# AZRIELI FELLOWS 2022-2023



# Azrieli Fellows Program

December 2022

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Naomi Azrieli, OC, DPhil

Chair and CEO The Azrieli Foundation

#### Welcome Azrieli Fellows.

We are honoured to have you join us for what we hope will be one of the most rewarding experiences of your academic career.

Our prestigious and respected Fellows Program is now entering its 16th year. In 2007 we welcomed 11 Fellows; this year we greet 56 Fellows from across the globe, including Canada, Israel and all corners of Europe.

You are now one of a special group of more than 400 past and present Azrieli Fellows, chosen by leading scientists and scholars in a rigorous selection process. Each of you is here because of the impressive scientific and scholarly breadth of your work – and the leadership you demonstrate beyond your outstanding academic achievements.

It has been a challenging couple of years, with the pandemic influencing your research journeys. But with the return to a more typical way of working and with the structures we have put in place to best support your efforts, you are now in the best place to forge ahead with your trailblazing research.

As Azrieli Fellows, you will get the chance to network and collaborate with other exceptional researchers from around the world. And we, at the Azrieli Foundation, are here to support you all the way – as you delve into your environment, strive to innovate, and work to unravel the world's toughest challenges.

We have full confidence in your abilities and wish you enormous success as you join our Azrieli Fellows family.



#### Prof. Hermona Soreq

Senior Academic Advisor Azrieli Fellows Program

#### Dear Azrieli Fellows,

It is hard to believe, but another year has ended and a new one begins. As the Hebrew saying goes: "May this year and its troubles be over; may the New Year and its blessings begin."

It is wonderful to be able to look forward to in-person Azrieli events, where we can see each other and enjoy the opportunity to truly interact with colleagues, students, and friends from the different academic institutions across Israel. Thanks to the power of Zoom, which remains with us as a relic of the pandemic, we can also easily be in contact with our friends and colleagues across the ocean.

Indeed, each pandemic in human history has brought sadness while also advancing the development of human society. "Our" pandemic is no exception; one special feature of COVID-19 is its impact on our aptitude to develop and disseminate vaccines in a relatively short time frame and with fairly limited damage. Nevertheless, both school and university students' studies have been impaired, some American postdoctoral trainees have rebelled, and government support for academic research remains behind its support for security, medical care and public education.

So my wish to you, Azrieli Fellows, for the year ahead, is to make the best of the post-COVID academic environment, to actively strive to advance by building on progress made, and to take the time to appreciate and enjoy the support of the Azrieli Fellows Program on so many levels.

#### About the Azrieli Foundation

Fulfilling the philanthropic legacy of David J. Azrieli z"l, the Azrieli Foundation has been funding institutions and operating programs in Israel and Canada since 1989.

Driven by a strong belief in the powerful role and responsibility of philanthropy, the Foundation empowers people by supporting a broad range of organizations, facilitating innovative outcomes and increasing knowledge and understanding in the search for practical and novel solutions.

With a firm conviction that everyone has potential, we work to open doors, break ground, and nurture networks, empowering the most vulnerable to the most exceptional to achieve their best and contribute to society.

In addition to strategic philanthropic investments, the Azrieli Foundation operates several programs: the Azrieli Fellows Program, the Azrieli Science Grants Program, the Holocaust Survivor Memoirs Program, the Azrieli Music Prizes, and the Azrieli Prize in Architecture.

#### About the Azrieli Fellows Program

The Azrieli Fellows Program was established in 2007 to create a network of leading academics and professionals committed to raising Israel's profile while maintaining strong academic links between Israel and the rest of the world. The program offers generous funding for the three critical stages of an academic career through its Graduate Studies Fellowships, International Postdoctoral Fellowships, and Early Career Faculty Fellowships.

In keeping with its core values, the program nurtures interdisciplinary and cross-cultural exchange, leadership training, community engagement, professional mentorship, and a growing alumni network. Azrieli Fellows comprise a community of outstanding scientists and scholars who have the unique potential to perform groundbreaking research while nurturing an intellectual curiosity that transcends their fields of study.

By enabling multidisciplinary research and the cross-pollination of ideas, the Azrieli Fellows Program breaks down silos, encourages creative thinking, and drives out-of-the box solutions to some of the world's most pressing issues.





# AZRIELI GRADUATE STUDIES FELLOWS 2022-2023

# Azrieli Graduate Studies Selection Committees 2022-2023

#### SENIOR ACADEMIC ADVISOR

Professor Hermona Soreq, The Hebrew University of Jerusalem

	NATURAL SCIENCES
Chair:	Prof. Naama Brenner, Technion – Israel Institute of Technology
	<ul> <li>Prof. Amir Aharoni, Ben-Gurion University of the Negev</li> <li>Prof. Shiri Artstein, Tel Aviv University</li> <li>Prof. Leeor Kronik, Weizmann Institute of Science</li> <li>Prof. Yossi Mandel, Bar-Ilan University</li> <li>Prof. Eli Pikarsky, The Hebrew University of Jerusalem</li> <li>Prof. Miriam Zacksenhouse, Technion – Israel Institute of Technology</li> </ul>
	H U M A N I T I E S
Chair:	Prof. Yerachmiel (Richard) Cohen, The Hebrew University of Jerusalem
	Prof. Nirit Ben-Aryeh Debby, Ben-Gurion University of the Negev Prof. Meir Buzaglo, The Hebrew University of Jerusalem Prof. Ora Limor, The Open University of Israel Prof. Dina Stein, University of Haifa Prof. Oren Tal, Tel Aviv University Prof. Tamar Wolf-Monzon, Bar-Ilan University
	SOCIAL SCIENCES
Chair:	Prof. Nachman Ben-Yehuda, The Hebrew University of Jerusalem
	Prof. Noga Collins-Kreiner, University of Haifa Prof. Ayelet Harel, Ben-Gurion University of the Negev Prof. Beni Lauterbach, Bar-Ilan University Prof. Yoram Shachar, Reichman University & Hebrew University of Jerusalem Prof. Galit Yovel, Tel Aviv University
	EDUCATION
Chair:	Prof. Bat-Sheva Eylon, Weizmann Institute of Science
	<b>Prof. Boris Koichu,</b> Weizmann Institute of Science <b>Prof. Adam Lefstein,</b> Ben-Gurion University of the Negev <b>Prof. Nilly Mor,</b> The Hebrew University of Jerusalem
	ARCHITECTURE
Chair:	Prof. David Leatherbarrow, University of Pennsylvania
	Dr. Edna Langenthal, Ariel University

LEADERSHIP & COMMUNITY CONSULTANT

Dr. Varda Silberberg, Ziv Institute

## RONNIE AGASSI COHEN



Ronnie Agassi Cohen is a PhD student in the Department of Islamic and Middle Eastern Studies at the Hebrew University of Jerusalem under the supervision of Dr. Julia Rubanovich and Prof. Eyal Ginio. Ronnie studies the history of the Ottoman Empire with a focus on the influence of Persian culture and literature on the development of Ottoman identity. By analyzing historical works written in the Ottoman Empire in Persian and Turkish, her research identifies the intertextual connections between these texts and other prominent Persian literary works. She thus traces the links between historical writing in Persian and the development of Ottoman imperial identity during the second half of the fifteenth century. Ronnie hopes to offer a broader view of the cultural and intellectual changes following the transformation of the Ottoman state into an empire and present a unique perspective on cultural connections and identity formation in the pre-modern Middle East.

Ronnie grew up in Ra'anana and currently lives with her husband and child in Kfar Saba. She received her BA and MA in Middle Eastern and African history from Tel Aviv University. She is a member of the research group Past and Past Perfect at the Mandel Scholion Research Center at the Hebrew University of Jerusalem. In addition to her research, in the past few years she has been part of "Great History in a Nutshell," a voluntary project promoting public history education via social media. In her free time, she enjoys listening to podcasts and audiobooks, watching movies, and spending time with her family.

# LIAT ARIEL

Liat Ariel is a PhD student in the Seymour Fox School of Education at the Hebrew University of Jerusalem under the supervision of Prof. Tal Gilead. Liat's field is the philosophy of education, and she focuses on the characteristics of the post-truth era and the challenges they bring to education for democratic citizenship in post-truth societies. She is particularly interested in the extent to which existing democratic theories and pedagogies remain relevant to the education of future citizens who will need to become the gatekeepers of democracy in a post-truth world. Liat hopes that her findings will provide practical implications for education for democracy and serve as a starting point for constructing a new pedagogy for citizenship and democratic education that will protect and promote the democratic values of freedom, justice, peace, and equality in light of the threats posed by the post-truth era.

Liat was born and raised and currently lives in Nahariya. Throughout her life, she has worked and volunteered in diverse educational settings with children and youth from disadvantaged backgrounds. She completed her BA in special education and English language and literature at the University of Haifa. She was awarded a Fulbright Scholarship and studied for an MA in cultural and educational policy studies at Loyola University Chicago. As an English teacher, Liat is eager to generate a change in the Israeli educational system; she dreams of bringing philosophical educational theories into practice and thus reduce the gaps between the academic and practical fields of education. Liat is also an educational entrepreneur and initiated Fly High, a program which encourages disadvantaged youth to achieve a full matriculation certificate in English and aims to make English literacy accessible for underprivileged youth in the periphery. In her free time, Liat enjoys writing, exercising, and travelling with her family.



### GAL BITTON



Gal Bitton is a political scientist in the direct PhD track in the School of Political Science. Government and International Affairs at Tel Aviv University under the supervision of Prof. Tal Sadeh. Her field of study is international political economy, and her main interests are global monetary and financial relations, currency internationalization, and cultural finance. Gal developed a culture-based theory that seeks to examine the effect of cultural factors on policymakers' financial decisions through macro (government policy) and micro (individual preferences) levels of analysis. Her findings demonstrate that in financial decisionmaking individuals have strong incentives to bias interactions toward in-group members while introducing indifference, hostility, or distrust toward out-group members. Hence, in-group favouritism decreases the cooperativeness and harmony that are essential for any functioning society; understanding the roots of cooperation, or lack thereof, is, therefore, of great significance.

Gal was born and raised in Kiryat Shmona and currently lives there with her two dogs. She has a BA and an MA in political science from Tel Aviv University. Gal teaches at both Tel Aviv University and Reichman University and provides academic assistance to undergraduate students from the Arab population. In the coming years, as part of the Azrieli Fellowship, Gal intends to use her academic skills and volunteering experience to help improve the welfare of citizens in Kiryat Shmona. In her free time, Gal loves practising yoga and playing board games.

## OMRI CARMON

Omri Carmon is an urban planner and PhD student in the Department of Geography and Environmental Development at Ben-Gurion University of the Negev. He is under the supervision of Dr. Naama Teschner and Prof. Meidad Kissinger from Ben-Gurion University and Prof. Yael Parag and Dr. Shiri Tzemach-Shamir from Reichman University. Omri focuses on the increasing adoption of the decarbonized, decentralized, and digitalized technologies transforming the energy sector. He is developing a socio-techno-economic perspective for researching such technological transitions within future energy systems to emphasize new energy security, equity, and environmental concerns (i.e., "the energy trilemma"). To this end, Omri has developed an integrative evaluation framework that presents optimal power system transformation pathways to help energy leaders and planners promote effective policy design and planning.

Omri grew up in Mevaseret Zion and Savyon. He now lives with his spouse and two children in Tel Aviv. He received a BA in management and geography and environmental development from Ben-Gurion University and an MA in environmental and resource management and policy with a concentration on urban and regional planning from the Hebrew University of Jerusalem. In addition to his research, Omri is involved in various energy and climate initiatives. having previously served as the deputy chief resilience officer for the Tel Aviv-Yafo Municipality, and is a teaching assistant in the School of Sustainability at Reichman University. In addition to spending his free time with his family, he also loves different sports activities, such as running and cycling.



#### SHAHAR DUBINER



Shahar is a PhD student in the School of Zoology at Tel Aviv University under the supervision of Dr. Eran Levin and Prof. Shai Meiri. He studies the ecophysiology of reptiles and the drivers for its variation across time and space. His research interests revolve around the meeting points between thermal biology, metabolism, diet, biological rhythms, biogeography, and conservation and spans a wide range of scales and methods from the molecular through the organismal to the macro-ecological. By studying reptiles' diverse solutions to survive cold, heat, aridity, food shortage - and their inherent changes - Shahar hopes to expand our knowledge of how life can adapt to its environment.

Shahar grew up in Kibbutz Yahad in the Lower Galilee. He received his BSc in biology from Tel Aviv University, continuing immediately on the direct PhD track. He loves every kind of living organism – and even some of the dead ones. In his (sadly) limited free time, Shahar enjoys good books, music, mangoes, karate, and hiking in nature. His favourite punctuation mark is the left round bracket.

# SERAFIMA (SIMA) DUBNOV

Serafima (Sima) Dubnov is a PhD student in the Edmond and Lily Safra Center for Brain Sciences at the Hebrew University of Jerusalem under the collaborative supervision of Prof. Hermona Soreq and Azrieli Early Career Faculty Fellow Dr. Mor Nitzan. Her research combines advanced computational and molecular tools to investigate RNA regulation in the human brain at the level of single cells and cell types. RNA research has an invaluable clinical potential. offering an opportunity to develop methods for both diagnostics and therapeutics. Sima is constructing a unique short RNA-Seg dataset of neurons and microglia extracted from live human brain samples in an attempt to identify cell type specific regulation by microRNAs and tRNA fragments. She is also developing a novel RNA-Seq data analysis approach based on information theory and hopes that her research will contribute to the diagnosis of Alzheimer's disease.

Sima was born and raised in Moscow. She made aliyah after completing one year of a BSc in linguistics at the Higher School of Economics in Moscow. After spending a year learning Hebrew, she started a BSc in psychobiology at the Hebrew University of Jerusalem and subsequently continued on the direct PhD track in neuroscience. In addition to her research, Sima also works as a teaching assistant at the Hebrew University and volunteers as a summer camp tutor in ALUT, the National Israeli Society for Children and Adults with Autism. Since the outbreak of the war between Russia and Ukraine. Sima has been helping new immigrants from both countries integrate into Israel. In her free time, she enjoys travelling, especially visiting her family in Moscow.



