



WS03 Imaging and Functional Neurosurgery Workshop

Monday, June 24, 2019

This course provides a theoretical framework for translational applications of functional neuroimaging for Stereotactic & Functional Neurosurgery specifically diffusion magnetic resonance imaging (MRI), functional MRI, nuclear medicine imaging. The hands-on component allows participants to practice steps involved in integration of diffusion MRI for stereotactic targeting: preprocessing, co-registration and tract visualization. At the end of this course, participants will become familiar with the role of functional neuroimaging in improving stereotactic targeting and learn its potential pitfalls.

08:00 - 12:00

Mercury

	Coordinator: Vibhor Krishna (USA)
	Chair: Mojgan Hodaie (Canada)
	Chair: Vibhor Krishna (USA)
08:00	Introduction Invited Speaker: Mojgan Hodaie (Canada)
08:05	Principles underlying DTI and its accuracy – “Tracks and Traps” Invited Speaker: Frank Yeh (USA)
08:25	DTI and based VIM targeting Invited Speaker: Mojgan Hodaie (Canada)
08:25	DTI based VIM targeting Invited Speaker: Vibhor Krishna (USA)
08:45	Improving targeting accuracy- atlases in image registration Invited Speaker: Stephan Chabardes (France)
09:05	Post-operative imaging after lesioning and DBS Invited Speaker: Ashwin Viswanathan (USA)
09:25	Hands On Integration Invited Speaker: Tejas Sankar (Canada)
09:25	Hands-On Integration Invited Speaker: Vibhor Krishna (USA)
10:25	Break
10:35	fMRI and resting-state fMRI - Paradigms, accuracy and clinical application Invited Speaker: Dario Englot (USA)
10:55	MRI and Nuclear Medicine imaging in movement disorders Invited Speaker: David Eidelberg (USA)
11:15	MRI and Nuclear Medicine imaging in Epilepsy and Memory dysfunction Invited Speaker: Effie Kapsalaki (Greece)
11:35	7T and Proton imaging Invited Speaker: Michael Park (USA)
11:55	Closing remarks Invited Speaker: Vibhor Krishna (USA)