



Healthy Longevity
Research Center
Tel Aviv University

THE HEALTHY LONGEVITY RESEARCH CENTER



TEL AVIV אוניברסיטת
UNIVERSITY תל אביב

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Editors: Prof. Karen Avraham, Alana Sisam

Graphic design: Michal Semo Kovetz, TAU Graphic Design Studio

December 2022

THE CENTER'S GOALS

- To serve as a catalyst for translating research and development into novel devices, technologies, treatments and expertise that promote dignity, health and quality-of-life among the elderly
- To disseminate findings and recommendations among scientists, health professionals, policymakers, and the general public in Israel and around the world
- To foster a new generation of researchers in gerontology and other aging-related fields
- To initiate inter-disciplinary discussion groups on topics such as memory, loss, the emotional world of aging, age and law, intergenerational synergies, meaning of life in old age, ageism, caregiving and caregivers

ACTIVITIES

- Conferences, workshops and lectures
- Discussion groups
- Scholarships for Excellence in Research for graduate students
- Research grants

Director: Prof. Uri Ashery

ACADEMIC COMMITTEE, TEL AVIV UNIVERSITY

Prof. Uri Ashery – Faculty of Life Sciences & Sagol School of Neuroscience

Prof. Karen B. Avraham – Faculty of Medicine & Sagol School of Neuroscience

Prof. Abdussalam Azem – Faculty of Life Sciences & Sagol School of Neuroscience

Prof. Yael Benyamini – School of Social Work, Faculty of Social Sciences

Prof. Ilit Ferber – Department of Philosophy, Faculty of Humanities

Prof. Micha Fridman – School of Chemistry, Faculty of Exact Sciences

Prof. Daphna Hacker – Faculty of Law, Gender Studies

Prof. Jeffrey Hausdorff – Tel-Aviv Sourasky Medical Center & Faculty of Medicine

Prof. Silvia Koton – School of Health Professions, Faculty of Medicine & Herzeg Institute

Prof. Uri Nevo – Bioengineering, Faculty of Engineering

Dr. Gal Raz – Faculty of the Arts

Prof. Tzipi Strauss – Sheba Medical Center & Faculty of Medicine

Prof. Sharon Toker – School of Management

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LEARNING AND MEMORY



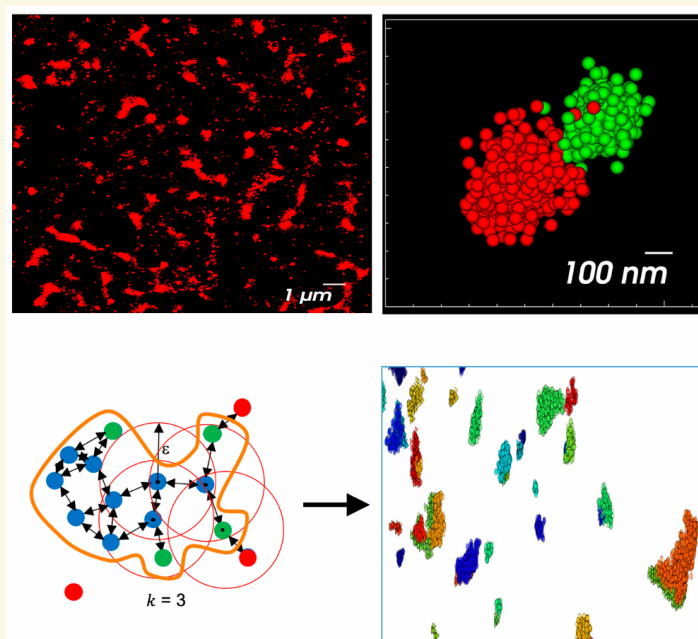
Prof. Uri Ashery, Ph.D.

School of Neurobiology, Biochemistry & Biophysics
Faculty of Life Sciences
and Sagol School of Neuroscience

Prof. Ashery completed his BSc in biology and chemistry with distinction, and his PhD in 1996 in neurobiology *cum laude* at the Hebrew University of Jerusalem. He completed his post-doctoral studies at the Max Planck Institute for Biophysical Chemistry, Germany. Ashery spearheaded the establishment of the TAU Sagol School of Neuroscience, a unique multidisciplinary “ecosystem” and served as Head of School from 2011–2020. The School is now Israel's largest and leading neuroscience institute, with over 100 research groups led by internationally renowned scientists and clinicians. Prof. Ashery has published over 70 papers and has won awards including the Bernard Katz Prize for Neurosciences and the Rector list for best lecturer and he is supported by major grant agencies including ISF, BSF, Teva and NIH.

<https://uriashery.wixsite.com/ualab>

Prof. Ashery is the head of the *learning and memory lab* and leads an interdisciplinary research team focused on elucidating the molecular mechanisms of learning and memory, and their link to neurodegenerative diseases. Ashery's lab focuses on two of the most common diseases in an aging society: Alzheimer's disease (AD) and Parkinson's disease (PD). (His lab investigates the mitigating effects of Hyperbaric oxygen treatment) HBOT, (a medical administration of 100% oxygen at environmental pressure greater than 1 Atmosphere absolute, on different AD mouse models. They demonstrated that HBOT ameliorates AD-related pathologies including a reduction in neuroinflammation, improvement in vascular dysfunction, reduced hypoxia and beta-amyloid plaques and improvement in behavioral tasks. His lab is also developing a new platform to allow early diagnosis of PD. This is achieved by applying a combination of super-resolution microscopy and AI and advanced analysis on skin biopsies from PD patients as part of a collaboration with several medical centers affiliated with TAU.



UNDERSTANDING THE CELL BIOLOGY OF NEUROLOGICAL DISORDERS



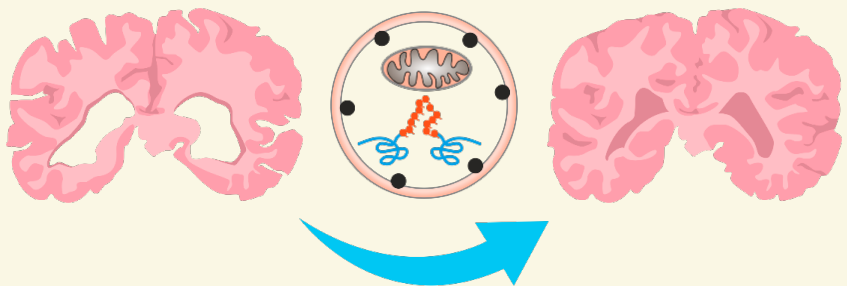
**Dr. Avraham Ashkenazi,
Ph.D.**

Department of Cell and
Developmental Biology
School of Medicine
Faculty of Medicine

Dr. Avraham Ashkenazi is a faculty member at the Faculty of Medicine and a member of Sagol School of Neuroscience. He is also the co-director of the BioMed@TAU Research Hub Disorders of the Mind and Brain. Dr. Ashkenazi completed his Ph.D. at the Weizmann Institute. He then moved to the University of Cambridge as a Postdoctoral Fellow investigating autophagy and neurodegeneration. He was awarded the Distinguished Young Investigator Award by the Federation of European Biochemical Societies, and the Azrieli Foundation Faculty Fellowship.

<https://www.ashkenazilab.com>

Dr. Ashkenazi's lab utilizes state-of-the-art technologies to elucidate cellular mechanisms of neurological disorders. Many of these disorders progress late in life, such as Huntington's disease and Parkinson's disease. A common characteristic in these disorders is the accumulation of proteins that are not folded properly and can form aggregates in cells. Research in the lab is currently focused on the ubiquitin-proteasome and autophagy pathways, the main routes by which aggregate-prone proteins are degraded. Also, these pathways are important for cells to cope with various stress conditions. This research will elucidate novel regulatory pathways of protein homeostasis in cells to better understand the basis of these devastating diseases and to identify future therapeutic targets.



GENETICS AND EPIGENETICS FOR HUMAN DISEASE



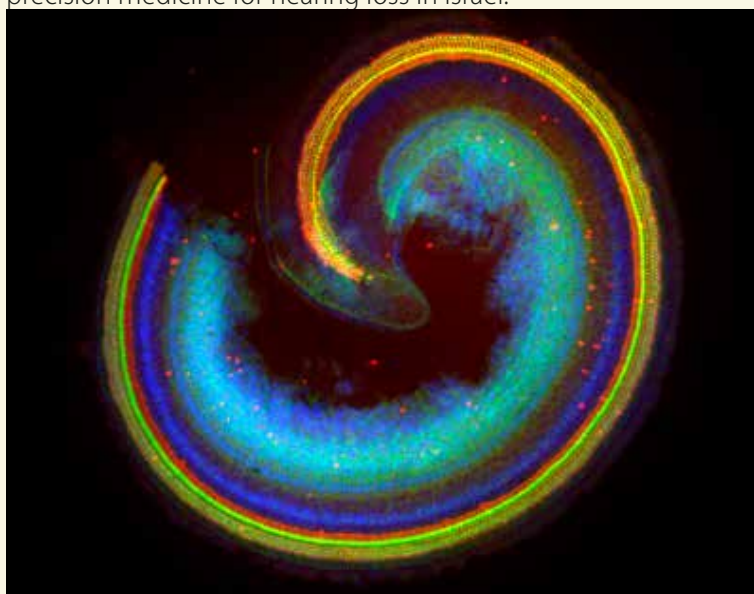
Prof. Karen Avraham, Ph.D.

