



The Hebrew University of Jerusalem
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LEADERSHIP
FOR TOMORROW

JUNE 2022

THE PRUSINER- ABRAMSKY RESEARCH AWARDS

IN CLINICAL & BASIC NEUROSCIENCES





The prestigious Prusiner-Abramsky Research Awards in Clinical and Basic Neuroscience by The Orion Foundation, honor Professors Stanley Prusiner and Oded Abramsky.

The awards are intended for outstanding researchers from all fields of clinical and basic neurosciences at The Hebrew University and the Hadassah University Medical Center.

Dr. Amit Lotan

Department of Psychiatry
Hadassah University Medical Center

Phosphorylated Tau as a Biomarker of Alzheimer's Disease Presenting with Late-Life Depression: a Translational Study

Dr. Atira Bick

Neuro-Rehabilitation Center
Hadassah University Medical Center

Clinical Applications of Functional MRI and DTI

Dr. Inbal Reuveni

Department of Psychiatry and Outpatient Mental Health Clinic
Hadassah University Medical Center

Psychological and Neural Correlates of Maternal Childhood Trauma

Dr. Shai Sabbah

Department of Medical Neurobiology
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Mechanisms of Image Stabilization and Light-Induced Mood Regulation

Dr. Tawfeeq Shekh-Ahmad

Department of Pharmaceutics
School of Pharmacy

A New Approach for Treating Epilepsy: Cns-Targeted Antioxidant Gene Therapy



PROF. STANLEY B. PRUSINER, M.D.

Stanley B. Prusiner, M.D., is the Director of the Institute for Neurodegenerative Diseases and Professor of Neurology at the University of California, San Francisco (UCSF), where he has worked since 1972. Born in Des Moines, Iowa, in 1942, he spent his childhood there and in Cincinnati, Ohio. He received his undergraduate degree and medical training at the University of Pennsylvania and his postgraduate clinical training at UCSF.

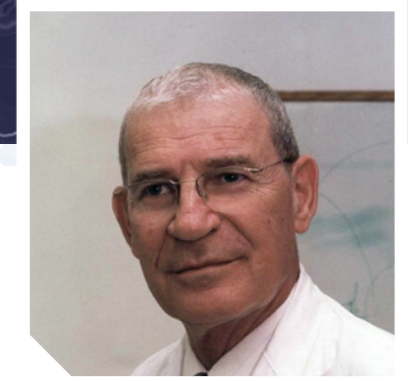
From 1969-72, he served in the U.S. Public Health Service at the National Institutes of Health. He is the author of over 500 research articles and the book "Madness and Memory".

Prof. Prusiner is a member of the U.S. National Academy of Sciences, the Institute of Medicine, the American Academy of Arts and Sciences, the American Philosophical Society, and a foreign member of the Royal Society of London. He is the recipient of numerous prizes, including the Potamkin Prize for Alzheimer's Disease Research of the American Academy of Neurology (1991); the Richard Lounsbery Award for Extraordinary Scientific Research in Biology and Medicine from the National Academy of Sciences (1993); the Gairdner Foundation International Award (1993); the Albert Lasker Award for Basic Medical Research (1994); the Paul Ehrlich

Prize from the Federal Republic of Germany (1995); the Wolf Prize in Medicine from the State of Israel (1996); the Keio International Award for Medical Science (1996); the Louisa Gross Horwitz Prize from Columbia University (1997); the Nobel Prize in Physiology or Medicine (1997); and the U.S. National Medal of Science (2009).

Prof. Prusiner's groundbreaking research on prion diseases, beginning in the late 1970s, led him to propose an explanation for the cause of bovine spongiform encephalopathy ("mad cow" disease) and its human equivalent, Creutzfeldt-Jakob disease, for which he was awarded the Nobel Prize. In this work, he coined the term prion (derived from "proteinaceous" and "infectious") to refer to a previously undescribed form of infection caused by the self-propagation of alternatively folded proteins.

His research has elucidated a fundamental understanding of the proteins underlying such illnesses as Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis (ALS) and PrP prion diseases. These advances in understanding the molecular, genetic and cellular basis of neurodegenerative diseases have fueled progress toward the development of targeted drug therapies.



PROF. ODED ABRAMSKY, M.D., PH.D.

Oded Abramsky was born in Jerusalem and received his M.D. and Ph.D. degrees from The Hebrew University of Jerusalem. He completed his residency in neurology at Hadassah University Hospital, where he was later appointed Head of the Neuroimmunology Unit (1982) and Chairman of the Neurology Department (1988-2005). He was appointed Professor of Neurology at Hebrew University-Hadassah Medical School in 1982, holding the Israel S. Wechsler Chair in Neurology. He served as Dean of the Faculty of Medicine of The Hebrew University (1992-96) and subsequently was appointed Chairman of the Agnes Ginges Center for Human Neurogenetics at Hadassah University Medical Center.

Prof. Abramsky has been actively involved in many aspects of medical research and holds prominent positions in numerous professional organizations concerned with both clinical practice and medical research. He was Chief Scientist of the Israel Ministry of Health (1987-1992), Chairman of the National Medical Research Organization, and served as Chairman of the Israel National Council for Research and

Development. He is an Honorary President of the Israel Society of Neuroimmunology; Honorary Member of the American Neurological Association; Member of the Institute of Medicine, National Academy of Sciences (USA); Fellow by Distinction of the Royal College of Physicians (FRCP); and Member of the Israel Academy of Sciences and Humanities, among many other affiliations. In 2008, the Oded Abramsky Chair in Neuroimmunology was established in his honor by Biogen USA at the Hadassah University Medical Center.

Prof. Abramsky's clinical and scientific research focuses on autoimmune neurological diseases. He was a pioneer in the field of neuroimmunology and demonstrated immune pathogenesis in various neurological diseases of the central and peripheral nervous systems and muscle. Indeed, he proved that myasthenia gravis (MG) is an autoimmune disease, and showed the beneficial effect of corticosteroids and chemotherapy on induced experimental MG. His research served as a guideline to successful immunotherapy of MG and many other autoimmune diseases.

