



EU Horizon 2020 MSCA RISE under grant agreement 101007926

## NeuronsXnets Miniscope workshop

June 30 – July 1, 2024

Foundation for Research and Technology Hellas

In the context of Marie Curie RISE “neuronsXnets”, we are organizing the first Miniscope workshop at FORTH in Heraklion, Greece. Miniaturized microscopes (Miniscopes) allow for in vivo imaging of neuronal activity in freely moving rodents. Their development and their open access application, spearheaded by the Golshani and Aharoni laboratories, has revolutionized neuroscience research. Prof. Golshani and Prof. Aharoni, as well as scientists from their laboratories, will visit FORTH in order to host a miniscope workshop. The workshop will introduce all aspects of using Miniscopes, including basic principles of Miniscope design and imaging, how to build and attach a Miniscope, how to implant a GRIN lens for imaging deep structures, and how to analyze imaging data. The workshop will also cover the most recent developments in Miniscope technology and highlight some of the best advances in this exciting and growing field. You can find the program of the workshop below. The workshop is provided free of charge.

Sunday, 30 June 2024

Time	Title/Topic	Speaker
11-11:30am	Coffee, participants' arrival	
11:30am-12pm	Introduction and history of the development of miniscopes	Prof. Peyman Golshani
12-1 pm	Imaging principles and miniscope design	Daniel Aharoni
1-2-pm	Grin lens and baseplate surgery	Dr. Samara Miller
2-3pm	Lunch	
3-4pm	Miniscope assembly and data acquisition	Prof. Daniel Aharoni
4-5pm	In vivo imaging and behavior	Dr. Samara Miller/ Chrysa Iordanidou
5-5:30pm	Coffee break	
5:30 -7pm	Hands-on data acquisition with mice already implanted with GRIN lens	Dr. Samara Miller/ Chrysa Iordanidou
8pm	Dinner	

Monday, 1 July 2024

9-10am	Data analysis lecture (1hr)	Prof. Daniel Aharoni
10-10:30am	Coffee break	
10:30-12:30pm	Hands-on data analysis with a demo set	Prof. Daniel Aharoni
12:30-1:30pm	Future directions	Prof. Daniel Aharoni/ Prof. Peyman Golshani
1-2pm	lunch	