Department of Human Molecular Genetics and Biochemistry
School of Medicine, Faculty of Medicine and Sagol School of Neuroscience

Prof. Avraham is Dean at the Faculty of Medicine at Tel Aviv University and holds the Drs. Sarah and Felix Dumont Chair for Research of Hearing Disorders. She is a member of the Department of Human Molecular Genetics and Biochemistry, the Sagol School of Neuroscience and the Safra Center for Bioinformatics. Avraham was awarded the Sir Bernard Katz Prize, the Bruno Memorial Prize, the TEVA Prize for Groundbreaking Research in Rare Diseases, and the Teva Founders Prize on Breakthroughs. She is co-director of the Aufzien Family Center for the Prevention and Treatment of Parkinson's Disease and the Taube-Koret Global Collaboration in Neurodegenerative Diseases. Prof. Avraham founded and co-directs the Biomed@TAU Research Hubs and the MSc program in Medical Sciences with a specialty in Genetic Counseling.

<https://www.kbalab.com/>

Hearing loss is a leading cause of disability worldwide, with an estimated 466 million people suffering from this debilitating loss. In adults, in particular in the elderly, hearing impairment causes communication difficulties, which, in turn, can lead to social isolation. Disabling hearing loss is highly prevalent in the elderly population, with about 25% between ages 65-74 and 50% of those aged 75 and above. Epidemiological and clinical studies have demonstrated that hearing loss is associated with cognitive decline in older adults. Genetic treatment for hearing loss is crucial, since the benefit from general solutions for deafness, such as hearing aids, is often low. Prof. Avraham's goal is to determine the genetic basis of hearing loss and use genome editing to create models to study the mechanisms of auditory function. Gene therapy is being conducted on these models for human hearing loss. Regulatory mechanisms are being discovered at the level of non-coding RNA and methylation. The team's work has demonstrated that genomic sequencing using high-throughput technologies is effective for genetic diagnoses in a diverse population, providing a guideline for precision medicine for hearing loss in Israel.



MITOCHONDRIA IN DISEASES OF AGING



Prof. Abdussalam Azem, Ph.D.

Prof. Azem is the Dean of the George S. Wise Faculty of Life Sciences. Since joining Tel Aviv as a faculty member in 1997, he has served in several positions. Among them is the head of the Department of Biochemistry and Molecular Biology and as the first head of the newly established School of Neurobiology Biochemistry and Biophysics. At the national level, Prof. Azem served as Secretary General of the Israel Society for Biochemistry and Molecular Biology (ISBMB) (2013–2017). During this period, he served as representative of ISBMB in the Federations of European Biochemical Societies (FEBS). Prof. Azem holds the Louise and Nahum Barag Chair in Molecular Genetics of Cancer.

<https://en-lifesci.tau.ac.il/profile/azema>

The general focus of Prof. Azem's research is to study the function and dysfunction of proteins, with a focus on protein folding and aggregation properties inside mitochondria, the energy producing organelle in our cells. These processes are relevant during the development of neurodegenerative diseases such as Alzheimer's and Parkinson's. Recently, his focus has shifted to include the study of the molecular mechanisms of the development of rare genetic diseases, linked to mitochondrial function.

SOCIAL SCIENCES

PERCEPTIONS OF HEALTH AND ILLNESS



Prof. Yael Benyamini, Ph.D.

Prof. Yael Benyamini is a health psychologist and a Professor at the Bob Shapell School of Social Work at the Tel Aviv University. She attained her Bachelor's degree in Psychology and Biology and her Master's degree in Social Psychology at the Hebrew University in Jerusalem, and her Ph.D. in Health and Social Psychology at Rutgers University in New Jersey. She is an elected Honorary Fellow of the European Health Psychology Society.

<https://en-socialwork.tau.ac.il/profile/benyael>

Prof. Benyamini studies how people think about their health. Her research focuses on subjective perceptions of health and illness as one gets older and their effects on coping with health threats and ultimately, on the psychological and physical outcomes.

Her studies provide evidence for the intricate ways in which one's subjective perceptions of health, age, and aging are interrelated. Particular contexts include cardiac disease, chronic pain, and women's health issues (from childbirth through midlife and aging).

STRUCTURE & FUNCTION OF THE NEUROVASCULAR INTERFACE



Prof. Pablo Blinder, Ph.D.

Prof. Blinder leads a multidisciplinary laboratory, where he develops and implements advanced in vivo imaging tools to uncover the nature of neurovascular coupling, under healthy and pathological conditions. This reflects his deep devotion to understand the inner workings in the brain and the path he took, which started with undergraduate and graduate studies in biology that took place at the Ben-Gurion University of the Negev, followed by a joint PhD in Neuroscience with a tutor in Physics (Ben Gurion University and Tel Aviv University) and a post-doctoral training at the Department of Physics, University of California, San Diego. He has made several fundamental contributions to the understanding of brain vascular structure and function and more recently contributed to deepening our understanding of novel aspects of the neuro-immune axis in metastases and stroke.

[Website: https://pblab.tau.ac.il/en/](https://pblab.tau.ac.il/en/)

Maintaining life-long memories through preservation of Peri-Neuronal Nets (PNN). Perineuronal nets, are formed by the most stable proteins know, anchoring the location of synapses around key inhibitory neurons while also protecting them from oxidative stress and damage. It is believed that these combined functions enable the storage of life-long memories. PNN are lost during ageing and their preservation opens a new window of opportunity for healthy cognitive ageing. To this day, the study of this peculiar structure was limited to histological and ex vivo experiments which limited our understanding of their function and interactions with other cells in the brain Blinder's laboratory developed a novel method to longitudinally label and image PNNs. They now combine this approach with the ability to modulate the neuro-immune axis in order uncover the mechanism beyond the formation, maintenance and degradation of PNNs, opening a new horizon of research into neuronal longevity and preservation of cognitive.

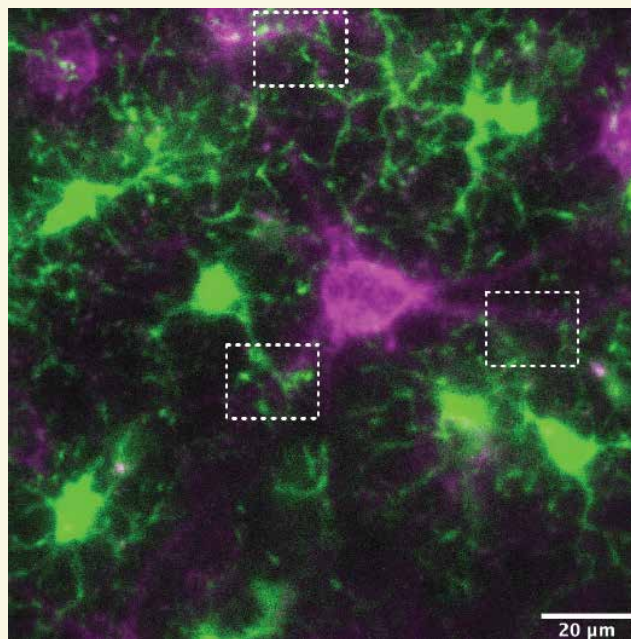


Figure 1 Two-photon In vivo imaging of perineuronal nets (PNNs, purple) and microglia (green) interactions in the mouse somatosensory cortex.

END-OF-LIFE PROCESSES & CARE



Moran Bodas, M.P.H., Ph.D.

Department of Emergency & Disaster
Management
School of Public Health
Faculty of Medicine

Dr. Bodas is the acting director of the Israel National Center for Trauma & Emergency Medicine Research, Gertner Institute of Epidemiology in Israel. In addition, he is a clinical lecturer at the Department of Emergency Management & Disaster Medicine (Tel Aviv University), and a faculty member at the Ph.D. Program in Global Health, Humanitarian Aid and Disaster Medicine, and the European Master in Disaster Medicine, both at Università del Piemonte Orientale, Italy)

End-of-life processes are becoming more complex due to social norms and ethics. Terminally-ill patients and their caregivers are faced with a myriad of issues, including the patient's will and ability to accept the truth and the doctors' hardship in delivering it, willingness to come to term with the news, and shifting to palliative treatment, the level of doctor's involvement in the end-of-life process, the legitimacy of such process, etc. Recent studies in Israel among physicians and the public confirm this complexity and call for further research. The research led by Dr. Bodas and Dr. Baruch Velan (Gertner Institute) is aimed at generating a database of public opinion in Israel concerning the issue of life termination, collecting epidemiological data on actual end-of-life processes in the last five years in Israel, and identifying differences in attitudes across subgroups in the population.