DR. AMIT LOTAN

Department of Psychiatry
Hadassah University Medical Center



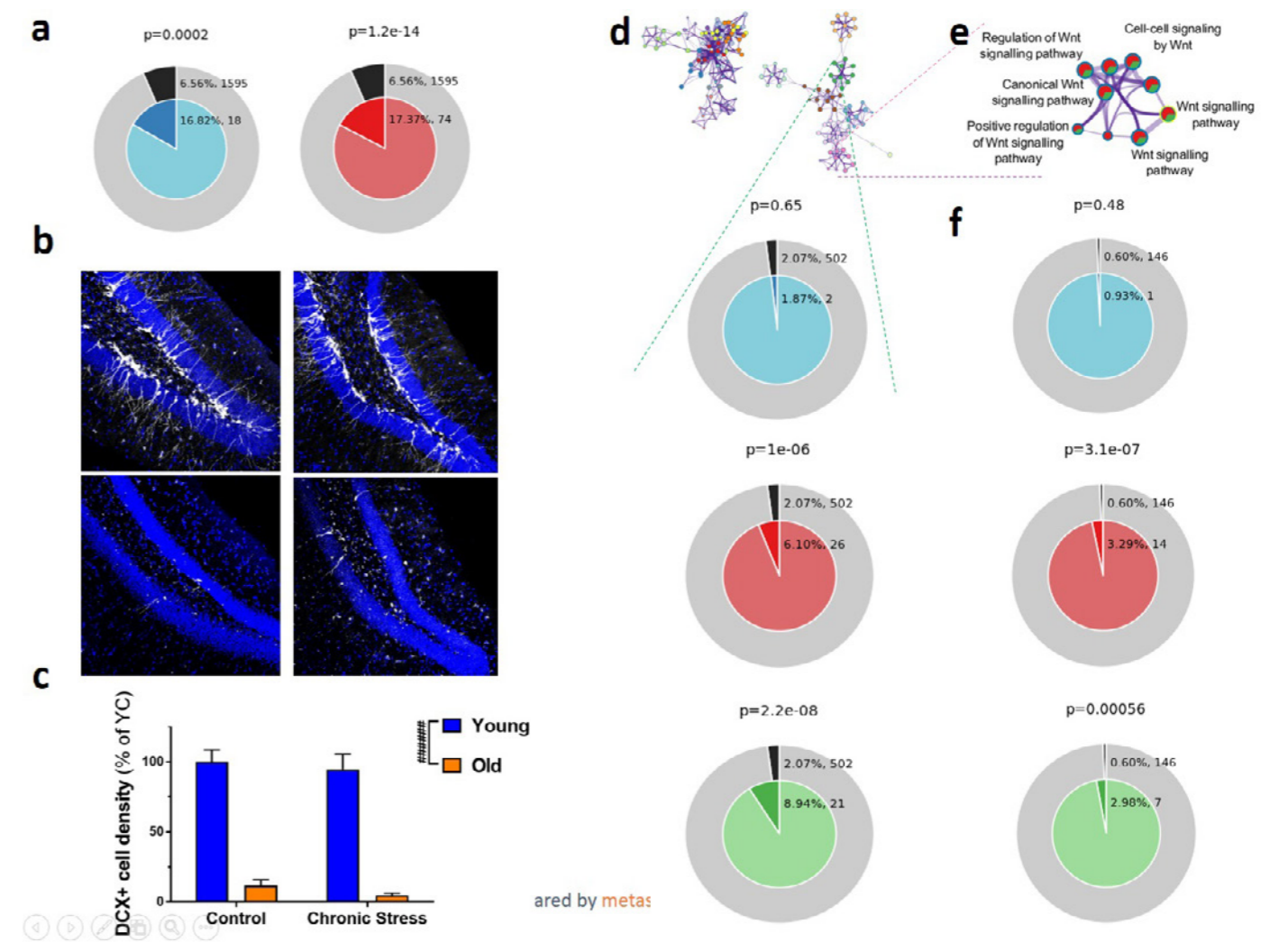
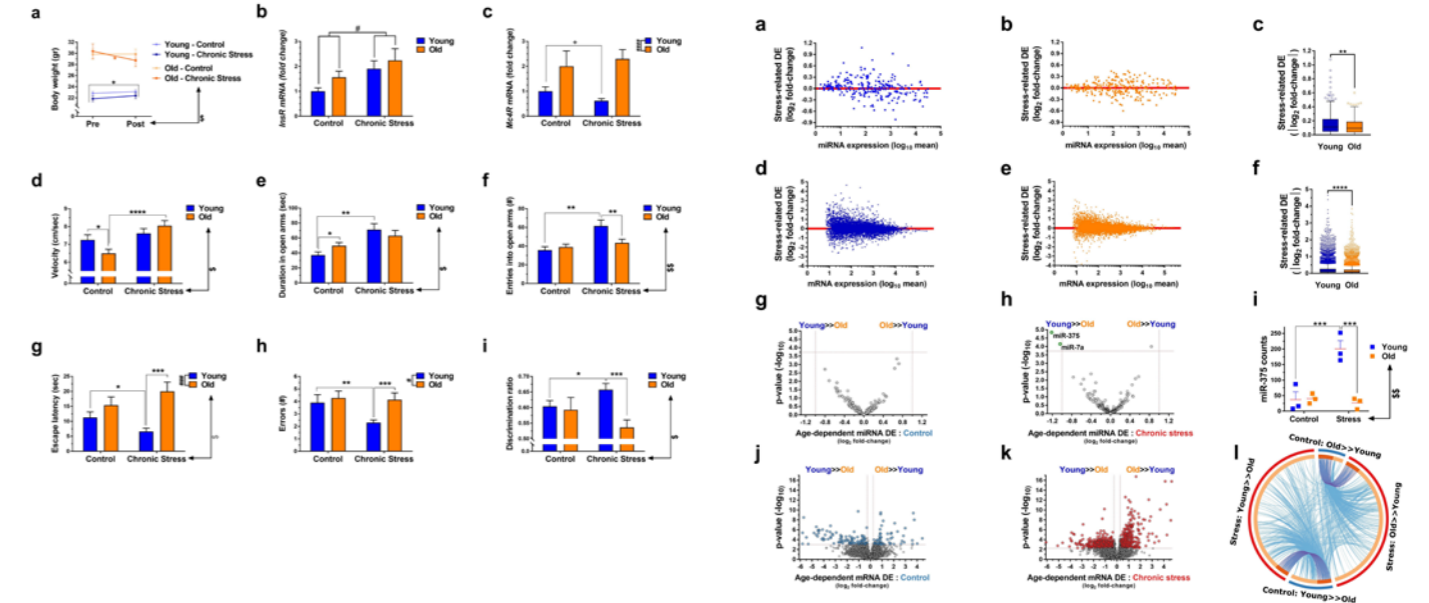
Dr. Amit Lotan, a senior psychiatrist, is responsible for the Adult Inpatient Unit at Hadassah University Medical Center, and is the Director of the Biological Psychiatry Laboratory (BPL). During his past fourteen years at Hadassah, he found special interest in schizophrenia and in the interface between neurodegenerative disorders and psychiatry. Vis-à-vis research into translational mouse models for neuropsychiatric disorders, which has led to several high-impact publications, Dr. Lotan has also participated in clinical trials and in the analysis of cross-species neuroinformatic data. He recently returned from a two-year translational research fellowship at the Florey Institute of Neuroscience and Mental Health in Melbourne, focusing on the emerging roles of transition metals in the pathogenesis of neurodegenerative disorders and schizophrenia. Based upon original data indicating iron cortical elevation in schizophrenia patients, he has been awarded funding from the Israel Science Foundation to explore the efficacy of iron chelators and ferroptosis in preclinical models of schizophrenia. Beyond his interest in psychotic disorders, Dr. Lotan has also focused on late-life disorders, and a large, translational study exploring the differential effects of chronic stress in young adulthood and in old age has been published in the highly cited journal *Molecular Psychiatry*. Extending these results, Dr. Lotan and the BPL team intend to conduct a translational study using a combined gene-environment model of Alzheimer's disease and depression, alongside an observational clinical study aiming to dissect the relationship between serum p-tau levels and late-life depression.

RESEARCH DESCRIPTION

Phosphorylated Tau as a Biomarker of Alzheimer's Disease Presenting with Late- Life Depression: A Translational Study

Alzheimer's disease (AD) is the most common form of dementia among the elder population, impairing the quality of life of both those afflicted with the disease and their close relatives. Late-life depression (LLD), defined as depression that begins after the age of 65 years, is common in AD. We hypothesize that LLD can either reflect primary depression,

in which case it could be a risk factor for future AD, or secondary depression, reflecting ongoing AD pathology in the brain that precedes the onset of cognitive decline and dementia. In the preclinical translational arm of the study, we will explore the interaction between a genetic model of AD and environmental stressors (such as solitary caging). During the clinical arm we will measure both the cross-sectional and longitudinal relationships between LLD and the novel biomarker phosphorylated tau protein (p-tau) that reliably reflects active AD brain pathology.



