

#### THE 27th TEL-AVIV UNIVERSITY AD CONFERENCE &

#### First Joint UK-Israel Dementia Prevention

June 17-19, 2019

#### **Program**

# Lectures will be held at the Dan David building, lecture hall # 3 on the Tel Aviv University campus

Chairs: First Joint UK-Israel Dementia Prevention Robert Perneczky & Amos Korczyn, Imperial College London, UK/ Tel Aviv University, Israel.

The 27<sup>th</sup> Tel Aviv AD conference Amos Korcyn, Danny Frenkel, Danny Michaelson. Tel Aviv University

	Monday, 17 June 2019
08.00-08.30	Registration + coffee
08.30-08.45	Welcome and opening presentations
	Robert Perneczky & Amos Korczyn, Imperial College London, UK/ Tel
	Aviv University, Israel
08.45-09.15	Israel opening presentation: The Israel national plan to address and
	prevent Alzheimer's disease and other dementias
	Shelley Sternberg, Ministry of Health, Israel
09.15-09.45	UK opening presentation: How far are we from curing Alzheimer's
	disease
	Susan Greenfield, House of Lords, UK

#### Session 1. Risk and protective factors I

**Chairs:** Gill Livingston & Eli Wertman, University College London, UK/ Hebrew University Jerusalem, Israel

9.45-10.10	Changing the prevalence and incidence of dementia
	Gill Livingston, University College London, UK
10.10-10.35	Prevention of diabetes-related dementia
	Michal Schneider-Beeri, Sheba Medical Center, Israel
10.35-11.00	Effect of physical activity, APOE4 and plasma amyloid-beta on cognition
	function in healthy older adults
	Catherine Robb, Imperial College London, UK
11.00-11.25	Can lifestyle changes reduce the incidence of dementia?
	Yakir Kaufman, Herzog Medical Center Jerusalem, Israel
11.25-11.45	Coffee break

## Session 2. Data blitz: Early-stage researchers - blue sky

**Chairs:** Robert Perneczky & Illana Gozes, Imperial College London, UK/ Tel Aviv University, Israel

11.45-11.50	A possible new blood biomarker for AD
	Paul Morrill, Neuro-Bio Ltd, UK
11.50-11.55	The effects of ApoE4 on membrane trafficking of ABCA1
	Roni Bar, Tel Aviv University, Israel
	Artificial cells with controllable central dogma activities as a tool for
11.55-12.00	understanding complex biological events
	Shai Zilberzwige –Tal, Tel Aviv University, Israel
12.00-12.05	Targeting brain metabolic impairment in an AD mouse model
	Yuval Nash, Tel Aviv University, Israel
12.05-12.10	Arrested autophagy mediated by GSK-3 enhances mutant-huntingtin
	aggregates accumulation
	Ido Rippin, Tel Aviv University, Israel
12.10-12.15	Illuminating disorientation across the Alzheimer's disease spectrum
	through the use of functional, structural and metabolic neuroimaging
	Gregory Peters-Founshtein, Hadassah Hebrew University Medical
	Center, Israel

Maternal DNA-immunization strategy targeting amyloid-β related
neuropathology and dementia in Down syndrome
Tomer Illouz, Bar-Ilan University, Israel
Lunch break

#### Session 3. Preclinical research and small animal studies

**Chairs:** Danny Michaelson & Peter St George-Hyslop, Tel Aviv University, Israel/ University of Cambridge, UK

13.30-13.55	Development of ApoE targeted Alzheimer's disease therapy
	Daniel Michaelson, Tel Aviv University, Israel
13.55-14.20	Impairments of neural circuit function in Alzheimer's mouse models
	Marc Aurel Busche, Dementia Research Institute, UK
14.20-14.45	Extra-hippocampal learning and memory deficits in young ApoE4
	expressing rodents
	Anan Moran, Tel Aviv University, Israel
14.45-15.10	Microglial diversity and neuroinflammation in neurodegeneration
	Peter St George-Hyslop, University of Cambridge, UK

#### 15.10-15.30 Coffee break

#### Session 4. Risk and protective factors II

Chairs: Amir Glik & Raj Kalaria, Rabin Medical Center, Israel/ University of Newcastle, UK
 15.30-15.55 Long-term cognitive outcomes after stroke in the COGFAST study
 Raj Kalaria, University of Newcastle, UK

15.55-16.20 Gait and cognitive decline in old age
Anat Mirelman, Tel Aviv Sourasky Medical Center, Israel
Hearing loss and dementia risk
Sergi Costafreda Gonzalez, University College London, UK
Antidepressant Medication and the Risk of Dementia
Stephen Levine, University of Haifa, Israel

Speakers' dinner

	Tuesday, 18 June 2019
08.30-09.00	Registration + coffee
09.00-09.05	Welcome
	Robert Perneczky & Amos Korczyn, Imperial College London, UK/ Tel
	Aviv University, Israel

## Session 5: Interventions to prevent neurodegeneration and dementia

**Chairs:** Patrick Kehoe & Abdalla Bowirrat, University of Bristol, UK/ Bar Ilan University-Galilee, Israel

09.05-09.30	Application of the gene editing tool CRISPR-Cas9 for studying and treating Alzheimer's disease
	Daniel Offen, Tel Aviv University, Israel
09.30-09.55	Dysfunctional RNA metabolism in neurodegeneration
	Marc-David Ruepp, King's College London, UK
09.55-10.20	Obesity and dementia
	Ramit Ravona-Springer, Sheba Medical Center, Israel
10.20-10.45	The Reducing pathology in Alzheimer's Disease through Angiotensin
	taRgeting study (RADAR)
	Patrick Kehoe, University of Bristol, UK
10.45-11.05	Coffee break