THE CHALLENGE OF HEALTHY AGING WITH DIABETES



**Prof. Tali Cukierman-Yaffe,
M.D., M.Sc.**

Department of Epidemiology
School of Public Health
and Sheba Medical Center

Prof. Tali Cukierman-Yaffe is an endocrinologist and a clinical epidemiologist. A senior physician in the Endocrinology Institute, the Head of the Centre for Successful Aging with Diabetes at the Sheba Medical Center, Head of the Endocrinology & Diabetes Service for women and pregnancy, and an Associate Professor at the Department of Epidemiology at the School of Public Health in the Faculty of Medicine at Tel Aviv University and a member of the Herczeg institute on Aging. She is also a PHRI (Population Health Research Institute, McMaster University, Canada) senior international fellow.

The Center for Successful Aging with Diabetes is a clinical, training and research platform. Research wise it serves both as an idea generator and as a platform to identify risk and protective factors for cognitive impairment and sarcopenia in older people with diabetes, test the effect of interventions on these long term sequels of the disease, as well as development of technological assessment tools. These include the effect of different anti diabetic drugs in the older population, the effect of hyperglycemia on the risk of falls and other geriatric adverse symptoms, and technological solutions for the assessment of physical capacity and cognitive function in older people with diabetes, and risk and protective factors for cognitive impairment and physical disability in older people with diabetes

The focus of Prof. Cukierman-Yaffe's research is the relationship between diabetes and cognitive dysfunction and the challenges of treating diabetes in older age. She is part of working groups writing local and international guidelines on this topic and is an invited advisor in forums dealing with this subject. She was the PI of the cognitive sub-study of the ORIGIN trial, a co-investigator of the ACCORD-MIND study and took a key role in the cognitive sub-study of the REWIND trial that tested the cognitive safety and efficacy of Dulaglutide in people with diabetes. In the last several years her research has also been focused on finding technological solutions to improve the care of older people with diabetes and understanding of the role of hyperglycemia on geriatric adverse outcomes (frailty, falls, etc.). She is the Principal Investigator of a EFSD-funded study aimed at developing a technological solutions for the replacement of traditional physical capacity assessments for older people with diabetes and another study aimed at developing a digital Digit Substitution Test (DSS) cognitive assessment tool.

MEDICINE

REVEALING ETIOLOGY AND PREVENTING CARDIOVASCULAR DISEASES AND DIABETES



Prof. Rachel Dankner, M.D., M.P.H.

Department for Epidemiology and Preventive Medicine, School of Public Health, Faculty of Medicine; Unit for Cardiovascular Epidemiology, the Gertner Institute for Epidemiology and Health Policy Research, Sheba Medical Center; Research and Development, Reuth Rehabilitation and Geriatric Hospital, Tel Aviv

Prof. Dankner is a senior researcher at the Gertner Institute and the director of the Reuth R&D institute at the Reuth Rehabilitation and Geriatric hospital. She is a Public Health physician and serves as Head of the public health residency examinations committee. Prof. Dankner graduated in medicine at the Hebrew University and earned her M.P.H. degree at the John's Hopkins School of Hygiene and Public Health. She holds a Diploma in Sports Medicine from the Tel Aviv Continuing Education program and is a certified sports physician and marine physician.

Prof. Dankner is the P.I. on the Israel Glucose Intolerance, Obesity and Hypertension study, a 50-year follow up study on a cohort of the Israeli population. She is a winner of the 2022 Healthy Longevity Research Center Research Grant on "Machine learning versus classic epidemiological investigation into determinants of unhealthy aging on the one hand and healthy aging on the other: a 50-year cohort study of community-dwelling men and women". Her research focus on risk factors and prevention of cardiovascular diseases, with an emphasis on lifestyle modifications. She established several cohorts of heart patients, stroke survivors, and diabetic patients, which serve in her longitudinal epidemiologic studies.



DISCOVERY AND DESIGN OF NEW THERAPEUTICS FOR TREATING NEURODEGENERATION



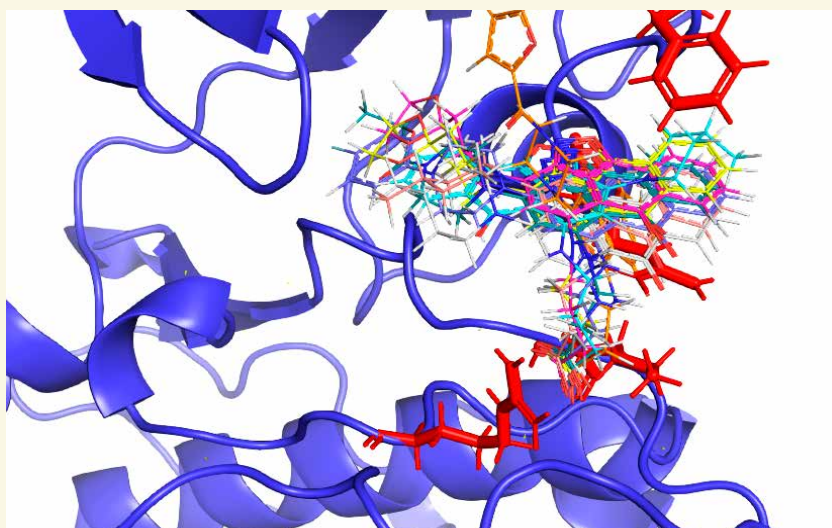
**Prof. Hagit Eldar-Finkelman,
Ph.D.**

Department of Human Molecular
Genetics and Biochemistry
School of Medicine
Faculty of Medicine

Prof. Eldar-Finkelman obtained her B.Sc. in Chemistry from the Hebrew University of Jerusalem and Ph.D. in Life Sciences from the Weizmann Institute of Science. Her post-doctoral training was carried out with Nobel prize laureate Edwin G. Krebs. Eldar-Finkelman is well known for her pioneering work on developing unique protein kinase inhibitors that target the substrate binding site. She published over 75 original papers and ten patents in the field of protein kinase inhibitors. She was the recipient of several awards, including the British Council Award, the American Heart Association Award, the Joslin Diabetes Center Fellowship and the Linder Prize of the Israel Endocrine Society.

<https://www.heflab.sites.tau.ac.il>

Our laboratory is focused on understanding the molecular mechanisms underlying human disease giving an emphasis to the development of new therapeutics addressing unmet needs in neurodegenerative disorders. Of particular interest is the protein kinase, GSK-3, that plays important roles in accelerating neuron deterioration and brain function. We showed that hyperactivity of GSK-3 is a causative factor in accumulation of toxic proteins such as beta amyloid and mutant Huntingtin in Alzheimer's and Huntington's, respectively, and in disturbing cognitive functions. Therefore, we develop GSK-3 inhibitors with unique inhibition modality as potential drugs. We combine expertise in medicinal chemistry, computational modeling, and the use of suitable in vivo models to ultimately produce beneficial therapeutics for clinical practice.



Designed molecule inhibitors bound to GSK-3

TIME, EMOTION AND THE EXPERIENCE OF AGING: A PHILOSOPHICAL PERSPECTIVE



Prof. Ilit Ferber, Ph.D.

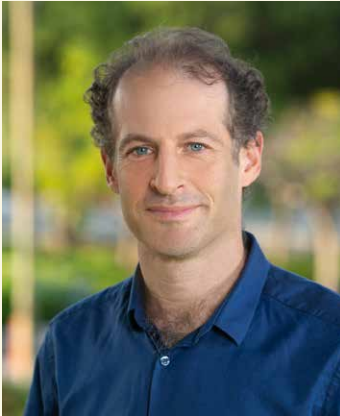
Prof. Ferber is an Associate Professor of Philosophy. Her research focuses on the philosophy of emotions, especially melancholy, suffering and pain, from the perspective of language. She has published articles on Benjamin, Heidegger, Leibniz, Scholem, Herder, Freud, Améry and others. She has co-edited a book on the role of moods in philosophy, two books in English and Hebrew, on lament in Gershom Scholem's thought and a book on the grammar of the cry (in Spanish). She has also edited the new translation into Hebrew of Jean Améry's book on aging. Ferber published two monographs: *Philosophy and Melancholy: Benjamin's Early Reflections on Theater and Language* (Stanford University Press, 2013) and *Language Pangs: On Pain and the Origin of Language* (Oxford University Press, 2019). She is now working on the role of the five senses in Benjamin's "Berlin Childhood" and on Améry's philosophy of temporality.

<https://www.ilitferber.com>

Ferber's current work explores aging from two perspectives. First, the experience of time and temporality in aging in relation to the body's decline, transformation of identity, missed opportunities and the expansion of the presence of death in life. Second, the emotional expanse of the aged, specifically, emotions such as resentment, reconciliation, nostalgia, regret, forgiveness, mourning, humiliation and hope.

MEDICINE

HUMAN MOTOR CONTROL



Dr. Jason Friedman, Ph.D.