#### SHACHAR FRAENKEL



Shachar Fraenkel is a PhD student in the Raymond and Beverly Sackler School of Physics and Astronomy at Tel Aviv University under the supervision of Prof. Moshe Goldstein. His research lies at the intersection between quantum information theory and quantum condensed matter theory, as he employs mathematical tools developed under the umbrella of the former to address fundamental problems within the latter. Condensed matter theory deals with many-body systems, i.e., systems comprised of many microscopic particles that produce complex behaviours through their intercorrelations. In this context, Shachar mainly studies the entanglement properties of quantum many-body systems. Entanglement is a type of correlation between particles that is unique to quantum systems and defies classical intuition, providing a universal framework for the study of collective phenomena in such systems. Shachar analyzes entanglement in canonical theoretical models, hoping to elucidate its connection to foundational questions in quantum many-body physics, related to phase transitions, symmetries, and many-body systems out of equilibrium.

Shachar was born and raised in Haifa and currently lives in Tel Aviv. He received his BSc in mathematics and physics from Tel Aviv University. Alongside his research, Shachar teaches undergraduate physics courses at the university. He also previously taught middleschoolers preparing to compete in the Physics Olympiad and worked as a personal tutor in Tel Aviv University's support centre for students with learning disabilities. In his free time, Shachar enjoys photography, plays tennis, and has a deep interest in cinema, literature, history, and classical music.

## SHIR GENZER

Shir Genzer is a PhD student in the Psychology Department at the Hebrew University of Jerusalem under the supervision of Azrieli Early Career Faculty Alum Prof. Anat Perry. Her research focuses on the mechanisms that enable us to understand others' emotions and feelings, specifically, how different information channels (visual, auditory, and semantic) contribute to cognitive and affective empathy. She combines behavioural, physiological, and EEG methods as well as advanced statistical methods (e.g., mixed model analysis, Bayesian modelling analysis) to analyze the empathy abilities of both neurotypical people, people with clinical conditions such as autism and ADHD, and stroke patients. Shir hopes to shed light not only on deficits but also on conditions that enhance the emotion recognition abilities of individuals from these clinical populations. By shifting the focus from difficulties to strengths, she hopes to facilitate the development of better intervention approaches and improve the daily social functioning of neurodiverse individuals.

Shir was born and raised in Bet Lehem Haglilit with three sisters: an identical twin and two younger sisters who are also identical twins. She received her BSc in psychobiology and the Amirim Natural Sciences Program from the Hebrew University, where she was an active member of the student union, working to improve the rights of students. In her free time, Shir volunteers with autistic children and enjoys dancing, reading, and spending time with her family and friends.



#### EINAV GOZANSKY



Einav Gozansky is a PhD student in in the School of Psychological Sciences at the University of Haifa under the supervision of Prof. Hadas Okon-Singer and Prof. Irit Weissman-Fogel. Her research combines knowledge from the fields of cognitive psychology, pain physiology, and data science. She employs advanced machine learning methods to examine the effects of cognitive-emotional computerized trainings on experimental pain outcomes. In her research, Einav trains healthy individuals using different methods and examines changes in cognitive, emotional, and autonomic physiological factors following her interventions. Her research aims to enhance our understanding of basic pain modulation mechanisms and thus facilitate more personalized training interventions that address individual differences in pain perception. This line of research is based on Einav's expertise in advanced analysis of connections between variables. Previously, she used modelling approaches to explore factors predicting the development of depression symptoms during the COVID-19 pandemic.

Einav grew up in Ramat Gan and currently lives in Haifa. She received her BA in psychology and cognitive sciences from Ben-Gurion University of the Negev and her MA in clinical neuropsychology from the University of Haifa. Einav is also interested in social and environmental activities and has volunteered in a number of social organizations, such as the Green Course, the Summit Institute, and a social development project in Mexico. In her spare time, she enjoys travelling both in Israel and abroad, cooking, yoga, and hanging out with friends.

# OR HADAS

Or Hadas is pursuing a PhD in the Department of Earth and Planetary Sciences at the Weizmann Institute of Science under the supervision of Prof. Yohai Kaspi. His research focuses on midlatitude storms, which are the main driver of extreme weather outside the tropics and in Israel in particular. Using a wide range of data sources, from atmospheric observations to idealized numerical simulations and advanced data analysis tools. Or is searching for the mechanism underlying two abnormal phenomena in the Earth's climate: the Pacific midwinter suppression and the hemispheric albedo symmetry. Understanding these phenomena will contribute to our understanding of the interaction between storms and the Earth's climate and improve our ability to anticipate mid-latitude weather and climate change which have a substantial impact on communities worldwide.

Or was born in Eilat and raised in Kibbutz Hanita. He started his BSc in physics at Tel Aviv University at the age of 14 through the Presidential Program for Future Scientists (currently known as the Odyssey Program), which was inspired and initiated by the late President Shimon Peres. He was first introduced to atmospheric science during his army service as a weather forecaster, and his great affinity for the topic drove him to reach out to Prof. Kaspi and begin an MSc even before finishing his mandatory service. Due to his belief that making the science of climate and sustainability accessible to the general public is crucial for mitigating climate change, Or volunteers in various organizations that operate in this field. In his free time, he practises rock climbing both indoors and outdoors.



#### ELAD HORN



Elad Horn is an architect and a PhD student in the Faculty of Architecture and Town Planning at the Technion - Israel Institute of Technology. His research in the Big Data in Architectural Research Lab (BDAR), under the supervision of Dr. Or Aleksandrowicz, combines the fields of architectural history and digital humanities. Elad is examining Tel Aviv-Yafo during the 1980s, when Israel's economy underwent rapid neoliberal restructuring and the city's architectural style was significantly altered. His specific interest is in how economic trends, especially those affecting construction and real estate development, helped generate new architectural idioms. To better understand the mechanisms that drive architectural change, Elad employs computational methods such as big data analysis and machine learning for historical research. At a time when cities are undergoing rapid development, Elad hopes to contribute to the academic and public discourse on built heritage and preservation.

Elad was born in Kiryat Shmona and currently lives in Givatayim. He obtained his BArch from the Bezalel Academy of Art and Design and his Master of Design Studies in critical conservation from Harvard Graduate School of Design. His fascination with historical architectural research led Elad to co-author with Dr. Jeremy Hoffman PoMo - Architecture of Privatization (2021), which documents Tel Aviv's architectural evolution toward the end of the 20th century. He was, in addition, director of the Avie and Sarah Arenson Built Heritage Research Center at the Technion until starting his PhD. Since 2012, Elad has been investigating the tangled planning history of the New Central Bus Station in Tel Aviv, which included initiating a range of public activities and publications, consulting the municipality, and appearing in the media. Elad is also a selftaught chef-pâtissier and enjoys exploring the links between desserts and architectural form.

# ANAT HOROWITZ HAREL

Anat Horowitz Harel is an architect and MA student in the Azrieli School of Architecture at Tel Aviv University under the supervision of Prof. Talia Margalith. Her research aspires to increase the participation of children in city planning processes, thus grounding their right to the city. Anat looks at the case of Israel from an international lens, and her ensuing comparative research contributes to the scholarly literature in Hebrew about children's right to cities. Her research uses qualitative methods including in-depth interviews with professionals in the field, assessments of fieldwork conducted by various initiatives looking to change children's right to the city, and analyses of materials and products from relevant processes. Anat hopes that her research will help raise the awareness of Israeli planners and architects regarding the perspective of children on the use of the city and establish operative policy directions to promote built environment education (BEE) for children. thus deepening children's knowledge of the urban environment.

Anat was born in Jerusalem and currently lives in Ramat Gan with her spouse and two daughters. She received her BArch in architecture and town planning from the Technion – Israel Institute of Technology. Over the last 15 years, she has engaged in planning policy, strategic planning, and environmental planning in civil society organizations and now works as an expert in the field of sustainable public space at the Israeli Green Building Council. As part of her ongoing voluntary work, Anat represents the Israel Association of Architects and Urban Planners in the UIA Architecture and Children Work Program. In her free time, Anat likes to wander around cities in Israel and throughout the world.



#### REFAEL KROIZER



Refael Kroizer is a PhD student in the School of Jewish Studies and Archaeology at Tel Aviv University under the supervision of Prof. Maoz Kahana. His research focuses on Jewish perceptions of the urban space in European cities in the early modern period as portrayed in the rabbinic literature. Through his research, Refael hopes to contribute to our understanding of the lives of Jews and Jewish culture and the coexistence of Judaism and other faiths in Christian Europe.

Refael was born in Jerusalem and currently lives there with his wife, Sari, and their four children. He received his BA in philosophy and Jewish thought from the Hebrew University of Jerusalem and his MA in the history of the Jewish people at Tel Aviv University. He began his academic journey in secret, taking courses at the Open University in parallel to his Torah studies as a young yeshiva student. Over the years he has advanced in both worlds and was ordained as a rabbi by the Chief Rabbinate of Israel. In his free time, Refael likes to play chess and read books.

### CHEYN LAMBERT

Cheyn Lambert is an architect and MSc student in the Faculty of Architecture and Town Planning at the Technion - Israel Institute of Technology under the supervision of Prof. Alona Nitzan-Shiftan. Her research seeks to identify structuralist and semiotic theories in the pedagogy of the Technion's Faculty of Architecture and Town Planning between 1975 and 1994 through interviews with pedagogues and archived materials. Through her research, Cheyn hopes to show how structuralist theories bridged the transition of the curriculum from modernism to postmodern teachings. As many of Israel's leading architects were trained in this era, her research looks to contribute to our understanding of Israel's current architectural environment.

Cheyn was born in Jerusalem. She grew up in a bilingual home in Canada and Israel and currently lives in Haifa. She received her BSc in design sciences and MArch from the Technion. Cheyn worked as a research assistant during her studies and today continues to develop her thesisstudio project on platforms for marginalized voices in Lod. In addition, she guides historical research projects as a teaching assistant. Having previously volunteered as a Hebrew teacher to immigrant children, she now volunteers as the faculty representative of graduate students, working to advance both the research and social lives of her colleagues while connecting them with one another. Her hobbies include creative experimental pursuits such as painting and crafts, reading, and piano playing.



#### ROEE LEDER



Roee Leder is a PhD student in the Einstein Institute of Mathematics at the Hebrew University of Jerusalem. While Roee's research is supervised by Prof. Raz Kupferman, he also works closely with the experimental physics research group led by Prof. Eran Sharon - a cooperation that facilitates synergetic interaction between mathematics and its applications. Roee's research focuses on the mathematical foundations of powerful models that aim to explain complex mechanical systems. Such models serve innovative theories within material science and are thus expected to yield new applications. The geometric and analytical foundations of these theories are lacking, however, which limits their scope and insight. Therefore, in addition to the intrinsic mathematical aspects of his research, Roee hopes to help solve a number of open problems in application.

Roee lives in Givatayim with his wife, Miriam. He earned a BSc and MSc in mathematics at the Hebrew University. When not researching, Roee enjoys crossfit and weightlifting, partying with family and friends, reading books, and quoting films. Each summer, he picks a mountain range for a hiking trip abroad, from which he returns rejuvenated and full of new ideas.

## AMIT MANOR ARMON

Amit Manor Armon is a PhD student in the Schulich Faculty of Chemistry at the Technion - Israel Institute of Technology under the supervision of Prof. Charles Diesendruck. Amit's research focuses on a new methodology for the design and synthesis of kinetically stable quaternary ammonium (QA) salts for renewable energy applications. Electrochemical devices, such as fuel cells and flow batteries, are seen as gamechanging opportunities for the storage and conversion of green energy. QA are embedded in anion exchange membranes which are, in terms of lifetime, the limiting component in these devices. By modelling different degradation pathways and varying electronic and steric parameters, Amit aims to identify the QA weak spots, synthesize new "hits," and test their stability experimentally. Her unique approach of modelling prior to synthesis will allow for better understanding of the structure-property relationships in bottom-up QA design, hopefully promoting their implementation in the green energy field.

Amit was born and raised in Haifa, where she currently lives with her husband and daughter. Her academic path started in high school when she enrolled in the Technion Archimedes chemistry program. After five years of military service as, mostly, an intelligence officer, she returned to the academic world, completing her BSc in chemistry and art history at the Hebrew University of Jerusalem, where she also pursued her MSc in chemistry under the supervision of Prof. Ori Gidron. In her free time, Amit enjoys hiking with her family and horseback riding.



#### AVIV ORNER



Aviv Orner is a PhD student in the Seymour Fox School of Education at the Hebrew University of Jerusalem under the supervision of Prof. Adam Lefstein and Dr. Hadar Netz from Tel Aviv University. She is interested in the connections between language, gender, and sexuality as expressed in public spaces, traditional and social media, and, especially, educational contexts. Her research focuses on gender equity in classroom discourse in Israeli primary schools. She examines how gender equity can be promoted by developing criteria for interpreting and measuring gender bias in classroom discourse, designing new practices to reduce gender bias (together with teachers in the field), and examining the outcomes and implications of these interventions. She believes her research will contribute to our understanding of the mechanisms of gender inequality in the crucial arena of education and help rectify these inequalities both in the classroom and on the societal level.

Aviv completed her BA in Hebrew linguistics and communication at Oranim College of Education, where she was the head of the student union and a board member of the National Union of Israeli Students. She also worked as a Hebrew teacher in middle school. She completed an MA in the Program for Multilingual Education at Tel Aviv University, where she began researching language and gender in classroom discourse. For as long as she can recall. Aviv has been involved in social and educational activism. She was the president of the student council in high school and a youth movement counsellor, completed a year of community service before her military service, and served in the IDF Education Corps. In her free time, Aviv enjoys travelling, learning about new places, cultures, and people, and attending concerts, theatre, and art exhibitions.

## MEITAL PASCAL

Meital Pascal is a PhD student in the Constantiner School of Education at Tel Aviv University under the supervision of Dr. Orly Lahav. Her research takes a capacity building approach and focuses on the strengths of adults on the autism spectrum - a field which remains under-researched. Meital aims to develop a practical online learning program to improve current intervention programs for this target group. Her strength-based learning program strives to promote awareness among adults on the autism spectrum of their own strengths, increase their self-esteem, and contribute to their wellbeing. Meital hopes that her research approach will help change dominant perceptions about autism and thereby contribute to the integration of adults with autism into society.