DR. ATIRA BICK

Neuro-rehabilitation Center
Hadassah University Medical Center



Dr. Atira Bick was born in Alon Shvut. Following a B.A. in Mathematics and the Amirim Honors Program for outstanding students, Dr. Bick joined the ELSC direct Ph.D. program and wrote her thesis on representations of morphological processing in the brain under the supervision of Professors Ram Frost and Gadi Goelman. Her postdoc fellowship in Prof. Levin's lab was used to implement the fMRI tools acquired during her Ph.D. research as a clinical tool to assist in neurosurgery planning and to prevent functional damage. Since then, Dr. Bick has led the clinical fMRI service at Hadassah and participates in protocol development and research of the fingerprint of disease and recovery on the brain. Dr. Bick is married and a mother of three daughters.

RESEARCH DESCRIPTION

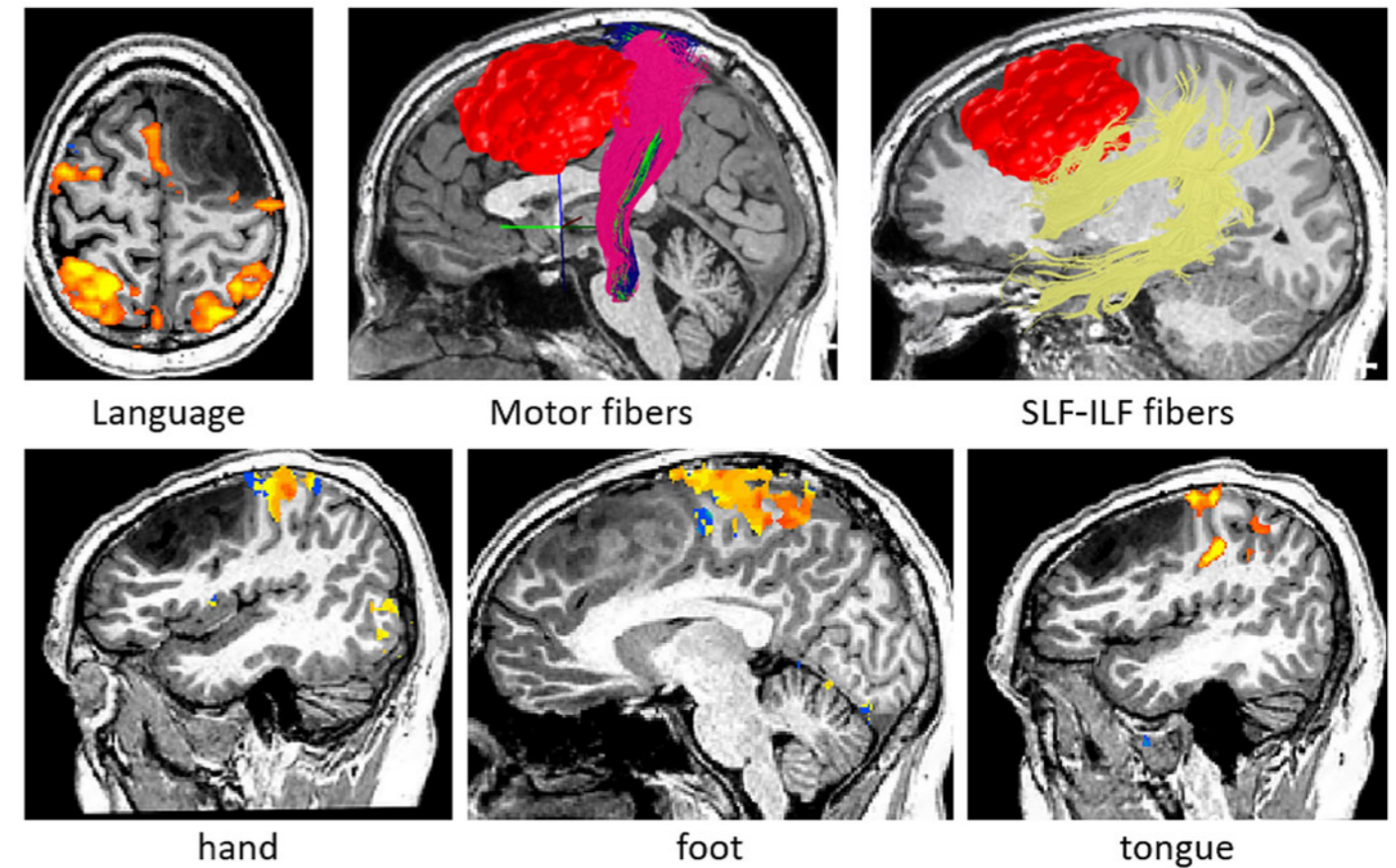
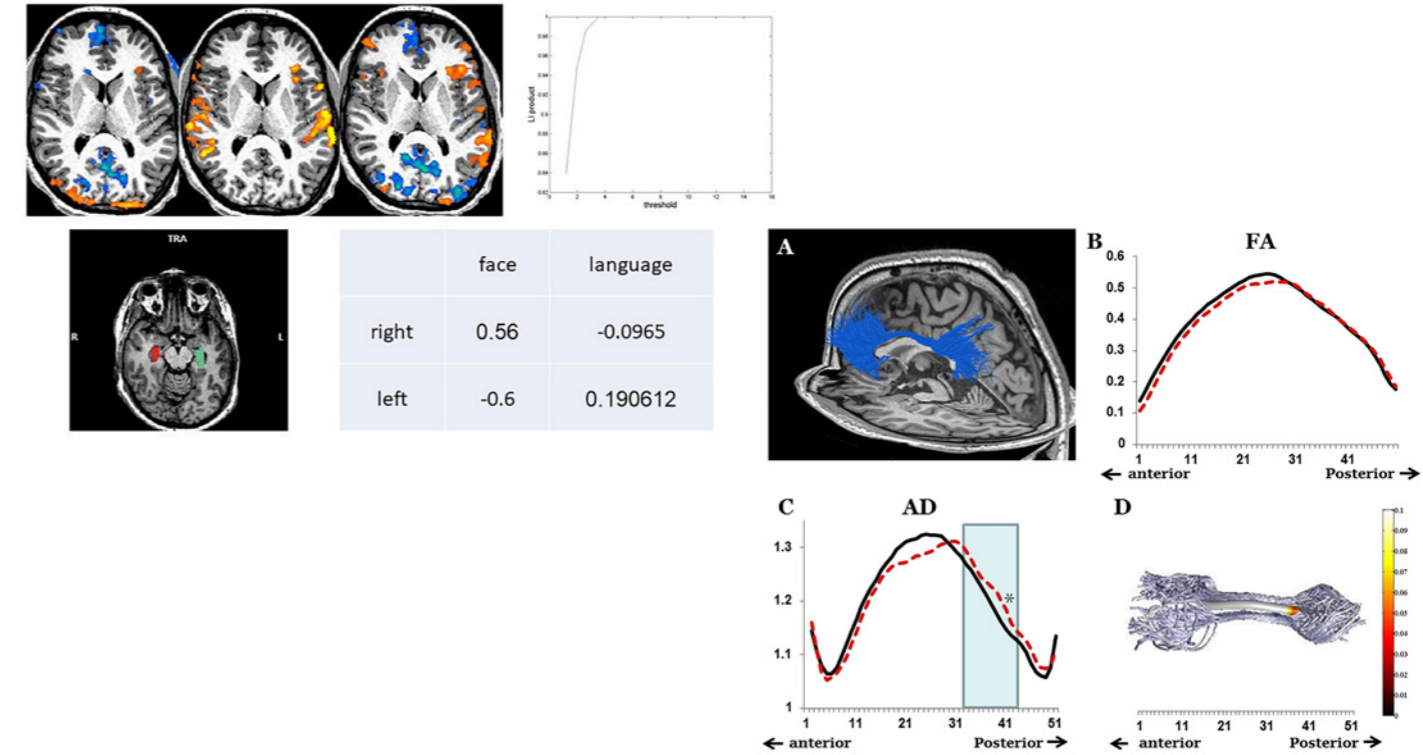
Clinical Applications of Functional MRI and DTI

