Joffe</b>
המחלקה למדעי הכימיה בהדרכת פרופ' ארנסטו יוסלביץ	המחלקה למדעי הפיסיקה בהדרכת פרופ' נירית דודוביץ	המחלקה למתמטיקה ומדעי המחשב בהדרכת פרופ' מיכל אירני
Department of Chemical Sciences Advisor: Prof. Ernesto Joselevich	Department of Physical Sciences Advisor: Prof. Nirit Dudovich	Department of Mathematics and Computer Science Advisor: Prof. Michal Irani
<b>Thesis:</b> Guided growth of nanostructures by van der Waals epitaxy on 2D materials	<b>Thesis:</b> Attosecond transient interferometry	<b>Thesis:</b> What does the scene look like from a scene point? revisited with deep learning
		
<b>מיכל לוי</b> <b>Michal Levi</b>	<b>מעיין לביא</b> <b>Maayan Lavie</b>	<b>בנימין כהן</b> <b>Benjamin Cohen</b>
המחלקה למדעי החיים בהדרכת פרופ' זבולון אלעזר	המחלקה למדעי הכימיה בהדרכת פרופ' ניר לונדון	המחלקה למדעי החיים בהדרכת פרופ' יפעת מרבל
Department of Life Sciences Advisor: Prof. Zvulun Elazar	Department of Chemical Sciences Advisor: Prof. Nir London	Department of Life Sciences Advisor: Prof. Yifat Merbl
<b>Thesis:</b> The involvement of ATG8 family members in endocytosis	<b>Thesis:</b> High-throughput methacrylamide libraries synthesis for ligands discovery	<b>Thesis:</b> Uncovering regulatory mechanisms of metabolic-driven changes in proteasomal degradation




**שירי משה**  
**Shiri Moshe**

המחלקה למדעי החיים  
בהדרכת פרופ' דוד הראל

Department of Life Sciences  
Advisor: Prof. David Harel

**Thesis:**  
Prosodic style transfer




**איליה מרקולוב**  
**Ilya Merkulov**

המחלקה למדעי הפיסיקה  
בהדרכת ד"ר רתם ארנון פרידמן

Department of Physical Sciences  
Advisor: Dr. Rotem Arnon Friedman

**Thesis:**  
Entropy accumulation under post-quantum cryptographic assumptions




**חנן מרדכי**  
**Hanan Mordechai**

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' עמוס תנאי

Department of Mathematics and Computer Science  
Advisor: Prof. Amos Tanay

**Thesis:**  
Locally parametric manifold models for single cell RNA-seq




**אור אבי מירון**  
**Orr Avi Meron**

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' עופר פירסטנברג

Department of Physical Sciences  
Advisor: Prof. Ofer Firstenberg

**Thesis:**  
Two-photon spectroscopy of alkali spins using unresolved optical lines




**ולדימיר מינדל**  
**Vladimir Mindel**

המחלקה למדעי החיים  
בהדרכת פרופ' נעמה ברקאי

Department of Life Sciences  
Advisor: Prof. Naama Barkai

**Thesis:**  
From binding to expression: Exploring specificity layers of gene transcription using minimal transcription factors