Physical Therapy Department
School of Health Professions
Faculty of Medicine

Dr. Jason Friedman is a Senior lecturer in the Physical Therapy Dept. and the Sagol School of Neuroscience. He has a multidisciplinary background – an M.Sc. and Ph.D. in Computer Science from the Weizmann Institute, and postdoctoral research in kinesiology at Penn State University and cognitive sciences at Macquarie University. He combines his computational background with practical experience in studying movements to perform research on human motor control and motor learning.

www.movementscienceslab.com

Dr. Friedman studies and models how we produce movements, and how we learn to make new movements. In particular, he is interested in ways to speed up motor learning in different populations, including typically developing children and adults, as well as people with motor disorders (such as stroke, cerebral palsy and Parkinson's disease). His approach examines what are the building blocks of movements (movement primitives), how these building blocks are combined to produce skillful movement, how they change as we learn new movements, and how movement coordination and generation changes as we age. He plans to use this understanding to enhance motor learning.



THE EFFECT OF TIME-RESTRICTED EATING COMBINED WITH RESISTANCE TRAINING ON BODY COMPOSITION AND CARDIOMETABOLIC HEALTH



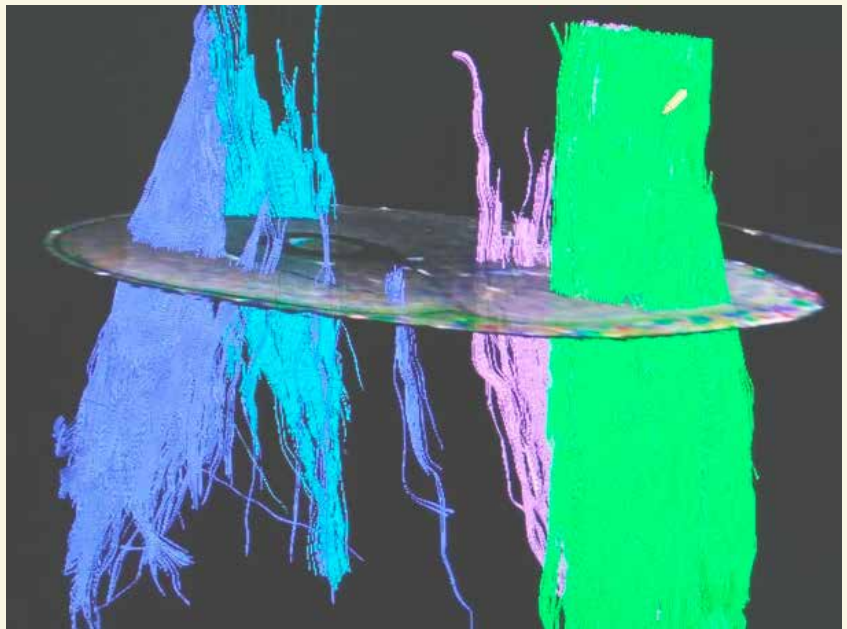
Dr. Yftach Gepner, Ph.D.

Department of Epidemiology and
Preventive Medicine
School of Public Health
Faculty of Medicine
and Sylvan Adams Sports Institute

<https://www.gepnerlab.com/>

Prof. Gepner uses cutting-edge technologies, including magnetic resonance imaging (MRI) for assessing muscle damage/mass and adipose tissue distribution, and labeled amino acid to determine protein synthesis by muscle biopsy.

Regular physical activity helps to improve physical and mental functions as well as reverse some effects of chronic disease to keep older people independent and well-being. Dr. Gepner's research focuses on understanding the impact of exercise training, combined with dietary strategies, on muscle mass, physical function, and metabolism across a range of populations. By combining applied and mechanistic metabolism and physiology adaptation studies using advanced monitoring devices, his goal is to elucidate the unique beneficial effect from physical activity.



FROM GENE TO BEHAVIOR FOR AUTISM, SCHIZOPHRENIA, AND ALZHEIMER'S DISEASE



Prof. Illana Gozes, Ph.D.

Department of Human Molecular Genetics and Biochemistry
School of Medicine, Faculty of Medicine and Sagol School of Neuroscience

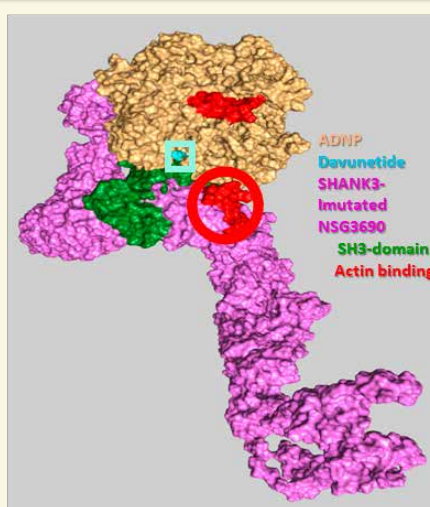
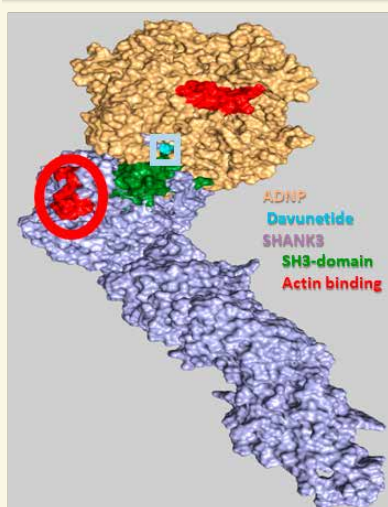
Prof. Gozes is a Professor Emerita, formerly Lily and Avraham Gildor Chair and Director of the Adams Super Center for Brain Studies. She is currently the Director of the Elton Laboratory in Molecular Neuroendocrinology. She received her B.Sc. from Tel Aviv University, her Ph.D. from the Weizmann Institute, and performed her postdoctoral training at MIT and the Salk Institute. She was a Fogarty-Scholar-in-Residence at the NIH and a Humboldt Awardee. She mentored over 65 graduate students has published over 350 papers, with an h-index of 79. She has multiple patents including (NAP, Davunetide), a clinical drug candidate targeted at the ADNP. Prof. Gozes discovered ADNP, essential for brain formation implicated in autism, schizophrenia, Alzheimer's disease and

cancer. NAP is the active site of ADNP. She was awarded multiple prizes including the Teva Founders Prize, Landau and Best Applied Scientist Prize from Tel Aviv University. She served as President of the Israel Society for Neuroscience, a member of the Council of Higher Education. She is currently Secretary of the European Society for Neurochemistry, Editor-in-Chief of the Journal of Molecular Neuroscience, and Chief Scientific Officer of ATED Therapeutics.

<https://igozes.wixsite.com/website-1gozeslab-1>

Prof. Gozes studies the mechanisms shared by mutations in different genes associated with autism, schizophrenia, and Alzheimer's disease. Her research targets ADNP and Tau in Alzheimer's disease. Her team strives to uncover shared mechanisms affecting brain diseases toward better understanding of brain function and the molecular and cellular level translated into the behavioral level, critical for learning, memory and social interactions: Using knowledge acquired in the laboratory, we aim toward drug development to currently intractable diseases.

Essential for Brain Formation and Function: ADNP Precise Mechanism of Action



LAW, FAMILIES AND GENDER



Prof. Dafna Hacker, Ph.D.

Women Studies
School of Cultural Studies
Faculty of Law

Prof. Hacker is a legal scholar and a sociologist and is a member of the Faculty of Law and the Faculty of Humanities. She received her LL.B. from the Hebrew University and her LL.M. from American University Washington College of Law, graduating *summa cum laude*, and holds a Ph.D., *summa cum laude*, from the Department of Sociology and Anthropology at Tel Aviv University. She has received numerous grants and prizes, including research grants from the Israel Science Foundation and a nomination to the Israeli Academy of Science Young Scholars in Humanities and Social Science Forum. Prof. Hacker has been a visiting professor at Cornell, Hong Kong University, the University of Warsaw, and a visiting researcher at King's College London.

Prof. Hacker's socio-legal research focuses on the intersection of law, families and gender and provides empirical as well as normative insights in relation to post-divorce parental arrangements, inheritance conflicts, filial piety towards elder parents, and transnational families.

