



The 3rd Annual Meeting of The Integrative Brain Science Center – Ariel

Sunday October 23

9:00 Coffee and registration

09:30 Greetings

Prof. Dan Meyerstein, President, Ariel University Center

Prof. Michael Zinigrad, Rector, Ariel University Center

Dr. Albert Pinhasov, Head IBSCA

Session I Advances in the cannabinoid arena

Chairperson: Prof. Mechoulam, Prof. Vogel

10:00 Beyond cannabis and anandamide

Prof. Raphael Mechoulam, School of Pharmacy, The Hebrew University of Jerusalem, Israel

10:30 Role of the endocannabinoid system in young non-organic failure to thrive (NOFT) syndrome

Dr. David Branski & Prof Ester Fride (z"l), Professor and Chair in Pediatric Editor-in-Chief
Journal of Pediatric Gastroenterology and Nutrition-Europe

10:50 Cannabinoids, skeletal growth and bone remodeling

Prof. Itai Bab, Bone Laboratory, The Hebrew University of Jerusalem, Israel

11:20 Coffee break

11:40 Effects of cannabinoids on microglial gene expression: Role in experimental autoimmune encephalomyelitis, a model of multiple sclerosis

Prof. Zvi Vogel, Neurobiology Department, Weizmann Institute of Science, Israel

12:10 On obese partners of endocannabinoids and the discovery of their promiscuity

Prof. Juerg Gertsch, Institute of Biochemistry and Molecular Medicine, University of Bern, Switzerland

12:40 Cannabinoid CB2 receptor: A new player in mental disorders

Dr. Sharon Anavi-Goffer, Departments of Behavioral Sciences and Molecular Biology, Ariel University Center of Samaria, Israel

13:00 Lunch

Chairperson: Prof. Bab, Dr. Anavi-Goffer

14:00 The pharmacology of LPI on *in vitro* neuronal and non-neuronal cell cultures: possible involvement of GPR55

Dr. Daniele Bolognini, Institute of Medical Sciences, University of Aberdeen, Scotland

14:20 Anti-inflammatory effects of the non-psychoactive plant cannabinoid, cannabidiol, on microglia: Interactions with non-CB1, non-CB2 targets.

Dr. Netta Rimmerman, The Department of Neurobiology, Weizmann Institute of Science, Israel



Session II MicroRNA signatures in neurological disorders

Chairperson: Dr. Hornstein, Dr. Aronov

- 14:50 The dominant role of microRNA in regulated gene expression**
Dr. Noam Shomron, Department of Cell and Developmental Biology, *Sackler Faculty of Medicine, Tel Aviv University, Israel*
- 15:10 MicroRNA in motor neuron disease**
Dr. Eran Hornstein, Department of Molecular Genetics, *Weizmann Institute of Science, Israel*
- 15:30 Coffee break**
- 15:50 The role of microRNA in regulating the central stress response**
Dr. Alon Chen, Department of Neurobiology, *Weizmann Institute of Science, Israel*
- 16:10 Functional regulation of Tau in Alzheimer's disease: Role of microRNA**
Dr. Stella Aronov, Department of Molecular Biology, *Ariel University Center of Samaria, Israel*

Session III All we need is love?

Chairperson: Dr. Pinhasov, Dr. Michaelevski

- 16:30 From signaling network domains of protein-protein interaction to physiology and behavior**
Dr. Izhak Michaelevski, Department of Biochemistry and Molecular Biology, George S. Wise, Faculty of Life Sciences, *Tel Aviv University, Israel*
- 16:50 All we need is love? Character strengths and well-being: Effects of sociological contexts and attachment orientations**
Dr. Shiri Lavi & Dr Hadassah Littman-Ovadia, Department of Behavioral Sciences, *Ariel University Center of Samaria, Israel*