**אלואיז מימון וייס**  
**Heloise Mimoun Weiss**

המחלקה למדעי החיים  
בהדרכת ד"ר מיכל רמות

Department of Life Sciences  
Advisor: Dr. Michal Ramot

**Thesis:**  
Sleep learning using olfactory biofeedback to reduce sleep bruxism




**שמעון נוביק**  
**Shimon Nowik**

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' עופר אהרוני

Department of Physical Sciences  
Advisor: Prof. Ofer Aharony

**Thesis:**  
The superconformal index of the SU(2) N=4 supersymmetric Yang-Mills theory




**נועה אנה נאירנר**  
**Noa Anna Nairner**

המחלקה למדעי החיים  
בהדרכת ד"ר מורן בן עמי

Department of Life Sciences  
Advisor: Dr. Moran Shalev-Benami

**Thesis:**  
Structural characterization of the MC4 receptor's inactive and desensitized states




**סמיחה מתוולי**  
**Sameeha Mittwali**

המחלקה למדעי החיים  
בהדרכת ד"ר ליאת פני ינקלביץ קרן

Department of Life Sciences  
Advisor: Dr. Leeat Yankielowicz-Keren

**Thesis:**  
Revealing the structure of the tumor-immune microenvironment in melanoma by Multiplexed imaging




**דויג' מנקאד**  
**Dvij Mankad**

המחלקה למדעי הפיסיקה  
בהדרכת ד"ר נועם טל הוד

Department of Physical Sciences  
Advisor: Dr. Noam Tal Hod

**Thesis:**  
Test of lepton flavor universality with the first measurement of R(K\*) using the ATLAS experiment




**נעמה מלר**  
**Naama Meller**

המחלקה למדעי החיים  
בהדרכת ד"ר יונתן שטלצר

Department of Life Sciences  
Advisor: Dr. Yonatan Stelzer

**Thesis:**  
Elucidating the mechanism maintaining parent-specific DNA methylation imprints and establishment of rAAV system for the creation of transgenic animals



**תהל מלכה**  
**Tahel Malka**

המחלקה למדעי הכימיה  
בהדרכת פרופ' איגור לובומירסקי

Department of Chemical Sciences  
Advisor: Prof. Igor Lubomirsky

**Thesis:**  
The investigation of low temperature proton conduction in rare- earth-hydroxides.





יואל סילורמן  
Yoel Silverman

המחלקה למדעי הכימיה  
בהדרכת פרופ' יואב סואן

Department of Chemical Sciences  
Advisor: Prof. Yoav Soen

**Thesis:**  
Developing building blocks of a setup for investigating the feasibility of artificial multicellular organization of complex bacterial populations



יקים סילברמן  
Yakim Silverman

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' יצחק גלנדר

Department of Mathematics and Computer Science  
Advisor: Prof. Tsachik Gelerder

**Thesis:**  
In a state of liminality



רוני סטוק  
Roni Stok

המחלקה למדעי החיים  
בהדרכת פרופ' עמוס תנאי  
ד"ר יונתן שטלצר

Department of Life Sciences  
Advisors: Prof. Amos Tanay  
Dr. Yonatan Stelzer

**Thesis:**  
De-novo DNA methylation and mouse gastrulation: Intracellular and intercellular functions



אורין נורי מלכה  
Orin Noori Malka

המחלקה למדעי החיים  
בהדרכת ד"ר ריטה שמידט

Department of Life Sciences  
Advisor: Dr. Rita Schmidt

**Thesis:**  
Exploring the time responses in the visual circuit using high temporal resolution at ultra-high magnetic field, 7T



יעל נוי  
Yael Noy

המחלקה למדעי הכימיה  
בהדרכת פרופ' נטע רגב-רוצקי

Department of Chemical Sciences  
Advisor: Prof. Neta Regev-Rudzki

**Thesis:**  
Communication crosstalk between the host CXCL10 chemokine and the malaria parasite, Plasmodium falciparum



תומר נוביקוב  
Tomer Novikov

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' בועז בנימין קלרטג

Department of Mathematics and Computer Science  
Advisor: Prof. Boaz Binyamin Klartag

**Thesis:**  
Sign symmetries using a topological approach to Dvoretzky's theorem



טל סקוורר  
Tal Skverer

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' עודד גולדרייך  
פרופ' גיא רוטבלום

Department of Mathematics and Computer Science  
Advisor: Prof. Oded Goldreich  
Prof. Guy Rothblum

**Thesis:**  
on interactive proofs of proximity with prover-oblivious queries



מאיה מאי סלומון חזות  
Maya May Salomon Hazut

המחלקה למדעי החיים  
בהדרכת ד"ר מיכל רמות  
פרופ' יניב זיו

Department of Life Sciences  
Advisors: Dr. Michal Ramot  
Prof. Yaniv Ziv

**Thesis:**  
Benefits of multi-echo acquisition for longitudinal memory representation studies with ultra-high field 7T fMRI



