



Leopoldina
Nationale Akademie
der Wissenschaften

האקדמיה הלאומית הישראלית למדעים
المجمع الوطني الإسرائيلي للعلوم والآداب
THE ISRAEL ACADEMY OF SCIENCES AND HUMANITIES



האקדמיה הלאומית הישראלית למדעים והאקדמיה הלאומית הגרמנית ליאופולדינה
מתכבדות להזמין אתכם לכינוס משותף בנושא

The Israel Academy of Sciences and Humanities and the German National Academy of Sciences Leopoldina
cordially invite you to the 7th Inter-Academy Symposium

RECENT ADVANCES IN NEUROSCIENCE

שלישי-רביעי, כ"ט-ל' בסיון, תשפ"ב
Tuesday – Wednesday, June 28–29, 2022

Scientific committee of the symposium:

Yadin Dudai, Chair, Science Division, The Israel Academy of Sciences and Weizmann Institute of Science;
Arthur Konnerth, Munich Technical University; Peter Riederer, University Hospital of Wurzburg;
Asya Rolls, Technion - Israel Institute of Technology

Tuesday, June 28, 2022

08:30 Registration and coffee

09:00 Welcome addresses

David Harel, President, Israel Academy of Sciences and Humanities
Gerald Haug, President, German National Academy of Sciences Leopoldina
Susanne Wasum-Rainer, German Ambassador
Renewal of the Memorandum of Understanding between IASH and Leopoldina

SESSION I

Chair: **Asya Rolls**, Technion - Israel Institute of Technology

09:30 **Onur Güntürkün**, Ruhr-University Bochum
Cognition without cortex

10:00 **Yoav Livneh**, Weizmann Institute of Science
Brain-body interactions: sensations and predictions in insular cortex

10:30 **Merav Ahissar**, The Hebrew University of Jerusalem
Perceptual priors explain acquisition

11:00 Coffee break

SESSION II

Chair: **Peter Riederer**, University Hospital of Wurzburg

11:30 **Thomas Misgeld**, Munich Technical University & German Centre for Neurodegenerative Diseases Munich
Mechanisms of axon damage in neuroinflammation

12:00 **Avi Mendelsohn**, University of Haifa
Building memories by mistake: the impact of errors on long-term memory

12:30 **Rafi Haddad**, Bar-Ilan University
How do gamma oscillations affect the neural activity of downstream neurons?

13:00 Lunch break

SESSION III

Chair: **Moussa Youdim**, Technion - Israel Institute of Technology

14:00 **Michael Thomas Heneka**, Luxembourg University
Does innate immunity contribute to neurodegenerative disease?

14:30 **Firas Mawase**, Technion - Israel Institute of Technology
Neural control of finger dexterity

15:00 **J. Matt McCrary**, Hannover University of Music, Drama and Media
Fatigue in elite musicians: symptoms, consequences, and peripheral/central mechanisms

15:30 Coffee break

SESSION IV

Chair: **Onur Güntürkün**, Ruhr-University Bochum

16:00 **Sarah Kittel-Schneider**, University Hospital of Wurzburg
The brain in a dish – stem cell models in psychiatry

16:30 **Stefan Vestring**, University of Freiburg
GluN2D: a novel target for rapid antidepressive treatment

17:00 **ROUNDTABLE - Research horizons and Israeli-German cooperation in neuroscience**

Moderators

Israel Nelken, The Hebrew University of Jerusalem
Arthur Konnerth, Munich Technical University

Funding organisations

Daniel Zajfman, Chair of the Academic Board of the Israel Science Foundation

Anke Ley, German Research Foundation DFG (virtual)

Sonja Spal, Alexander von Humboldt Foundation (virtual)

Lou Bohlen, Minerva Foundation of the Max Planck Society (virtual)

18:15 Adjourn

Wednesday, June 29, 2022

SESSION V

Chair: **Arthur Konnerth**, Munich Technical University

09:30 **Benjamin Judkewitz**, Charité University Medicine Berlin
Imaging the smallest vertebrate brain while singing

10:00 **Yaniv Ziv**, Weizmann Institute of Science
The dynamic engram: long-term spatial memory is maintained in the presence of ongoing changes in hippocampal representations

10:30 **Shira Knafo**, Ben-Gurion University of the Negev
AMPA receptors: from fundamental insights to cognitive enhancement

11:00 Coffee break

SESSION VI

Chair: **Menahem Segal**, Weizmann Institute of Science

11:30 **Katharina Lichter**, University Hospital of Wurzburg
Three-dimensional nanoscopy of hippocampal mossy fiber active zones in RIM1a knock-out and wildtype mice

12:00 **Ivo Spiegel**, The Weizmann Institute of Science
Mechanisms of experience-dependent plasticity in cortical GABAergic circuits

12:30 **Rhiannon McNeill**, University Hospital of Wurzburg
Development of a human-based, disease-relevant in vitro model for investigating the role of genetic variation in the ADGRL3 gene in ADHD pathogenesis

13:00 Lunch break

SESSION VII

Chair: **Sarah Kittel-Schneider**, University Hospital of Wurzburg

14:00 **Jastyn A. Pöplau**, University Medical Centre Hamburg-Eppendorf
Reorganization of adolescent prefrontal circuitry is required for the functional maturation of cognitive abilities

14:30 **Naomi Habib**, The Hebrew University of Jerusalem
Unmasking cellular dynamics in Alzheimer's disease

15:00 **Yaara Yeshurun**, Tel Aviv University
It's not what you look at that matters, it's what you see

15:30 Concluding remarks by members of the scientific committee
Yadin Dudai, Chair, Science Division, The Israel Academy of Sciences; Weizmann Institute of Science

Arthur Konnerth, Munich Technical University

Peter Riederer, University Hospital of Wurzburg

Asya Rolls, Technion - Israel Institute of Technology

The conference will take place at
The Israel Academy of Sciences and Humanities,
43 Jabotinsky St., Jerusalem

The conference will be held in English



הכינוס יתקיים
בבית האקדמיה הלאומית הישראלית למדעים,
רחוב ז'בוטינסקי 43, ירושלים

ההרצאות תתקיימנה בשפה האנגלית

With the kind support of



האירוע יתקיים בכפוף להנחיות משרד הבריאות שיהיו בתוקף

הכניסה בהרשמה מראש, ללא תשלום ועל בסיס מקום פנוי | חניה עירונית ברחובות הסמוכים לאקדמיה

The conference will be conducted according to current Health Ministry regulations | Please register in advance
Admission is free of charge, on the basis of available seating | Paid on-street municipal parking is available in the vicinity of the Academy

עקבו אחר האקדמיה ברשתות החברתיות

בקרו בתערוכה "בית ועד לחכמים: שישים שנות מדע ודעת" המוצגת בבית האקדמיה | הכניסה חופשית

Visit the exhibition "A Gathering Place of Scholars: 60 Years of Science and Knowledge", now on display at the Israel Academy | Admission is free of charge