Research Topics

**Sensation and Perception**
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**
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**
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**
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**
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.

**ELSC Friends**

**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.

**ELSC Media Channel**

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

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[2] [http://elsc.huji.ac.il/content/movement-planning-and-control-0](http://elsc.huji.ac.il/content/movement-planning-and-control-0)
[3] [http://elsc.huji.ac.il/content/computational-neuroscience](http://elsc.huji.ac.il/content/computational-neuroscience)
[4] [http://elsc.huji.ac.il/content/consciousness-and-cognition](http://elsc.huji.ac.il/content/consciousness-and-cognition)