Meital grew up in Holon and currently lives with her spouse and two children in Kibbutz Nahsholim in the Hof HaCarmel region. She received a BA in education and MA in learning disabilities from Tel Aviv University. She has extensive experience working with children on the autism spectrum both as an educator in a school environment and on an individual basis. Her work in the field led her to research challenging notions concerning the empowerment of adults on the autism spectrum. In addition to her research, Meital teaches in the Department of Special Education at Kibbutzim College. In her free time, she enjoys spending time with family and friends, reading, practising yoga, and hiking in the woods near her home.



#### SHIRI RON



Shiri Ron is a PhD student in the Department of **Computer Science and Applied Mathematics** at the Weizmann Institute of Science under the supervision of Prof. Shahar Dobzinski. She is interested in algorithmic mechanism design, which is a subfield at the intersection of computer science and microeconomic theory. In her work, she aims to design algorithms for settings in which people may benefit by providing the algorithm with false or biased information. Examples of such settings are the assignment of medical students to internships and government auctions for allocating public goods, such as radio spectrum, electricity, and housing. Her interest in this subject also led her to take part in the implementation of the 5G spectrum auction held by the Israeli Ministry of Communications.

Shiri was born in Tel Aviv, where she currently lives with her partner. She received her BSc in computer science and psychology from the Hebrew University of Jerusalem and her MSc in computer science from the Weizmann Institute, also under the supervision of Prof. Dobzinski. Before and during her undergraduate studies she volunteered at Sahar, where she provided hotline support for people undergoing emotional distress. In her spare time, Shiri enjoys yoga, reading, and playing beach volleyball.

### DANA RUBINSTEIN

Dana Rubinstein is a PhD student in the Department of Jewish Thought at the Hebrew University of Jerusalem under the supervision of Prof. Benjamin Pollock. Her research focuses on the extensive and largely unpublished collection of working papers by Martin Buber and Franz Rosenzweig which underlies their monumental Bible translation project. By mining the depths of the Buber-Rosenzweig Bible and the dialogue surrounding it, Dana seeks to demonstrate the possibilities and limitations of Bible translation as a unique exegetical medium and to construct a hermeneutic method for using Bible translations as commentary.

Dana was born in Israel and grew up in Germany, Austria, and the United States. She received her BA in philosophy from Yale University and her JD from Columbia University. She subsequently worked as a litigator at Davis Polk & Wardwell in New York, where she specialized in corporate litigation and white-collar crime but also had the opportunity to work on pro bono asylum cases. She is the co-founder of Dapple, a mission-driven consumer products start-up which makes plantbased cleaners and personal care products for homes with children. In 2014, Dana made aliyah with her husband and four children and returned to academia. Completing her MA in jewish thought at the Hebrew University, she wrote her thesis on Nehama Leibowitz's exegetical use of translations. In her free time, Dana enjoys reading, listening to music, and experimenting with new recipes and cocktails before unleashing her concoctions on unsuspecting guests.



#### INBAL TAMIR



Inbal Tamir is an MA student in the Azrieli School of Architecture at Tel Aviv University under the supervision of Dr. Roy Kozlovsky. Her research deals with the field of industrial heritage conservation, specifically, factories built between the 1950s and 1970s in Israel's development towns. Inbal aims to reveal their architectural, social, and economic value and assess which buildings are worthy of conservation. Given that many factory buildings, both in Israel and across the world, have been abandoned, Inbal hopes that her research will raise awareness of the potential of conservation and adaptive reuse of industrial buildings. She also hopes that her exposure of the development towns' industrial architecture will encourage their reuse, development, and urban renewal.

Inbal was born in Jerusalem and currently lives with her spouse in Tel Aviv. She obtained a BArch from the Faculty of Architecture and Town Planning at the Technion - Israel Institute of Technology, during which she studied at the Polytechnic University of Turin, Italy. In Turin, she was exposed to the fascinating world of building conservation and successful examples of buildings that had undergone adaptive reuse, including the actual Faculty of Architecture building where she was studying which had previously served as a Fiat factory. After completing her undergraduate studies, Inbal worked in architecture firms in Hamburg and Tel Aviv. In her spare time, Inbal likes travelling, discovering new cities and cultures, hiking, cycling, and attending live music concerts.

#### IRENE UNTERMAN

Irene Unterman is an MD student in the Faculty of Medicine at the Hebrew University of Jerusalem and a PhD student in the Department of Developmental Biology and Cancer Research (IMRIC) at the Institute for Medical Research Israel-Canada. She is co-supervised by Prof. Benjamin P. Berman (IMRIC) and Prof. Benjamin Glaser (Hadassah Medical Center). Her research focuses on DNA methylation, a chemical modification informing cell identity and function. She is developing novel computational tools to analyze methylation sequencing. These tools correct cell composition differences and infer methylation changes in individual cell types. By applying them to pancreas samples from diabetic and healthy individuals, Irene aims to expose the genetic underpinnings of type 2 diabetes. She hopes to improve current methods for identifying the origin of DNA molecules in blood samples and contribute to cancer screening.

Irene was born in Jerusalem, where she currently lives with her husband, Ido, and their dog, Nimbus. She became fascinated with science while pursuing a high school matriculation project at the Hebrew University supervised by Prof. Hermona Soreq. Her experience as a community first responder led her to the field of medicine. During her army service, she served in the 8200 intelligence unit and participated in the Atidim program, tutoring high school students from underprivileged backgrounds in STEM. Following her discharge from the army, she helped children with special needs at Alyn (a hospital for children with a wide range of congenital and acquired conditions) and worked as a research assistant for Prof. Yuval Tabach. She completed her BSc in medicine at the Hebrew University and embarked on a joint MD-PhD program. In her spare time, Irene enjoys hackathons, where she learns coding skills and works with her team on real-life problems. She is also a certified Pilates instructor and especially enjoys working with the elderly.



### ANNA UZONYI



Anna Uzonyi is a PhD student in the Department of Molecular Genetics at the Weizmann Institute of Science under the supervision of Prof. Schraga Schwartz. Her research focuses on understanding the role of chemical modifications of RNA nucleotides. Of central importance to Anna's research is deciphering how RNA structure determines the deposition of the RNA modification inosine, which is involved in the immune response to viral infections and plays a role in autoimmune diseases. In an additional research project. Anna is assessing how another modified RNA base regulates the lifespan of RNA molecules, using both experimental methods and computational analysis. Anna hopes that her research will lead to a better mechanistic understanding of RNA modifications and consequently help the development and improvement of RNA-based therapeutics.

Anna was born and raised in Budapest. Hungary. During high school, she had the opportunity to learn university-level biology and experimental methods and participate in national and international science competitions. including the International Biology Olympiad in Switzerland and Indonesia. She moved to Munich, Germany for her undergraduate studies in molecular biotechnology. During her studies, Anna completed several research internships abroad: she studied protein translation at the Weizmann Institute in Israel, influenza virus in Oxford, ovarian cancer in Singapore, and noncoding RNAs in Germany. She moved to Israel to pursue her MSc in life sciences in the Weizmann Institute and stayed for subsequent PhD research. In her free time, Anna enjoys travelling, hiking, and sports activities. She likes reading fantasy and science fiction novels and is enthusiastic about cooking, baking, and cake decoration. In addition, Anna enjoys debating and has participated twice in the European Universities Debate Championship.

## AVITAL WAGNER

Avital Wagner is a PhD student in the Department of Chemistry at Ben-Gurion University of the Negev under the supervision of Azrieli Early Career Faculty Alum Dr. Benjamin Palmer. Her research focuses on the formation and crystallization pathways of biogenic guanine crystals. In nature, the assembly and morphologies of these crystals are exquisitely controlled to create different optical phenomena associated with animal coloration and vision. However, almost nothing is known about how organisms make the crystals themselves. Avital follows the morphogenesis of guanine crystals in model organisms during development using cryogenic scanning and transmission electron microscopy and synchrotron x-ray diffraction methods. Her aim is to adapt the strategies used by organisms to the laboratory and develop new green routes for making the artificial molecular crystals used in optics, pharmaceuticals, and other fields.

Avital grew up in Rehovot and currently lives in Be'er Sheva. While growing up, Avital was a competitive swimmer on the Maccabi-Weisgal-Rehovot team. She did her military service as a chemistry and materials lab assistant in the Technology and Maintenance Corps. While completing her BSc and MSc degrees in materials engineering at Ben-Gurion University, she actively participated in tutoring and mentoring students and organizing enrichment activities. Avital's MSc studies centred on optical properties of doped ceramics, and she has multiple publications resulting from her research. In her spare time, Avital enjoys reading books, playing word games, spending time with family and friends, and hiking around the Negev desert.



# ORYAN ZACKS



Oryan Zacks is a PhD student in the Cohn Institute for the History and Philosophy of Science and Ideas at Tel Aviv University under the supervision of Prof. Eva Jablonka. Oryan researches cognition and consciousness from an evolutionary perspective, relating current philosophical questions to findings in neuroscience and animal behaviour studies. The focus of her research is the evolution of imagination and its relationship to episodic memory. As part of her research, Oryan is currently comparing the brains of different animals, trying to build a more coherent picture of the relationship between an animal's brain, behaviour, and subjective experience of the world. Through her research Oryan hopes to contribute to a better understanding of the human mind and the internal worlds of other animals. She also hopes that her findings will have implications for people with mental illness and influence the treatment of animals from an ethical perspective.

Oryan grew up in Omer, a small town near Be'er Sheva, and currently lives with her spouse in Jersusalem. She completed her BSc and MSc in the Sagol School of Neuroscience at Tel Aviv University. Inspired by her background as a dancer and acrobat, she devoted her masters to studying how imagination can affect human movement. At the same time she was a dancer and creator of Feedback – a live performance combining biofeedback, psychology, music, and dance – and taught movement, biology, and neuroscience. In her free time, Oryan enjoys wandering the streets of Jerusalem and discovering the beauty and diversity of this unique city.

#### SARAH YONA ZWEIG

Sarah Yona Zweig is a PhD student in the Department of Comparative Religion at the Hebrew University of Jerusalem under the guidance of Dr. Joseph Witztum and Dr. Naphtali Meshel. Her research focuses on the Moses episode in Sūrat al-Kahf 18:60-82 and its literary background in Late Antiquity. Sarah traces the narrative predecessors of Moses' journey to sources as diverse as the Gilgamesh Epos, Apocalyptic Literature, and the Sayings of the Desert Fathers. By reading the classic Islamic commentaries as polytexts, she demonstrates their interplay with the many archives of Late Antiquity. Her research thus portrays the traditional exegetes as sensitive readers with their own modes of critical thought and philological practices. Sarah believes that motifs are instruments of transformation and that the world is comprised of stories and not of atoms.

Sarah arew up in Germany where she was a horse acrobat before making aliya to Israel. She obtained her BA in Greek philosophy and MA in comparative religion at the Hebrew University and also studied at both the Sorbonne in Paris and the Pontifical Gregorian University in Rome. Driven by a strong sense of social justice and a desire to explore visual parallels of emotional states. Sarah worked as a filmmaker in cinema and journalism for over a decade. She has lived, volunteered, and reported from India, China, Mongolia, Russia, the Syrian border, refugee camps in Germany, Israel and the Palestinian territories, and, most recently, the Ukrainian border. She was a fellow in the residence program at the Doha Institute for Advanced Studies in Doha, Qatar and a research fellow at the India International Centre in New Delhi. In her free time, Sarah likes to stand on her hands, play the oud disharmoniously, make furniture out of discarded wood, and explore hidden places.



#### AZRIELI GRADUATE STUDIES FELLOWS 2021-2022



Tamar Amishav The Hebrew University of Jerusalem Educational Psychology



Michal Andelman-Gur Weizmann Institute of Science Neuroscience



Ambreen Ben-Shmuel The Hebrew University of Jerusalem Sociology



Rasha Bowirrat Technion – Israel Institute of Technology Architecture



Emil Bronstein Technion – Israel Institute of Technology Mechanical Engineering



Danielle Chen Kleinman The Hebrew University of Jerusalem Asian Studies



Hagit Gabbay Tel Aviv University Educational Technology



Merav Hayak Ben-Gurion University Educational Technology



Taelin Karidi The Hebrew University of Jerusalem Computer Science



Aliaksei (Alexey) Horlach

Technion - Israel Institute of Technology

Theoretical Physics

Yonatan Katzenelenbogen Weizmann Institute of Science Genomics



Alon Jasper Tel Aviv University Law

**Ron Kleiner** 

Tel Aviv University

Nanomedicine



Ruthie Kaplan University of Haifa Jewish History



Mai Lazarus Tel Aviv University Ecology



**Mordechai (Motti) Levy** The Hebrew University of Jerusalem Middle Eastern Studies

#### **AZRIELI GRADUATE STUDIES FELLOWS 2021-2022**



Racheli Levy Technion - Israel Institute of Technology Technion - Israel Institute of Food Engineering



Eytan Mann

Architecture



Oded Naor **Computer Science** 



Mor Rozner



Lihi Sarfaty University of Haifa Educational Psychology



**Orphée Senouf-Pilpoul** Tel Aviv University Cultural Studies



**Ohad Sorek** Tel Aviv University Architecture



Astrophysics

Yoni Stern University of Haifa Neuropsychology



Jasmin Wennersbusch Tel Aviv University Law

AZRIELI FELLOWS PROGRAM 2022-2023

GRADUATE STUDIES FELLOWS

#### **AZRIELI GRADUATE STUDIES FELLOWS 2020-2021**



**Doron Atias** The Hebrew University of Jerusalem Social Psychology



Abhishek Banerjee Weizmann Institute of Science Physics



Naama Ben-Dor Technion - Israel Institute of Technology The Hebrew University of Jerusalem Dialogic Learning



Moshe Dovid Chechik Talmud and Halakha



Aviya Doron The Hebrew University of Jerusalem Medieval Jewish History



Shvat Eilat Tel Aviv University Social Anthropology



**Einat Elizarov** University of Haifa Developmental Psychology



Haggai Eyal The Hebrew University of Jerusalem Earth Sciences



Noa Feldman Tel Aviv University Physics



Israel Gabay Technion - Israel Institute of Technology The Hebrew University of Jerusalem Mechanical Engineering