עאישיה סינדיאני-בסול  
Ayshi Sindiani-Bsoul

המחלקה להוראת המדעים  
בהדרכת פרופ' רון בלונדר

Department of Science Teaching  
Advisor: Prof. Ron Blonder

**Thesis:**  
Attitudes and behavior of science teachers and students regarding the SDGs: An intervention study



יהל סופר רימלט  
Yahel Sofer Rimalt

המחלקה למדעי הפיסיקה  
בהדרכת ד"ר שגיא בן-עמי

Department of Physical Sciences  
Advisor: Dr. Sagi Ben-Ami

**Thesis:**  
HighSpec - a high spectral resolution spectrograph for the multi aperture spectroscopic telescope



נטשה סגל בן-אישטי  
Natasha Segal Ben Isti

המחלקה להוראת המדעים  
בהדרכת פרופ' דוד פורטס

Department of Science Teaching  
Advisor: Prof. David Fortus

**Thesis:**  
Teaching science through the Grand Challenges and its impact on students



יוחאי נירנברג  
Yohai Nirenberg

המחלקה למדעי החיים  
בהדרכת פרופ' עפר פינרמן

Department of Life Sciences  
Advisor: Prof. Ofer Feinerman

**Thesis:**  
Spatial flow of nutrients in Ant colonies



קשלב פאריק  
Keshav Pareek

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' ארז ברג  
פרופ' יובל אורג

Department of Physical Sciences  
Advisors: Prof. Erez Berg  
Prof. Yuval Oreg

**Thesis:**  
Entropy and soft modes in twisted bilayer graphene



ליאור פאר  
Lior Peer

המחלקה למדעי החיים  
בהדרכת פרופ' מאיה שולדינר

Department of Life Sciences  
Advisor: Prof. Maya Schuldiner

**Thesis:**  
Peroxi-ome – a near-complete compendium of yeast peroxisomal proteins



דולב עפרי-אמר  
Dolev Ofri-Amar

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת ד"ר טלי דקל

Department of Mathematics and Computer Science  
Advisor: Dr. Tali Dekel

**Thesis:**  
Neural congealing: Aligning images to a joint semantic atlas



אסעד עוודאללה  
Asad Awadallah

המחלקה למדעי הכימיה  
בהדרכת ד"ר עמית פינקלר

Department of Chemical Sciences  
Advisor: Dr. Amit Finkler

**Thesis:**  
Characterization of spin-strain coupling in nanodiamonds



שושנה סרניק  
Shoshana Sernik

המחלקה למדעי החיים  
בהדרכת פרופ' אלי ארמה

Department of Life Sciences  
Advisor: Prof. Eli Arama

**Thesis:**  
The role of the effector caspases in irradiation induced cell migration (ICM)



מרים רחל סרניק  
Miriam Sernik

המחלקה למדעי החיים  
בהדרכת פרופ' משה אורן

Department of Life Sciences  
Advisor: Prof. Moshe Oren

**Thesis:**  
Exploring the effect of p53 on the crosstalk between adipocytes and breast cancer



אסף פטרושקה  
Asaf Petruschka

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' מרב ברכה פרטר

Department of Mathematics and Computer Science  
Advisor: Prof. Merav Parter

**Thesis:**  
Distributed algorithms and labeling schemes for small vertex cuts



ויקטוריה פולטורק  
Victoria Poltorak

המחלקה למדעי הכימיה  
בהדרכת פרופ' אסף אהרוני  
ד"ר דוד זאבי

Department of Chemical Sciences  
Advisors: Prof. Asaph Aharoni  
Dr. David Zeevi

**Thesis:**  
Developing a new computational approach for class classification of plant metabolites using machine learning



עליזה פדורנקו  
Aliza Fedorenko

המחלקה למדעי החיים  
בהדרכת פרופ' עדה יונת

Department of Life Sciences  
Advisor: Prof. Ada Yonath

**Thesis:**  
Structural and anti-microbial studies of 16-member ring macrolides against the Staphylococcus aureus ribosome



מיכל עמרני  
Michal Amrani

המחלקה למדעי הכימיה  
בהדרכת פרופ' רוני נוימן

Department of Chemical Sciences  
Advisor: Prof. Ronny Neumann

**Thesis:**  
Electrocatalytic reduction of CO<sub>2</sub> and CO catalyzed by first row tri-transition metal substituted keggin polyoxometalates



