

# THE INTERNATIONAL DAY OF WOMEN IN SCIENCE

10.02.2022

PARENTING AND ACADEMIA CONFERENCE

We are proud and thrilled to continue our very special tradition of commemorating the International Day of Women in Science at the Hebrew University. The goal of this day is to highlight the impressive achievements of our female researchers, achievements that are even more outstanding when the difficulties and obstacles they encountered in the past year are taken into account.

In conjunction with the academic units, we once again salute a group of female researchers from all the disciplines!

Congratulations to you, our 2022 outstanding female scientists. I hope that you will all continue to excel in your fields.

Professor Haya Lorberboum-Galski  
President's advisor on gender equity and advancement of women in science

## Dr. Dina Schneidman

School of Engineering and Computer Science



For the past two years, Dina Schneidman has headed a series of research studies that enhance our understanding of SARS-CoV-2 and of potential ways to neutralize it through nanobodies that can halt the progress of the virus, efficiently and at a low cost. These studies utilize methods developed by Dr. Schneidman that combine machine learning and computational-structural biology. The research was part of an international collaboration and was conducted with teams from the University of Pittsburgh. Dina and her colleagues discovered nanobodies that neutralize the coronavirus in animals, that are also very efficient against mutations found in variants, including the delta variant. These fascinating findings were published in the prestigious journal Nature Communications and describe three different mechanisms through which the nanobodies neutralize the virus, block its ability to infect cells and thus prevent the development of the coronavirus disease. The structural analysis conducted by the researchers provides vital information and opens up widespread possibilities for developing vaccines and future treatment for a wide range of corona viruses, including variants that have not yet appeared!

## Professor Maya Tamir

Faculty of Social Sciences, Department of Psychology



Maya is one of the world leaders of research in the field of emotion regulation. She studies what people want to feel, and why and how a feeling can be harnessed for the personal benefit of a person. Her studies show empiric evidence that an emotion is vital in decision-making processes, as well as in ethical and other cognitive processes. She also deals with questions regarding the essence of the distinction between emotion and cognition, especially in light of evidence that illustrates the extent to which emotions help and serve us cognitively.

Maya recently ended a very successful term in office as head of the Department of Psychology, during which time she made an excellent contribution to the Department and Faculty. In addition, Maya was awarded the Klachky Prize for the Advancement of the Frontiers of Science.

## Professor Ruth HaCohen

Faculty of Humanities, Department of Musicology



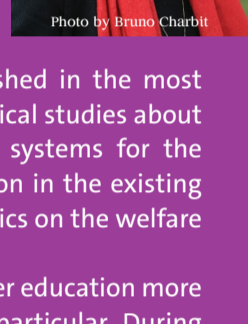
Ruth HaCohen-Pinczower's research encompasses a wide range of topics in Western and Jewish music and musical thought in these areas. She focuses on the role of music in shaping and reflecting processes and comprehensive cultural and political contexts. Ruth deals extensively with the contribution that music makes to the history of emotions, questions of music and religion, society and politics, and Jewish music.

She was awarded the Kinkeldey Prize by the American Musicological Society and the Polonsky Prize for Creativity and Originality in the Humanistic Disciplines for her major work, The Music Libel Against the Jews.

Ruth HaCohen-Pinczower serves as a role model for academic leadership and social activism. She is the Artur Rubinstein Professor of Musicology and has been a director at the Israel National Library since 2018, and a member of the Van Leer Jerusalem's board of trustees since 2016. HaCohen-Pinczower is the recipient of Rothschild Prize in the Humanities, for 2022. In 2017 she was elected as honorary member by the American Musicological Society "for outstanding contributions to the advancement of scholarship in music."

## Dr. Rana Eseed

School of Social Work and Social Welfare



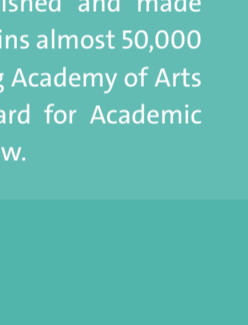
Rana focuses on the place of religion in the study of social phenomena, both at the individual-family level and at the community-political level. In her studies, she explores the place of religion in the development of social-religious organizations, in the behaviors of delinquent youth, among mothers of infants, in the therapeutic setting of social workers and their clients etc. Rana's studies have been published in the most prestigious journals for social work and social policy. Rana is also conducting historical studies about social organizations and the welfare state. She is currently studying welfare systems for the Palestinian population before 1948, a subject that has only received scant attention in the existing literature. Her research is expected to contribute to understanding the characteristics on the welfare state throughout the past and in the present.

