

האקדמיה הלאומית הישראלית למדעים المجمـــع الوطــــني الإســــرائيلي للعلـــوم والآداب THE ISRAEL ACADEMY OF SCIENCES AND HUMANITIES





ADAMS CONFERENCE 2020 2020 כנס אדמס

January 2020 ינואר



ADAMS CONFERENCE

Tuesday, January 28, 2020

	Morning Session	מושב בוקר
9:30-10:00	Refreshments	כיבוד קל
	Prof. Nili Cohen,	
10:00-10:10	President of the Academy,	נשיאת האקדמיה,
	Opening Remarks	דברי פתיחה
10:10-10:20	Prof. Moshe Oren,	פרופ' משה אורן,
	Academy Member, Chair of the	חבר אקדמיה, יו״ר ועדת מלגות
	Adams Committee, Introduction	אדמס, הקדמה
10:20-11:05	Prof. Yadin Dudai,	חרוח' ודון דודעו
	Chairman, Sciences Division,	פרופ' ידין דודאי, יו"ר החטיבה למדעי הטבע, חוקר
	Professor of Neurobiology,	ידי החס בחינה עי חסבע, ההק נירוביולוגיה, מכון ויצמן למדע,
	The Weizmann Institute of Science,	עתידו של הזיכרון האנושי"
	"The Future of Human Memory"	
11:05-11:20	Questions and Answers	שאלות ותשובות
11:20-12:05	Prof. Shimon Ullman,	פרופ' שמעון אולמן,
	Academy Member, Professor of	חבר האקדמיה,
	Computer Science and Applied	חוקר מדעי המחשב,
	Mathematics, the Weizmann	מכון ויצמן למדע,
	Institute of Science, "The Age of	״עידן המכונות החושבות
	Intelligent Machines"	
12:05-12:20	Questions and Answers	שאלות ותשובות
12:20-13:30	Lunch	ארוחת צהריים
	Afternoon Session	מושב אחה״צ
13:30-15:00	Poster Competition	תחרות פוסטרים
	Dr. Moran Yassour, Microbiology	ד״ר מורן יסעור,
15:00-15:45	and Molecular Genetics,	חוקרת מיקרוביולוגיה וגנטיקה
	The Hebrew University of	מולקולרית, האוניברסיטה העברית
	Jerusalem, "How to Choose the	בירושלים, ״טיפים לבחירת מעבדה
	Postdoc Lab That is Best for You"	לבתר-דוקטורט״
15:45-16:00	Questions and Answers	שאלות ותשובות
16:00-16:45	Prof. Eli Keshet, Academy Member,	פרופ׳ אלי קשת , חבר האקדמיה,
	Professor of Molecular Biology,	חוקר ביולוגיה מולקולרית,
	The Hebrew University of Jerusalem,	האוניברסיטה העברית בירושלים,
	"The Quest for Healthy Ageing:	הצערת כלי דם לקידום הזדקנות"
	A Vascular-Centered Approach"	בריאה"
16:45-17:00	Questions and Answers	שאלות ותשובות
17:00	Prizes	פרסים



כנס אדמס

יום שלישי, ב' בשבט, תש״ף

Greetings from

Prof. Moshe Oren

Academy Member, Chair of the Adams Fellowships Steering and Approval Committee

Warm greetings to all our Adams Fellows and Adams Alumni,

Adams Fellows, you are entrusted with a special mission: you are expected not only to advance your own career, but also to fulfil a dream – the dream of Marcel Adams to make Israel a hub of scientific excellence and a powerhouse of human knowledge. This also makes you very special: through a very careful and elaborate selection process, you have been identified as being the most meritorious of this prestigious fellowship. It is undoubtedly a great honor, but also an obligation: we expect you to prove, again and again, that we made the right choice in picking you out as the best of the best.

You, the new Adams Fellows, are just at the beginning of what will hopefully turn out to be a exciting journey towards gaining better understanding of the universe we live in and making it a better place to live in. On this long journey, make sure to take with you the four big C's: Curiosity to always learn and explore, Confidence in what you are doing, even if it is more difficult than you expected, Courage to challenge the dogma and not take no for an answer, and Consideration for other people, even if they disagree with you. Remember that you are representing not only yourself, but the scientific community in which you grew up and which will continue to be your natural home, regardless of what you choose to do. In the era of social networks and increased transparency, it is even more important than ever to bring out the best of you, both as researchers and as human beings.

By maintaining your excellence and leadership for many more years, you should serve as role models to younger generations of students with whom you will share your knowledge and your passion for learning and creating. In the meantime, I would like to wish you all a lot of satisfaction in your scientific endeavors and in moving successfully to the next stages of your career. Perhaps one day you may be standing on this podium and welcoming new Adams fellows!

Sincerely, M. Oren Moshe Oren



Prof. Yadin Dudai

Academy Member, Professor of Neurobiology, The Weizmann Institute of Science

Yadin Dudai was born in Israel to a family most of which perished in the Holocaust in Lithuania and Poland. After

reading philosophy and middle eastern studies at Tel Aviv University, he switched to study biochemistry and genetics, with supplements in modern history, at the Hebrew University in Jerusalem. He received his BSc (with honors) from the Hebrew University and his PhD from the Weizmann Institute of Science, where he studied biophysics. He conducted postdoctoral training at the California Institute of Technology, where he was on the team that pioneered the neuroenetic analysis of memory mechanisms.

Over the years he has been a Scholar in Residence at the National Institutes of Health, and a Visiting Professor at Columbia University, Harvard University, Yale University, University of Edinburgh, Collège de France, Boston University, and at New York University (NYU), where he was selected to serve as Global Distinguished Professor in neural science. He served in a number of academic and public positions in Israel and abroad and was also the Scientific Director of the Israel Center of Research Excellence (I-CORE) in the cognitive sciences.

