



Tel Aviv University Center for Nanoscience and Nanotechnology
and the Marian Gertner Institute for Medical Nanosystems
cordially invite you to a symposium on

Medical Nanosystems: New Solutions to Stubborn Challenges

marking 10 years of activity at
The Marian Gertner Institute for Medical Nanosystems

Keynote speaker: Prof. Robert Langer (MIT)



Thursday, June 6 2013 at 9:30

Malka Brender Hall of Justice
Buchmann Faculty of Law, Tel Aviv University

Thursday, June 6 2013

- 9:30-10:00 **Reception**
with Gertner scholarship recipients
- 10:00-10:10 **Greetings**
- 10:10-10:50 **Keynote speaker:**
Prof. Robert Langer (MIT)
Nanotechnology and its potential in medicine
- 10:50-11:05 **Prof. Dan Peer (Tel Aviv University)**
Revolutionizing treatment and disease management in
cancer and inflammation
- 11:05-11:20 **Dr. Inna Slutzky (Tel Aviv University)**
Evolution of Alzheimer's disease: From synaptic
dynamics to memory loss
- 11:20-11:35 **Dr. Tal Dvir (Tel Aviv University)**
Mending a broken heart
- 11:35-11:50 **Dr. Silvia Noiman (Pontifax)**
The vision of nanomedicine in Israel
- 11:50-12:00 **Dr. Giora Yaron (Chairman of the Executive Council and of
Ramot, Tel Aviv University)**

Sunday, June 9 2013

- 10:00-12:00 Lab tours/meetings with researchers (Tel Aviv
University Center for Nanoscience and Nanotechnology)

Organizers: Prof. Karen Avraham, Prof. Dan Peer, Prof. Yael Hanein



ABOUT THE SPEAKERS

Prof. Robert Langer is the David H. Koch Institute Professor at MIT and the most cited engineer in history. He has written over 1,175 articles and holds some 800 issued and pending patents worldwide. Prof. Langer's patents have been licensed or sublicensed to over 250 pharmaceutical, chemical, biotechnology and medical device companies. He has received over 210 major awards including the 2006 US National Medal of Science; the Charles Stark Draper Prize, considered the equivalent of the Nobel Prize for engineers; the 2008 Millennium Prize, the world's largest technology prize; and the 2012 Priestley Medal, the highest award of the American Chemical Society. In 1989, Prof. Langer was elected to the Institute of Medicine of the US National Academy of Sciences and, in 1992, he was elected to the US National Academies of Engineering and of Sciences. He is one of very few people ever to be elected to all three National Academies and the youngest in history (at age 43) to ever receive this distinction. He received his BSc from Cornell University in 1970 and his ScD from MIT in 1974, both in Chemical Engineering.

Dr. Giora Yaron is chairman of the Tel Aviv University Executive Council. He co-founded and served as chairman of P-Cube and PentaCom (both sold to Cisco) and Comsys (landline business sold to Conexant, wireless sold to Texas Instruments), Qumranet (sold to RedHat), and is former chairman of the board of Mercury Interactive (sold to HP for \$4.9B). Dr. Yaron currently serves on the board of Amdocs (DOX), the advisory boards of the Ministry of Defense and of Raphael, and serves as the chairman of the board of Ramot, TAU's technology transfer company. From 1992-1995 Dr. Yaron served as President of Indigo NV (sold to HP). Prior to joining Indigo he served as Corporate Vice President of National Semiconductor and general manager of its Israeli operations with worldwide responsibility for its microprocessor business. Dr. Yaron holds a PhD in Device Physics from the Hebrew University, has published numerous scientific papers and holds several patents.

Dr. Silvia Noiman is a leading entrepreneur and executive with over 20 years of experience in the biopharmaceuticals industry including as venture partner at Pontifax and chairperson at 5 incubator companies in the framework of the strategic collaboration between Pontifax and Roche. Dr. Noiman is also the founder of Fusimab and ProMining Therapeutics. Previously she founded Predix Pharmaceuticals and served as a Senior Vice President of the company, during which time she transformed the small, early-stage drug discovery company into

a publicly traded, multi-product company (NASDAQ, EPIX) that advanced four discovery programs to the clinical trial stage and led significant pharma partnerships in the areas of Alzheimer's (\$1.2B partner deal with GSK), pulmonary hypertension, schizophrenia, inflammation (\$307M license deal with Amgen), anxiety and depression. Dr. Noiman holds a PhD in Molecular Biology from Tel Aviv University and conducted her post-doctoral research at the Weizmann Institute of Science. She has published numerous papers and is a co-inventor of several patents.

Prof. Dan Peer joined TAU's Department of Cell Research & Immunology, Wise Faculty of Life Sciences, in 2008 to establish the Laboratory of Nanomedicine. He has received over 20 awards and honors, among them the 2009 Roche Award for innovative translational research, the 2010 Innovator Award from the Kenneth Rainin Foundation and the 2011 Breakthrough Award by the KRF. He was elected to the AAAS Program of Excellence for Young Scientists by Science Magazine in 2008. Prof. Peer is on the editorial boards of *BioMEMs and Biomedical Nanotechnology*, *Nanotechnology*, *The Journal of Controlled Release*, and *Cancer Letters*. He is an associate editor of the *Journal of Biomedical Nanotechnology* and a guest editor in *Chemistry & Physics of Lipids*, *Journal of Controlled Release* and *Advanced Drug Delivery Reviews*. He holds over 40 patents (both granted and pending) and is the co-founder of LeukoBioscience in the USA and Quiet Therapeutics in Israel, both of which aim to bring the nanotechnologies he has developed into clinical use. He is currently the director of the Israel National Nanoscience Initiative (INNI) on nanomedicines for personalized theranostics and the director of the Leona M and Harry B. Helmsley Research Fund in Nanotechnology.

Dr. Inna Slutsky joined TAU's Department of Physiology and Pharmacology, Sackler Faculty of Medicine, in 2010. She has received several international prizes, including the 2010 Bernard Katz Prize in Neuroscience, the 2010 New Investigator Award of the US Alzheimer's Association, the 2008 New Investigator Award in Alzheimer's disease of the American Federation for Aging Research and a prestigious starter grant from the European Research Council. The research of Dr. Slutsky and her team has been published in leading journals, among them *Nature Neuroscience* and *Neuron*. Her team's studies demonstrate, for the first time, a physiological role of amyloid-beta peptide, the main player in Alzheimer's pathogenesis, and propose a novel mechanism underlying initiation of neuronal dysfunction in sporadic Alzheimer's. She completed her post-doctoral research at MIT, specializing in cellular mechanisms that maintain memory function, and received both her PhD in neurobiology and her BSc in biology from the Hebrew University of Jerusalem.

Dr. Tal Dvir was recruited in 2011 by TAU's Department of Biotechnology, George S. Wise Faculty of Life Sciences, and the TAU Center for Nanoscience and Nanotechnology to establish the Laboratory for Tissue Engineering and Regenerative Medicine. Dr. Dvir completed his PhD at the Ben-Gurion University Faculty of Engineering and pursued his post-doctoral studies in the laboratory of Prof. Robert Langer at the Department of Chemical Engineering at MIT. Dr. Dvir's current research interests include nano-scale technologies for cardiac and brain tissue engineering, biomaterials for controlling stem cell fate, and advanced delivery systems for tissue regeneration. Dr. Dvir is the recipient of numerous accolades and holds several patents (both granted and pending) in the field of tissue engineering and regeneration.