Alongside her studies and academic work, Rana is also very involved in making higher education more accessible for minority populations in general, and for the Palestinian population in particular. During her undergraduate studies, Rana headed the Unit for Equal Opportunities for Arab Students at the Hebrew University. She continues to promote this issue, both as part of her social activism, and also recently as part of her research.

Rana is a new researcher who has only recently joined the faculty after she returned from post-doctoral studies abroad, where she was alone with her young son. Like all other young mothers, she has had to cope with career challenges, as well as the challenge of being a Muslim Israeli woman.

## Professor Keren Weinshall

Faculty of Law



Professor Keren Weinshall is a young, innovative, creative and multi-disciplinary researcher who has made a name for herself in Israel and internationally. She uses sophisticated empirical methodologies to investigate judicial decisions as well as the activities of legal institutions. Her studies have been published in leading legal journals, including the Journal of Empirical Legal Studies and PNAS.

Collaborating with Professor Lee Epstein, Professor Weinshall developed, published and made available to the public the first 'Big Data' Infrastructure for Legal Analytics that contains almost 50,000 rulings by the Israeli Supreme Court Database. She was elected to The Israeli Young Academy of Arts and Sciences. She has been awarded many prizes, including the Cheshin Award for Academic Excellence in the Field of Law for a junior researcher and the Gorny Prize in Public Law.

## Dr. Neta Schlesinger

The Faculty of Agriculture, Food and Environment, School of Veterinary Medicine

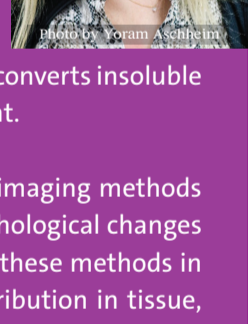


Neta is a junior researcher who joined the School of Veterinary Medicine two years ago. She studies fungal pathogenesis and is promoting an inter-disciplinary study that focuses on the mutual relationship between fungal pathogens and the immune system and deciphering the immune mechanisms; one the one hand she examines how a fungal pathogen is able to overcome the immune system and cause infectious diseases, and conversely, she examines how the immune system identifies and protects itself from the fungal pathogen.

Neta's list of publications is exceptional, including an article published in Science based on her post-doctoral studies, and one in Microbial Cell based on her doctoral studies). During her post-doctorate at Memorial Sloan Kettering in New York she was awarded many prizes for excellence in research, and has since won a large number of competitive research grants. Neta is currently writing a proposal for the European Research Council. She heads a very active laboratory, and in a very short time, she has set up a unique course in flow analysis for graduate students.

## Dr. Katy Margulis

Faculty of Medicine, School of Pharmacology



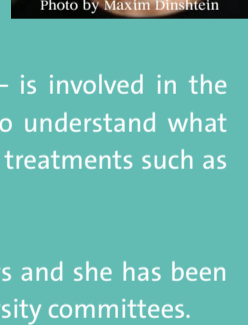
Katy is a pharmacist and chemist who conducts groundbreaking research into drug imaging in tissue. She began her academic career at the Hebrew University of Jerusalem, and continued her doctoral studies at the Casali Institute for Applied Chemistry at Givat Ram. During her doctoral studies, Katy developed a method that converts insoluble substances to nano-molecules that are easily distributed in an aqueous environment.

As part of her post-doctoral studies at Stanford University, she developed unique imaging methods and used them to investigate physiological processes in living tissue to identify pathological changes in the tissue and to develop new goals for drug treatment. Katy now incorporates these methods in her laboratory and develops logical ways of drug delivery by measuring drug distribution in tissue, monitoring their metabolism and mapping physiological changes that occur in this treatment.

When Katy joined the Hebrew University, she set up the University Center for Metabolism that is used by many research units.