תומר עמית  
Tomer Amit

המחלקה למדעי הכימיה  
בהדרכת ד"ר סיון רפאלי-אברמסון

Department of Chemical Sciences  
Advisor: Dr. Sivan Refaely-Abramson

**Thesis:**  
Exciton scattering mechanisms in transition metal dichalcogenides upon structural complexities



לאה עמית  
Leah Amit

המחלקה למדעי החיים  
בהדרכת פרופ' אליאור (אורי) פלס

Department of Life Sciences  
Advisor: Prof. Elior (Ori) Peles

**Thesis:**  
Unraveling functional components of the Axo-glial interface



יותם יאיר קדיש  
Yotam Kadish

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' גרגורי פלקוביץ

Department of Physical Sciences  
Advisor: Prof. Gregory Falkovich

**Thesis:**  
Multi-mode-correlations in a doubling frequency cascade as a shell model of turbulence



אלעד צליק  
Elad Tzalik

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת ד"ר רן טסלר

Department of Mathematics and Computer Science  
Advisor: Dr. Ran Tessler

**Thesis:**  
Topological expansion for posets and the homological k-connectivity of random q-complexes



יונתן צין  
Jonathan Zin

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' אירית דינור

Department of Mathematics and Computer Science  
Advisor: Prof. Irit Dinur

**Thesis:**  
Expanding posets of non-simplicial structure



עידו קיפר  
Edo Kiper

המחלקה למדעי החיים  
בהדרכת פרופ' נטע רגב-רוצקי

Department of Life Sciences  
Advisor: Prof. Neta Regev-Rudzki

**Thesis:**  
High-throughput analysis of the transcriptional patterns of sexual genes in malaria



עליזה קינזל  
Alisa Kinzel

המחלקה למדעי החיים  
בהדרכת פרופ' ג'פרי גרסט

Department of Life Sciences  
Advisor: Prof. Jeffrey Gerst

**Thesis:**  
Role of mRNA localization of coatomer subunits in COPI complex formation

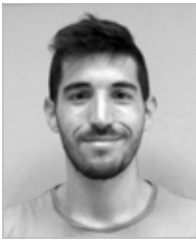


יהונתן קוגמן  
Jonathan Kogman

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' אולף לאונהרדט

Department of Physical Sciences  
Advisor: Prof. Ulf Leonhardt

**Thesis:**  
Lifshitz theory of the quantum vacuum in spherically symmetric gravitational fields



נדב פרנקל  
Nadav Frenkel

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' דן אורון

Department of Physical Sciences  
Advisor: Prof. Dan Oron

**Thesis:**  
SPAD array enabled heralded spectroscopy of quantum dot molecules



עוז פראנק  
Oz Frank

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' יונינה אלדר

Department of Mathematics and Computer Science  
Advisor: Prof. Yonina Eldar

**Thesis:**  
Integrating domain knowledge into deep networks for lung ultrasound with applications to COVID-19



עמית פנדו  
Amit Pando

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' ניר דודזון

Department of Physical Sciences  
Advisor: Prof. Nir Davidson

**Thesis:**  
Effects of detuning disorder on coupled lasers



אריה צימרמן  
Arie Zimmerman

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' דמיטרי גורביץ

Department of Mathematics and Computer Science  
Advisor: Prof. Dmitry Gourevitch

