Tel Aviv University
Sagol School of Neuroscience

Welcome to the International Neuroscience M.Sc. Program

19.3.23
What is Neuroscience?

- How Does The Brain Work?
- Understanding Basic Mechanisms
- Where and How are Memories Stored?
- What are Emotions?
- Understanding Brain Disorders
- Treatment of Aging and Brain Diseases
The Sagol School of Neuroscience

❖ Established in 2011
❖ Cross campus – 150 laboratories from 8 faculties and 17 medical centers
❖ Full Educational Studies in Neuroscience: B.Sc., M.Sc., Ph.D., and Post-Doc
❖ 600 undergrad and grad students
❖ State of the art research
❖ In house research centers – Minducate and MILA
❖ The leading Neuroscience School in Israel
Best Global Universities for Neuroscience in Israel

- Tel Aviv University: #1 place to study Neuroscience in Israel
- Hebrew University of Jerusalem: #1 place to study Neuroscience in Israel
- Weizmann Institute of Science: #6 place to study Neuroscience in Asia
- Ben Gurion University: #1 place to study Neuroscience in Israel
- University of Haifa: #6 place to study Neuroscience in Asia
The Sagol School Cross-Campus Network

- Medicine
- Exact Sciences: Physics, Computer Science, Chemistry, Statistics
- Engineering
- Management
- Life Sciences
- Humanities: Linguistics, Philosophy, Education
- Social Sciences: Psychology
- Arts: Film
Sagol is a Mega center for combatting brain disorders

- Alzheimer’s disease
- Parkinson’s disease
- Rett Syndrome
- Schizophrenia
- Epilepsy
- ADHD
- Stroke
- Multiple Sclerosis
- Dyslexia
- Pain
- Mental disorders
- Autism
- Glaucoma
- Huntington’s disease
- Neurosensory disorders
- ALS
- Neurovascular-interface
- Traumatic Brain Injury
- Mental disorders
From Academic Research to the Patient’s Bedside

❖ Prof. Daniel Offen
❖ Prof. Oded Rechavi
❖ Prof. Yaniv Assaf
❖ Prof. Bernard Attali
❖ Prof. Illana Gozes
❖ Prof. Talma Hendler
❖ Prof. Uri Nevo – Lifegraph LTD.
❖ Prof. Hagit Eldar-Finkelman

❖ Stem Cell Medicine
❖ Prof. Yael Hanin
❖ Prof. Nathan Intrator
❖ Prof. Miguel Weil
❖ Prof. Noam Shomron

❖ Prof. Daniel Offen
❖ Prof. Oded Rechavi
❖ Prof. Yaniv Assaf
❖ Prof. Bernard Attali
❖ Prof. Illana Gozes
❖ Prof. Talma Hendler
❖ Prof. Uri Nevo – Lifegraph LTD.
❖ Prof. Hagit Eldar-Finkelman
Sagol Network with Industry
Publications in Top Journals

**How COVID-19 harms the heart**

Many patients are experiencing heart palpitations, chest pain, and shortness of breath even after recovering from COVID-19. But new studies suggest these symptoms may not be caused by the virus.

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**Memory reactivation improves visual perception**

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**Neuronal Small RNAs Control Behavior Transgenerationally**

Rachel Porstein,1,2 Aron TM Toker,1,2 Oleg Antonevich,1,2 Shilhar Bracha,1,2 Hila Gingold,1,2 and Oded Eldar1,3,4

1Department of Neurobiology, Weizmann Institute of Science, Rehovot, Israel; 2Department of Computer Science and Applied Mathematics, Weizmann Institute of Science, Rehovot, Israel; 3Department of Molecular Biology, Weizmann Institute of Science, Rehovot, Israel; 4Department of Molecular Biology and Biochemistry, School of Life Sciences, Tel Aviv University, Tel Aviv, Israel

**New dimensions for brain mapping**

Imaging reveals new features of memory representation in the brain

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**Mitochondrial Regulation of the Hippocampal Firing Rate Set Point and Seizure Susceptibility**

Boaz Stryker1,2, Ne Gevorkyan1,2, Daniel Zothan1,2, Antonella Ruggiero,1,2 Refaela Atsmon1,2, Neto Gazit1,2, Gabriella Braun1,2, Samuel Freidovich1,2, Moshe Shapira1,2, Michal Harel1,2, Leonor Reis1,2, Maxim Katsenelson1,2, Ohad Rechitz1,2, Saja Fadda1,2, Yehuda Geva1,2, Eytan Ruppin1,2, and Inna Slutsker1,3,4,5,7