**Omer Hacker** Anthropology



Daphne Inbar The Hebrew University of Jerusalem International Relations



Maya Inbar The Hebrew University of Jerusalem Linguistics & Cognitive Neuroscience



Zohar Klein University of Haifa Clinical Neuropsychology



Yoni Livneh Ben-Gurion University Hebrew Literature



**Danielle Miller** Tel Aviv University Bioinformatics

#### **AZRIELI GRADUATE STUDIES FELLOWS 2020-2021**



Tamer Mour Weizmann Institute of Science **Computer Sciences** 



**Rotem Rozenblat** Bar-Ilan University Molecular Neurobiology



Tanya Nazaretsky Weizmann Institute of Science Science Education



Shay Sadovsky Tel Aviv University Mathematics



Ziv Orpaz Bar-Ilan University Molecular Biology



Gal Vishne The Hebrew University of Jerusalem Neuroscience



Ofer Prinz Setter

Biotechnology

AZRIELI FELLOWS PROGRAM 2022-2023 GRADUATE STUDIES FELLOWS Technion - Israel Institute of Technology

#### 2020-2021

ALON DAVID SADEH

Tel Aviv University Architecture

**OREN ELDAR** Tel Aviv University Architecture

**ZIV LEIBU** Technion – Israel Institute of Technology Architecture

HAGIT LESHEM Tel Aviv University Architecture

DAPHNA LEVINE Technion – Israel Institute of Technology Architecture

RYAN POURATI Technion – Israel Institute of Technology Architecture

#### 2019-2020

AVIAD ABERDAM Technion – Israel Institute of Technology Electrical Engineering

**SHIREL BAKBANI ELKAYAM** University of Haifa Psychology

KAREN LEE BAR-SINAI Technion – Israel Institute of Technology Architecture

SHRAGA BICK The Hebrew University of Jerusalem Comparative Religion

ITAY BLOCH Tel Aviv University Physics

**RÉMI DANIEL** The Hebrew University of Jerusalem International Relations SHANI EVENSTEIN SIGALOV Tel Aviv University Education

**SHIR FILO** The Hebrew University of Jerusalem Neuroimaging

**OMER HAGGAG** The Hebrew University of Jerusalem Chemistry

OMER KNELLER Weizmann Institute of Science Physics

PETER LANCHIDI Ben-Gurion University of the Negev Jewish Thought

JONATHAN LETZTER Tel Aviv University Architecture

NOAM MAEIR The Hebrew University of Jerusalem Comparative Religion

TAL NAHARI The Hebrew University of Jerusalem Cognitive Science

PERLE NICOLLE-HASID The Hebrew University of Jerusalem Sociology

SHILO OHAYON Technion – Israel Institute of Technology Biomedical Engineering

MEYTAL RADZINSKI The Hebrew University of Jerusalem Biological Chemistry

**SIGAL-HAVA ROTEM** University of Haifa Mathematics Education

NOY SHEMESH Bar-Ilan University Archaeology TIRZA WILLNER The Hebrew University of Jerusalem Education

HADAS ZAHAVI Tel Aviv University Literature

#### 2018-2019

ESSAM ASSALI Ben-Gurion University of the Negev Biochemistry & Physiology

YINON BAR-ON Weizmann Institute of Science Biochemistry

HADDAR BEISER Tel Aviv University Musicology

YOAV CHARPAK-AMIKAM The Hebrew University of Jerusalem Biology

SHAHAR DERY The Hebrew University of Jerusalem Chemistry

HAGAI HILLEL DIAMANDI Bar-Ilan University Electrical Engineering

MICHAL DVIR University of Haifa Education

LOTEM ELBER-DOROZKO The Hebrew University of Jerusalem Computational Neuroscience

MICHAL ERLICH Tel Aviv University Indian Studies

MICHAL FRIEDMAN Technion – Israel Institute of Technology Computer Science SHILAT HAIM-NACHUM

Bar-Ilan University Education

**LEORE HEIM** Tel Aviv University Neurophysiology

ALON ISRAELI The Hebrew University of Jerusalem Genetics

JONATHAN JEFFET Tel Aviv University Biophysics

MERRYAN KRUPNIK MAJEROWITZ Technion – Israel Institute of Technology Architecture

ROY MAROM University of Haifa Israel Studies

ORIT NAFCHA University of Haifa Psychology

TOM SHAKED Technion – Israel Institute of Technology Architecture

KEREN SHOHAM Technion – Israel Institute of Technology Architecture

GAL SOFER Ben-Gurion University of the Negev Jewish Thought

AVIV STEREN Ben-Gurion University of the Negev Management

**MIRJAM STRENG** Tel Aviv University Law

**ELLA TOVIA** The Hebrew University of Jerusalem Talmud VANESSA WORKMAN Bar-Ilan University Archaeology

AYELET ZALIC The Hebrew University of Jerusalem Condensed Matter Physics

# 2017-2018

RAN EITAN ABUTBUL Ben-Gurion University of the Negev Materials Science

**ELIRAN ARAZI** The Hebrew University of Jerusalem Social Anthropology

GUY AUSTERN Technion — Israel Institute of Technology Architecture

IDIT BEN OR The Hebrew University of Jerusalem History

YONATAN CHEMLA Ben-Gurion University of the Negev Synthetic Biology

ADI DORON The Hebrew University of Jerusalem Neuroscience

**IFAT GAVISH** University of Haifa Education

**YUVAL GIVON** Tel Aviv University History

**IDAN HARITAN** Technion – Israel Institute of Technology Quantum Chemistry

**OMER KARIN** Weizmann Institute of Science Systems Biology OHAD KOHN Tel Aviv University

Comparative Literature

SHACHAR LIVNE The Hebrew University of Jerusalem Comparative Literature

TOWIBAH MAJDOOB Tel Aviv University Sociology

LIHI MATZA Technion – Israel Institute of Technology Architecture

DAN MIKULINCER Weizmann Institute of Science Mathematics

NADAV OUTMEZGUINE Tel Aviv University Physics

**NOA ROM** The Hebrew University of Jerusalem Education

YAIR SEGEV Weizmann Institute of Science Chemical Physics

HARAN SENED Bar-Ilan University Psychology

OHAD SOREK Tel Aviv University Architecture

KAREN YIRMIYA FELDSTEIN Bar-Ilan University Psychology

TOM ZAHAVY Technion – Israel Institute of Technology Machine Learning

#### 2016-2017

AVISHAI ABBO The Hebrew University of Jerusalem Geology

SAAR ALON-BARKAT The Hebrew University of Jerusalem Political Science

ALON APPLEBOIM The Hebrew University of Jerusalem Computational Biology

**ELLA ASSAF SHPAYER** Tel Aviv University Archaeology

RONA AVIRAM Weizmann Institute of Science Cell Biology

MIRIAM BABICHENKO The Hebrew University of Jerusalem Education

ARIELLE BLONDER Technion – Israel Institute of Technology Architecture

GAL DAR-WAISEL Tel Aviv University Architecture

TALYA EDEN Tel Aviv University Electrical Engineering

MICHAL EISENBERG-BORD Weizmann Institute of Science Molecular Genetics

RACHEL GREGOR Ben-Gurion University of the Negev Chemistry

ITAY GRINIASTY Weizmann Institute of Science Physics

ORI KATZ Ben-Gurion University of the Negev Sociology & Anthropology SHMUEL KATZ Technion – Israel Institute of Technology Mechanical Engineering

**GAL LAZARUS** Bar-Ilan University Psychology

IDO LEVIN The Hebrew University of Jerusalem Physics

MAAYAN NIDBACH The Hebrew University of Jerusalem Asian Studies

NIRIT PILOSOF Technion – Israel Institute of Technology Architecture

LOTEM PINCHOVER The Hebrew University of Jerusalem Art History

YUVAL RUBINSTEIN Technion – Israel Institute of Technology Architecture

**SHARON SADAN-LEVY** University of Haifa Education

BRIGITTA R. SCHVARCZ Bar-Ilan University Linguistics

YANIV SELA Tel Aviv University Neuroscience

MARK SHUSTERMAN Tel Aviv University Mathematics

IDO SIVAN-SEVILLA The Hebrew University of Jerusalem Public Policy & Government

RAN WEKSLER The Hebrew University of Jerusalem Economics

#### 2015-2016

DAVID ADRAEE Technion – Israel Institute of Technology Architecture

LENA ARBOV ATUAR Technion – Israel Institute of Technology Architecture

HALELY BALABAN Tel Aviv University Neuroscience

**EREZ O. COHEN** Tel Aviv University Physics

MICHAEL M. DANZIGER Bar-Ilan University Physics

ALON DIAMENT CARMEL Tel Aviv University Biomedical Engineering

VERONICA DUDAREV The Hebrew University of Jerusalem Psychology

TOM DVIR The Hebrew University of Jerusalem Physics

NATHAN GOLDSTEIN Bar-Ilan University Economics

**BOAZ HAMEIRI** Tel Aviv University Psychology

RUTHIE KAPLAN Technion – Israel Institute of Technology Architecture

SHIFRA LANSKY The Hebrew University of Jerusalem Biochemistry DEBORAH MARCIANO The Hebrew University of Jerusalem Psychology

TALLY ROSENFELD BRODER Technion – Israel Institute of Technology Microfluidics

**YONAT RUM** Tel Aviv University Education

GABRIEL SCHWAKE Tel Aviv University Architecture

WISAM SEDAWI Ben-Gurion University of the Negev Education

MATAN SOREK The Hebrew University of Jerusalem Neuroscience

ALEXANDER SPIEGELMAN Technion – Israel Institute of Technology Electrical Engineering

# 2014-2015

LIRAN BEN MOSHE University of Haifa Marine Geosciences

DEBORAH COHEN Technion – Israel Institute of Technology Electrical Engineering

**IDAN FRUMKIN** Weizmann Institute of Science Molecular Genetics

YAMIT LAZIMI Technion – Israel Institute of Technology Architecture

**ZIV LEIBU** Tel Aviv University Architecture

JONATHAN LETZTER Tel Aviv University Architecture

YUVAL PELED The Hebrew University of Jerusalem Computer Science

HAGIT SABATO Ben-Gurion University of the Negev Educational Psychology

SHIRA SAGIE Technion – Israel Institute of Technology Biology

DANA SURY-BAROT University of Haifa Education

**SOLI VERED** Tel Aviv University Education

# 2013-2014

DAVID AMAR Tel Aviv University Computational Biology

ITZHAK BERKOVICH The Hebrew University of Jerusalem Education

MIRI DANAN-GOTTHOLD Bar-Ilan University Computational Biology

**DROR DOTAN** Tel Aviv University Education

**YOEL GROMAN** The Hebrew University of Jerusalem Mathematics

HILA HARRIS-MILLER Weizmann Institute of Science Neurobiology

ITAY REMER Ben-Gurion University of the Negev Biomedical Engineering

NANCY SANDOLUVICI-KATZ Tel Aviv University Architecture

ALEX TOLMACHEV Technion – Israel Institute of Technology Electrical Engineering

# 2012-2013

**GIORA ALEXANDRON** Weizmann Institute of Science Science Education

ITAMAR GURMAN Weizmann Institute of Science Condensed Matter Physics

**TAL J. LEVY** Tel Aviv University Molecular Electronics

**EYTAN MANN** Tel Aviv University Architecture

**MEYTAL NASIE** Tel Aviv University Education

MOR NITZAN The Hebrew University of Jerusalem Physics and Bioinformatics

TOMER PELEG Technion – Israel Institute of Technology Electrical Engineering

**TOM SHAKED** Tel Aviv University Architecture

ALON SZCZUPAK Ben-Gurion University of the Negev Biotechnology

**KEREN YIZHAK** Tel Aviv University Bioinformatics

# 2011-2012

MERAV BATTAT-AVIRAM Tel Aviv University Architecture

**EYAL KARZBRUN** Weizmann Institute of Science Synthetic Biology

MICHAL LEVO Weizmann Institute of Science Bioinformatics

ASAF LEVY Weizmann Institute of Science Molecular Genetics

MICHAL NISSIM-BERENSTEIN Bar-Ilan University Education

YULIA SAPIR-LEKHOVITSER Ben-Gurion University of the Negev Biotechnology Engineering

ERAN TREISTER Technion – Israel Institute of Technology Computer Science

**EFRAT VERTES COHEN** Tel Aviv University Architecture

MATI ZAKAI-MASHIACH Tel Aviv University Education

# 2010-2011

LILACH ASHOULIN University of Haifa Education

ARIEL J. BEN-SASSON Technion – Israel Institute of Technology Nanotechnology

MICHAL BRAIER Tel Aviv University Architecture

IFTACH DOLEV Tel Aviv University Neurobiology

NIR ERDINEST The Hebrew University of Jerusalem Neurobiology

RAJA GIRYES Technion – Israel Institute of Technology Computer Science

TALYA GOREN University of Haifa Education

**EREZ KLAPPER** Tel Aviv University Architecture

**ELAD NOOR** Weizmann Institute of Science Biochemistry

**GILI SHAPIRA** Tel Aviv University Architecture

HILA ZAROSIM Bar-Ilan University Computer Science - Cryptography

#### 2009-2010

**OMRI ABEND** The Hebrew University of Jerusalem Computer Science & Linguistics

BNAYA BAUER Technion – Israel Institute of Technology Bio-Architecture

SIVAN BERCOVICI Technion – Israel Institute of Technology Bioinformatics

MICHAL BLEICHER KUGLER Tel Aviv University Architecture

**GUY COHEN** Tel Aviv University Chemical Physics

NOY LAZAROVICH Technion – Israel Institute of Technology Architecture

OHAD MANOR Weizmann Institute of Science Computational Biology

HEDVA MEIRI University of Haifa Education

**OREN SHOVAL** Weizmann Institute of Science Molecular Cell Biology

LIOR SOMECH The Hebrew University of Jerusalem Educational Psychology

**OMRI WURTZEL** Weizmann Institute of Science Molecular Genetics

OMER YAFFE Weizmann Institute of Science Molecular Electronics

# 2008-2009

NETTA ABUGOV Tel Aviv University Education

BARAK ALFASSI Technion – Israel Institute of Technology Physics

OMER BARAD Weizmann Institute of Science Molecular Genetics

**YEHUDA BRODY** Bar-Ilan University Biotechnology

NATANEL ELFASSY Tel Aviv University Architecture

**ODED HAAS** Tel Aviv University Architecture

LIAT SAVIN-BEN SHOSHAN Bar-Ilan University Architecture

**ARIE SHAUS** Tel Aviv University Computational Mathematics & Archaeology

SHIRA SOFFER-VITAL The Hebrew University of Jerusalem Education

TALI TAVOR RE'EM Ben-Gurion University of the Negev Biotechnology Engineering

### 2007-2008

#### FATINA ABREEK-ZUBIEDAT

Technion – Israel Institute of Technology Architecture

OMRI BARAK Weizmann Institute of Science Neurobiology

JONATHAN BERANT Tel Aviv University Computer Science & Linguistics

**SHLOMIT DAVIDOVITCH** The Hebrew University of Jerusalem Education

NAAMA ELEFANT-BERNSTEIN The Hebrew University of Jerusalem Molecular Genetics

EDNA LANGENTHAL Tel Aviv University Architecture

TAL MODAI-SNIR Technion – Israel Institute of Technology Architecture & Urban Planning

