During our everyday life we are constantly gathering information from the environment around us, so that we can interact with the outside world in an appropriate way. While much of this information is acquired through our visual system while simply viewing our surroundings, we also spend a vast amount of time actively searching for one object or another. Take for example a situation in which you are seated at your (cluttered) desk and have to write a note. You now have to search your desk for pen and paper. After finding them and writing the note you decide you’d like to listen to some music, and so you now search for your headphones. We perform this kind of visual search many times a day, and often (like in the example above) search for different objects in the same scene. But how much information do we actually acquire about objects surrounding us that were not our search targets? Will you know where your headphones are if you incidentally happened upon them while searching for your pen?

In our study we investigate memory for distractors (objects that were not our search target) after multiple searches through a natural scene. Preliminary results indicate that semantic and visual information about distractors and their location is acquired without intention. We are using eye movement recordings in order to better understand how search parameters (e.g. fixation time) influence the formation of these memories and representations.
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.

read more

Studying at ELSC

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.

read more

ELSC Media Channel

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

read more

Source URL: http://elsc.huji.ac.il/zohary/people/nomi-carlebach