TRIUX™ neo Introductory Training (Remote)

Institute of Neuroscience ION Chinese Academy of Science CAS – CEBSIT

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MEGIN

	Self-Study	**Resources**
	Introduction to MEG	NM26263H-* MEG in neuroimaging NM26264H-* MEG signal generation NM26265H-* Brain responses measured by MEG NM26266H-* Magnetic interference and artifacts in MEG NM26267H-* Magnetic source imaging NM26268H-* MEG examples
	Introduction to TRIUX neo	NM26269H-* TRIUX neo system overview NM26270H-* TRIUX neo ARMOR sensors NM26271H-* TRIUX neo ARMOR electronics NM26272H-* TRIUX neo EEG and auxiliary electronics NM26273H-* TRIUX neo patient positioning and monitoring NM26274H-* TRIUX neo probe unit and operation NM26275H-* TRIUIX neo system hardware safety and performance precautions NM26276H-* TRIUX neo service and maintenance NM26277H-* TRIUX neo network and IT NM26278H-* TRIUX neo IHR core user training
	Supplemental (Optional) modules	NM26279H-* Experimental design guidelines NM26280H-* Stimulators and response devices NM26281H-* MEGIN file format NM26282H-* 3rd party software NM26283H-* Interference suppression with SSP and SSS NM26284H-* MaxFilter guidelines and examples NM26285H-* MEG dipole modelling

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		Resources
Session 1	Review video lectures and questions	
	Review of data collection workflow	NM26152H MEG data acquisition guidelines, TRIUX neo
	Hands-on session: Data acquisition settings #1 • Review settings procedure • Setup for spontaneous recording	NM26082A DACQ Guidelines, TRIUX neo
	Hands-on session: Data acquisition • Prepare the MEG system • Prepare the patient • Record spontaneous MEG • Finalize the measurement	NM26082A DACQ Guidelines, TRIUX neo
Session 2	Hands-on session: Data acquisition settings #2 • Setup for internal triggering (SEF) • Setup for external triggering (MEF)	NM26082A DACQ Guidelines, TRIUX neo
	Hands-on session: Data acquisition • Prepare the MEG system • Prepare the patient (including EEG) • Record spontaneous MEG • Record magnetic evoked fields (SEF and MEF) • Finalize the measurement	NM26082A DACQ Guidelines, TRIUX neo

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		Resources
Session 3	Hands-on session: Data acquisition settings #3 • E-Prime3 system and stimulus devices • Setup for external triggering (AEF, VEF, LEF)	NM26082A DACQ Guidelines, TRIUX neo
	Hands-on session: Data acquisition • Prepare the MEG system • Prepare the patient (including EEG) • Record spontaneous MEG • Record magnetic evoked fields (AEF, VEF, LEF) • Finalize the measurement	NM26082A DACQ Guidelines, TRIUX neo
	Hands-on session: Care and cleaning of EEG cap	
Session 4	Hands-on session: Phantom recording • Optimize digitization • Evaluate accuracy of 32 dipoles	NM25883A TRIUX neo IFU
	Hands-on session: Optimize signal quality • MEG sensor tuning • EEG calibration signals	NM26082A DACQ Guidelines, TRIUX neo NM25883A TRIUX neo IFU NM24011A Tuner
	Hands-on session: Data acquisition • Artifacts, interference • Head movements, cHPI • Troubleshooting topics	NM26082A DACQ Guidelines, TRIUX neo

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		Resources
Session 5	Review of data analysis workflow	NM26083H MEG data analysis guidelines TRIUX neo
	Hands-on session: Data analysis • Prepare MRI and single sphere model • Pre-process raw data using *MaxFilter* • Prepare events for functional mapping • Perform source modelling	NM25775A DANA guidelines
Session 6	Hands-on session: Data analysis • Prepare MRI and single sphere model • Pre-process raw data using *MaxFilter* • Prepare events for epilepsy source localization • Perform source modelling	NM25775A DANA guidelines

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