## Professor Yifat Prut

Safra Center for Brain Sciences



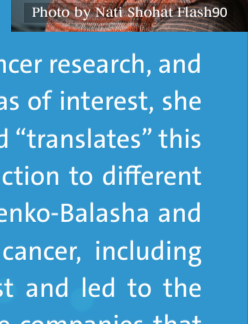
Yifat studies the motor system in macaque monkey models. In her studies, she demonstrates how planning and execution of motor actions are designed through communication among a large number of brain parts.

In her research, Professor Prut shows how the small brain – the cerebellum – is involved in the planning, regulating, learning and timing of voluntary movement. She tries to understand what neural mechanism is used to influence the cerebral cortex, so that in the future, treatments such as brain stimulation may be given for brain injury.

Her studies have been published in the most prestigious journals in recent years and she has been promoted to the rank of full professor. Yifat is also a member of important university committees.

## Professor Nathaly Kravchenko-Balasha

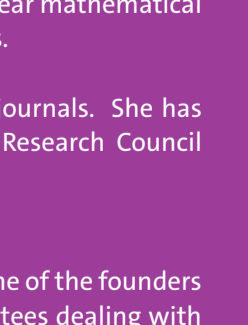
Faculty of Dental Medicine



Professor Nathaly Kravchenko-Balasha is a distinguished researcher who joined the Institute of Biomedical Research of the Faculty of Dental Medicine six years ago. Since joining the university, she has set up a group of leading researchers, has been awarded research grants and many competitive prizes. Nathaly focuses on cancer research, and she incorporates theoretical and experimental approaches. In one of her chief areas of interest, she examines molecular differences among cancer patients, or among different cells, and "translates" this difference into quantitative parameters that enable researchers to predict cell reaction to different treatments, and thus to plan personalized drug therapy. Professor Nathaly Kravchenko-Balasha and her team successfully implemented this approach in treating several kinds of cancer, including melanoma, lung, breast and oral cancer. This achievement evoked much interest and led to the founding of the MEDPNC company. Nature Research recently examined innovative companies that developed in academic research and selected MEDPNC as one of the 40 "one to watch" most innovative companies.

## Professor Nathalie Balaban

The Faculty of Mathematics and Sciences, The Racah Institute of Physics



Professor Balaban is one of the outstanding biophysicists in the world. In her research, she identifies important problems in biological systems in which the physics approach brings an additional value, she develops experimental systems for precise quantitative measuring, and she applies diverse and efficient physical and mathematical analytical methods. Using this approach, Professor Balaban has repeatedly surprised the scientific community by showing that the complex behavior of biological systems (in this case viruses) often stems from mechanisms with limited parameters that can be described with nonlinear mathematical equations, and that they even display behaviors typical of complex physical systems.

Professor Balaban's groundbreaking studies have been published in top scientific journals. She has been awarded competitive prizes and research grants (including two European Research Council grants). She is considered a central figure in the international biophysics community.

In addition, Nathalie is very involved in a wide range of university activities. She is one of the founders and directors of the "Teacher-Scholars" program and is a member of many committees dealing with research, education and academic management.

## Dr. Tanya Zion-Waldoks

School of Education



Tanya Zion-Waldoks has been a lecturer in the Seymour Fox School of Education at the Hebrew University of Jerusalem from 2019. Her studies deal with the intersection of gender, religion and politics, with an emphasis on education and social change. Using qualitative and comparative research methods, she focuses on women who are active in promoting the status of women in varied traditional and religious societies (religious, ultra-Orthodox, Muslim etc).

In addition, Tanya studies education for gender equality and female activism against racism in Israel. Her research has been published in leading journals, including an article that was awarded a prize by the Israeli Sociological Society. Tanya completed her PhD on the struggle against aguna (get refusal) in Israel at Bar-Ilan's Gender Studies program. She continued her post-doctoral studies at Princeton University in the United States and at the Ben-Gurion Research Institute for the Study of Israel and Zionism at Ben-Gurion University of the Negev, supported by a number of prestigious research grants: The Rothschild (Yad Hanadiv) Foundation, the Israel Science Foundation (ISF), Kreitman fellowship and the Israel Institute. Tanya is a mother of four and lives in the Negev.