Dr. Bick's main occupation over the past twelve years has been leading the clinical fMRI service at Hadassah. Together with Prof. Netta Levin, who heads the fMRI unit, they developed and adapted several tests to allow pre-surgery evaluation of neighboring regions that may be damaged by surgery, and to assess abilities in unconscious patients. Her interest in fMRI as a clinical tool brought her to work with the deep brain stimulation (DBS) team. Dr. Bick developed an fMRI protocol to prepare OCD patients for DBS and was involved in the implantation of DBS electrodes in two OCD patients—the first in Israel.

Dr. Bick was involved in many of the studies in the Levin lab, including studying the reorganization of the visual

cortex following diseases such as optic neuritis or PCA. Her contribution to these studies was mostly in developing methods and performing analysis. Moreover, Dr. Bick investigated the brain's response to trauma in PTSD patients and in healthy resilient subjects.

Several of her future plans include developing advanced tools to identify locos of epileptic seizures and the memory representation in the brain to aid pre-surgery decision-making. The goal is to understand the relationship between language lateralization and memory lateralization and to develop accurate tools that do not require cooperation using resting state and DTI. Additional projects include using fMRI and DTI to better understand the bases of neurological diseases involving vision and the neural representation of trauma and resilience.



DR. INBAL REUVENI

Department of Psychiatry and Outpatient Mental Health Clinic
Hadassah University Medical Center



Dr. Inbal Reuveni, a senior psychiatrist at the Department of Psychiatry, is the Director of Women's Mental Health Services at Hadassah University Medical Center.

Between 2018–2019, she joined the Perinatal Pathways Lab at Columbia University as an Adjunct Associate Research Scientist. Upon her return to Israel, Dr. Reuveni launched an integrated care program centered on women's mental health, aiming to increase access to mental health care for women during pregnancy, postpartum, and for women undergoing fertility treatments. Her current research focuses on the neurobiological imprint of exposure to childhood trauma and risk for perinatal mood and anxiety disorders. This multi-disciplinary study of women from preconception to postpartum attempts to characterize perinatal-based neuroplasticity, as well as deviations related to childhood adversity and the risk for perinatal psychopathology.

RESEARCH DESCRIPTION

Psychological and Neural Correlates of Maternal Childhood Trauma

Perinatal mood and anxiety disorders (PMAD) represent a major public health problem affecting 15–20% of women, with significantly higher rates in women who have a history of childhood trauma. Research suggests that exposure to childhood trauma may have sustained effects on the developing brain that could exacerbate vulnerability for psychopathology under stressful circumstances, such as the perinatal period. The Default-Mode Network (DMN) is one of the most robustly identified and extensively investigated brain networks thought to be involved in internal mentation and emotional processing. Disrupted functional patterns and anatomical connections within the DMN are seen in PMAD and in the aftermath of childhood trauma. Late in pregnancy and during postpartum there is increased mental focus and preoccupation concerning the safety and well-being of one's infant. In some cases, perinatal psychopathology ensues, rendering the DMN a focus of research regarding vulnerability and early detection of women at-risk. Currently, there are several effective interventions for preventing

PMAD in women at-risk, including women with a history of trauma. However, there is a gap in knowledge regarding the effective identification of individual differences in sensitivity to childhood trauma and the consequent vulnerabilities for perinatal psychopathology.

This study capitalizes on Israel's healthcare policy to subsidize and encourage preconception counseling to recruit women planning a pregnancy and to follow up with them through to postpartum. The overall objective is to identify maternal risk profiles based on shared variables of childhood trauma experiences, and to determine whether different profiles, possibly mediated and detectable by relevant DMN patterns, are differentially associated with occurrence of PMAD.

Upon completion, the data collected in this study would provide an unprecedented opportunity to promote identification of trauma-exposed women who are at risk for PMAD, and advance implementation of specific and time-sensitive interventions to prevent perinatal psychopathology in high-risk women.

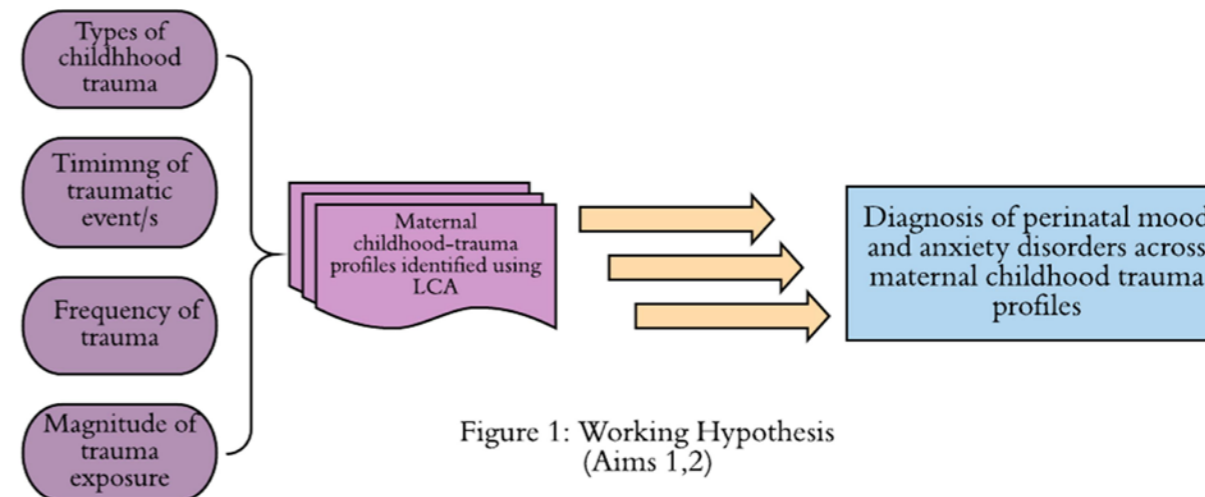


Figure 1: Working Hypothesis (Aims 1,2)