Monday October 24

08:45 Coffee and registration

09:20 Greetings

Session I Drug discovery of neuropeptides

Chairperson Prof. Gozes, Prof. Gertsch

09:30 **Microtubules and drug discovery**

Prof. Illana Gozes, Department of Human Molecular Genetics and Biochemistry, *Tel Aviv University, Israel*. Chief Scientific Officer, *Allon Therapeutics Inc.*

09:50 **A novel fish neurokinin system has potential role in control of reproduction**

Dr. Ori Palevitch, Department of Animal Sciences, *The Robert H. Smith Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem, Israel*

10:10 **Peptide endocannabinoids in the brain**

Prof. Juerg Gertsch, Institute of Biochemistry and Molecular Medicine, *University of Bern, Switzerland*

10:30 **Dynamics alignment: Comparison of protein dynamics in the SCOP database**

Dr. Dror Tobi, Department of Molecular Biology, *Ariel University Center of Samaria, Israel*

10:50 Coffee break

Session II Stem cell therapies for CNS disorders

Chairperson Prof. Yanai, Dr. Turgeman

11:10 **Stem cells for neurodegenerative diseases**

Prof. Daniel Offen, Felsenstein Medical Research Center, *Rabin Medical Center, Tel Aviv University, Israel*

11:30 **Reversal of neurobehavioral teratogenicity with stem cells**

Prof. Yossi Yanai, Hadassah school of Medicine, *The Hebrew University of Jerusalem, Israel*

11:50 **Mesenchymal stem cells therapy for affective disorders**

Dr. Gadi Turgeman, Department of Molecular Biology, *Ariel University Center of Samaria, Israel*

Session III New therapeutics for mental diseases

Chairperson Dr. Pinhasov, Dr. Anavi-Goffer

12:10 **Lingual implications of a deficit in auditory Temporal Order Judgment (TOJ)**

Dr. Leah Fostick, Department of Communication Disorders, *Ariel University Center of Samaria, Israel*

12:30 **Autism spectrum disorder: Birth, familial and child's risk factors**

Dr. Esther Ben Itzhak, Department of Communication Disorders, *Ariel University Center of Samaria, Israel*

12:50 **Molecular and pharmacological insights from dominance and submissiveness**

Dr. Albert Pinhasov, Department of Molecular Biology, *Ariel University Center of Samaria, Israel*



13:10 **Chronic administration of incensole acetate reduces depressive-like behavior and corticosterone levels of submissive animals**
Mr. Moshe Gross, Department of Molecular Biology, *Ariel University Center of Samaria, Israel*

13:30 **Lunch**

Session IV **Homeostatic centers: From bench-to-bedside**

Chairperson **Prof. McCaffery, Prof. Baranes**

14:30 **Ordered overlap among neighboring dendritic trees: A new mean to code functionality of neuronal networks**

Prof. Danny Baranes, Department of Molecular Biology, *Ariel University Center of Samaria, Israel*

14:50 **Food for thought: Vitamin A's control of new neuronal birth in the hippocampus and hippocampal dependent learning and memory**

Prof. Peter McCaffery, School of Medical Sciences College of Life Sciences & Medicine, *University of Aberdeen, Scotland*

15:10 **Vitamin A signalling in the hypothalamus**

Dr. Kirsty Shearer, Institute of Medical Science, School of Medicine, *University of Aberdeen, Scotland*

15:30 **The negative consequences of light at night through the disruption of pineal melatonin production**

Prof. Abraham Haim, The Israeli Center for Interdisciplinary Research in Chronobiology, *University of Haifa, Israel*

15:50 **Coffee break**

16:10 ***Sarcopoterium spinosum* extract for the treatment of diabetes: *in vitro* and *in vivo* study**

Dr. Tovit Rosenzweig, Department of Molecular Biology and Nutrition, *Ariel University Center of Samaria, Israel*

16:30 **Touch-less tactile feedback using an air brush – an imaging device for visually impaired**

Dr. Boaz Ben-Moshe, Department of Computer Science, *Ariel University Center of Samaria, Israel*

16:50 **Concluding remarks**