**Thesis:**  
Geometric conditions for twisted O-sphericity



דניאל צ'אוסובסקי  
Daniel Chausovsky

המחלקה למדעי הפיסיקה  
בהדרכת ד"ר סרג' רוזנבלום

Department of Physical Sciences  
Advisor: Dr. Serge Rosenblum

**Thesis:**  
Design, fabrication, and characterization of Fluxonium qubits



נוגה פרנקל  
Noga Frenkel

המחלקה למדעי החיים  
בהדרכת פרופ' יעקב אברמסון

Department of Life Sciences  
Advisor: Prof. Jakub Abramson

**Thesis:**  
The role of vitamin D in regulation of epithelial tissues and the immune system





נועה רוזנטל  
Noa Rosenthal

המחלקה למדעי החיים  
בהדרכת ד"ר משה ביטון

Department of Life Sciences  
Advisor: Dr. Moshe Biton

**Thesis:**  
Deciphering Tuft cells' interaction with the commensal microbiota in homeostasis and in gut inflammation



דריה ראספופובה  
Daria Raspopova

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' ויקטור ארמנד מלכא

Department of Physical Sciences  
Advisor: Prof. Victor Armand Malka

**Thesis:**  
Control of a gas density profile for improving Laser-Plasma Accelerator

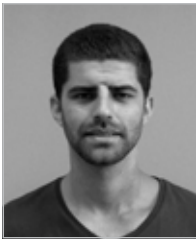


שי קריתי  
Shai Kiriati

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' חיים בידנקופף

Department of Physical Sciences  
Advisor: Prof. Haim Beidenkopf

**Thesis:**  
Testing new configuration for nanowires with induced superconductivity using STM



דוד קניגסברגר  
David Kenigsberger

המחלקה למדעי החיים  
בהדרכת ד"ר פיליפה אנדרה נטליו

Department of Life Sciences  
Advisor: Dr. Filipe Andre Natalio

**Thesis:**  
Production of alternative glycans via substrate substitution of bacterial cellulose synthase



רישיר קלפו  
Rishir Kalepu

המחלקה למדעי הכימיה  
בהדרכת פרופ' דבורה פאס  
ד"ר סרגיי סמנוב

Department of Chemical Sciences  
Advisors: Prof. Deborah Fass  
Dr. Sergey Semenov

**Thesis:**  
Exploring the contexts of cysteine-rich proteins using organic and biological chemistries



נוי קליידר  
Noy Klaider

המחלקה למדעי הכימיה  
בהדרכת ד"ר שירה רוה

Department of Chemical Sciences  
Advisor: Dr. Shira Raveh-Rubin

**Thesis:**  
Cold extremes: Global climatology and driving mechanisms



ורד רוסו  
Vered Rouso

המחלקה למדעי הכימיה  
בהדרכת פרופ' דוד מרגוליס

Department of Chemical Sciences  
Advisor: Prof. David Margulies

**Thesis:**  
Sensing the Estrogen Receptor (ER) and ER binding interactions using bivalent 'turn on' fluorescent molecular probes



עמרי רון  
Omri Ron

המחלקה למדעי הכימיה  
בהדרכת פרופ' ארנסטו יוסלביץ

Department of Chemical Sciences  
Advisor: Prof. Ernesto Joselevich

**Thesis:**  
Self-integrating memories based on guided nanowires



עמרי רוזנר  
Omri Rosner

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' כפיר בלום  
פרופ' יוסף ניר

Department of Physical Sciences  
Advisors: Prof. Kfir Blum  
Prof. Yosef Nir

**Thesis:**  
Renormalization group evolution bounds for the cubic Higgs coupling in the singlet extension to the Standard Model



