WIN (Weizmann institute neuroscience) Research

Neuroscience research at the Weizmann institute employs various cutting-edge disciplines, including molecular, computation, systems, cellular, and cognition. Many of the labs combine several approaches into a multidisciplinary research. Please visit individual labs for more information.

List of labs:

Ehud Ahissar, Dept. of Neurobiology
*Neural mechanisms of adaptive perception*

Amos Arieli, Dept. of Neurobiology

Shabtai Barash, Dept. of Neurobiology
*Mind-Brain: Neurophysiology*

Alon Chen, Dept. of Neurobiology
*Neurobiology of stress*

Mike Fainzilber, Dept. of Biomolecular Sciences
*Molecular neurobiology*

Ofer Feinerman, Department of Physics of Complex Systems
*Ant collective behavior*

Tamar Flash, Department of Computer Science And Applied Mathematics
*Motor control in humans and robotic systems*

Eran Hornstein, Dept. of Molecular Genetics
*Regulation of cellular processes by miRNAs*

Takashi Kawashima, Dept of Neurobiology
*Whole-brain deconstruction of behavioral mechanisms*

Tali Kimchi, Dept. of Neurobiology
*Neuronal basis of sexually dimorphic behaviors*

Ilan Lampl, Dept. of Neurobiology
*Processing of sensory information in the cerebral cortex*

Gil Levkowitz, Dept. of Molecular Cell Biology
*Development and function of the hypothalamus.*

Rafi Malach, Dept. of Neurobiology
*Vision and the human brain*

Elisha Moses, Department of Physics of Complex Systems
*Physics of biological computation*

Meital Oren, Dept. of Neurobiology
*The synaptic basis of sexually dimorphic behaviors*
Rony Paz, Dept. of Neurobiology
*Neural mechanisms of learning*

Elior Peles, Dept. of Molecular Cell Biology
*The development of myelinated nerves*

Orly Reiner, Dept. of Molecular Genetics
*Forming the Cortex-translating environmental cues to cellular responses*

Michal Rivlin, Dept. of Neurobiology
*Dynamic computations in the retina*

Eitan Reuveny, Dept. of Biomolecular Sciences
*Ion channel – signaling Physiology and biophysics*

Dov Sagi, Dept. of Neurobiology
*From images to visual perception*

Rita Schmidt, Dept. of Neurobiology
*Imaging the human brain: ultra-high field MRI and new biomarkers for brain function*

Elad Schneidman, Dept. of Neurobiology
*Neural computation, learning, and collective behavior*

Michal Schwartz, Dept. of Neurobiology
*The laboratory of the immunology of the mind in health and disease*

Oren Schuldiner, Dept. of Molecular Cell Biology
*Molecular mechanisms of neuronal remodeling*

Noam Sobel, Dept. of Neurobiology
*Olfaction*

Ivo Spiegel, Dept. of Neurobiology
*How experience regulates brain function*

Michail Tsodyks, Dept. of Neurobiology
*Models of brain function*

Nachum Ulanovsky, Dept. of Neurobiology
*Hippocampal neural activity in freely moving echolocating bats*

Shimon Ullman, Department of Computer Science And Applied Mathematics
*Vision*

Avraham Yaron, Dept. of Biomolecular Sciences
*Neuronal wiring*

Ofer Yizhar, Dept. of Neurobiology
*Synaptic organization in neural circuits*
Yaniv Ziv, Dept. of Neurobiology

Neural coding of long-term memory