MEDICINE & NEUROSCIENCE

GAIT, FALLS AND COGNITION IN OLDER ADULTS



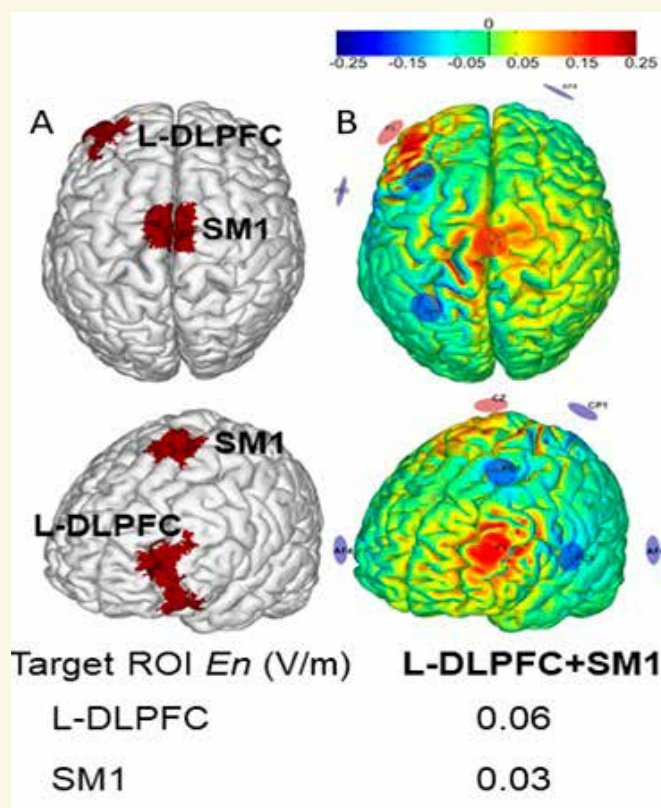
Prof. Jeffrey M. Hausdorff, Ph.D.

Department of Physical Therapy,
Faculty of Medicine and Sagol School
of Neuroscience

Prof. Hausdorff received undergraduate and graduate degrees from The Cooper Union, MIT, and Boston University in biomechanics and biomedical engineering. After completing postdoctoral training in gerontology at Harvard Medical School, he joined the faculty there, first as an instructor and later as an assistant professor. For the past 22 years, he has been directing a research center that studies gait, cognition, and mobility at the Tel-Aviv Sourasky Medical Center. He has authored more than 340 peer-reviewed publications and has an H-index of 95. His research been funded by the NIH, the ISF, European Commission, and private agencies and has been widely recognized. He received the Gerontology Society of America's Excellence in Rehabilitation of Aging Persons Award and was named a fellow of that society.

tinyurl.com/cmcmTASMC

Prof. Hausdorff and the research team that he leads aim to better understand, evaluate, and treat gait, balance, cognitive function, and their changes with aging and disease. They study gait, motor control, and brain function, with a special focus on motor-cognitive interactions, gait variability, "fractal" physiology, falls in older adults, and freezing of gait. His research on the dependence of everyday walking on specific cognitive abilities lead to important new insights about fall risk and paved the way for new therapeutic approaches such VR-based interventions and the use of non-invasive brain stimulation. Innovative studies quantifying real-world mobility set the stage for a new way of evaluating gait and fall risk.



EPIDEMIOLOGY OF STROKE AND DEMENTIA IN AGING RESEARCH



Prof. Silvia Koton, Ph.D., RN

Department of Nursing, School of Health Professions, Faculty of Medicine
Head, Herczeg Institute on Aging

Prof. Koton completed her BSN with distinction at the Hebrew University of Jerusalem, and her MOCCH and PhD in Epidemiology and Preventive Medicine at Tel Aviv University. She completed her post-doctoral fellowship at the Centre for the Prevention of Stroke and Dementia, Nuffield Department of Clinical Neurosciences, University of Oxford, UK. Prof. Koton is a full professor in the Department of Nursing, Faculty of Medicine. She serves as Head of the Herczeg Institute and manages the PhD program in the Department of Nursing. Previously, she served as head of the Department of Nursing and managed the RN to BA in Nursing program. Prof. Koton holds is adjunct faculty at the Department of Epidemiology, Bloomberg School of Public Health and School of Nursing, Johns Hopkins University, Baltimore, Maryland, USA.

Stroke is a major cause of long-term disability and a strong predictor of dementia and cognitive decline in adult and elderly populations. The incidence of stroke has declined in the last decades in various countries; however, this decline is not consistent across population-groups. Prof. Silvia Koton's varied research includes studies on epidemiology of stroke and other cardiovascular diseases; age and aging; dementia, changes in physical and cognitive functioning after stroke, and health of primary caregivers of the elderly. She studies factors associated with changes in stroke epidemiology and cardiovascular risk factors in Israel and in the US. Her research provides important information on possible reasons for these changes; how the incidence of stroke may be affected by the increasing rates of obesity, diabetes and other cardiovascular risk factors, and how the changing trends in stroke may influence rates of physical and cognitive function in old persons. As Head of the Herczeg Institute, she conducts and promotes interdisciplinary research on age and aging

The Herczeg Institute on Aging

The Herczeg Institute on Aging, established in 1992 at Tel Aviv University, fosters interdisciplinary research, as evidenced by the joint direction of the Faculty of Medicine and the Faculty of Social Sciences.

The Institute's goals:

To conduct and promote multilevel Bio-Psycho-Social research on aging as an investment for tomorrow

To disseminate knowledge on gerontology in the academia and the community

To support researchers studying aging and old-age in the various disciplines

To provide information and maintain collaboration with policy makers in areas related to aging and old age

<https://herczeg-institute.tau.ac.il/>

MEDICINE

HEALTH PROMOTION AND LONGEVITY



Dr. Shahar Lev-Ari, Ph.D.

Department of Health Promotion
School of Public Health
Faculty of Medicine

Dr. Lev-Ari was trained in cellular biology, and expertise in biology and health promotion. He leads the Health Promotion Unit, Integrated Cancer Prevention Center, Tel-Aviv Medical Center and is a member and immediate former Chair of the Department of Health Promotion, School of Public Health, Faculty of Medicine at Tel Aviv University. Dr. Lev-Ari received the Outstanding Scientist Award of the Israel Society for Complementary Medicine under the auspices of the Israeli Medical Association. His research on well-being and longevity has been published on leading peer-review journals, including JCM and JAMA Network Open.

slevari.com

Dr. Lev-Ari's research is concerned with assessing and strengthening protective factors for health promotion and good mental health and enabling access to skills, resources and supportive environments that will keep individuals and populations physically and mentally healthy. Dr. Lev-Ari is currently a visiting scientist at Prof. Michael Snyder's Lab, Department of Genetics, Stanford University and is working on developing innovative precision medicine tools for health promotion and longevity.

MEDICINE

GERONTOLOGY & COGNITIVE DECLINE



Prof. Eliyahu Mizrahi, M.D., MHA

Geriatric and Rehabilitation Hospital,
Beer-Yaakov
Faculty of Medicine

Prof. Mizrahi received a Doctor of Medicine degree (M.D.) from the Faculty of Medicine, Technion Israel Institute of Technology in Haifa, Israel. He then specialized in geriatric medicine at the Rambam General Hospital and at the Flieman Medical and Rehabilitation Center in Haifa. Mizrahi received his advanced training with a Fellowship in neurogeriatrics at the Department of Neurology of the School of Medicine at Case Western Reserve University and University Hospitals of Cleveland. He was then head of the Department of Geriatrics and Medicine at the Chaim Sheba Medical Center. In 2012, he became head of the Department of Geriatrics and Medicine at Shmuel-Harofe, Geriatric and Rehabilitation Hospital in Beer-Yaakov, affiliated to the

School of Medicine at Tel Aviv University. From 2018 to 2022, Mizrahi was the CEO of the Geriatric and Medical Center "Shmuel-Harofe" in Beer-Yaakov.

Prof. Mizrahi's research deals with identifying risk factors for cognitive decline in patients aged 65 and over. His research works to identify independent predictive factors that may predict the success of rehabilitation in patients after surgery to fix a fracture in the femoral head joint, ischemic stroke, and patients who experienced a significant functional decline after prolonged hospitalization.

He also tests the effect of various infectious agents such as Covid-19 and Clostridium Difficile in geriatric hospitals and antibiotic resistance in the elderly patient population who are hospitalized in geriatric hospitals.

Prof. Mizrahi develops analytical methodologies that would be able to perform diagnostic evaluation of several diseases at once by individual or combined evaluation parameters and selects the most informative parameters or parameter combinations.

He also works on a methodology to provide a measurement and definition, the effects of individual or combined diagnostic parameters and therapeutic interventions on multimorbidity using information theoretical measure of normalized mutual information.

MEDICINE

SWALLOWING DISORDERS

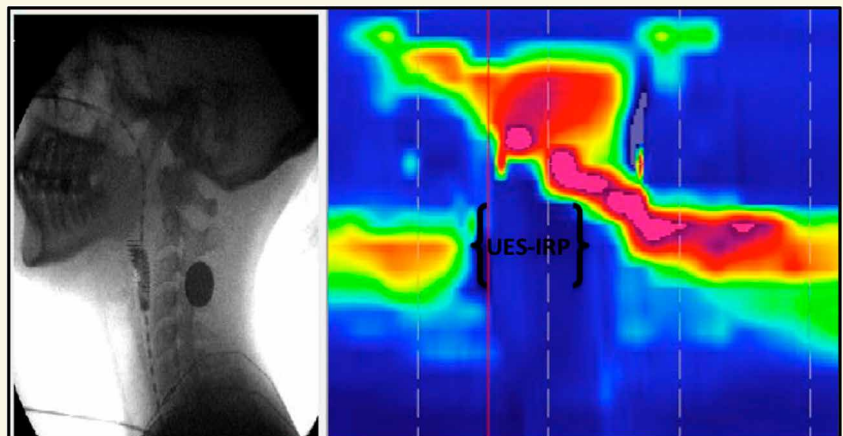


**Dr. Nogah Nativ-Zeltzer,
Ph.D.**

Department of Communication Disorders
School of Health Professions
Faculty of Medicine

Dr. Zeltzer completed her Ph.D. studies at Northwestern University and her postdoctoral training at the University of California Davis Department of Otolaryngology-Head and Neck Surgery, where she was the recipient of the Dickenson Fellowship.