בר קרוב  
Bar Karov

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' מוני נאור

Department of Mathematics and Computer Science  
Advisor: Prof. Moni Naor

**Thesis:**  
New algorithms and applications for risk-limiting audits



איתמר קרבי  
Itamar Karbi

המחלקה למדעי הפיסיקה  
בהדרכת ד"ר רעי צימקה

Department of Physical Sciences  
Advisor: Dr. Rei Chemke

**Thesis:**  
The projected changes in the spatial and temporal scales of the mid-latitude flow



ג'יוואן קסיו  
Jiewen Xiao

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' שחל אילני  
פרופ' ארז ברג

Department of Physical Sciences  
Advisors: Prof. Shahal Ilani  
Prof. Erez Berg

**Thesis:**  
Momentum resolved quantum twisting microscope



שקד שורץ  
ShakkeD Schwartz

המחלקה למדעי הכימיה  
בהדרכת ד"ר מיכל לסקס

Department of Chemical Sciences  
Advisor: Dr. Michal Leskes

**Thesis:**  
Investigating the surface dynamics of ions at the anode-electrolyte interface using NMR spectroscopy



אבנר שולצמן  
Avner Shultzman

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' יונינה אלדר

Department of Mathematics and Computer Science  
Advisor: Prof. Yonina Eldar

**Thesis:**  
Leveraging deep-learning concepts for solving waveform inversion and linear inverse problems



מאי שדה  
Mai Sadeh

המחלקה למדעי החיים  
בהדרכת פרופ' אסף ורדי

Department of Life Sciences  
Advisor: Prof. Assaf Vardi

**Thesis:**  
Deciphering genes involved in survival and cell death mechanisms in marine diatoms



יעל ריץ  
Yael Rich

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' שחל אילני

Department of Physical Sciences  
Advisor: Prof. Shahal Ilani

**Thesis:**  
Study of electronic flow in 2D van der Waals heterostructures



אורן ריכטר  
Oren Richter

המחלקה למדעי החיים  
בהדרכת פרופ' אלעד שניידמן

Department of Life Sciences  
Advisor: Prof. Elad Schneidman

**Thesis:**  
Modeling the development of neural circuits' topologies using generative models



אופיר רז  
Ofir Raz

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' עמוס תנאי  
פרופ' אהוד שפירא

Department of Mathematics and Computer Science  
Advisors: Prof. Amos Tanay  
Prof. Ehud Shapiro

**Thesis:**  
Differentiation and commitment in mammalian embryos: a comparative approach



בת-אור שלום  
Bat-Or Shalom

המחלקה למדעי הכימיה  
בהדרכת ד"ר בארן ארן

Department of Chemical Sciences  
Advisor: Dr. Baran Eren

**Thesis:**  
Catalytic micro-reactors for in situ surface-sensitive measurements



יעל שטכמן  
Yael Shtechman

המחלקה להוראת המדעים  
בהדרכת ד"ר מיכל איטח השכל

Department of Science Teaching  
Advisor: Dr. Michal Haskel Ittah

**Thesis:**  
Elementary school students' evaluation of explanations about biological phenomena



יובל שטיינברג  
Yuval Steinberg

המחלקה למדעי הכימיה  
בהדרכת ד"ר מיכל לסקס

Department of Chemical Sciences  
Advisor: Dr. Michal Leskes

**Thesis:**  
Sensitive detection of the solid electrolyte interphase in beyond-lithium ion batteries via dynamic nuclear polarization - solid state NMR spectroscopy



דן שגב  
Dan Segev

המחלקה למתמטיקה ומדעי המחשב  
בהדרכת פרופ' רונן בצרי

Department of Mathematics and Computer Science  
Advisor: Prof. Ronen Basri

**Thesis:**  
Classification of diabetic retinopathy from optical coherence tomography



נטע שאול  
Neta Shaul

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' ירון ליפמן

Department of Physical Sciences  
Advisor: Prof. Yaron Lipman

**Thesis:**  
On kinetic optimal probability path for generative models



אלון אפרים רפפורט  
Alon Ephraim Rapaport

המחלקה למדעי החיים  
בהדרכת ד"ר תמיר קליין

Department of Life Sciences  
Advisor: Dr. Tamir Klein

**Thesis:**  
Field dynamics and chemical composition of C transfer from trees to Ectomycorrhizal fruit bodies





בן שנהר  
Ben Shenhar

המחלקה למדעי הפיסיקה  
בהדרכת פרופ' אלי וקסמן

Department of Physical Sciences  
Advisor: Prof. Eli Waxman

**Thesis:**  
Inefficient thermalization timescales of charged decay products in kilonovae ejecta - simple and robust analytical formulae



נופר שמן  
Nofar Shemen

המחלקה למדעי החיים  
בהדרכת פרופ' רוני פז  
ד"ר יואב ליבנה

Department of Life Sciences  
Advisors: Prof. Rony Paz  
Dr. Yoav Livneh

**Thesis:**  
The effect of different body states on decision-making



טליה סימה שלר  
Talia Shaler

המחלקה למדעי החיים  
בהדרכת פרופ' אסף ורדי

Department of Life Sciences  
Advisor: Prof. Assaf Vardi

**Thesis:**  
Exploring the transcriptional plasticity of algal response to viral infection that enables their coexistence



גיא תדמור  
Guy Tadmor

המחלקה למדעי הכימיה  
בהדרכת פרופ' אברהם לוי

Department of Chemical Sciences  
Advisor: Prof. Avraham Levy

**Thesis:**  
A new tool for estimating the contribution of Double Strand Break DNA repair mechanisms in shaping short structural variation across genomes



