

Final program

”From insulin mimetics to artificial pancreas- comprehensive approaches in antidiabetic therapy” January 29th till February 1st, 2018. (Monday-Thursday)

Auditorium 112
New Chemistry Building, 211
Dept. of Chemistry
Bar-Ilan University
Ramat-Gan
Israel

Monday, January, 29 th	
9:00-9:45	<p><i>Arrivals and registration (coffee)</i> <i>Greeting</i> Prof. Arie Gruzman, Bar-Ilan University, Ramat-Gan, Israel, Head of the Organizing Committee. Prof. Amnon Albeck, Bar-Ilan University, Ramat-Gan, Israel, Vice Rector. Prof. Jean-Paul Lellouche, Bar-Ilan University, Ramat-Gan, Israel Head of the Department of Chemistry Representative person from Ramat-Gan Municipality</p>
9:45-11:30	<p><i>Opening session: Artificial islets and the engineered pancreas: dream or reality?</i> Chair: Prof. Juergen Eckel – German Diabetic Center, Dusseldorf, Germany.</p> <p><u>Keynote Lecture:</u> Prof. Stefan Bornstein – University of Dresden, Dresden, Germany. “Novel strategies for islet transplantation”. 45 min</p> <p>Prof. Leonardo Ricotti -The BioRobotics Institute, Pontedera, Italy. “Fully implantable robotic pancreas refilled by smart pills”. 30 min</p> <p>Dr. Kfir Molocandov-“Kadimastem”, Ness-Ziona, Israel. “Large scale production of insulin producing cells from hESC: progress and future challenges”. 30 min</p>
11.30-12.00	Coffee break
12.00-13.15	<p><i>Artificial islets and the engineered pancreas: dream or reality?</i> Chair: Prof. Gerardo Byk, Bar-Ilan University, Israel.</p> <p><u>Keynote Lecture:</u> Prof. Danielle Melloul- Hadassah-Hebrew University Medical Center, Jerusalem, Israel. “Inhibition of nuclear factor-κB activation has a protective effect on allogeneic pancreatic islet graft survival: Involvement of IP-10/CXCL10 chemokine“. 45 min</p> <p>Dr. Uriel Barkai-Beta-O₂ technologies, Rosh HaAyin, Israel. “The</p>

	Beta-Air, a clinical solution for curing type I diabetic patients“. 30 min
13.15-14.15	Lunch and poster session
14:15-16.00	<p><i>Artificial islets and the engineered pancreas: dream or reality?</i> Chair: Dr. Kfir Molocandov, “Kadimastem”, Ness-Ziona, Israel</p> <p>Keynote Lecture: Prof. Shulamit Levenberg- Technion, Haifa, Israel. “Novel Transplantation Strategies to Reverse Diabetes Mellitus in Rats After Total Pancreatectomy“. 45 min</p> <p>Dr. Limor Landsman- Tel-Aviv University, Tel-Aviv, Israel. “The islet vasculature in β-cell function and dysfunction“. 30 min</p> <p>Stasia Krishtul-Technion, Haifa, Israel. “Developing a Pancreatic ECM-based 3D Microencapsulation Platform for Diabetes Therapy“. 15 min</p> <p>Shahar Ben-Shaul-Technion, Haifa, Israel. “Mature vasculature within engineered tissue promotes graft-host anastomosis, integration and prevents graft thrombosis“. 15 min</p>
Tuesday, January, 30 th	
09:00-11:00	<p><i>β-cells heterogeneity and functions under cellular stress and autoimmunity (This session is supported by D-cure)</i> Chair: Prof. Arie Gruzman, Bar-Ilan University, Ramat-Gan, Israel.</p> <p>Keynote Lecture: Prof. Gil Leibowitz – Hadassah-Hebrew University of Jerusalem, Israel. "Mechanisms of β-cell loss in ER stress-induced diabetes", 45 min</p> <p>Dr. Ron Piran- Bar-Ilan University, Ramat-Gan, Israel. “PAR2: A Passe-partout for understanding autoimmunity and type I diabetes“. 30 min.</p> <p>Dr. Dana Avrahami-Tzfati-Hadassah-Hebrew University Medical Center, Jerusalem, Israel. " Islet cell heterogeneity during aging and disease revisited using novel single cell technologies". 30 min.</p> <p>Ofer Elhanani- Weizmann Institute of Science, Rehovot, Israel. “Molecular mechanisms underlying reprogramming of exocrine pancreas cells into insulin-producing β-like cells“. 15 min.</p>
11:00-11:30	Coffee break
11:30-13:15	<p><i>Traditional and novel treatment of diabetes</i> Chair: Dr. Mariela Glandt, Diabetes Medical Center, Tel Aviv, Israel and Bronx-Lebanon Hospital, Bronx, NY, USA.</p> <p>Keynote Lecture: Dr. Miriam Kidron –Oramed Pharmaceuticals, Jerusalem, Israel. “Taking the Sting Out of Diabetes “. 45 min</p> <p>Dr. Tovit Rosenzweig – Ariel University, Israel. “Nutraceuticals and medicinal herbs for the treatment of diabetes: the promise and</p>

