



Parkinson's Disease: From basic mechanisms to treatment and prevention

The Natural History Museum, Tel Aviv University

November 17, 2022

[Register to attend and submit abstract >>](#)

8:00-8:50 **Registration**
light refreshments + poster hanging

8:50-9:00 Greetings: Prof. Karen Avraham
Dean, Faculty of Medicine

9:00-9:45 **Keynote lecture**

Chair: Avi Ashkenazi (TAU)

Clive Svendsen, Cedars-Sinai Medical Center, USA
Using stem cells to model and treat Parkinson's disease

9:45- 10:30 **Session 1**

Neurobiology of Parkinson's disease

Chair: Ilana Schlesinger (Rambam)

Shani Stern (Haifa)

Shared and distinct phenotypes of Parkinson's disease patient-derived dopaminergic neurons

Daniel Gitler (BGU)

Attenuation of synaptic function by alpha-synuclein depends on the synapsins: mapping of their binding sites

Joshua Goldberg (HUJI)

Alpha-Synuclein-driven pathophysiologies underlying non-motor parkinsonian symptoms

10:30-11:00 **Coffee Break and Posters**

11:00 -11:45 **Keynote lecture**

Chair: Claude Brodski

Maria Grazia Spillantini, University of Cambridge, UK
Alpha-synuclein synaptic dysfunction in Parkinson's disease: a target for therapy

11:45-12:30 **Session 2**

Cellular mechanisms in Parkinson's disease

Chair: Dani Offen (TAU)

Moussa B.H. Youdim (Technion)

Restoration of dopamine neurons in animal models of Parkinson's Disease via activation of HIF, cell cycle and mitochondrial biogenesis

Simone Engelender (Technion)

Role of SIAH proteins in PINK1 homeostasis: Implications for mitochondrial dysfunction in Parkinson's disease

Eran Perlson (TAU)

The role of local protein synthesis in axon degeneration

12:30-14:00 **Lunch break + posters**

14:00-14:45 **Keynote lecture**

Chair: Sharon Hassin-Baer (Sheba)

Pamela McLean, Mayo Clinic, USA

Therapeutic strategies targeting alpha-synuclein for Parkinson's disease and Lewy body dementia

14:45-15:30 **Session 3**

Alpha synuclein physiology in health and disease

Chair: Nirit Lev (Meir)

Ronit Sharon (HUJI)

Alpha-synuclein: A physiological function in vesicle traffic and the implications to the pathophysiology of Parkinson's disease.

Philipp Selenko (Weizmann Institute)

What is the biological function of alpha-Synuclein

Avi Ashkenazi (TAU)

Influence of membrane phospholipids on alpha-synuclein pathological behavior

15:30-16:00 **Coffee break**

16:00-16:30 **Session 4**

New approaches for PD diagnosis and tracking

Chair: Anat Mirelman (Sourasky)

Aviv Mezer (HUJI)

Mapping microstructural gradients of the human striatum in Parkinson's disease.

Uri Ashery (TAU)

A new platform for diagnosis of alpha-synuclein aggregates using super resolution microscopy

16:30-17:15 **Keynote lecture**

Chair: Roy Alcalay (Sourasky)

Claudio Soto - University of Texas, USA

Detection and Biology of alpha-synuclein conformational strains

17:15 **Concluding remarks**

Prof. Nir Giladi, Chairman Neurological Institute and Director of the Aufzien Family Center for the Prevention and Treatment of Parkinson's Disease