Swallowing disorders are prevalent in older adults and have severe health implications including dehydration, malnutrition, pneumonia and reduced quality of life. Dr. Zeltzer's research focuses on investigating the effects of ageing on the swallow and devising prophylactic treatment methods for the preservation of swallow function in the elderly. She utilizes high resolution manometry and biomechanical analysis of the swallow to characterize physiological components of both normal and disordered swallowing, with the goal of designing accurately targeted preventative and rehabilitative treatment for adults with dysphagia (difficulty swallowing). Her research also focuses on identifying risk factors and biomarkers for the development of aspiration pneumonia, a common complication of swallowing disorders, and translating these research discoveries into novel approaches for pneumonia prevention in individuals with dysphagia.



Age-related changes in swallowing physiology, visualized by advanced imaging.

MEDICINE & NEUROSCIENCE

SLEEP AND COGNITION IN AGING AND NEURODEGENERATION



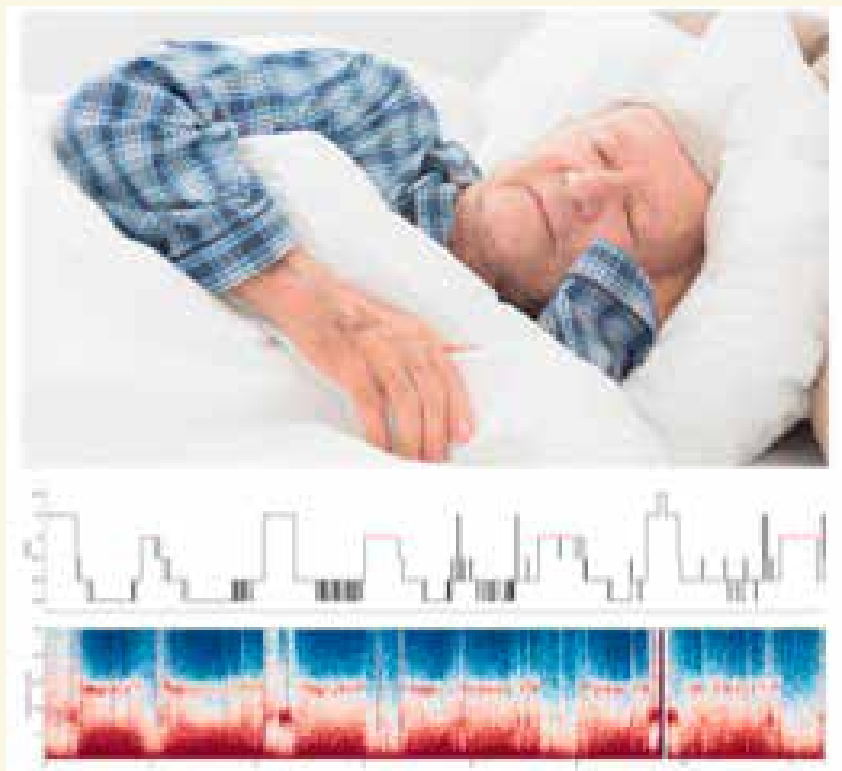
Prof. Yuval Nir, Ph.D.

Department of Physiology and Pharmacology
School of Medicine, Faculty of Medicine
Sagol School of Neuroscience
Department of Biomedical Engineering

Prof. Nir is the scientific director of the Sieratzki-Sagol Center for Sleep Medicine at the Tel Aviv Sourasky Medical Center ('Ichilov'). Prof. Nir completed his M.Sc. in computer science, Ph.D. in neurobiology, and was trained in sleep research at the world-leading center at UW-Madison. He is currently pursuing ERC- and NIH-funded research on sleep and memory and has won several awards for his research, including the Sieratzki Prize for Neuroscience, the Adelis Prize in Neuroscience, as well as HFSP, EMBO, Fulbright, Teva, and Stanford Wu Tsai awards.

<https://www.yuvalnirlab.com/>

Prof. Nir's lab studies sleep and cognition, using a combination of human and animal studies. Sleep is essential for supporting cognition, contributes to DNA repair, while changes in sleep in aging and neurodegeneration can contribute to cognitive decline. Research in the lab includes studies of how sleep promotes learning and memory consolidation and how this can be boosted, how sleep changes in aging and in early stages of neurodegeneration, and how sleep can be used to improve medical diagnosis across neurological and psychiatric disorders.



MOLECULAR MECHANISMS OF NEURON DEGENERATION



Prof. Eran Perlson, Ph.D.

Department of Physiology & Pharmacology
School of Medicine, Faculty of Medicine and Sagol School School of Neuroscience

Prof. Eran Perlson is an Associate Professor with the long-term research goal to understand the molecular mechanisms of neurodegeneration during diseases like ALS. His scientific work has earned him many distinguished grants, awards, and honors, and he is the author of numerous high-profile scientific publications and invited speaker to lead international meetings.

<https://www.perlsonlab.sites.tau.ac.il>

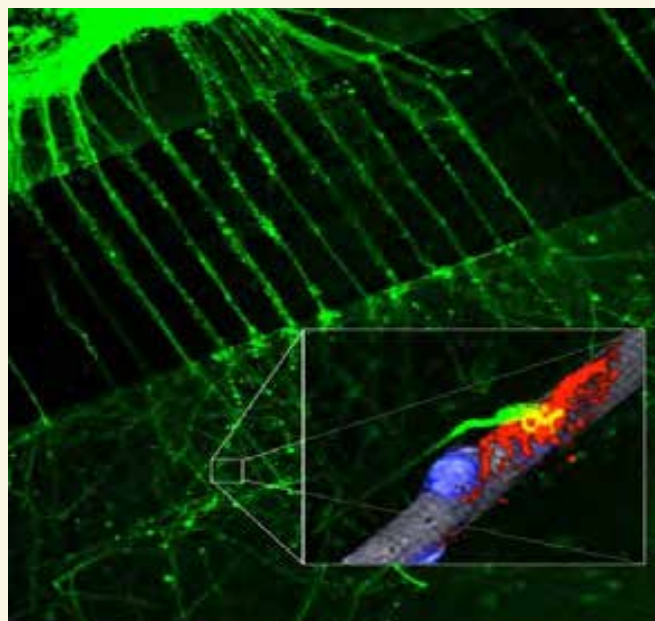
Neuron cell death and synapse disruption occur during aging and

neurodegenerative diseases like Amyotrophic Lateral Sclerosis (ALS). The goal of the Perlson lab is to elucidate the molecular mechanisms of motor neuron degeneration in ALS. The lab study mechanisms of axon and neuromuscular junction degeneration and regeneration.

The Perlson lab combines advanced microscopy, transgenic mice models, human iPSC, and a unique Lab-on-a-Chip platform that mimics the motor unit. This platform enables the growth of neurons and muscle on a silicon chip and provides a powerful tool for studying new neuromuscular junction biology in health and disease.

Current efforts are focused on

- Local protein synthesis in axons and NMJs
- Mitochondrial maintenance at the NMJs
- Phase separation at axon/NMJ
- Neurotropic signaling



NMJ-on-a-Chip platform for studying neurodegeneration and regeneration

ACTIVE AND HEALTHY AGING



Prof. Debbie Rand, Ph.D.

Department of Occupational Therapy,
School of Health Professions
Faculty of Medicine

Debbie Rand is an Associate Professor and an experienced occupational therapist in the field of geriatrics and stroke rehabilitation. She completed her doctorate in Occupational Therapy (Virtual Reality for Rehabilitation) at Haifa University and travelled to Vancouver for her post-doctoral training at the University of British Columbia (researching physical activity post stroke).

<https://en-med.tau.ac.il/profile/drand>

Gaming for Rehabilitation Lab:

<https://www.tau.ac.il/~drand/>

Prof. Rand is particularly interested in healthy aging, focusing on the physical, cognitive and social aspects of older adults and how these may impact daily living and quality of life. She aims to develop clinical interventions to maintain and improve independence in daily living and participation. She integrates technologies for assessment and/or interventions. Executive function (cognitive) deficits are common in older adults and individuals with stroke. Prof. Rand has developed 'real-life' functional assessments such as online shopping or bill payment, to assess executive functions and to understand how these deficits impact daily functioning.

ARTS & NEUROSCIENCE

IMMERSIVE NEUROIMAGING



Dr. Gal Raz, Ph.D.