תמיר שרף  
Tamir Scherf

המחלקה למדעי החיים  
בהדרכת פרופ' רוני פז

Department of Life Sciences  
Advisor: Prof. Rony Paz

**Thesis:**  
Using Reinforcement Learning to unravel neural mechanisms of learning from punishment and reward



אריה שקולניקוב  
Arie Shkolnikov

המחלקה למדעי החיים  
בהדרכת פרופ' רוני פז

Department of Life Sciences  
Advisor: Prof. Rony Paz

**Thesis:**  
Integration of social cues during avoidance learning





# Recipients of MSc without thesis in Science Teaching

The Feinberg Graduate School’s master’s degree program without thesis in science teaching was launched in 2008, as a joint initiative between the Weizmann Institute and the Rothschild Caesarea Foundation. The mission of this program is to improve the quality of science and mathematics teaching in Israel, by encouraging excellence among educators and providing them with the skills needed for leadership, both in the classroom and beyond. The master’s program is intended for outstanding teachers of math and science who already hold at least a first degree in biology, chemistry, mathematics, or physics.

This is a two-year framework in which participants—with the support and encouragement of the schools in which they teach—are expected to devote two full days each week to their studies, in parallel with their continued work in the classroom. The curriculum includes the enrichment of participants’ basic scientific knowledge (discipline-specific and interdisciplinary topics) and familiarity with new developments in scientific research, the acquisition of innovative teaching skills and strategies, and participation in hands-on seminars in Weizmann Institute labs. The course curriculum, created specifically for this program, was designed to match the unique needs of science and math educators. Many of the classes are taught by members of the Weizmann Institute faculty.

- Mohammad Abu Jafar
- Ahmed Agbaryah
- Tahel Aharonof
- Raneen Alatawna
- Natalie Bernaz-Padon
- Shiri Cohen Genosar
- Efrat Dolan
- Shiran Edri
- Ilya Fuchs
- Hila Genis
- Ofer Ginzburg
- Maria Gontar
- Abdalla Haj Amer
- Amnon Herman
- Tova Hojman
- Fatina Kersh
- Revaya Levi
- Mor Malka
- Fatima Mhameed
- Rami Neeman
- Shoham Pargamanik
- Veronika Pelekhov
- Stav Rom
- Raghda Samara
- Nurit Shriki
- Irit Zemach
- Houssien Zoabi



שירן אדרי  
Shiran Edri

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



אחמד אגבאריה  
Ahmed Agbaryah

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



מוחמד אבו געפר  
Mohammad Abu Jafar

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



נטלי אליס ברנז פדון  
Natalie Bernaz-Padon

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



רנין אלעטאונה  
Raneen Alatawna

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



תהל ורדה אהרונוף  
Tahel Aharonof

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



עפר גינזבורג  
Ofer Ginzburg

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



הילה גייניס  
Hila Genis

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



מריה גונטר  
Maria Gontar

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



אמנון הרמן  
Amnon Herman

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



טובי הוכמן  
Tova Hojman

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



אפרת דולן  
Efrat Dolan

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



שירי כהן גינוסר  
Shiri Cohen Genosar

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



עבד אללה חאג' עאמר  
Abdalla Haj Amer

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



חוסיין זועבי  
Houssien Zoabi

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



מור מלכה  
Mor Malka

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



פאטמה מחאמיד  
Fatima Mhameed

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



רוויה לוי  
Revaya Levi

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



איליה פוקס  
Ilya Fuchs

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



רגדה סמארה  
Raghda Samara

תואר שני ללא תזה בהוראת המדעים  
MSc without thesis in Science Teaching



רם אברהם נאמן  
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The Weizmann Institute created five Research Schools affiliated with its five Faculties to expand and enhance its graduate education. These strategic investments provide students with greater opportunities for personal development and independent research, expanded contact with the international science community, and even greater exposure to world leaders in their fields of study.

The **Lorry I. Lokey Research School of Biochemical Science** was established by California entrepreneur and philanthropist Lorry Lokey in 2007. It provides students in biochemistry, at all levels, with the tools and opportunities needed to excel.

Two brothers, Maurizio from Geneva and Solo from Milan, and their families founded the **Solo Dwek and Maurizio Dwek Research School of Chemical Science** in 2008 to provide students in chemical sciences necessities such as laptops, software, journal subscriptions, and conference travel expenses.

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