

# WISE Technologist

## MEGIN Customer Training Program

Practical considerations and hands-on practice for performing quality clinical MEG

Willingness to strive for high quality  
Ingenuity to overcome  
**S**elf-sufficient  
**E**ducated



**MEGIN**

# Practical considerations and hands-on practice

*Each workshop includes...*

Lecture led by Prof. John Mosher discussing practical quality control considerations

- video lecture with interactive Q&A session

Hands-on virtual guidance for data acquisition

- video demonstrations and live support led by MEGIN trainers and expert technologists while trainees practice at their home site

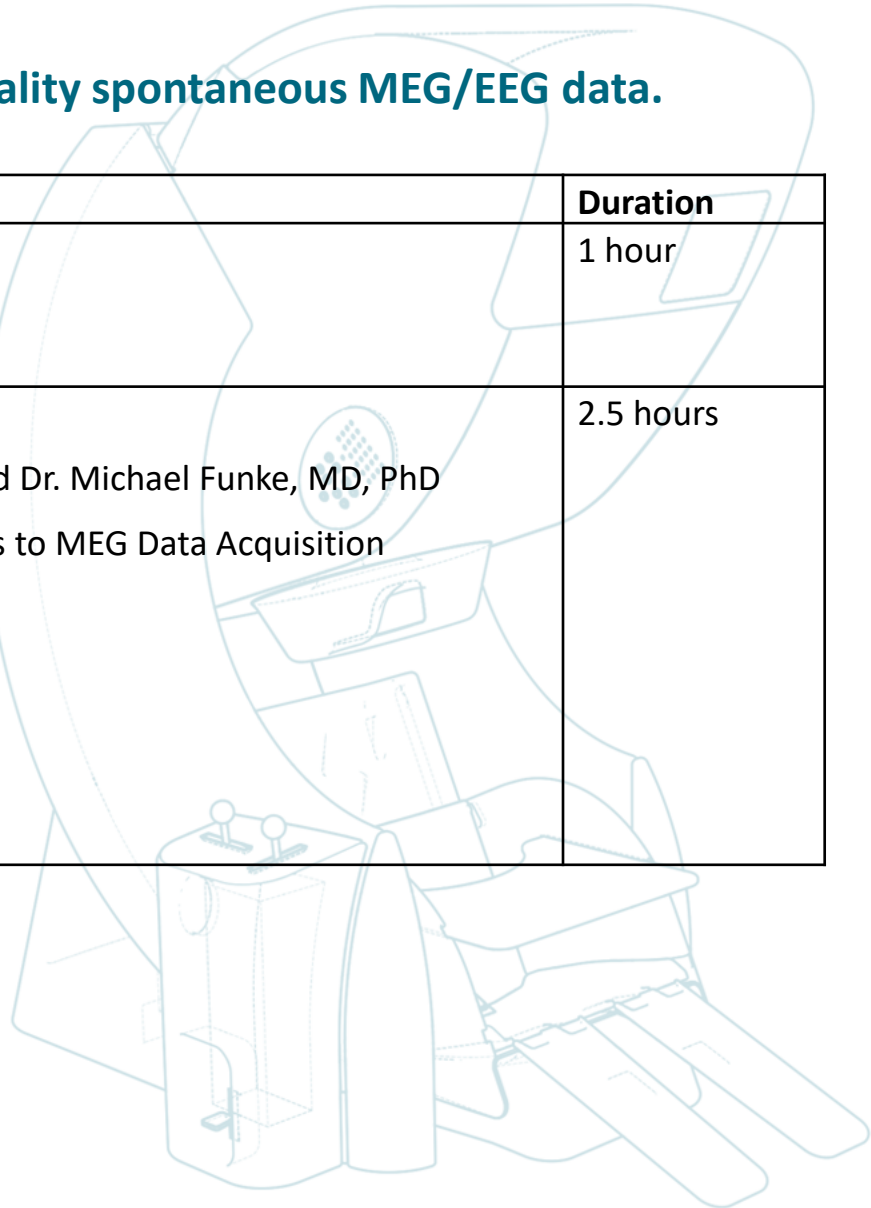
Hands-on virtual guidance for data processing and analysis