Steve Tisch Schools of Film and Television
and Sagol School of Neuroscience

Dr. Raz is a Senior Lecturer and has an interdisciplinary background, including film and television studies, biology, culture research, and medical research. He received his B.A. in Film and Television Studies at Tel Aviv University and a B.Sc. in Biology at Tel Aviv University (*magna cum laude*). He completed his M.A. at the Unit of Culture Research at Tel Aviv University (*summa cum laude*) on Relative Feminine Dominance in Epigenetic Inheritance Research and his Ph.D. at the Graduate School of Medicine at Tel Aviv University on Neural Markers of Cinematic Emotion Experience - The Role of interregional Coupling Dynamics. Raz performed his post-doc in the Psychology and Neuroscience Faculty at Maastricht University.

In his research, Dr. Raz seeks to actively construct bridges between art and science, theory and empirics, design and academic inquiry, and basic and applied research. He employs various neuroimaging and psychophysiological methods including functional magnetic resonance imaging, encephalography, eye tracking, and physiological measurements. His current research projects include a neuroscientific account of the cinematic device of point-of-view editing and its application in communicating with children on the autism spectrum, the development of a gamified intervention in Tourette's Syndrome in children, augmented reality for diagnosing freezing-of-gait in Parkinson's Disease, and a gamified virtual reality rehabilitation tool for children with cerebral palsy.



SOCIAL SCIENCES

THE PURSUIT OF HAPPINESS IN THE FACE OF ADVERSITY



Prof. Dov Shmotkin, Ph.D.

School of Psychological Sciences
Faculty of Social Sciences

Dov Shmotkin is Professor Emeritus and former head of the Herczeg Institute on Aging, both at Tel Aviv University. He received his PhD from Tel Aviv University. He is a senior clinical psychologist and formerly the head of the clinical psychology graduate program in the School of Psychological Sciences. He was Visiting Scholar in the Institute of Gerontology at the University of Michigan, Ann Arbor, and Honorary Fellow in the Institute on Aging at the University of Wisconsin, Madison, USA. He was elected as Fellow of the Gerontological Society of America.

E-mail: shmotkin@tauex.tau.ac.il

Websites: <https://en-social-sciences.tau.ac.il/profile/shmotkin>

[https://en.wikipedia.org/wiki/Dov Shmotkin](https://en.wikipedia.org/wiki/Dov_Shmotkin)

Dov Shmotkin conducts research that designs an integrated theory on *the pursuit of happiness in the face of adversity*. This work expands his studies on well-being across the life span, as well as on long-term traumatic effects among Holocaust survivors and older adults at large. His studies in this area examine interrelations of biographical experiences (e.g., trauma), time perspective, and self-conception systems (e.g., subjective well-being, meaning in life, the hostile-world scenario). He has been engaged in gerontological research on developmental and aging processes along adulthood and late life, focusing on outcomes of physical and mental health. He has served in leading research roles in nationwide studies on the Israeli older population, including the Cross-Sectional and Longitudinal Aging Study (CALAS) and the Israeli branch of the Survey of Health, Ageing and Retirement in Europe (SHARE). His research has largely addressed adaptation to aging among particular sub-populations that faced life adversities, including trauma survivors, persons in very old age, minorities of sexual orientation, and bereaved parents.

MEDICINE

FUNCTIONAL GENOMICS



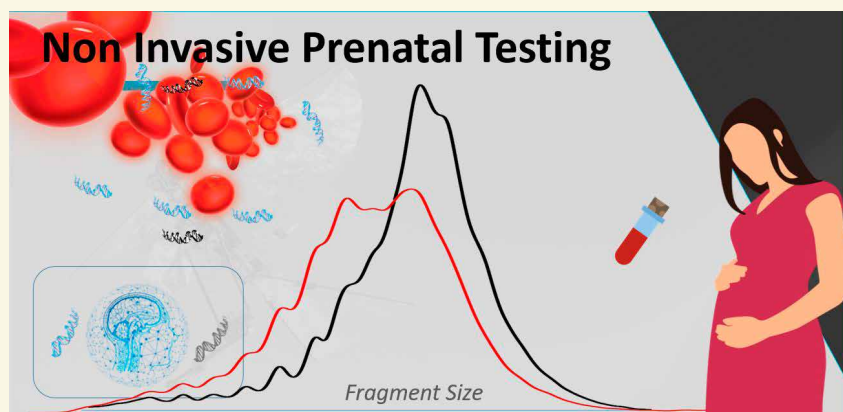
Prof. Noam Shomron, Ph.D.

Department of Cell and
Developmental Biology
School of Medicine
Faculty of Medicine

Prof. Shomron's aim is to deepen our understanding of diseases in order to translate information into clinical reality. Shomron is also the Editor of 'Deep Sequencing Data Analysis' book (Springer, Edition I and II), Director of 'Rare-Genomics' Israel, Director of the Djerassi Institute of Oncology, Academic Director of 'ScienceAbroad', Head of the Digital Medicine Team at the Center for Innovation Labs at Tel Aviv University (TILabs), and co-founder and Chief Scientific Officer (CSO) of Variantyx, GotSho and IdentifAI

www.tau.ac.il/~nshomron

Our research on aging includes using THC to extend cognition in old mice, understanding the molecular mechanisms involved in neurogenesis in aged brains and how it affects the phenotype, mutations involved in aging-related diseases, and looking into microRNA expression of tissues along a natural aging pathway. Prof. Shomron is passionate about using basic science to advance better healthcare. Shomron heads the Genomic Intelligence Research Laboratory leading a multidisciplinary team of scientists: biologists, physicians, computer scientists and bioinformaticians. The team collects clinical data and develops computational methods for parsing molecular and big-data in the bio-medical field using Artificial Intelligence, successfully publishing hundreds of scientific papers and applying for dozens of patents.



CARE OF CHILDREN FORESHADOWS QUALITY OF AGING ADULTS



Prof. Tzipi Strauss, M.D., MPH

Sheba Medical Center
and Faculty of Medicine

Prof. Strauss is Head of the Department of Neonatology at the Sheba Medical Center and Professor at the School of Medicine. She obtained her M.D. from the Rappaport Faculty of Medicine at the Technion Institute of Technology and an MPH from the School of Public Health at Harvard. She performed her residency in Pediatrics at the Sheba Medical Center. During her residency she performed research at the Leiden University Medical Center in Holland. Formerly she served as Deputy Director of the Edmond and Lily Safra Children's Hospital. She has recently established the first academic and clinical research center for Longevity in Israel.

Prof. Strauss' main research topics are hemostasis and prematurity. She has studied how breast milk feeding (BMF) practices among very preterm infants influence their growth, as well as the recent consequences of vaccination during pregnancy on maternal-neonatal transfer of SARS-CoV-2 antibodies. Her focus is that the children of today are the adults of tomorrow, so that the quality and care will affect us throughout adulthood and the aging process. She has published more than 50 original articles in international journals.

The Longevity Academic Center at the Sheba Medical Center aims to enhance knowledge and interventions in aging and longevity to identify opportunities for improving the quality of life and function in older age. The Center focuses on studying life from younger adulthood to the centenarian's age group (45-100 years old), including cutting-edge diagnostic, analysis and monitoring of health biomarkers and biological age, while studying multidisciplinary interventions.

MANAGEMENT

HEALTHCARE MANAGEMENT



Prof. Sharon Toker, Ph.D.

Coller School of Management

Prof. Toker is an Associate Professor and the head of the Healthcare Management program at Tel Aviv University's Coller School of Management. She graduated from Tel Aviv University, completing her B.A. in Psychology and Sociology (1997) and her Ph.D. in Organizational Behavior with distinction (Accelerated Doctoral Program, 2007). In 2008 she completed her postdoctoral fellowship at Stanford University and soon joined the Department of Organizational Behavior at Tel Aviv University's Coller School of Management. In addition to her academic activity, Prof. Toker is an active advocate for employees' wellbeing. She is working with the Israeli Ministry of Health and the Ministry of Law to reduce employee burnout. She is also an illustrator, translating her research findings into visual images

INSTAGRAM: [Sharon_toker](https://www.instagram.com/sharon_toker)

<https://en-coller.tau.ac.il/profile/tokersha>

Prof. Toker's research strives to discover the extent to which occupational and environmental factors, stress perceptions, and organizational resources affect employees' physical and mental wellbeing. By combining various areas of knowledge such as occupational psychology, cognition, and medicine, in addition to conducting experimental and observational longitudinal studies among thousands of employees, she points to the risk involved in exposure to occupational and environmental stressors (including the fear of terrorism).



PHILOSOPHY OF TECHNOLOGY MEETS MEDICINE



Dr. Galit Wellner, Ph.D.

The Multidisciplinary Program in
Humanities
Faculty of Humanities

Dr. Galit Wellner, PhD, lectures at Tel Aviv University. Dr. Wellner specializes in philosophy of digital technologies and their inter-relations with humans. She is an active member of the Postphenomenology community. Her book *A Postphenomenological Inquiry of Cellphones: Genealogies, Meanings and Becoming* was published in 2015 in Lexington Books. She translated to Hebrew Don Ihde's book *Postphenomenology and Technoscience* (Resling 2016). She also co-edited *Postphenomenology and Media: Essays on Human–Media–World Relations* (Lexington Books, 2017). Galit is interested in the ways in which digital technologies transform medical and scientific practices.