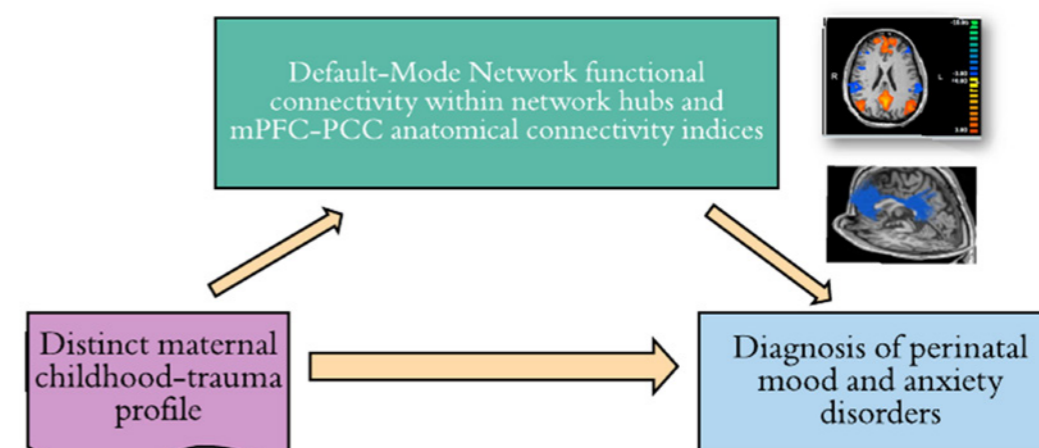
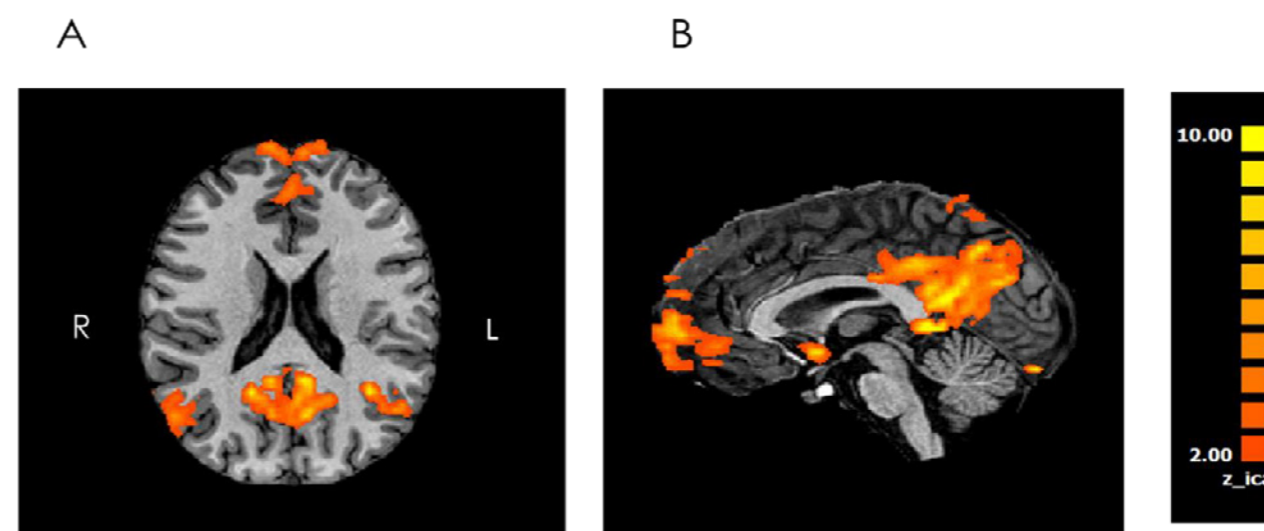


Figure 2: Working Hypothesis (Aim 3)



Representative DMN map of our cohort
A on an axial slice / B on a sagittal slice.

DR. SHAI SABBAH

Department of Medical Neurobiology
Faculty of Medicine



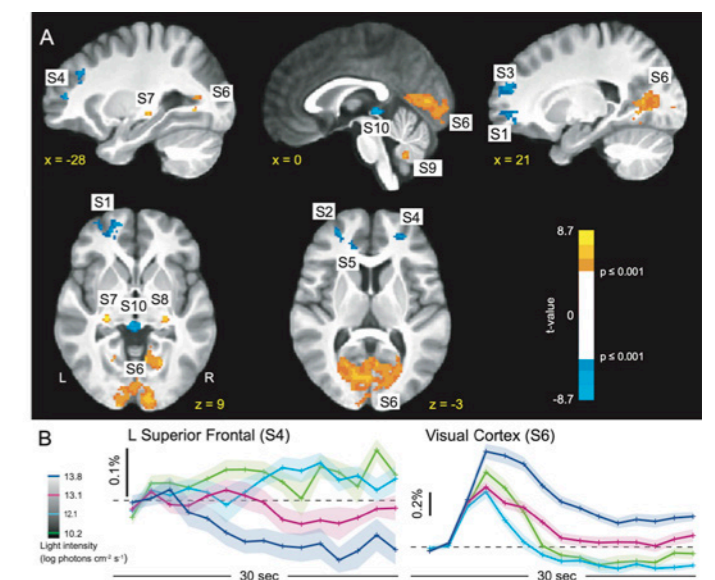
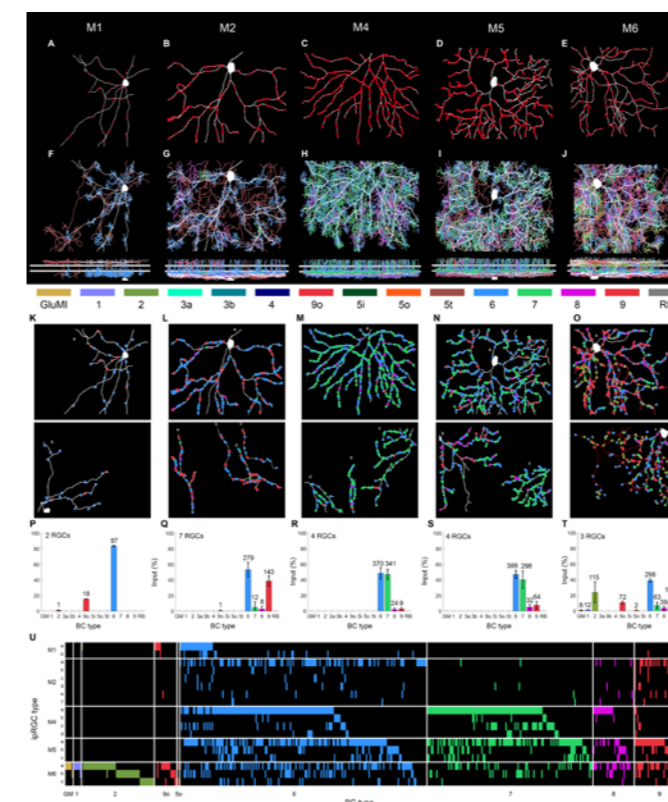
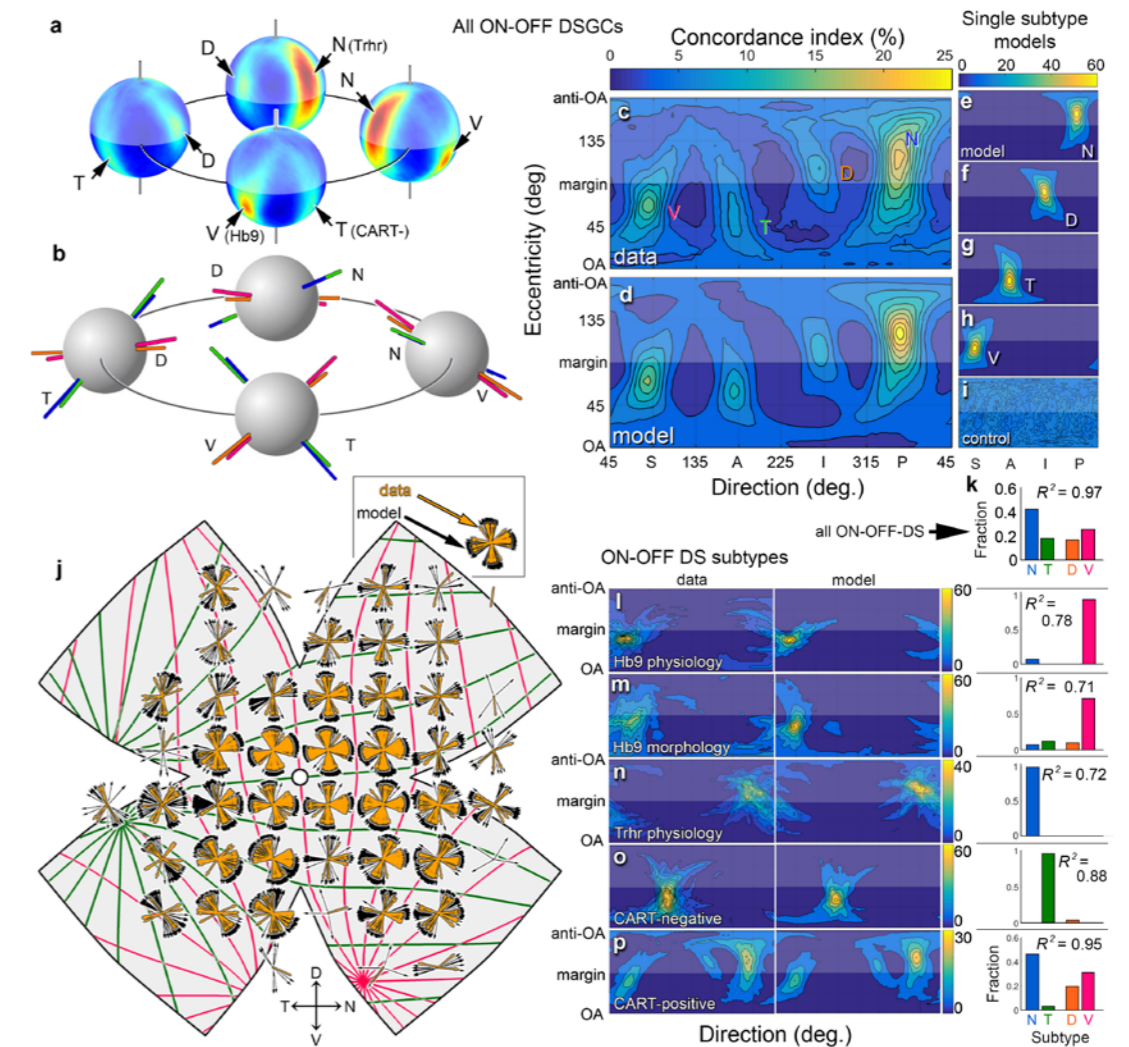
Dr. Shai Sabbah was born in Dimona in Southern Israel. His academic journey began with an undergraduate degree in biology from the Technion–Institute of Technology, then continued with a Master’s degree in Evolutions, Systematics, and Ecology from The Hebrew University of Jerusalem. For his doctorate, Dr. Sabbah travelled to Queen’s University in Canada, where he explored how evolution has shaped the vertebrate retina. He then undertook a postdoctoral research position at the Department of Neuroscience at Brown University, where his research focused on the tuning of direction-selective cells and on mechanisms of luminance coding in the retina. In 2018, Dr. Sabbah returned to The Hebrew University and established his laboratory for Visual Neuroscience, Behavior, and Mood at the Faculty of Medicine.