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**Selective neuronal lapses precede human cognitive lapses following sleep deprivation**

Yuval Nevo1, Thomas Andrillon2,3,4,5, Amit Manor6,6,7, Jonah Suthana2, Chiara Cirilli4, Giulio Tononi1,3,7,8

1Department of Neurology, Beth Israel Deaconess Medical Center, Boston, Massachusetts, USA; 2Department of Psychiatry, Harvard Medical School, Boston, Massachusetts, USA; 3Department of Neurology, Massachusetts General Hospital, Boston, Massachusetts, USA; 4Department of Neuroscience, Brown University, Providence, Rhode Island, USA; 5Department of Psychology, Boston College, Chestnut Hill, Massachusetts, USA; 6Department of Psychology, New York University, New York, New York, USA; 7Department of Radiology, Department of Neurology, Beth Israel Deaconess Medical Center, Boston, Massachusetts, USA; 8Department of Systems Biology, Harvard Medical School, Boston, Massachusetts, USA

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**Cell Press**
The Largest Individual Competitive Grants Awarded in Europe

Pablo Blinder
Nitzan Censor
Tal Dvir
Ehud Gazit
Amir Globerson
Yossi Yovel
Yael Hanein
Ben Maoz
Yuval Nir
Moshe Parnas
Eran Perlson
Oded Rechavi
Ronit Satchi-Fainaro
Tom Schonberg
Mark Sheindelosn
Inna Slutsky
David Sprinzak
Eran Stark
Omri Wurtzel
Tali Ilovitsh
Yaniv Assaf
Daphna Joel
Liad Mudrik
International Conferences
Academic Programs
Diverse undergraduate and graduate programs in Neuroscience:

- Biology and Psychology
- Biology and Bio-medical Engineering
- Psychology and Computer Science

Special Interdisciplinary graduate programs in Neuroscience:

- Master in Neuroscience
- Master in Clinical Neuroscience
- PhD in Neuroscience
- Master in Neuronal Computation
The International Neuroscience M.Sc. Program

2023-24
Program Highlights:

• Expand your knowledge in specific neuroscience areas of research, while enjoying access to over 150 laboratories associated with the Sagol School.
• Take advantage of both an empiric experience as part of a research thesis, and a variety of knowledge-expanding classes.
• Benefit from an enhanced living scholarship and a full-tuition exemption.
• Learn advanced quantitative methods in diverse areas, led by world-renowned neuroscientists.
International Neuroscience M.Sc. Program

Program staff:

Prof. Dinorah Friedmann-Morvinski
Academic head of the program

Dr. Boaz Barak
Academic head of the program

Orly Segev
Coordinator of the program
International Neuroscience M.Sc. Program

- **Length**: 2 years
- **Language** of Instruction: English
- **Total credit hours** in the program: 30 semester hours
- The program includes **Courses** (mandatory and elective) and **Thesis**.
  
  * To find a **Supervisor** – after acceptance - you can search the list of researchers on our website and reach out independently.
  
  ** It is advisable to consult the supervisor about course selection.
International Neuroscience M.Sc. Program

- **Admissions Requirements**: An average of 88 or above in a B.Sc. or B.A. in neuroscience, life sciences, psychology (or exact sciences, engineering, linguistics)
- **Application Deadline**: March 23rd, 2023
- **Tuition**: Our students are exempt from tuition
- **Fellowship**: Living assistance for your personal use
- **TAU Housing**: Option to apply for dorms
International Neuroscience M.Sc. Program

❖ Prerequisite mandatory courses

• Introduction to Chemistry
• Introduction to Physics
• Introduction to Cell Biology
• Introduction to Neurobiology
• Introduction to Psychology
• Mathematics
• Statistics

❖ English Requirements

applicants from non-English speaking countries or are non-native speakers of English must provide proof of English proficiency.
In order for your application to be reviewed, the following documents should be submitted to your online profile:

- Complete online application form and payment of $150 application fee
- CV
- Original transcripts, in English, signed and stamped, as well as undergraduate diploma
- 2 academic recommendations + email addresses of both recommenders
- English proficiency results
- Copy of a Valid Passport
- PowerPoint Presentation (full instructions are elaborated in the online application form)
Thank You

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🌐 https://international.tau.ac.il/Neuroscience_MSc/