TALI RAVEH-SADKA Weizmann Institute of Science Computational Biology

**ARYEH (ARIK) SEGEV** Ben-Gurion University of the Negev Education

SHIRA SPRECHER-SEGALOVITZ Technion – Israel Institute of Technology Architecture

HAIM SUCHOWSKI Weizmann Institute of Science Physics

# AZRIELI INTERNATIONAL POSTDOCTORAL FELLOWS 2022–2023

# Azrieli International Postdoctoral Selection Committees 2022-2023

#### SENIOR ACADEMIC ADVISOR

Professor Hermona Soreq, The Hebrew University of Jerusalem

	EXACT SCIENCES
CHAIR:	Prof. Uri Banin, The Hebrew University of Jerusalem
	<ul> <li>Prof. Ronen Brafman, Ben-Gurion University of the Negev</li> <li>Prof. Yigal Erel, The Hebrew University of Jerusalem</li> <li>Prof. Yael Hanein, Tel Aviv University</li> <li>Prof. Roy Meshulam, Technion – Israel Institute of Technology</li> <li>Prof. Dan Oron, Weizmann Institute of Science</li> <li>Prof. Pekka Sinervo, University of Toronto</li> </ul>
	LIFE SCIENCES
CHAIR:	Prof. Shulamit Michaeli, Bar-Ilan University
	<ul> <li>Prof. Naama Barkai, Weizmann Institute of Science</li> <li>Prof. Oded Beja, Technion – Israel Institute of Technology</li> <li>Prof. Judith Berman, Tel Aviv University</li> <li>Prof. Ariel Chipman, The Hebrew University of Jerusalem</li> <li>Prof. Alan Davidson, University of Toronto</li> <li>Prof. Erez Levanon, Bar-Ilan University</li> <li>Prof. Marla Sokolowski, University of Toronto</li> </ul>
	HUMANITIES
CHAIR:	Prof. Sarah Stroumsa, The Hebrew University of Jerusalem
	<ul> <li>Prof. Mira Balberg, University of California San Diego</li> <li>Prof. Jonathan Ben-Dov, Tel Aviv University</li> <li>Prof. David Enoch, The Hebrew University of Jerusalem</li> <li>Prof. Mercedes García-Arenal, CSIC (Spanish National Research Council)</li> <li>Prof. Francoise Lavocat, Université de la Sorbonne Nouvelle, Paris III</li> </ul>
	SOCIAL SCIENCES
CHAIR:	Prof. Csaba Nikolenyi, Concordia University
	<ul> <li>Prof. Avner de Shalit, The Hebrew University of Jerusalem</li> <li>Prof. Eva Gilboa-Schechtman, Bar-Ilan University</li> <li>Prof. Yehonatan Givati, The Hebrew University of Jerusalem</li> <li>Prof. Morton Weinfeld, McGill University</li> <li>Prof. Lea Wittenberg, University of Haifa</li> </ul>

# EDUARDO ARLÉ



Dr. Eduardo Arlé is an Azrieli International Postdoctoral Fellow in the George S. Wise Faculty of Life Sciences at Tel Aviv University under the supervision of Prof. Jonathan Belmaker. His primary areas of research are invasion biology and nature conservation, but his interests extend to method development and programming. Hundreds of species have migrated from the Red Sea to the Mediterranean Sea through the Suez Canal, establishing alien populations that can disturb the local environment. Understanding the dynamics driving biological invasions is crucial for controlling the spread of species already established and preventing the future introduction of new alien species. However, the methods currently available for predicting species distribution have severe limitations. Eduardo's research uses the Mediterranean as a case study for developing new methods, best practices, and computational tools to advance invasion biology research and management.

Eduardo was born in Rio de Janeiro and has had a strong interest in observing and understanding nature since childhood. After obtaining a BA in international relations, he felt more drawn to biology and went on to complete a BSc in biological sciences and an MSc in neotropical biodiversity at the Federal University of Rio de Janeiro. He pursued his PhD at the German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig, under the supervision of Dr. Carsten Meyer, where he worked on improving knowledge of alien species distribution by integrating data across scales. Apart from science, Eduardo enjoys travelling, learning languages, cooking, and eating delicious food.

### STEFANO BAIGUERA

Dr. Stefano Baiguera is an Azrieli International Postdoctoral Fellow in the Physics Department at Ben-Gurion University of the Negev. His research, under the supervision of Dr. Shira Chapman, deals with the interplay between quantum information and black holes. The holographic principle is a theoretical duality relating quantum mechanical phenomena to the physics of gravitational systems. This surprising link connects the theoretical properties of astronomical objects, like black holes, to the optimization of quantum computers. In particular, the interior of a black hole can be related to computational complexity, which is the difficulty of implementing a certain operation. Stefano's research also focuses on the study of nonrelativistic theories which lead to a controlled framework for analyzing quantum systems and their dual gravitational description.

Stefano was born in Italy and studied for his BSc and MSc in physics at the Catholic University of the Sacred Heart in Brescia. He completed his PhD in physics at the University of Milano-Bicocca under the supervision of Prof. Silvia Penati and then continued to a postdoctoral position at the Niels Bohr Institute (NBI) in Copenhagen under the supervision of Prof. Troels Harmark and Prof. Niels Obers. Besides research, Stefano enjoys playing board games, trading card games, and playing chess and football with friends.



# CARLOS BRAVO-LAGUNA



Dr. Carlos Bravo-Laguna is an Azrieli International Postdoctoral Fellow in the Federmann School of Public Policy and Government at the Hebrew University of Jerusalem under the supervision of Prof. David Levi-Faur. His research interests cover public policy and crisis management and the evolution of regulatory oversight across the OECD. In particular, his primary area of research examines crisis networks with a focus on their performance during transboundary incidents. Carlos aims to link structural characteristics of crisis networks to policy outcomes by determining which conditions affect their ability to produce rapid and effective emergency reactions. He thus hopes to contribute to the definition of crisis networks and shed light on how network theory explains crisis management. Carlos is also looking to assess factors that impact the role and weight of EU actors in the governance of external crisis responses.

Carlos has a BA in translation and interpreting from the University of Granada and an MA in international relations from the Barcelona Institute of International Studies (IBEI). He completed his PhD in political and social sciences at the Pompeu Fabra University in Barcelona, exploring the role and weight of the EU in the management of external transboundary crises, and was subsequently a visiting research fellow at University of Konstanz, University of Tübingen and the Hebrew University of Jerusalem. He served as an events officer in the UACES Graduate Forum and is part of the coordination team of the UACES Research Network, RELATE (European Studies in a Relational Universe). His research has been published in various journals, including the Journal of Common Market Studies, the Journal of European Integration, Environmental Sciences Europe, and the Journal of Contingencies and Crisis Management. In his free time, Carlos likes running and hiking with friends. While he considers himself quite sociable, Carlos also enjoys spending quality time at home, reading books, watching films, cooking, or playing computer games.

# ROLANDO CARBONARI

Dr. Rolando Carbonari is an Azrieli International Postdoctoral Fellow in the Fredy & Nadine Herrmann Institute of Earth Sciences at the Hebrew University of Jerusalem under the supervision of Prof. Simon Emmanuel. His central research interest is the application of machine learning and deep learning solutions to geological problems. As part of his Azrielisponsored research, Rolando is working on automating digital rock analysis: a crucial step in subsurface characterization, which helps quantify rock porosity, permeability, and mineralogical composition. This is currently performed by analyzing digital data from microscope images and X-ray computed tomography. As this process is time-consuming and costly, Rolando is hoping to develop an automatic image analysis tool that will help to assess the mineralogy and quantify the quartz cement and porosity in sandstones and will be accessible as an open source software for all earth scientists.

Rolando was born and raised in Naples, Italy. He completed a BA and MA in geology with a specialization in geophysics at the University of Naples Federico II, where he then went on to pursue his PhD under the supervision of Prof. Rosa Di Maio, focusing on the application of electromagnetic geophysical methods. After a brief period as a data scientist in Milan, Rolando embarked on a two-year postdoctoral position at Oregon State University under the supervision of Prof. Adam Schultz, exploring the application of machine learning techniques to optimize geothermal drilling efficiency. When not engaged in research, Rolando enjoys reading, travelling, and cooking.



# REMI CASIER



Dr. Remi Casier is an Azrieli International Postdoctoral Fellow in the Department of Chemical and Biological Physics at the Weizmann Institute of Science. Under the supervision of Prof. Gilad Haran, Remi employs single-molecule spectroscopy to study the ultrafast conformational dynamics of proteins. Protein disaggregases are molecular machines that reverse protein aggregation, making them a vital component of cells and enabling their use in the development of therapeutics to combat neurodegenerative disorders. Remi aims to apply his background knowledge in polymer physics to study the dynamic interaction between a disaggregase and its substrates and thus enhance our understanding of their disaggregation mechanism on the molecular level.

Born and raised in Canada. Remi obtained his BSc and MSc in chemistry from the University of Waterloo. During his MSc under the supervision of Prof. Mario Gauthier and Prof. Jean Duhamel. Remi began his studies in polymer science developing a new technique to quantify the diffusion of polymer chains during the coalescence of latex films. Continuing with Prof. Duhamel for his PhD studies, Remi shifted his focus to the internal dynamics of biological macromolecules, particularly polypeptides. Employing the relationships he discovered between amino acid composition and local chain dynamics, he developed a blob-based model to provide experimentally supported insight into the complex phenomena of protein folding. When not working on his research, Remi enjoys travelling, spending time in nature, and trekking adventures.

# MILICA DENIĆ

Dr. Milica Denić is an Azrieli International Postdoctoral Fellow in the Linguistics Department at Tel Aviv University under the supervision of Prof. Roni Katzir. In her current research, Milica is working on a central question about human cognition: what are the building blocks of human thought? To answer this question, she is developing novel approaches, combining tools from linguistics, cognitive science, and computational modelling and applying them to numerical and logical concepts.

Milica was born in Serbia and moved to Slovenia, where she studied for a BA in linguistics at the University of Ljubljana. She pursued her MSc and PhD in cognitive science at École normale supérieure in Paris under the supervision of Dr. Emmanuel Chemla and Dr. Benjamin Spector. She then held a postdoctoral position at the Institute for Logic, Language and Computation at the University of Amsterdam under the supervision of Prof. Jakub Szymanik. Besides research, Milica enjoys inline skating, films, and chess.



# ALEXANDER DUTHIE



Dr. Alexander Duthie is an Azrieli International Postdoctoral Fellow in the Physics Department at Ben-Gurion University of the Negev under the supervision of Dr. Yevgeny Bar Lev. His research interests concern the fundamental behaviour of matter on the smallest length scales. This involves using mathematical and computational tools to understand the behaviour of vast numbers of strongly interacting particles and the often surprising and beautiful collective behaviour that can result. Realizing and manipulating these novel phases of matter is an important step toward a fully-fledged quantum computer in the future. As an Azrieli Fellow, Alexander is planning to explore how the presence of disorder can inhibit systems from reaching thermal equilibrium of their own accord (so-called "manybody localization") with a potential application in the development of quantum memory devices. His interests also extend to quantum information science and quantum computing - fields which lie at the forefront of the development of nextgeneration technologies.

Alexander was born in the UK and obtained an undergraduate in natural sciences from Cambridge University. He then completed his DPhil in theory and modelling in chemical sciences at Oxford University under the supervision of Prof. David Logan. His research focused on single-particle systems, which lie on the border between disorder and order, such as quasiperiodic models, and he developed a theoretical framework for understanding their electronic properties. In his spare time, Alexander enjoys running, cycling, rock climbing, reading, and travelling.

# GWENAËL FERRANDO

Dr. Gwenaël Ferrando is an Azrieli International Postdoctoral Fellow in the Raymond & Beverly Sackler School of Physics and Astronomy at Tel Aviv University under the supervision of Prof. Amit Sever. Gwenaël's work deals with theoretical problems in high energy physics, particularly models for which an exact analytic solution is believed achievable. Gwenaël hopes to gain insights into more general issues, such as nonperturbative aspects of quantum field theory or the so-called AdS/CFT correspondence. The latter is a promising conjecture that certain quantum field theories are equivalent to some string theories, which are themselves the best candidates for theories of quantum gravity.

Gwenaël was born in France and studied at the École normale supérieure in Paris where he obtained undergraduate degrees in both physics and mathematics and a master's degree in theoretical physics. He then went on to complete a PhD under the joint supervision of Prof. Vladimir Kazakov at the École normale supérieure and Dr. Didina Serban at the Institut de Physique Théorique in Saclay. In his free time, Gwenaël enjoys reading, watching movies, hiking, and travelling.