RESEARCH DESCRIPTION

Mechanisms of Image Stabilization and Light-Induced Mood Regulation

By studying the structure and function of genetically distinct retinal and brain circuits, the Sabbah lab seeks to link the processing of brightness, contrast, and motion information to behavior. A major focus of the lab is a unique family of retinal neurons—the intrinsically photosensitive retinal ganglion cells (ipRGCs), comprising a “luminance channel” and acting as a light meter that reports the total amount of light in the environment to the retina and brain. ipRGCs’ signals are critical for synchronizing the circadian clock to the light-dark cycle, constricting the pupil, shaping neuroendocrine rhythms, and modulating sleep, mood, and learning. Thus, we know why a luminance channel is needed by the brain, but we have not yet deciphered how the distinctive luminance-coding behavior of ipRGCs is shaped through retinal neurons and networks. Recently, the Sabbah lab, together with Brown University’s Berson lab,

explored this mystery. In a major surprise, they discovered that the excitatory input to all retinal ganglion cells is intensity-encoding. However, while non-ipRGCs appear to filter this input to encode temporal contrast, ipRGCs lack this filter and instead encode intensity and send this information to specific centers of the visual brain. A different line of research in the Sabbah lab is the role of light-sensitive neural networks in triggering depression. Recently, using neuroimaging to investigate humans for mood-regulating light-sensitive networks, the Sabbah lab identified twenty-six brain regions, many of them known to modulate cognition, mood, and addiction, which exhibited graded activation to light intensity. Lastly, together with Japan’s Yonehara lab, the Sabbah lab used the retinal direction selectivity model to reveal an unexpectedly high computational capacity of axon terminals in mammalian neurons, which can provide key insights into how functionally specific signaling from one neuron to different neuronal types can be established.



DR. TAWFEEQ SHEKH-AHMAD

Department of Pharmaceutics
School of Pharmacy, Faculty of Medicine



Dr. Tawfeeq Shekh-Ahmad obtained his first three degrees from the School of Pharmacy at The Hebrew University of Jerusalem: a B.Sc. in Pharmacy, an M.Sc. in Pharmaceutical Sciences, and a Ph.D. researching new anti-epileptic drugs. In 2019, he joined The Hebrew University's School of Pharmacy as a Senior Lecturer (Assistant Professor).

Dr. Shekh-Ahmad's research focuses primarily on developing new treatments for uncontrolled or refractory epilepsy. His work focuses on two main research areas: 1) studying oxidative stress in neurological disorders and developing pharmacological treatments to inhibit its associated cell damage, particularly in epilepsy; and 2) developing targeted gene therapy for epilepsy.

His laboratory harnesses cutting-edge technologies including in vivo electrophysiology, in vitro live cell imaging, and in vivo real-time live imaging, together with extensive experience with in vitro and in vivo animal models of seizures and epilepsy.

RESEARCH DESCRIPTION

A New Approach for Treating Epilepsy: CNS-Targeted Antioxidant Gene Therapy

Epilepsy is one of the most common neurological diseases globally, affecting ~1% of the world's population. Many epilepsies are acquired conditions following an insult to the brain; however, available therapy is only symptomatic and neither an effective prophylaxis nor a cure are available.

