Who Are We?

A new scientific venture, the **Edmond and Lily Safra Center for Brain Sciences (ELSC)** is unique in its approach to brain research. It is one of the few places in the world where scientists from fields as diverse as physics and psychology, or computer science and medicine, work closely together toward a better understanding of the brain. **ELSC** integrates the one-of-a-kind, revolutionary Ph.D. program of the Interdisciplinary Center for Neural Computation (ICNC) with the excellence and innovation of the Hebrew University, bringing together top experts, outstanding young faculty recruits, talented students, generous research funding, and state-of the-art equipment.

At ELSC we study the brain from various angles, from genes through neural activity to behavior. We focus, in particular, on the theoretical and experimental study of the dynamics and computational capabilities of large networks, and develop new insights into the mechanisms underlying brain dysfunction. All of our research features the intense multidisciplinary collaboration that makes ELSC unique.

ELSC New building, currently under construction

ELSC's Ph.D. Program

The Ph.D. Program in Brain Research: Computation and Information Processing

Unraveling the mysteries of the mind and the brain is one of the most fascinating endeavors in all of science. At ELSC, we believe that the clue to solving this mystery lies in multidisciplinary collaboration.

This program is arguably one of the largest graduate programs in computational neuroscience in the world. A large percentage of our graduates become independent researchers in various fields of neuroscience both at Israeli universities and abroad.

Our 5-year Ph.D. program provides our outstanding students with the theoretical and experimental tools that will allow them to employ a broad range of approaches in order to understand how the nervous system efficiently performs a wide variety of functions, such as perception and action, learning and memory, thought and creativity.

Our students take advanced courses that provide a comprehensive background in neuroscience: physiology of the nervous system; theoretical neural and cognitive sciences; cognitive psychology; machine learning and information processing; and advanced research methods in neuroscience.

All scientific activities, as well as the classes, are conducted in English. The first three semesters of the program are comprised of the core courses, after which students join research labs and engage in their thesis research. Each student is provided with an individualized program, consisting of both required and elective courses, that allows them to meet the necessary requirements for the doctorate. Throughout their studies, students are encouraged to participate in international conferences, and to visit similar research centers around the world. Generous scholarships and travel fellowships are available from the first year of the program.

Why the Hebrew University?

The Hebrew University is consistently rated as the top Israeli university in international educational surveys. The Hebrew University's 23,000 students – about half of whom are graduate students – represent Israel's vibrant society, and include Jews, Christians and Muslims. The Hebrew University is open to all academically-qualified applicants, regardless of nationality, race, creed, color or religion.

Why Jerusalem?

Jerusalem offers an unparalleled mix of past and present culture. From world-class restaurants and cafes to historical religious sites, the city is a melting pot of ancient roots and modern innovations. Jerusalem is rich in art galleries, museums, theaters and concert halls. Exciting festivals, exhibitions, sports competitions and other special events are held throughout the year.

Jerusalem - Santiago Calatrava's Bridge of Strings

Admissions

Eligible candidates are those who meet the requirements of the Hebrew University for acceptance to a direct doctoral program and have a record of academic excellence. Our students come from various fields, including mathematics, physics, computer science, engineering, biology, and psychology. Applications for admission are accepted in the winter, and applicants are notified of the committee's decision shortly afterwards.

Application

Interested applicants are invited to look over the application process at: **http://elsc.huji.ac.il/phd**

ELSC Conference

Contact Us

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http://elsc.huji.ac.il

Prof. Adi Mizrahi's Lab

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