# EUGENIO GAROSI



Dr. Eugenio Garosi is an Azrieli International Postdoctoral Fellow in the Department of Middle Eastern and Islamic Studies at the University of Haifa under the supervision of Dr. Uriel Simonsohn. Eugenio specializes in the social history of the early Islamic Empire, with an emphasis on the role of languages and scribal practices in constructing social identities. The main focus of his work lies in early Islamic documents on papyrus, paper, parchment and ostraca. Unlike the later Islamic literary tradition and the narratives of non-Muslim denominations living under Muslim rule, these documents were not redacted with posterity in mind and thus offer a comparatively unbiased perspective on their environment. Eugenio's current research engages with expressions of religious identities through the lens of Arabic, Greek, and Coptic everyday writings in seventh to tenth-century Egypt. He is planning to explore the relationship between onomastic patterns and other social identifiers and subsequently inject empirical insights, gained from thousands of original documents, into debates on the related processes of Arabization and conversion to Islam, during the crucial first centuries following the Arab conquests.

Eugenio was born and raised in Italy before moving to Germany to complete an MA in Arabic and Islamic studies at Ludwig Maximilian University of Munich (LMU). He then obtained a PhD in Arabic studies and ancient history from LMU and the University of Basel, researching two projects, "Change and Continuities from a Christian to a Muslim Society" and "The Arabic Papyrology Database," under the supervision of Prof. Andreas Kaplony and Prof. Sabine Huebner. During postdoctoral fellowships at the Hebrew University's Israel Institute for Advanced Studies and the University of Hamburg's RomanIslam - Center for Comparative Empire and Transcultural Studies, Eugenio also explored the construction and negotiation of religious and cultural boundaries in pre-modern Islamicate societies. When not engaged in research, Eugenio enjoys reading, travelling, skiing, and going to the opera.

# MAXIMILIAN KNOTT

Dr. Maximilian Knott is an Azrieli International Postdoctoral Fellow in the Sagol School of Neurosciences at Tel Aviv University where. under the supervision of Prof. Oded Rechavi, he is investigating the impact of small RNAs on genomic integrity and mutagenesis. Small RNAs have been identified as site-specific regulators of chromatin organization and accessibility in response to environmental stimuli. The fidelity of DNA repair mechanisms has been shown to vary among different chromatin states, leading Maximilian to claim that temporally limited small RNA-mediated adaptation to environmental change might be genetically hardwired by mutations of the genome. This has tremendous implications for evolution as well as for tumorigenesis and chemoresistance of cancer.

Maximilian was born and raised in Munich. He studied medicine at Ludwig Maximilian University of Munich (LMU) and the University of Queensland. He completed his MD thesis under the supervision of Prof. David Anz and focused his research on the interplay of the immune system and solid tumours with special focus on immune-evasion of tumour cells. During his residency in surgical pathology, he proceeded to study tumour-specific oncogene-enhancer interactions and their therapeutic potential in pediatric soft tissue tumours at LMU's Institute of Pathology under the supervision of Prof. Thomas Gruenewald. Besides his research, Maximilian participates in the Skype a Scientist program and enjoys literature, poetry, and travelling with friends.



# SARAH LIBANORE



Dr. Sarah Libanore is an Azrieli International Postdoctoral Fellow in the Physics Department at Ben-Gurion University of the Negev. Together with her supervisor, Azrieli alum Dr. Ely Kovetz, Sarah is investigating the structure and content of the universe and how it has changed over time, by studying the properties of the astrophysical sources and their distribution in time and space. In her work, Sarah deals with two different kinds of sources: the gravitational waves, produced when two massive and compact objects, such as black holes, collide; and emissions of hot gas in the early universe. Exploiting the synergies between these techniques can provide us with a new and invaluable tool for studying astrophysics and cosmology and understanding the universe we live in.

Sarah was born in a small city in the north of Italy. She pursued her BA, MA, and PhD degrees at the University of Padova. Her PhD research, under the supervision of Prof. Michele Liquori and Prof. Alvise Raccanelli, focused on the clustering of aravitational wave sources to understand cosmology. In 2022, under the auspices of the PhD Sandwich Program of the Israeli Council of Higher Education and with the support of Fondazione Aldo Gini, Sarah spent six months in Israel collaborating with Dr. Ely Kovetz. Sarah loves to talk about her research and thus also works as a science communicator, mainly with children. She is very curious and loves to travel, take photos, and meet new people from different cultures.

# ALLA MARCHENKO

Dr. Alla Marchenko is an Azrieli International Postdoctoral Fellow in the Department of Sociology and Anthropology at the Hebrew University of Jerusalem under the supervision of Prof. Nurit Stadler. Her area of research is Hasidic pilgrimage in contemporary Ukraine, specifically the growing female presence at the Hasidic shrines. She surfaces the role of women in religious communities and activities and the possibility of belonging to a traditional religious community, on the one hand, and taking an active social position, on the other. Alla hopes that her research will have positive impact on the development of cross-cultural bridges between local communities and international visitors to the Hasidic shrines in Ukraine.

Alla was born in Uman, Ukraine, which, as the most visited Hasidic shrine in Europe, shaped her curiosity on the topic. After obtaining a BA, an MA, and a Candidate of Sciences in sociology at Taras Shevchenko National University of Kyiv, Alla moved to Warsaw. She completed her PhD in the Institute of Philosophy and Sociology at the Polish Academy of Sciences under the supervision of Prof. Sławomir Kapralski, focusing on the effects of Hasidic pilgrimages on the local frames of memory in Polish and Ukrainian towns. She has also taken part in numerous educational and research projects aimed at making local cultural heritage visible, with an emphasis on Jewish heritage (e.g., the EU project ReHerit - Common Responsibility for Common Heritage and the POLIN Museum of the History of Polish Jews). In addition to research, Alla likes exploring museums and participating in guided tours connected with local history. She enjoys sports, especially yoga and Pilates, and writing poems, short stories, and reviews of books and places she has visited.



# MARÍA DEL CARMEN MARÍN PÉREZ



Dr. María del Carmen Marín Pérez is an Azrieli International Postdoctoral Fellow in the Faculty of Biology at the Technion - Israel Institute of Technology under the supervision of Prof. Oded Béjà. Her main area of research is rhodopsins. Many organisms sense light using rhodopsins, photoreceptive proteins containing a retinal chromophore. Her host laboratory recently found a previously uncharacterized rhodopsin family dubbed bestrhodopsins. Bestrhodopsins are found in marine unicellular alage and have unprecedented architecture. In her current research, María aims to further characterize this recently detected bestrhodopsin family and to examine the interplay between architecture and role. She will use various OMICS (genomics, metagenomics, transcriptomics, and metatranscriptomics) to search for hidden rhodopsin architectures. She hopes that the new advances and knowledge will have significant direct and indirect influence on the fields of optogenetics and rhodopsins.

María was born in Quesada, Spain. She studied for her BSc in chemistry at the University of Jaén and her MSc in the characterization of chemical systems at the University of Alcalá. She then completed her PhD in chemical and pharmaceutical sciences at the University of Siena under the supervision of Prof. Massimo Olivucci. After years of training in computational chemistry and several collaborations with wellknown biophysics groups around the world, María became interested in the biophysics characterization of photoreceptors and thus became an interdisciplinary researcher. For this reason, she moved to Tokyo to work with Prof. Keiichi Inoue, supported by the Japan Society for the Promotion of Science. Outside the laboratory, María has had a professional career as a rugby player. She also loves photography and travelling around the world.

# EVGENIA MITSOU

Dr. Evgenia Mitsou is an Azrieli International Postdoctoral Fellow in the Department of Molecular Chemistry and Materials Science at the Weizmann Institute of Science under the supervision of Prof. Jacob Klein. In the Soft Matter and Surface Forces Lab, Evgenia focuses on the study of lubrication under water in, especially, biological systems such as major joints. She also aims to develop nanoscale formulations which will serve as both biolubricants and drug delivery systems. Her overall aim is to contribute to our understanding of the origins of frictionassociated pathologies, such as osteoarthritis, and develop novel treatments to alleviate them.

Evgenia grew up in Athens, Greece. She studied biology at the University of Ioannina and completed her PhD in biotechnology from the same university in collaboration with the National Hellenic Research Foundation under the supervision of Prof. Aristotelis Xenakis and Prof. Haralambos Stamatis. She studied the development of biocompatible nanodispersions as hosts for bioactive compounds with therapeutic interest, such as antioxidants and enzymes for oral and intranasal administration. As part of her research, Evgenia collaborated with various research groups at, for example, the CBMN - University of Bordeaux, University of Parma, and University of Belgrade in the fields of colloidal science and drug delivery and was also involved in industrial-driven projects. Outside the lab, Evgenia loves travelling, learning new languages, and listening to good music, especially in live performances. She also enjoys participating in science communication activities, especially those designed for children.



# KATARZYNA (KASIA) MŁODZIKOWSKA-PIEŃKO



Dr. Katarzyna Młodzikowska-Pieńko is an Azrieli International Postdoctoral Fellow in the Schulich Faculty of Chemistry at the Technion - Israel Institute of Technology under the supervision of Prof. Renana Gershoni-Poranne and Azrieli alum. Prof. Graham de Ruiter. Her research focuses on the design of new organometallic catalysts by employing computational chemistry to obtain an understanding of their fundamental electronic properties. Modern catalysts based on noble metals are extremely efficient but are also rare, expensive, and toxic. The continuous push toward sustainability has led to a renaissance in the use of earth-abundant metals in catalysis. Katarzyna is probing the relationship between the aromatic character that evolves during the catalytic cycle and the performance of the catalyst in the hopes that this research will enable the design of new sustainable and environment-friendly catalysts.

Katarzyna was born in Poland and obtained an MSc in pharmacy from the Medical University of Warsaw. After working briefly as a pharmacist, she pursued her PhD under the supervision of Prof. Bartosz Trzaskowski in the Centre of New Technologies and the Faculty of Chemistry at the University of Warsaw. During her PhD, she applied computational chemistry tools to investigate the properties of ruthenium catalysts. When not researching, Katarzyna is a plantlover and enjoys reading. She is also a sports enthusiast and regularly practices yoga, running, and swimming.

# PATRICIA MORA RAIMUNDO

Dr. Patricia Mora Raimundo is an Azrieli International Postdoctoral Fellow in the Wolfson Department of Chemical Engineering at the Technion - Israel Institute of Technology under the supervision of Prof. Avi Schroeder. Her main area of research is drug delivery to the brain as a means for the potential treatment of neurodegenerative diseases. Patricia's research focuses on the design of brain-targeted lipid nanoparticles and the use of music to enhance their uptake and accumulation in the targeted tissue. She hopes to contribute to the understanding of how music is involved in nanoparticle uptake and can thus enhance the efficacy of nanotherapeutics. Patricia believes that the use of music as a non-invasive approach will open new possibilities in the field of nanomedicine.

Patricia was born and raised in Madrid and completed her BSc in pharmacy at the Complutense University of Madrid, where she also pursued her PhD under the supervision of Prof. María Vallet-Regí and Dr. Miguel Manzano. Her research focused on developing new nanomedicines based on mesoporous silica nanoparticles for osteoporosis treatment. Outside the lab, Patricia loves art, yoga and dancing ballet and flamenco. Through her research, she is fulfilling her dream of combining the two fields for the well-being of humanity.



#### TRUONG SAN PHAN



Dr. Truong San Phan is an Azrieli International Postdoctoral Fellow in the Department of Systems Immunology at the Weizmann Institute of Science under the supervision of Prof. Ido Amit. San's research focuses on the regulatory network of barrier tissue environments, such as the skin, in inflammatory diseases. Epithelial barriers represent the first contact organs to the outer environment and are frequently exposed to multifactorial stressors inducing infection, injury, and inflammation, which may lead to chronic inflammatory diseases. Using single-cell genomic technologies and epigenetic approaches, San aims to uncover tissue-imprinted tolerance and inflammation memory mechanisms in inflammatory diseases. Understanding these principles will help our understanding of how chronicity of inflammatory diseases and their dynamic progressions are regulated and how inflammation is epigenetically encoded over time. San hopes that his research will facilitate the development of new combined therapies to break the vicious cycle of inflammation and heal pathogenic tissue states.

San was born and raised in Berlin and obtained a BSc and MSc in biological sciences from the University of Konstanz, where he went on to pursue his PhD in biochemical pharmacology under the supervision of Prof. Thomas Brunner. His central PhD project focused on elucidating the role of skin-derived glucocorticoids in local skin homeostasis and in prevalent inflammatory skin diseases, highlighting their important immunosuppressive function. Besides science and lecturing, San enjoys being in nature, taking part in social activities and outdoor challenges, and combining all of these in the Alps.

# HERMANN PRODJINOTO

Dr. Hermann Prodjinoto is an Azrieli International Postdoctoral Fellow in The Robert H. Smith Faculty of Agriculture, Food and Environment at The Hebrew University of Jerusalem under the supervision of Prof. Menachem Moshelion. He is studying the physiological and functional phenotyping of aquaporins in the regulatory mechanism of the drought tolerance of tomatoes. Aquaporins are the main channels for the transport of water and are involved in drought recovery; however, their involvement in the drought response of tomatoes remains unclear. Hermann therefore plans to unravel aquaporins' functions by using the simple and efficient genome editing system, CRISPR-Cas9, as a way of improving our understanding of how to improve drought resistance in tomatoes.

Hermann was born and raised in Benin. He completed a BSc in natural sciences at the University of Abomey-Calavi and an MSc in vegetable and microbial biotechnologies at the Cheikh Anta Diop University of Dakar. After working as a research assistant, he moved to Belgium where he completed his PhD in agronomic sciences and bioengineering at the Catholic University of Louvain's Earth and Life Institute under the supervision of Prof. Stanley Lutts and Prof. Christophe Gandonou. In his research, Hermann highlighted the response strategies of African rice (Oryza glaberrima) to salinity while distinguishing the effects of both the osmotic component and the ionic component of salt stress on cultivars with different mean levels of salt resistance. In addition to research. Hermann enjoys various sporting activities including running and karate.



# MAAYAN ROICHMAN



Dr. Maayan Roichman is an Azrieli International Postdoctoral Fellow in the Department of Sociology and Anthropology at Tel Aviv University under the supervision of Dr. Michal Kravel-Tovi. She is also a postdoctoral affiliate in the Department of Industrial Engineering under the supervision of Prof. Eran Toch. As an anthropologist, Maayan's research explores the production of culture, values, and ideas. In her current research she is planning to employ ethnographic methods to examine the different values that shape the production of AI-infused technologies. She hopes that this work will contribute to our understanding of the deep connection between computational reason and human work, inform normative debates on AI ethics, and promote the development of ethical engineering pedagogies.