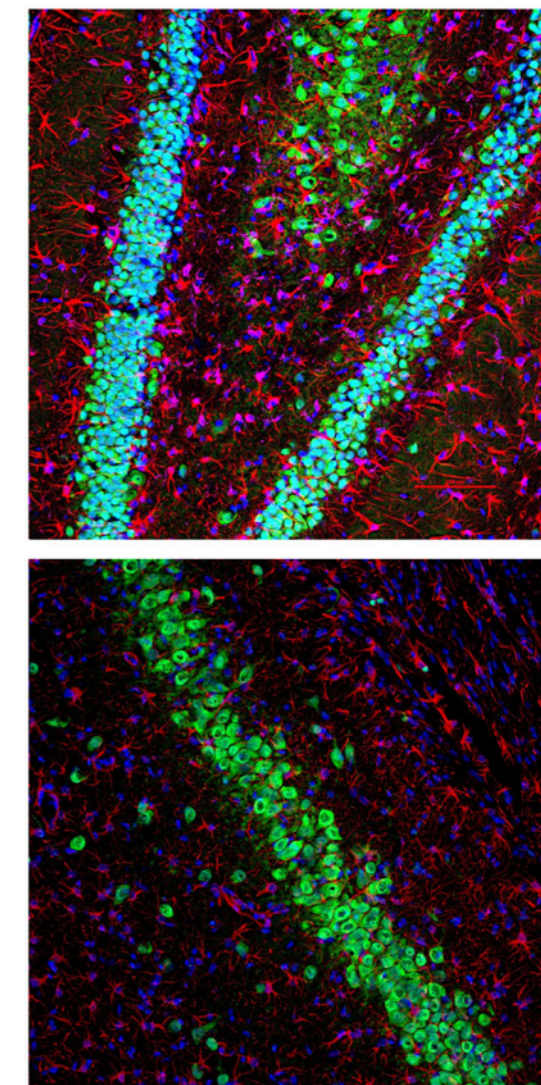
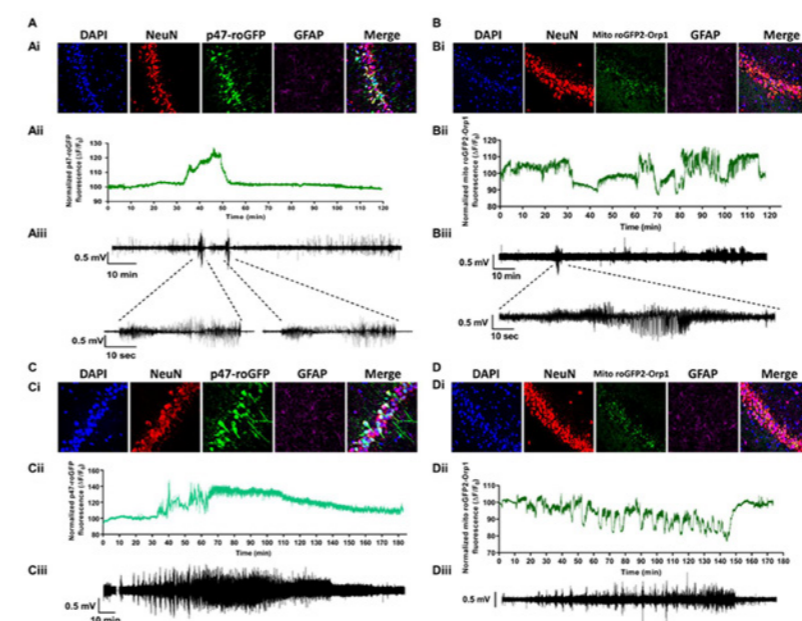
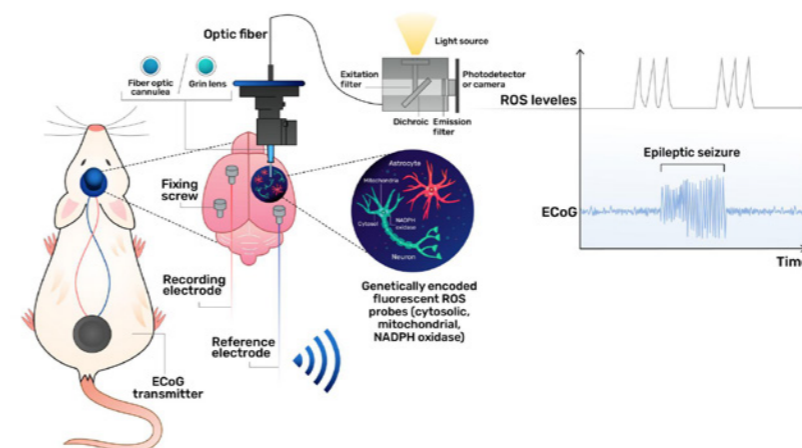
We have recently shown that pharmacological targeting of oxidative stress by upregulating the intrinsic antioxidant defenses of cells and/or inhibiting a major source that contributes to the generation of free radicals in epilepsy is an effective approach to prevent the development of spontaneous seizures in animals following status epilepticus (SE), and to modify the severity of chronic epilepsy. Nonetheless, these antioxidant therapies were not targeted to specific tissues or cell-types, and overwhelming free radicals in the body may disrupt the oxidant/antioxidant balance, which is important for many physiological functions, warranting more specific interventions.

The goal is to investigate two novel antioxidant gene therapy

strategies for epilepsy. For the first, adeno-associated viral (AAV) vectors will be utilized to drive the expression of therapeutic genes under the control of constitutive, cell type-specific promoters.

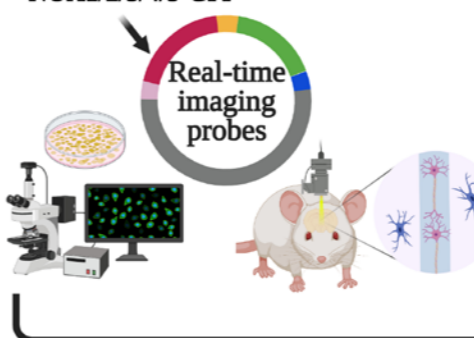
The second approach requires developing an "on-demand" antioxidant gene therapy, which relies on identifying and inhibiting the major pathway(s) responsible for reactive oxygen species generation in epilepsy, as well as upregulating the antioxidant capacity of cells. Therapeutic transgenes will be placed under the control of gene promoters that are sensitive to excessive neuronal activity. When active, these promoters will upregulate the expression of our antioxidant genes, in turn inhibiting oxidative damage—specifically where needed. Once seizures cease, the gene therapy tool will automatically turn off, returning ROS levels to normal.

These cell type-specific "on-demand" approaches for delivery of antioxidant therapies will allow combating oxidative stress OS following brain insult, thus preventing or modifying the development of epilepsy while preserving the critical balance of oxidants/antioxidants in non-affected cells.

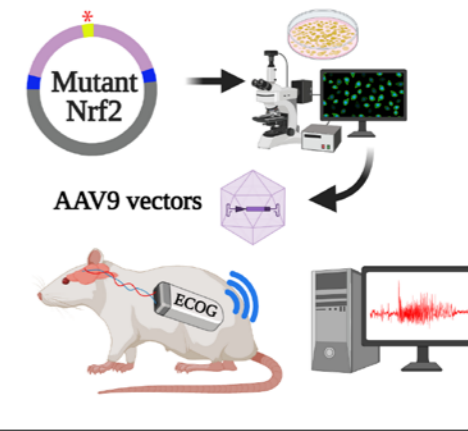


Identifying ROS sources in epilepsy

Mito-roGFPo-orp1
Cyto-roGFP-orp1
NOX1/2/3/4/5-GFP



Mutant Nrf2 to modulate antioxidant cell capacity



"On-Demand" gene therapy



Previous Winners

2021

DR. ASSAF HONIG

Department of Neurology
Hadassah Medical Center

Expanded treatment options for diseases of the Cerebrovascular system

DR. NINA FAINSTEIN

Department of Neurology
Hadassah Medical Center

The role of resident brain Neural Precursor Cells in the pathogenesis of Alzheimer disease

DR. HAITHAM AMAL

The Institute for Drug Research - School of Pharmacy
Faculty of Medicine

An integrative multiomics platform towards the development of diagnostic models and identifying therapeutic targets for autism spectrum disorder

DR. ARIEL GILAD

Medical Neurobiology
Faculty of Medicine

Brain-wide cognitive maps in health and disease.