#### **Session 6: Clinical studies**

**Chairs:** Ronit Pinkas-Kramraski & Klaus Ebmeier, Tel Aviv University, Israel/ University of Oxford, UK

12.45-13.45	Lunch break
	Noa Bregman, Tel Aviv Sourasky Medical Center, Israel
12.20-12.45	A simple tool to reach populations at risk for developing dementia
	Vladyslav Vyazovskiy, University of Oxford, UK
11.55-12.20	Ageing and sleep: insights from animal models
	Yuval Nir, Tel Aviv University, Israel
11.30-11.55	Sleep and dementia
	Klaus Ebmeier, University of Oxford, UK
	different stages of life
11.05-11.30	Lifebrain project: determinants of brain, cognitive and mental health at
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## Session 7: Risk and protective factors III

**Chairs:** Tamas Revesz & Odelia Elkana, University College London, UK/ Academic College of Tel Aviv-Yaffo, Israel

13.45-14.10	Neuroimaging correlates of cognitive reserve
	Robert Perneczky, Imperial College London, UK
14.10-14.35	Chronic traumatic encephalopathy as a neuropathological entity
	Tamas Revesz, University College London, UK
14.35-15.00	AD: past, present and future
	Amos Korczyn, Tel Aviv University, Israel
15.00-15.25	Neuromodulation of human memory: implications for AD
	Itzhak Fried, Tel-Aviv Medical Center, Israel
15.25-15.50	Closing words
15.50-16.30	Coffee
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## Wednesday, 19 June 2019

08.00-08.30 Registration + coffee

#### **Session 8: Neuroinflammation**

Chairs: Danny Frenkel & Eitan Okun, Tel Aviv University / Bar Ilan University

08.30-09.10	Modulating innate immunity in Alzheimer's disease
	Michael Heneka, German Center for Neurodegenerative Diseases
	(DZNE), Germany
09.10-09.30	The role of Apoe in microglia regulation in neurodegeneration
	Oleg Butovsky, Harvard Medical School, USA
09.30-09.50	CSF exchange therapy for the treatment of inflammatory degenerative
	diseases of the CNS
	Hanna Rosenmann, Hadassah Hebrew University Medical Center, Israel
09.50-10.10	Altered autophagy and mitochondrial dynamics in APOE4-expressing
	astrocytes
	Eran Schmukler, Tel Aviv University, Israel
10.10-10.30	Senescent astrocytes are affiliated with impaired cognition in 5xFAD
	mice.
	Shoshik Amram, Tel Aviv University, Israel
10.30-10.50	Coffee break

## Session 9. Therapy and metabolism

Chairs: Menahem Segal & Abraham Fisher, Weizman Institute, Israel.

10.50-11.10	NAP (davunetide) preferential interaction with dynamic 3-repeat Tau
	explains differential protection in selected tauopathies
	Illana Gozes, Tel Aviv University, Israel
11.10-11.30	Brain targeting of conjugated linoleic acid, a Calpain inhibitor, preserves
	memory and reduces A-beta and P25 accumulation in 5xFAD mice
	Ruth Gabizon , Hadassah Hebrew University Medical Center, Israel
11.30-11.50	Unraveling the X factor in AD: VEGF as a novel therapeutic treatment
	for ApoE4
	Shiran Salomon-Zimri, Tel Aviv University, Israel
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11.50-12.10	Idiosyncratic effects of putative N-glycosylation sites in human Tau on
	AD-related neurodegeneration
	Yelena Losev, Tel Aviv University, Israel
	Borderline levels of serum vitamin B12 may predict cognitive decline in
12.10-12.30	elderly hip fracture patients
	Eliyahu Mizrahi, Shmuel-Harofe hospital, Israel
12.30-12.50	Multifaceted Mitigating Effects of Hyperbaric Oxygen Therapy in
	Alzheimer's Disease Mouse Models
	Ronit Shapira, Tel Aviv university
12.50-13.50	Lunch break

## Session 10. Neurodegeneration and molecular mechanisms

Chairs: Uri Ashery & Beka Solomon, Tel Aviv University, Israel

13.50-14.30	Axons, trauma and neurodegeneration
	Gorazd Bernard Stokin, St. Anne's University Hospital, Czech Republic
14.30-14.50	Non-coding RNAs in neurodegenerative diseases
	Mona Soreq, The Hebrew University of Jerusalem, Israel
14.50-15.10	Classification and prediction of clinical FTD diagnosis based on plasma
	microRNAs
	Iddo Magen, Weizmann Institute, Israel
15.10-15.30	Decoding the genomic architecture of late onset AD using single cell-
	type omics analyses
	Ornit Chiba-Falek, Duke University, USA
15.30-15.50	Norvaline as a novel AD-modifying agent
	Baruh Polis, Bar-Ilan University, Israel
15.50-16.10	Concluding remarks
	Amos Korczyn, Danny Michaelson, Danny Frenkel, Tel Aviv University,
	Israel

**Sponsored by:** The National Institute for Psychobiology in Israel, Rabin Institute of Neurobiology,

Sagol School of Neuroscience.



