Computational Neuroscience and Biophysics

Research

Yoram Burak's research group investigates how neural circuits in the brain perform computations, such as: sensory inference, maintenance of short-term memory, and generation of motor output. To address these questions, we apply diverse theoretical tools from statistical mechanics, information theory, and the theory of nonlinear dynamics. We are interested also in computation and information processing in other biological systems, and in their relationship to physical organization and dynamics.

The lab is part of ELSC [1] and the Racah Institute of Physics [2].

Join our lab [3]! Where to find us [4]

Read more [5]

It is now widely accepted that deciphering the enigma of the brain is the most challenging intellectual endeavor of the 21st century, "The Century of the Brain" - Join our quest and become a friend of ELSC.

ELSC Friends

Our Int'l Ph.D. program provides outstanding students with top-notch courses in computational neuroscience.
The Jerusalem Brain Sciences Building will provide a state-of-the-art research and teaching facility for the Edmond and Lily Safra Center for Brain Sciences.

Get into our media channel and investigate ELSC's latest videos: seminars, public lectures, courses and video articles.