2020

DR. MORDECHAI MEDVEDOVSKY

Department of Neurology,
Hebrew University-Hadassah Medical School

Automatic algorithm for ictal behavior analysis in video-EEG

PROF. GADI GOLEMAN

MRI/MRS lab of the Human Biology Research Center
Hebrew University-Hadassah Medical School

Subject-specific diagnostic method based on functional connectivity fMRI

DR. DAN ROKNI

Medical Neurobiology Department
Hebrew University-Hadassah Medical School

Circuits and mechanisms underlying sensory processing in complex environments.

DR. AMI CITRI

The Edmond and Lily Safra Center for Brain Sciences

Experience-Dependent Plasticity in the Mammalian Brain: attention, reward and the development of habits, compulsions and addiction.

2019

DR. OR KAKHLON

Dept. of Neurology
Hadassah-Hebrew University Medical Center

Metabolic analysis as a tool for neurological drug development

DR. CHEN MAKRANZ

Gaffin center for Neuro-oncology
Sharet Institute for Oncology
Hadassah University Medical Center

Brain-derived circulating DNA as a biomarker for Radiotherapy-induced Brain Damage

DR. YONATAN KUPCHIK

The Department of Medical Neurobiology,
Institute of Medical Research Israel – Canada,
The Faculty of Medicine

Synaptic pathology in the reward system in drug addiction and obesity

DR. AYAL BEN-ZVI

The Department of Developmental Biology and Cancer Research
Institute of Medical Research Israel – Canada,
The Faculty of Medicine

Molecular and cellular aberrations of the Blood Brain Barrier (BBB) in central nervous system (CNS) pathologies

Previous Winners

2018

DR. EINAV GROSS

Department of Biochemistry and Molecular Biology
Faculty of Medicine

Mechanisms of Recovery from Hypoxia/Reoxygenation Stress in the Nematode *Caenorhabditis Elegans*

DR. ODED BEHAR

Department of Developmental Biology and Cancer Research Institute
The Institute for Medical Research Israel-Canada
Faculty of Medicine

Neuronal Cell Death in Health and Diseases

DR. SHAI ROSENBERG

Center for Neuro-Oncology
Hebrew University-Hadassah Medical School

Brain Tumor Genomics and Personalized Medicine

PROF. MILLET TREININ

Department of Medical Neurobiology
Hebrew University-Hadassah Medical School
Understanding the Role of RIC-3, a Chaperone of Nicotinic

Acetylcholine Receptors, in Multiple Sclerosis (MS)

2017

PROF. CHAYA KALCHEIM

Department of Medical Neurobiology
Institute for Medical Research Israel-Canada
Hebrew University-Hadassah Medical School

Embryonic Development of the Nervous System: The Transition between Peripheral and Central Branches

DR. JOSHUA GOLDBERG

Department of Medical Neurobiology
Institute for Medical Research Israel-Canada
Hebrew University-Hadassah Medical School

Physiological Underpinnings of Neurodegeneration and Neuronal Adaptations in Movement Disorders

DR. PANAYIOTA PETROU

Department of Neurology
Hebrew University-Hadassah Medical School

Testing the Effect of Pomegranate Seed Oil (Grana Gard) on the Clinical
Symptoms and the Quality of Life in Patients with Multiple Sclerosis and Alzheimer's Disease

DR. IRIS LAVON BEN MOSHE

Department of Neurology
Hebrew University-Hadassah Medical School

Clarifying Molecular Mechanisms that Could Aid in the Development of New Treatment and Diagnostic Strategies in Brain Tumors and Neurodegenerative Diseases

2016

DR. AVI PRIEL

Institute for Drug Research, School of Pharmacy
Faculty of Medicine

Inflammatory Pain: Elucidating the Cellular and Molecular Basis

DR. YUVAL TABACH

Department of Developmental Biology and Cancer Research
Institute for Medical Research Israel-Canada
Hebrew University-Hadassah Medical School

Combined Computational and Experimental Methods Suggest a Unified Theory to Explain 40 Neurodegenerative Disorders

DR. SHAHAR ARZY

Department of Neurology
Hebrew University-Hadassah Medical School

The Human Self in Space, Time, and Person: Physiology and Pathology

DR. NETTA LEVIN

Department of Neurology
Hebrew University-Hadassah Medical School

Cortical and White Matter Mapping in Understanding Visual System Pathologies

Previous Winners

2015

DR. EHUD COHEN

Department of Biochemistry and Molecular Biology
Institute for Medical Research Israel-Canada
Hebrew University-Hadassah Medical School

Dissecting the Mechanistic Roles of Aging in the Emergence of Neurodegenerative Disorders

DR. YORAM BEN -SHAUL

Department of Medical Neurobiology
Institute for Medical Research Israel-Canada
Hebrew University-Hadassah Medical School

Neuronal Circuits Underlying Social Behavior

DR. DAVID ARKADIR

Department of Neurology
Hebrew University-Hadassah Medical School

DYT1 Dystonia Links Corticostriatal Synaptic Plasticity and Learning Behavior in Humans

DR. MARC GOTKINE

Department of Neurology
Hebrew University-Hadassah Medical School
Identification of Serological, Cytological and Genetic Factors

Associated with the Development and Progression of ALS in Israel

2014

PROF. ALBERT TARABOULOS

Department of Microbiology and Molecular Genetics
Institute for Medical Research Israel-Canada
Hebrew University-Hadassah Medical School

Prion Neurotoxicity: From Protein Misfolding to Lipid Disease

PROF. HAGAI BERGMAN

Department of Medical Neurobiology
Institute for Medical Research Israel-Canada
Hebrew University-Hadassah Medical School

Computational Physiology and Pathophysiology of the Basal Ganglia and their Disorder – From Understanding to Closed Loop Deep Brain Stimulation Treatments

DR. DANA EKSTEIN

Department of Neurology
Hebrew University-Hadassah Medical School

Development of Tools for Patient-Specific Individualized Diagnosis and Treatment of Epilepsy

DR. ADI VAKNIN-DEMBINSK

Department of Neurology
Hebrew University-Hadassah Medical School

Personalized Medicine in Multiple Sclerosis and Neuromyelitis Optica: Predicting Disease Outcome and Treatment Responsiveness

2013

PROF. ALEXANDER LOSSOS

Department of Neurology
Hebrew University-Hadassah Medical School

Diagnosis and Treatment of Adult Polyglucosan Body Disease

DR. HANNA ROSENMANN

Department of Neurology
Hebrew University-Hadassah Medical School

Alzheimer's Disease and Tauopathies - Improved Animal Models, Pathogenesis, and Therapeutic Approaches

DR. SARA EYAL

Institute for Drug Research
School of Pharmacy

Imaging CNS Function in Health and Disease

DR. ADI INBAL

Department of Medical Neurobiology
Institute for Medical Research Israel-Canada
Hebrew University-Hadassah Medical School

Molecular Mechanisms of Forebrain and Eye Development

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At The Hebrew University of Jerusalem

By The Orion Foundation

June 2022

The Hebrew University of Jerusalem

The Authority for Research and Development

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