“You shall rise before a venerable person
and you shall respect the elderly” (Leviticus 19:32)

Granting elderly people a reasonable quality of life is a personal and professional commitment and one of the basic human values. This is the imperative of the “Healthy Aging” initiative at Tel Aviv University. Nowadays, as the proportion and impact of older members in society surge, the need to understand the vast phenomena of aging, in both their healthy and unhealthy manifestations, is ever growing.

The elderly person undergoes several simultaneous processes: biological aging, affected by genetics and its random structural changes, adaption to the physical environment, increasing of morbidity load, mental adaption to bodily changes as well as changes in one's role in society. This series of changes occurs in parallel, in different rhythms, dictated by various parameters investigated and defined through ongoing research in different disciplines. Thus, aging is one of the most fascinating, complex and dynamic phenomena.

The necessity of investigating the mechanisms of aging as well as of solving unique old-age problems and mental, physical and environmental needs, is a multidisciplinary challenge that involves a wide array of scientific pursuits. From art and culture to medical, sociological and law sciences, from humanities to engineering, smart cities and cyber security – all these research and technologies should be involved.

The goal of the "Healthy Aging" second symposium is to verify, share, discuss and brainstorm the broadband of the aging phenomena aspects, involving most of the research and development areas. Following the ongoing interest in the first “Healthy Aging” symposium, held in January 2018, this symposium aims to establish an international joint collaborative efforts for the benefit and wellbeing of all.
09:00 Welcome & Opening Remarks

Dr. Mira Marcus-Kalish - Director, International Research Collaborations, TAU
Prof. Joseph Klafter - President, Tel Aviv University, TAU
Prof. Yoav Henis - VP for R&D, TAU

09:20 - 10:40 Opening Session:

Chair: Prof. Alan Leshner - Chief Executive Officer, Emeritus, AAAS, and former Executive Publisher, Science, USA

Developing a Policy for an Ageing Population: Examples from the UK
Prof. Sarah Harper – Gerontology, Institute of Population Aging, Oxford University, GB

Do Micro-organisms Have Anything to do with Aging?
Prof. George Weinstock - Evnin Family Chair and Director of Microbial Genomics, Jackson Laboratory for Genomic Medicine, USA

Engineering Personalized Tissue Implants for Regenerative Medicine
Prof. Tal Dvir - Laboratory for Tissue Engineering and Regenerating Medicine School of Molecular Cell Biology and Biotechnology, Department of Materials Science & Engineering, Sagol Center for Regenerative Biotechnology, Center for Nanoscience & Nanotechnology, George S. Wise Faculty of Life Sciences, TAU

Keeping People Healthy with Vaccines for the Aging Society
Dr. Rino Rappuoli - Chief Scientist & Head of External R&D GlaxoSmithKline (GSK) Vaccines

10:40 - 11:00 Coffee Break

11:00 - 12:30 Session II:

Chair: Prof. Mauro Ferrari - President and CEO, Houston Methodist Research Institute, Director, Institute for Academic Medicine at Houston Methodist Hospital, Executive Vice President, Houston Methodist Hospital, USA

Biomarkers for Cognition, Aging and Alzheimer’s Disease
Prof. Ilana Gozes - The Gildor Chair for the Investigation of Growth Factors Department of Human Molecular Genetics and Biochemistry Sackler Faculty of Medicine, TAU

Patient-Centered In Silico Assessment of Health Aging: Imaging and Beyond.
Dr. Michael Morris, MD - Nuclear Medicine, and Internal Medicine, Mercy Medical Center, Baltimore, MD, USA
**Medical Epistemology: A Gerontologist's Perspective**
Prof. John Sorkin, Chief, Biostatistics and Informatics, University of Maryland School of Medicine Division of Gerontology and Geriatric Medicine Baltimore VA Medical Center

**Modelling and Optimization of Homecare and Caregiving Services for the Elderly**
Prof. Theng Yin Leng - Professor & Director, Wee Kim Wee School of Communication & Information, Acting Executive Director, Ageing Research Institute for Society and Education (ARISE), President's Office, Nanyang Technological University (NTU)

12:30 - 13:30 Lunch

13:30 - 15:00 Session III:

Chair: Prof. Dov Shmotkin - School of Psychological Sciences, and Head of the Herczeg Institute on Aging, TAU

**Protecting the Elderly and Frail from Pressure Ulcers Using Innovative Bioengineering Technologies**
Prof. Amit Gefen - The Herbert J. Berman Chair in Vascular Bioengineering, Department of Biomedical Engineering, Iby and Aladar Fleischman Faculty of Engineering, TAU

**Healthy Aging and Filial Piety in the Shadow of the Law**
Prof. Daphna Hacker - The Buchmann Faculty of Law, TAU

**The Social Shaping of Uncertainty in Length of Life**
Dr. Isaac Sasson, Department of Sociology and Anthropology and the Herczeg Institute on Aging, TAU

**Assistive Technology for Cognitive Impaired Seniors in Nursing Homes**
Kelvin Tan Cheng Kian - Director, NUS Smart Systems Institute National University of Singapore

15:00 - 15:30 Coffee Break

15:30 - 17:30 Session IV:

Chair: Dr. Dévora Grynspan - Vice President for International Relations, Northwestern University

**Research Directions in Healthy Aging in the Era of the Longevity Economy**
Dr. Dana Burr Bradley - Dean, Erickson School of Aging Studies, Professor of Social Gerontology, UMBC
Healthy Aging Starts Not at 65 but at Day One, So Why Do We Misplace Our Resources?
Prof. Manuel Trajtenberg - The Eitan Berglas School of Economics, TAU and Samuel Neaman Institute, Technion

Healthy Aging International Initiative – Panel Discussion
Prof. Theng Yin Leng (NanYang Technology University, Singapore)
Kelvin Tan Cheng Kian (National University of Singapore)
Dr. Hedva Voliovitch, Executive Manager, former Head of Global Patient Safety & Pharmacovigilance, Teva Pharmaceuticals
Miri Polachek - CEO, Joy Ventures, Israel

2019 JOY ACADEMIC GRANT CALL FOR PROPOSALS
INNOVATIVE TECHNOLOGIES, INTERVENTIONS AND NOVEL APPROACHES IN THE FIELD OF NEURO-WELLNESS

18:00 Cocktail event at the Porter School of Environmental Studies