Yadin Dudai's research interests encompass the neurobiology of learning and memory, memory as a concept and as a brain faculty, and the interrelationships among the two, as well as memory of interactive human groups. He is also interested in collective memory, and in the evolution of 'cultural organs', such as the cinema. Over the years, he has contributed to our understanding of brain and behavioral mechanisms of learning and memory, particularly those related to the consolidation and persistence of the memory trace, and of the evolution and role of concepts of memory in science and culture at large.

He has over 200 professional publications in the field of brain and memory, including several books.

Dudai received the IPSEN Prize 2013 for outstanding achievements in memory research, together with Richard Morris and Tim Bliss. He was elected member of EMBO in 2014, as a Neuroscience Fellow of the AAAS, and as a Fellow in the American Psychological Association. He is a member of the Israel Academy of Sciences and Humanities and since October 2019 serves as the Chairperson of the Sciences Division of the Academy.



Prof. Shimon Ullman

Academy Member, Professor of Computer Science and Applied Mathematics, the Weizmann Institute of Science

Shimon Ullman is the Samy and Ruth Cohn Professor of Computer Science at the Weizmann Institute of Science, and the head of the

Weizmann Institute AI Center. Prior to this position, he was a Professor at the Brain and Cognitive Science and the AI Laboratory at MIT. His areas of research combine computer and human vision, human cognition, and brain modeling.

He obtained his BSc in Mathematics, Physics and Biology, at the Hebrew University of Jerusalem, and PhD in Electrical Engineering and Computer Sciences, at the Artificial Intelligence Laboratory in the Massachusetts Institute of Technology. He is a recipient of the 2008 David. E. Rumelhart Prize in human cognition, the 2014 Emet Prize for Art, Science and Culture, the 2015 Israel Prize in Computer Science, and the 2019 Azriel Rosenfeld Award for lifetime achievement in computer vision. He is a member of the Israeli Academy of Sciences and Humanities, and the American Academy of Arts and Sciences.

ADAMS SEMINAR

May 2019 – 15th Class of Adams Fellows



Right to left: Batsheva Shor - Program Director, Prof. Moshe Oren - Program Chair, Sylvan Adams, Linda Adams-Troy, Yaron Laufer, Renan Gross, Aseel Shomar, Margaret Adams, Prof. Nili Cohen - Academy President, Roie Dann, Lior Rotem, Ron Efrat





Dr. Moran Yassour

Microbiology and Molecular Genetics, The Hebrew University of Jerusalem

Born in Berkeley, California and raised in Kfar Vitkin, a small town near Netanya, Moran Yassour returned from her

postdoctoral training abroad in October 2018 to a joint appointment in the Faculty of Medicine and the Rachel and Selim Benin School of Computer Science and Engineering.

Her PhD research was mostly computational, developing tools to analyze next generation sequencing data. Changes over the past 10-15 years in the field of genomics and biology called for the development of new tools and algorithms to process and analyze new data. Her research was instrumental in the development of these new tools, specifically for analyzing RNA sequencing data, which have been downloaded and used thousands of times in hundreds of research laboratories around the world.

For her postdoctoral studies, Dr. Yassour carried out her research at the Broad Institute affiliated with Massachusetts Institute of Technology (MIT) and Harvard University. Her research focused on the human microbiome, the microbial world that lives in and on our body. Particularly, her research honed in on the establishment of gut bacteria among infants.

Dr. Yassour's research has been widely published, including papers from her postdoctoral training which were published in 2016 *Science Translational Medicine* journal and her research on the transition of gut bacteria from mother to child, published in *Cell Host* and *Microbe Journal*, 2018. She has been awarded many fellowships including the Clore Award for her PhD, the Rothschild Postdoctoral Fellowship and the Azrieli Faculty Fellowship to name but a few. In July 2019, she is co-organizing the first Cold Spring Harbor Laboratory (CSHL) microbiome conference in Long Island in the US.



Prof. Eli Keshet

Academy Member, The Jerusalem Brain Community (JBC), The Hebrew University of Jerusalem,

Eli Keshet was born in Israel in 1945. He received his training in biology and biochemistry at the Hebrew University in

Jerusalem, where he also completed his PhD in 1975. He continued his advanced studies at the University of Wisconsin in the molecular biology of retroviruses, a field on which he focused in the early days of his career as a researcher. He also worked as a researcher at the American National Cancer Institute and the Institute Curie in France. Currently, he is a member of the Faculty of Medicine at the University and Hadassah Medical School.

For over two decades he has been studying the vascular system and the mechanisms of blood vessel formation. The research in his laboratory revealed the elaborate controls of VEGF - the key factor promoting genesis of new blood vessels (angiogenesis), including its role in the creation of alternative blood vessels replacing those, whose function was impaired, thus providing a solid basis for the development of new treatment modalities for ischemic heart diseases. The insights gained in his laboratory concerning the ability to inhibit the formation of blood vessels have contributed to the development of anti-angiogenic drugs in the field of cancer and diseases of the retina and his discoveries regarding pathogenic mechanisms of perinatal diseases driven by vascular vulnerabilities inspired changes in management of babies born prematurely, More recently, his studies focus on the role of blood vessels in stem cell niches, primarily of neuronal stem cells in the adult brain and on vascular rejuvenation, as well as on the impact of vascular aging on physiological aging at large.

His work has won him, among other awards, an Advanced ERC award (2013), the E.M.E.T Prize (2006) the the Rothschild Prize (2014), and the NAVBO Meritorious Award (2015). Professor Keshet is a member of the Israel Academy of Sciences.