<https://www.researchgate.net/profile/Galit-Wellner>

The potential roles of ICT for alleviating social frailty in older adults: Elderly people are prone to become lonely and socially isolated, especially in times of pandemics. Dr. Wellner examines the role of ICT in this complex process with tools from philosophy of technology. The hypothesis is that greater social frailty will be associated with reference to ICT as a quasi-other (alterity relations), and lower social frailty will be associated with embodying ICT and turning the technology into part of the user's body scheme (embodiment relations).

The "Data-fied" self – Health and happiness in the digital age: Digital technologies enable an efficient collection of data in real time and effortlessly in order to produce an omics portrait. Why do people constantly measure themselves? And why do they publish their omics? Privacy can hardly explain this phenomenon, as visibility is no longer a threat, but rather the invisibility. The socio-ethical challenges are now in developing risk awareness and new tools to investigate health-related risks.

Health Longevity Research Center Scholarships 2022

Announcing the Scholarship winners

The new *Tel Aviv University Healthy Longevity Research Center* brings together excellence in research to generate ideas and translate them into real-life tools for promoting health and improving quality of life among the elderly – physically, emotionally, socially, environmentally, nutritionally, culturally and more.

The following students have been awarded a scholarship for 2nd semester of the academic year, 2021–2022

Hanna Rapuano, MSc student

Mitochondrial copy number variations across scleractinian coral age groups
Faculty of Life Sciences

Shon Levkovich, PhD student

Metabolostasis' network and its decline in aging
Faculty of Life Sciences

Nimrod Rappoport, PhD student

Hematopoietic stem cell gene expression during aging at single cell resolution
Faculty of Exact Sciences

Ruth Maman, PhD student

Characterizing the maternal role of healthy older women and assessing its' contribution to health and wellbeing of women with chronic stroke
Faculty of Medicine

Zuha Tarabeih, PhD student

Reintegration in society and at work one year after ischemic stroke: associations with the patient's health status, sense of well-being, personal resilience and expectations
Faculty of Medicine

Shvartz Sapir, MSc student

The differences between haptic and visual feedback on spatiotemporal parameters of learning in adults and older adults
Faculty of Medicine

Meytal Wilf, Postdoctoral trainee

Mobile cognition: novel virtual reality-based paradigm to study cognitive-motor interactions in the context of fall risk in aging
Sagol School of Neuroscience

Adaya Liberman, PhD student

Worlding with dementia: an empiric-philosophical research
Faculty of Social Sciences

Meirav Hauben, PhD student

The role of paid work in the lives of retired workers – A mixed methods longitudinal study
School of Education

Gai Faarchi, PhD student

Amnesic writing: The dementic mother between Annie Ernaux and Michal Ben-Naftali
Faculty of Humanities

Ya'ara Adelsberg, MA student

The mother mystery: Secrecy strategies in autobiographic texts of daughters about their mothers
Faculty of Humanities

Shira Dushy-Barr, PhD student

Mental crises in non-combat Israeli soldiers: A qualitative interview-based analysis
Faculty of Medicine

Omer Bender, PhD student

Profiling immunologic response to pathogens in elderly population with or without Alzheimer's disease
Faculty of Medicine

Melody Kasher, PhD student

Deciphering of the casual genetic relationships between rheumatoid arthritis and cardiovascular comorbidities
Faculty of Medicine

Hasan Ishtayeh, PhD student

Investigating the role of autophagy in mutant PABPN1 revealed disruptions in cellular processes in Oculopharyngeal muscular dystrophy (OPMD)
Faculty of Medicine

Elisabeth Kleeblatt, MSc student

Inducible senescence in cultured mast cells as a model for elucidating the impact of aging on mast cell functions
Faculty of Medicine

Lucia Adriana Lifshits, PhD student

Harnessing protein engineering for the development of protein interaction immune modulators
Faculty of Medicine

Sapir Golan, MSc student

The relationship between regional abdominal adiposity in midlife and cognitive functioning, and neuropathology; among individuals at high Alzheimer's disease risk
Faculty of Medicine

Mazal Cohen, PhD student

An LHX2-OTX2 complex regulate AMD risk SNP's region
Faculty of Medicine

Rotem Iris Orad, PhD student

Brain Imaging changes in dementia with Lewy bodies: an advanced MRI study
Faculty of Medicine

Healthy Longevity Research Center Scholarships 2022–23

Announcing the Scholarship winners

The new *Tel Aviv University Healthy Longevity Research Center* brings together excellence in research to generate ideas and translate them into real-life tools for promoting health and improving quality of life among the elderly – physically, emotionally, socially, environmentally, nutritionally, culturally and more.

The following students have been awarded a scholarship for the academic year, 2022–2023

Shayna Fae Bernstein (Isaac Sasson), Post-doctoral trainee

Social inequalities in subjective survival expectations: The role of psychosocial and cultural attitudes
Faculty of Social Sciences

Adi Cohen (Maayan Gal), PhD student

Regulating molecular aging by the engineering of a bispecific CTLA4-VISTA for a tunable immune response
Faculty of Medicine

Dina Gat (Moshe Hazan & Ofer Setty), PhD student

The macroeconomic effects of labor market frictions – Optimal retirement age of women
Faculty of Social Sciences

Valeriya Huendgen (Silvia Koton), PhD student

Social attachment, stage of professional development, generational identity, cultural competence, and caring behavior among nurses caring for stroke patients in Israel and Germany
Faculty of Medicine

Roza Izgilov (Dafna Benayahu), PhD student

Advance Glycation End-products (AGEs) and its role in stem cells biology, metabolic diseases, and aging
Faculty of Medicine

Keila Kaplan (Ehud Gazit), MSc student

Unbalanced Metabolostasis as an Aging Factor
Faculty of Life Sciences

Ellon Nabet (Dan Frenkel), MSc student

Assessing the link between increase in cellular senescence in glia cells to impairment in cognition in animal model of Alzheimer's disease
Faculty of Life Sciences

Noa Meyrom (Daniel Zvi Bar), PhD student

Regulation of Kidney function and dysfunction, an age-related morbidity, correlated to biological clocks
Faculty of Medicine

Dana Omer (Milette Shamir), PhD student

A Middle-Aged Woman's Place: Questioning the Dominant Life Course in the Works of American Women Authors
Faculty of Humanities

Rotem Iris Orad (Dafna Ben-Bashat), PhD student

Brain Imaging changes in Dementia with Lewy Bodies: an advanced MRI study
Faculty of Medicine

Noa Parizian Steinberg (Idit Weiss-Gal & Yael Benyamini), PhD student

Predicting the intention to engage in the field of aging among social work students
Faculty of Social Sciences

Lea Peko (Tali Ilovitsh), Post-doctoral trainee

Enhancing drug delivery to the brain for age-related diseases using ultrasound and nanobubbles
Faculty of Engineering

Ron Sternfeld (Yftach Gepner), MSc student

The effects of time-restricted eating and exercise training on cardio-metabolic health
Faculty of Medicine

Healthy Longevity Research Center Grants 2022

Announcing the winners

The new *Tel Aviv University Healthy Longevity Research Center* brings together excellence in research to generate ideas and translate them into real-life tools for promoting health and improving quality of life among the elderly – physically, emotionally, socially, environmentally, nutritionally, culturally and more.

The following grants have been awarded for the year 2022

Discussion Group grant

Lilach Lurie

Department of Labor Studies, Faculty of Social Sciences
Pension, Retirement and the Ageing Workforce

Research Grants

Pablo Blinder

School of Neurobiology, Biochemistry & Biophysics, Faculty of Life Sciences & Sagol School of Neuroscience
Uncovering the mechanisms governing reversal of aging by hyperbaric oxygen treatment

Liat Chaushu

School of Dental Medicine, Faculty of Medicine
The role of "inflamm-aging" in secondary wound healing. An experimental in-vivo study

Rachel Dankner

School of Public Health, Faculty of Medicine
Machine learning versus classic epidemiological investigation into determinants of unhealthy aging on the one hand and healthy aging on the other: a 50-year cohort study of community-dwelling men and women

Chaim (Chagi) Pick

School of Medicine, Faculty of Medicine
Ketosis and its effect on cellular aging in traumatic brain injury

Debbie Rand

School of Health Professions, Faculty of Medicine
Understanding the phenomenon of frailty; A mixed-method approach

Violetta Rozani

School of Health Professions, Faculty of Medicine
Horticultural therapy for a healthy life: Examining intervention effectiveness among family caregivers of people living with Alzheimer's disease

Noam Shomron & David Gurwitz

School of Medicine, Faculty of Medicine
Comparative RNA-seq of blood-derived cells from centenarian and postmenopausal women