	<p>the challenge“. 30 min</p> <p>Prof. Rachela Popovtzer-Bar-Ilan University, Ramat-Gan, Israel. “Tracking of stem cells: challenges and achievements”. 30 min</p>
13:15-14:15	Lunch and Poster session
14:15-16:00	<p><u><i>Insulin and cellular sensitivity</i></u> Chair: Prof. Benjamin Glaser , Hadassah-Hebrew University of Jerusalem, Jerusalem.</p> <p><u>Keynote Lecture:</u> Prof. Juergen Eckel – German Diabetic Center, Dusseldorf, Germany. “IGF1 links DPP4 to hepatic insulin sensitivity”. 45 min</p> <p>Prof. Ittai Ben-Porath-The Hebrew University – Hadassah Medical School, Jerusalem, Israel. “Cellular senescence and β-cell function” 30 min</p> <p>Dr. Boaz Brill-GluSense, Rehovot, Israel. “Long-term bionic glucose sensor for closed-loop control”. 30 min</p>
Wednesday, January, 31 th	
09:00-10:45	<p><u><i>Medicinal chemistry, modeling and big-data analysis</i></u> Chair: Prof. Hanoch Senderowitz, Bar-Ilan University</p> <p><u>Keynote Lecture:</u> Prof. Krzysztof Jozwiak- Medical University of Lublin, Lublin, Poland. “Long-acting vs. short-acting insulins – molecular models of structures that can manipulate their pharmacokinetics”. 45 min</p> <p>Lecture: Dr. Ayelet Ofarim-Arad-Ophir Ltd. (CAS, Chemical Abstract Service), USA. “SciFinder-N as an investigation tool for β-cell research” 30 min</p> <p>Lecture: Prof. Arie Gruzman-Bar-Ilan University, Ramat-Gan, Israel. “A novel polycyclic aromatic compounds augment insulin secretion from pancreatic β-cells by activating AMPK” 30 min</p>
10:45-11:15	Coffee break
11:15-13:00	<p><u><i>Not only β cells.</i></u> Chair: Shay Hershovich, Betalin Therapeutics LTD, Ramat-Gan, Israel</p> <p><u>Keynote Lecture:</u> Prof. Itamar Raz -Head, Israeli National Council of Diabetes. “Cardiovascular outcome studies in T2D closing the gap in CV mortality”. 45 min</p> <p>Prof. Haim Cohen-Bar-Ilan University, Israel. “Regulation of glucose homeostasis by SIRT6“. 30 min</p> <p>Dr. Ekaterina Sorkina- Diabetes Institution, Endocrinology Research Center, Moscow, Russia. "Inherited lipodystrophies and</p>

	lipoatrophic diabetes: clinical, hormonal and molecular-genetic characteristics" 30 min
13:00-14:00	Lunch
14:00-16:00	<p><u>Lipids, insulin and β-cells</u> Chair: Dr. Guy Cohen, The Dead-Sea & Arava Science Center. Massada, Israel.</p> <p><u>Keynote Lecture:</u> Prof. Michael D. Walker-Weizmann Institute of Science, Rehovot, Israel. "Role of short chain fatty acids in pancreatic β-cell function". 45 min</p> <p>Prof. Shlomo Sasson – The Hebrew University of Jerusalem, Israel. "Lipid peroxidation, lipohormesis and lipotoxicity in insulin secreting β-cells". 45 min</p> <p>Prof. Giuseppe Maulucci -Università Cattolica del Sacro Cuore, Roma, Italy. "Quantitative analysis of fatty acid metabolism by confocal spectral imaging of intracellular polarity" 30 min</p>
Thursday, February, 1 st	
9:00-11:00	<p><u>Let's look on β-cells from a different angle.</u> Chair: Prof. Jean-Paul Lellouche, Bar-Ilan University, Ramat-Gan, Israel.</p> <p><u>Keynote Lecture:</u> Prof. Steven Chessler – University of California Irvine, USA. "GABAergic signaling mechanisms in pancreatic islet function and as a target for diabetes therapy". 45 min</p> <p>Anna Munder-Bar-Ilan University, Ramat-Gan, Israel. "Neurologin-2 mimetics enhance pancreatic β-cells proliferation and functions". 15 min</p> <p>Dr. Shani Shenhar-Tsarfaty- Tel-Aviv Sourasky Medical Center, Faculty of Medicine, Tel-Aviv University, Tel-Aviv, Israel. "Butyrylcholinesterase interactions with amylin may protect pancreatic β-cells in metabolic syndrome. The involvement of cholinesterase in metabolic outcomes". 30 min</p> <p>Prof. Israel Sekler – Ben-Gurion University, Beer-Sheva, Israel "Control of insulin secretion by Mitochondrial Ca²⁺ and N⁺ signaling". 30 min</p>
11:00-11:30	Coffee break
11.30:00-16:00	Excursion to Israel Diamond Exchange Ltd. /brainstorm meeting during the excursion
16:00-16:30	Closing remarks and awards
20:00-23.00	Speakers Dinner ("Regina", Neve Tzedek, Tel-Aviv)