Research Topics

**Sensation and Perception** [1]
The Sensation & Perception research labs at the Hebrew University focus on how our brain generates a representation of the world around us, combining incoming perceptual information with memory to enable us to act.

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**Movement Planning and Control** [2]
Scientists at the "Movement Planning and Control" laboratories focus on basic questions such as: How is visual information translated for use by the motor system? How do motor neurons learn new patterns of movement? How and where are learned movements stored in motor memory? A special avenue of research is the development of Brain Machine Interfaces, the control of artificial, robotic limbs through a brain interface.

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**Computational Neuroscience** [3]
The field of computational neuroscience combines theoretical physics, advanced mathematics and state-of-the art computer technology to create powerful models of working neural networks.

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**Consciousness and Cognition** [4]
Researchers at ELSC use advanced EEG and fMRI brain mapping tools to understand what happens in the brain when we become aware of something.

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**Neurological Disorders** [5]
Scientists at the Hebrew University are making similar advances in diseases as diverse as schizophrenia, depression, and Alzheimer's, and are starting to unravel the mechanisms underlying these illnesses.

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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.

Studying at ELSC

Our Int'l Ph.D. program provides outstanding students with top-notch courses in computational neuroscience.

The Building

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.

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