Maayan was born in Tel Aviv, and commenced her BA in Tel Aviv University's Multidisciplinary Program in the Arts at the age of fifteen. She later joined its Adi Lautman Interdisciplinary Program for Outstanding Students, where she earned her MA in the Department of Sociology and Anthropology. She was chosen as one of the two inaugural Israeli Rhodes scholars and completed her DPhil in anthropology at the University of Oxford under the supervision of Dr. Dace Dzenovska. Her doctoral research focused on the ethical and political dimensions of film production in Israel. While at Oxford, Maayan worked in the Rhodes Artificial Intelligence Lab (RAIL), which she co-directed from 2019 to 2020. In her free time, Maayan enjoys travelling, dancing, and spending time at the beach with family and friends.

# ALEXIOS STAMATIADIS-BRÉHIER

Dr. Alexios Stamatiadis-Bréhier is an Azrieli International Postdoctoral Fellow in the Department of Philosophy at Tel Aviv University under the supervision of Dr. David Mark Kovacs. His work focuses on the metaphysics of explanation and meta-ethics and their intersection. In meta-ethics, Alexios is interested in moral naturalism, normative explanation, and the nature of moral principles; more broadly, he also researches metaphysical grounding and the metaphysics of non-causal explanation. In his current research, he plans to explore a neo-Humean theory on the metaphysical foundations of pure moral principles (such as the principle of utility or the Kantian categorical imperative).

Alexios was born in Athens, Greece. He completed his BA and MA in the history and philosophy of science at the National and Kapodistrian University of Athens. He obtained his PhD from the University of Leeds where, under the supervision of Prof. Pekka Väyrynen and Dr. Jack Woods, he researched multiple aspects of contemporary moral metaphysics, such as the nature of normative explanation and its relationship to scientific explanation. When not researching, Alexios enjoys cooking and practising Brazilian jiu-jitsu.



# MONIKA WITZENBERGER



Dr. Monika Witzenberger is an Azrieli International Postdoctoral Fellow in the Department of Molecular Genetics at the Weizmann Institute of Science, where she studies RNA modifications under the supervision of Prof. Schraga Schwartz. Since the development of new sequencing technologies over the last few decades, the detection and mapping of RNA modifications has leaped forward, uncovering an additional layer of gene regulation in human cells. In her current research, Monika plans to explore the working principles of the enzyme machinery that installs RNA modifications in the hope of leveraging these findings to develop biotechnological tools or therapeutic approaches.

Monika was born in Germany and obtained her BSc and MSc in molecular biotechnology at the Heidelberg University, with research visits to the University of Cambridge and Tel Aviv University. She then pursued her PhD at Helmholtz Munich under the supervision of Prof. Dierk Niessing. While exploring an underexplored RNA modification enzyme, using structural biology and biochemistry tools, she also worked on a novel drug target for the treatment of Huntington's disease. Outside the lab, Monika volunteers for an NGO that aims to connect young researchers and professionals with current leaders in the biotech industry. Besides science, Monika enjoys swimming, yoga, learning new languages and playing the guitar.



### **AZRIELI INTERNATIONAL POSTDOCTORAL FELLOWS 2021-2022**



Raphaël Aguillon Bar-Ilan University Neuroscience



**Reuven Balkin** Technion - Israel Institute of Technology Theoretical Physics



Nathalie Béchon Weizmann Institute of Science Microbiology



María Camarasa Gómez Weizmann Institute of Science Materials Science



Flavio A. Geisshuesler The Hebrew University of Jerusalem Comparative Religion



Yann Gouttenoire Tel Aviv University Theoretical Physics



Balthasar Grabmayr University of Haifa Philosophy



Nadine Knab Tel Aviv University Psychology



**Chethan Kamath** Tel Aviv University Cryptography



Rajarshi Mondal The Hebrew University of Jerusalem Chemistry



Daniel Kirschenbaum

Weizmann Institute of Science

Immunology

Kirti Sankhala Technion - Israel Institute of Technology Technion - Israel Institute of Technology **Chemical Engineering** Chemistry



Keren Klass

The Hebrew University of Jerusalem

Genomics

**Thierry Slot** 



Vjacheslav (Slava) Tretjacenko Weizmann Institute of Science Evolution



Juan Pablo Unfried Weizmann Institute of Science Molecular Biology



Andrei Ushkov Tel Aviv University Nanotechnology

### AZRIELI INTERNATIONAL POSTDOCTORAL FELLOWS 2020-2021



Yael Machtinger Bar-Ilan University Law

### 2021-2022

**EMMANUEL GUILLERM** University of Haifa Earth Sciences

ILAN MANOR Tel Aviv University Communications

### 2020-2021

RAPHAEL BENLEVI University of Haifa International Relations

NOGA KEIDAR The Hebrew University of Jerusalem Sociology

HAGIT SINAI GLAZER Ben-Gurion University in the Negev Social Work

### 2019-2020

MICHAEL FREEDMAN The Hebrew University of Jerusalem Political Science

DAN DEUTSCH The Hebrew University of Jerusalem Musicology

MICHAEL JOHNSON The Hebrew University of Jerusalem Literature & Religion

NOA REICH University of Haifa English Literature

JOSHUA RICOUVIER Weizmann Institute of Science Biophysics

### 2018-2019

TAMIR ARVIV Technion – Israel Institute of Technology Architecture

HUGUES BEAUCHESNE Ben-Gurion University in the Negev Physics

ADINA HOULDIN University of Haifa Occupational Therapy

J.C. SAUNDERS Ben-Gurion University in the Negev Mathematics

NOAH STEMEROFF Tel Aviv University History and Philosophy of Science

### 2017-2018

**GENEVIEVE ALLAIRE-DUQUETTE** Tel Aviv University Education & Neuroscience

ADAM DOR-ON Technion – Israel Institute of Technology Mathematics

**TREVOR JANES** Weizmann Institute of Science Inorganic Chemistry

**DENI KASA** Tel Aviv University English Literature

YISKA LOEWENBERG WEISBAND The Hebrew University of Jerusalem Epidemiology

**DEVIN TRUDEAU** Weizmann Institute of Science Bioengineering

### AZRIELI INTERNATIONAL POSTDOCTORAL ALUMNI

### 2016-2017

ANDREA CASSATELLA The Hebrew University of Jerusalem Political Science

JERRY ALFRED FEREIRO Weizmann Institute of Science Bio-electronics

ADARA GOLDBERG The Hebrew University of Jerusalem Holocaust History

NOA GRASS Tel Aviv University Chinese History

VLADIMIR REINHARZ Ben-Gurion University in the Negev Computational Biology

LEIA SALTZMAN The Hebrew University of Jerusalem Social Work

# 2015-2016

**DON BUTLER** University of Haifa Micro-Archaeology

PAUL GREENHAM Tel Aviv University History of Science

JAMIE LEVIN The Hebrew University of Jerusalem Political Sciences

**TSIPORA MANKOVSKY-ARNOLD** University of Haifa Psychology

LITAL SEVER Weizmann Institute of Science Biology

VIJAYAN SUNDARARAJ Ben-Gurion University in the Negev Biology

### 2014-2015

TIFFANY ABITBOL The Hebrew University of Jerusalem Materials Chemistry

MERLIN DAVIES Tel Aviv University Experimental Particle Physics

ALISON GAINSBURY Tel Aviv University Integrative / Evolutionary Biology

ANDREA GONDOS Tel Aviv University Jewish Studies

DANA MARGALITH Technion - Israel Institute of Technology Architecture

**DEBORAH WINTER** Weizmann Institute of Science Computational Biology

### 2013-2014

**ZHIHUA CHANG** Bar-Ilan University Mathematics

ALEX DAUTH Weizmann Institute of Science Chemistry

ALEX GOLDBERG Weizmann Institute of Science Chemistry

SCOTT HANSEN Weizmann Institute of Science Environmental Science

**DELPHINE LUMBROSO** University of Haifa Biology

OLIVER VAN KAICK Tel Aviv University Computer Science

# 2012-2013

ALEEZA GERSTEIN Tel Aviv University Molecular Biology

ALEXANDER MIKHAILINE Weizmann Institute of Science Chemistry

**PINAKI MONDAL** Weizmann Institute of Science Mathematics

MEERA NAIR The Hebrew University of Jerusalem Communications

MARLIN PENNER Technion – Israel Institute of Technology Chemistry

**ZACHARY TAYLOR** Tel Aviv University Civil and Environmental Engineering

### 2011-2012

GAD ABIKHZER Technion - Israel Institute of Technology Medicine

YONATHAN ANAHORY Weizmann Institute of Science Condensed matter physics

SHOHAM BEN-DAVID The Hebrew University of Jerusalem Computer Science

BENOIT PALMIERI Weizmann Institute of Science Theoretical Chemistry / Materials and Interfaces

DESIREE TILLO Weizmann Institute of Science Genomics

ANAT ZAIDMAN-ZAIT Tel Aviv University Education

### 2010-2011

DANIEL-ROBERT CHEBAT The Hebrew University of Jerusalem Neurobiology

#### BOAZ MILLER

University of Haifa Philosophy

MIKAEL RECHTSMAN

Technion – Israel Institute of Technology Physics

#### AVIAD RUBIN

Tel Aviv University Political Science



# AZRIELI EARLY CAREER FACULTY FELLOWS 2022-2023

## Azrieli Early Career Faculty Selection Committees 2022-2023

#### SENIOR ACADEMIC ADVISOR

Professor Hermona Soreq, The Hebrew University of Jerusalem

Chair:	Professor Hagit Attiya, Technion – Israel Institute of Technology
	Prof. Yair Glasner, Ben-Gurion University of the Negev
	Prof. Roy Kishony, Technion – Israel Institute of Technology
	Prof. Noam Nisan, The Hebrew University of Jerusalem
	Prof. Gal Richter-Levin, University of Haifa
	Prof. Milko van der Boom, Weizmann Institute of Science
	Prof. Avi Zadok, Bar-Ilan University
Chair of Humanities, Education & Social Sciences Sub-Committee:	Prof. Menachem Fisch, Tel Aviv University
	<ul> <li>Prof. Avishai Henik, Ben-Gurion University of the Negev</li> <li>Prof. Michael Karayanni, The Hebrew University of Jerusalem</li> <li>Prof. Hanna Yablonka, Ben-Gurion University of the Negev</li> <li>Prof. Joseph Zeira, The Hebrew University of Jerusalem</li> </ul>

### ANAT ARZI



Dr. Anat Arzi is a new faculty member in the Department of Medical Neurobiology and the Department of Cognitive and Brain Sciences at the Hebrew University of Jerusalem. Her research combines basic and clinical neuroscience to answer how we process the world under loss of consciousness. Anat's work focuses on two central unconscious states: natural loss of consciousness during sleep and pathologically altered consciousness following brain injuries. By recording diverse aspects of brain-body activity, her goal is to shed additional light on principles underlying the ability to process the world around us unconsciously. As an Azrieli Fellow, Anat will investigate the neurophysiological processes underlying consciousness recovery in patients with severe brain injuries and develop new methods to detect consciousness and predict recovery in brain-injured patients.

Anat completed her PhD in neurobiology in the lab of Prof. Noam Sobel at the Weizmann Institute of Science. During her doctoral studies she harnessed the unique characteristics of olfaction to study the processing, learning, and memory of unperceived stimuli in wakefulness and sleep and discovered that, in contrast to previous notions, humans can learn novel information during sleep. In her postdoctoral work, she pursued the investigation of unconscious brain abilities and limits in the labs of Prof. Tristan Bekinschtein at the University of Cambridge and Prof. Jacobo Sitt at the Paris Brain Institute. She developed an innovative approach for consciousness detection, demonstrating that olfactory sniffing can serve as a biomarker for consciousness recovery in brain-injured patients. Anat lives with her spouse, Gadi, and their daughter, Naomi, and enjoys poetry, French patisserie, and yoga.

## SHLOMIT BECHAR

Dr. Shlomit Bechar is a new faculty member in the School of Archaeology and Maritime Cultures at the University of Haifa. Shlomit is an archaeologist who specializes in the study of material culture in general and the analysis of ceramic assemblages in particular. She has been excavating at the UNESCO World Heritage site of Tel Hazor since 2007, which she also co-directed (2016-2021). Starting in 2023, she will lead a new research project in the lower city of Hazor. Shlomit's research focuses on questions of social differentiation, cultural interconnections, and economic changes and challenges, and on identifying methods of resilience to climate change. She explores these research questions through a network of local and international collaborations using new scientific methods. As an archaeologist, her goal is to integrate these issues within broader historical research questions. During her Azrieli fellowship, she will investigate how human utilization of wetlands contributed to the rise of urbanization, using environmentalarchaeological methods of analysis, such as analysis of geological cores, stable isotopes, flora and fauna, petrography, and architecture and ceramics. This will be done with a multidisciplinary team of scholars from Israel and abroad.

Shlomit received her LLB, BA, MA, and PhD from the Hebrew University of Jerusalem. Her PhD dealt with the effects of political and historical change on material culture, examining the second millennium BCE as a test case (published by Eisenbrauns/Penn State University Press as her first book). She held several postdoctoral fellowships at the University of Chicago, the Haifa Center of Mediterranean History (University of Haifa), and, most recently, as a Minerva fellow at the Ludwig Maximilians University in Munich. Shlomit grew up in Maccabim (now part of Modi'in), and St. Louis, MO and today lives with her family in Kibbutz Almog, where she is an active member of the community. She enjoys learning about the philosophy of yoga and practicing it, playing the piano, and reading historical fiction.



### KARMA BEN JOHANAN



Dr. Karma Ben Johanan is a senior lecturer in the Department of Comparative Religion at the Hebrew University of Jerusalem. She is a historian of late modern Christianity and Jewish-Christian Relations, specializing in how conservative religious communities interact with each other and negotiate their traditions in changing political and cultural settings. As an Azrieli Fellow, Karma will research the global Roman Catholic discourse on Mission and evangelization in light of secularization processes and postcolonial critique.

Karma completed her PhD in the Zvi Yavetz School of Historical Studies at Tel Aviv University. She was a Fulbright postdoctoral scholar at the University of California, Berkeley, and a postdoctoral fellow at the Polonsky Academy for Advanced Studies in the Humanities and Social Sciences at the Van Leer Jerusalem Institute. Subsequently, she was engaged in research and teaching positions at the Pontifical Gregorian University in Rome, the Fondazione per le Scienze Religiose Giovanni XXIII in Bologna, and the Forschungskolleg Humanwissenschaften in Bad Homburg. In 2019, Karma was appointed the first chair of Jewish-Christian relations in the Faculty of Theology at Humboldt-Universität zu Berlin, where she served until the summer of 2022. Karma's book, Jacob's Younger Brother: Christian-Jewish Relations after Vatican II (Tel Aviv University Press, 2020), won the Shazar Prize for Research in Jewish History in 2021. Karma is an associate editor for the journal Political Theology. When not engaged in research, Karma can be found with her children, Lavi, Boaz, and Dror.

# ERAN BLACHER

Dr. Eran Blacher is a new faculty member in the Alexander Silberman Institute of Life Sciences at the Hebrew University of Jerusalem. Eran studies the gut-brain communication in aging and neurological disorders. By integrating novel imaging methods, multi-omics techniques, advanced computational analyses, and clinical observations, he creates an interactive merging point between the realms of neuroscience, immunology, microbiome, and metabolism. As an Azrieli Fellow, Eran aims to achieve indepth understanding of the intestinal processes affecting brain dysfunction that will support the development of better treatments, prolonged lifespan, and healthier aging.

Eran completed a BSc with distinction in life sciences and a PhD in neuroimmunology in the direct PhD track for outstanding students at Tel Aviv University under the supervision of Prof. Reuven Stein from the Department of Neurobiology. He studied the brain's immune responses in cancer and Alzheimer's disease and, in collaboration with Prof. Micha Fridman from the School of Chemistry. identified and tested a novel immune-metabolic modulator as a therapeutic approach to these conditions. His first postdoctoral position was in the laboratory of Prof. Eran Elinav in the Department of Systems Immunology at the Weizmann Institute of Science, where he was the first to study the role of the microbiome-gut-brain axis in the context of neurodegenerative diseases. For his findings in this field, Eran was awarded the Grand Prize in the inaugural NOSTER & Science Microbiome competition. He conducted a second postdoctoral training as a Marie Curie Fellow in the laboratory of Prof. Katrin Andreasson in the Department of Neurology & Neurological Sciences at Stanford University, where he studied maladaptive metabolism in aged immune cells and the gutbrain axis in stroke and aging. Eran grew up in Holon and enjoys reading literature, writing, hiking, and spending time with his spouse, Maya, and their two sons, Eli and Jordan.



### RONEN GOTTESMAN



Dr. Ronen Gottesman is a new faculty member in the Institute of Chemistry at the Hebrew University of Jerusalem. Ronen specializes in physical chemistry, material science, and the application of solar energy conversion materials. Ronen's research focuses on the intersection of plasma-based materials' synthesis and fundamental studies of novel functional materials. He is currently researching heteroanionic semiconducting chemical compounds containing multiple anions. These materials may be used for solar energy-driven conversion of cheap, abundant resources, like water, into chemical fuels. As an Azrieli Fellow, Ronen will explore oxynitrides, a sub-class of heteroanionic materials that exhibit significantly enhanced properties, high performance, and increased stability under photoelectrochemical water splitting. He aims to develop innovative experimental systems to study oxynitrides' structural properties, leading to scientific breakthroughs in sustainable development.

Ronen completed a BSc in biophysics at Bar-Ilan University. Before continuing with his PhD in physical chemistry under the supervision of Prof. Arie Zaban, he interned in South Korea with Prof. Nam-Gyu Park (a co-inventor of the perovskite solar cells). In his ensuing PhD research, he worked on perovskite-based solar cells - one of the first students in Israel to work on these captivating semiconductor materials. He continued in the field of solar energy conversion during his postdoctoral studies at the Institute for Solar Fuels at the Helmholtz Center for Materials and Energy in Berlin, where he established a specialized team for the development of "green" hydrogen. Ronen is married to Efrat, and they enjoy an active life with their two children, Yanai and Goni.

# TOM HOPE

Dr. Tom Hope is a new faculty member in the Rachel and Selim Benin School of Computer Science and Engineering at the Hebrew University of Jerusalem and a research scientist at The Allen Institute for AI (AI2). Tom develops artificial intelligence and natural language processing (NLP) methods to augment and scale scientific knowledge discovery by harnessing vast and diverse repositories of scientific knowledge. He aims to create computational methods that mine scientific literature and knowledge bases to help discover new directions and solutions to problems, generate hypotheses, make predictions and decisions, and build connections across different ideas and areas. As an Azrieli Fellow, Tom will explore AI and NLP methods for automatically extracting and organizing all mentions of challenges and directions across the scientific literature, including specific limitations, uncertainties, hypotheses and promising findings. This will enable systems that can detect and monitor areas of difficulty and gaps in knowledge and recommend new directions for problemsolving across the sciences.

Tom completed his PhD at the Hebrew University of Jerusalem under the supervision of Prof. Dafna Shahaf, working on using machine learning to augment creativity. His work received four best paper awards and appeared in high impact journals, including Nature and Science. While pursuing his PhD, Tom also led an applied Al research team at Intel. He conducted postdoctoral research at AI2 (Semantic Scholar group) and the University of Washington, working with Prof. Daniel Weld and Prof. Eric Horvitz to create systems that help scientists and medical doctors dealing with COVID-19 to find important knowledge and identify new research directions. Tom was selected for the Global Young Scientists Summit (2021) and the Heidelberg Laureate Forum (2019) and was a member of the SIGKDD Best Paper Award Committee (2020). He lives with his wife, Elia, and son, Jordan, in Jerusalem.



### YAARA OREN



Dr. Yaara Oren is a new faculty member in the Sackler School of Medicine at Tel Aviv University. Yaara's research merges concepts from evolutionary biology and cancer research, combining computational tools with experimental approaches to understand how cancer cells can evade therapy. As an Azrieli Fellow, she will generate new systems to study cancer "persister" cells: a rare cell population that is highly tolerant to treatment and lacks any underlying genetic cause. Understanding the basics of cancer persistence will enable the development of better therapies that could potentially delay or even prevent disease recurrence.

Yaara received her BSc and PhD in cell biology and microbiology from Tel Aviv University. In her PhD, under the supervision of Prof. Tal Pupko and Prof. Eliora Ron, she studied the evolution of harmless commensal bacteria into deadly pathogens. As a postdoctoral fellow at the Broad Institute of MIT and Harvard and Harvard Medical School, she studied how a subset of drug-tolerant cancer cells regain proliferative capacity which leads to disease recurrence. Yaara lives in Tel Aviv with her spouse, Lior, and their children, Arielle and Allon. She enjoys exploring different bakeries every week on her way home from the beach.

## RAY SCHRIRE

Dr. Ray Schrire is a new faculty member in the Department of General History at Tel Aviv University. His research focuses on the intellectual and cultural history of Renaissance and early modern Europe, fusing methods from book history with models from cognitive science. As an Azrieli Fellow, Ray will look at the social, mental, and material lives of a multitude of historical agents who depended on manipulating numbers to make their living: merchants, accountants, and housewives. While the numerical practice of these early modern groups is largely obscure, popular numeracy is often regarded as a precondition for a capitalist economy and mentality, the trigger for modern mathematics, and the engine of colonialism and slavery. Ray's research thus aims to examine how "big" historical shifts relate to the "small" everyday lives of individuals, whose shopping bills and accounting books are often their only mark in history.

Ray received his PhD from the Hebrew University of Jerusalem, where he enjoyed the close mentorship and inspiring teaching of Prof. Dror Wahrman, Dr. Ayelet Even-Ezra, and Prof. Raz Chen-Morris. As an exchange student at University of California, Berkeley, Ray came across the blotted schoolbook of a seventeenthcentury schoolboy doing his best to learn Latin. This odd finding led him to devote a decade to studying the history of grammar school education through hundreds of manuscripts and printed books in dozens of libraries across the world. During his postdoctoral studies at the Polonsky Academy for Advanced Studies in the Humanities and Social Sciences at the Van Leer Jerusalem Institute, another curious manuscript shifted his attention from literacy to numeracy. Ray lives in Jerusalem with his partner, Ella, and their two daughters: Naomi, who is confounded by numbers, and Layla, who is puzzled by language.



### NOAM SIEGELMAN



Dr. Noam Siegelman is a new faculty member in the Departments of Psychology and Cognitive and Brain Sciences at the Hebrew University of Jerusalem. Noam's research is concerned with how high-level behaviours are determined by individuals' learning abilities and the structure of the input to which they are exposed. His recent research has focused on the intersection between reading and learning, looking at the immense variability between individuals' literacy skills in light of their learning capacities and the properties of their native language's writing system. As an Azrieli Fellow, he will continue and expand this line of research, tracking children as they learn to read to examine how they gradually assimilate the regularities characteristic of their writing system and how success or failure in this process predicts their emerging reading skills. To achieve this aim, Noam plans to establish cognitive science laboratories in schools in Israel, tracking beginning readers "in the wild."

Noam completed his BA, MA, and PhD at the Hebrew University of Jerusalem. His PhD dissertation under the supervision of Prof. Ram Frost focused on individual differences in statistical learning, namely, the mechanism underlying the human ability to extract regularities from sensory inputs. He conducted postdoctoral work at Haskins Laboratories, a non-profit research institute affiliated with Yale University and the University of Connecticut, with funding from the Rothschild Foundation and the Israel Science Foundation. This is where Noam became fascinated with reading and the prospect of understanding reading from a learning perspective. Noam lives in Tel Aviv with his spouse, Maya. In his spare time, he enjoys music and learning to play unconventional instruments like the accordion and the banjo.



### AZRIELI EARLY CAREER FACULTY FELLOWS 2021-2022



Shai Evra The Hebrew University of Jerusalem Mathematics



Arseny Finkelstein Tel Aviv University Neurobiology



Moran Frenkel-Pinter The Hebrew University of Jerusalem Chemistry



Giddon Ticotsky The Hebrew University of Jerusalem Hebrew Literature



Jonathan Kadmon The Hebrew University of Jerusalem Neuroscience



Eshbal Ratzon Tel Aviv University Jewish Thought



Aldema Sas-Chen Tel Aviv University Cancer Research



Dvir Aran Technion – Israel Institute of Technology Technion – Israel Institute of Technology Computational Biology



Shay Moran Technion - Israel Institute of Technology The Hebrew University of Jerusalem Machine Learning



Yonatan Belinkov **Computational Linguistics** 



Mor Nitzan **Computational Biology** 



Sagi Ben-Ami Weizmann Institute of Science Particle Physics



Roni Porat The Hebrew University of Jerusalem Political Psychology



Leeat Keren Weizmann Institute of Science Systems Biology



Ezer Rasin Tel Aviv University Computational Linguistics

### 2019-2020

INBAL BEN-AMI BARTAL Tel Aviv University Psychobiology

**URI BEN DAVID** Tel Aviv University Molecular Genetics

TAKASHI KAWASHIMA Weizmann Institute Neuroscience

ELY KOVETZ Ben-Gurion University of the Negev Cosmology

BENJAMIN PALMER Ben-Gurion University of the Negev Biochemistry

**OMER PANETH** Tel Aviv University Computer Science

JENNIFER RESNIK Ben-Gurion University of the Negev Neuroscience

**GIDEON SEGEV** Tel Aviv University Electrical Engineering

YOTAM SOREQ Technion – Israel Institute of Technology Physics

# 2018-2019

AVRAHAM ASHKENAZI

Tel Aviv University Biology

**SHAI BEL** Bar-Ilan University Biology

**GIL COHEN** Tel Aviv University Computer Science

**BEN MAOZ** Tel Aviv University Biomedical Engineering

YAKIR PAZ The Hebrew University of Jerusalem Talmud and Classical Studies

MICHAL RABANI The Hebrew University of Jerusalem Biology

JUDITH WEISS Ben-Gurion University of the Negev Jewish Thought

MORAN YASSOUR The Hebrew University of Jerusalem Microbiology

### 2017-2018

AMIR BASHAN Bar-Ilan University Biological Physics

GRAHAM DE RUITER Technion – Israel Institute of Technology Chemistry

YONIT HOCHBERG The Hebrew University of Jerusalem Theoretical Physics

IDO KAMINER Technion – Israel Institute of Technology Physics & Nanotechnology

YONATAN MOSS The Hebrew University of Jerusalem Comparative Religion

MEITAL OREN-SUISSA Weizmann Institute of Science Neurobiology

ANAT PERRY The Hebrew University of Jerusalem Cognitive Psychology

SHLOMI REUVENI Tel Aviv University Physical Chemistry

### 2016-2017

**TSEVI BEATUS** The Hebrew University of Jerusalem Bioengineering

NOAM KAPLAN Technion – Israel Institute of Technology Computational Biology

MICHAEL KHANEVSKY Technion – Israel Institute of Technology Mathematics

AHMAD MASARWA The Hebrew University of Jerusalem Chemistry

DAN ORBACH The Hebrew University of Jerusalem History

TALYA SADEH Ben-Gurion University of the Negev Cognitive Neuroscience

TAMAR SEGAL-PERETZ Technion – Israel Institute of Technology Chemical Engineering

AMIT SITT Tel Aviv University Chemistry

### 2015-2016

**ORI KATZ** The Hebrew University of Jerusalem Applied Physics

**OREN RAM** The Hebrew University of Jerusalem Epigenomics

RINA ROSENZWEIG Weizmann Institute of Science Structural Biology

**ZIV SHULMAN** Weizmann Institute of Science Immunology

### OUR TEAM



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TAL MORDOCH Admissions Manager tal.m@azrieli.org



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DAFNA SOFRIN-FRUMER Analyst and Project Manager dafna.frumer@azrieli.org



KEREN ZAHARONI Projects Coordinator keren.z@azrieli.org







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