- video demonstration and live support guided by expert MEG analysts while trainees practice on their data

|   |                              |
|---|------------------------------|
| Workshop 1: Recording quality spontaneous MEG/EEG data<br>Wayne Mead, CMEG, and Michael Funke, MD, PhD, Memorial Hermann Hospital   | December 8, 2021<br>12pm EST |
| Workshop 2: Performing quality somatosensory mapping<br>Nichole Knott and Elizabeth Heinrichs-Graham, PhD, Boys Town National Research Hospital   | January 13, 2022<br>12pm EST |
| Workshop 3: Performing quality visual mapping<br>Jeremy Gurumendi and Paul Ferrari, PhD, Helen DeVos Children's Hospital,   | February 7, 2022<br>12pm EST |
| Workshop 4: Performing quality auditory mapping together with receptive language mapping (Papanicolaou protocol)<br>Teri Williard and Roozbeh Rezaie, PhD, Le Bonheur Children's Hospital | March 11, 2022<br>12pm EST   |
| Workshop 5: Performing motor mapping<br>Nao Matsuda and Steven Stufflebeam, MD, Massachusetts General Hospital  | April 11, 2022<br>12pm EST   |

# Workshop 1: Practical considerations and hands-on practice for recording quality spontaneous MEG/EEG data.

|   | Resources  | Duration  |
|---|--|-----------|
| Lecture discussing practical quality control considerations for spontaneous MEG   | John Mosher, PhD   | 1 hour    |
| Trainer-led, hands-on virtual guidance for data acquisition (trainer demonstrates, trainee practices) <ul style="list-style-type: none"> <li>• Preparing the MEG system</li> <li>• Tuning sensors</li> <li>• Identifying and mitigating magnetic interference and artifacts</li> <li>• Preparing the patient (including EEG cap)</li> <li>• Positioning the patient for comfort</li> <li>• Recording spontaneous MEG</li> <li>• Finalizing the measurement and managing data</li> </ul> | MEGIN trainers<br>Wayne Mead, CMEG and Dr. Michael Funke, MD, PhD<br>NM26082A-B Guidelines to MEG Data Acquisition | 2.5 hours |



## Workshop 2: Practical considerations and hands-on practice for performing quality somatosensory mapping

|  | Resources  | Duration |
|--|--|----------|
| Lecture discussing practical quality control considerations for mapping  | John Mosher, PhD   | 0.5 hour |
| Trainer-led, hands-on virtual guidance for data acquisition (trainer demonstrates, trainee practices) <ul style="list-style-type: none"> <li>• Prepare the MEG system</li> <li>• Prepare the patient</li> <li>• Record magnetic evoked fields</li> <li>• Considerations for median, tibial and ulnar nerve recordings</li> </ul>                         | MEGIN trainer<br>Nichole Knott<br>NM26082A-B Guidelines to MEG Data Acquisition        | 1.5 hour |
| Expert-led, hands-on virtual guidance for data processing and analysis (expert demonstrates, trainee practices) <ul style="list-style-type: none"> <li>• Prepare MRI and single sphere model</li> <li>• Pre-process raw data using MaxFilter</li> <li>• Prepare events for functional mapping</li> <li>• Source localization of evoked fields</li> </ul> | Elizabeth Heinrichs-Graham, PhD<br>NM25775A-B Guidelines to MEG Data Analysis Software | 1.5 hour |



## Workshop 3: Practical considerations and hands-on practice for performing quality visual mapping

|  | Resources  | Duration |
|--|--|----------|
| Lecture discussing practical quality control considerations for mapping  | John Mosher, PhD   | 0.5 hour |
| Trainer-led, hands-on virtual guidance for data acquisition (trainer demonstrates, trainee practices) <ul style="list-style-type: none"> <li>• Prepare the MEG system</li> <li>• Prepare the patient</li> <li>• Record magnetic evoked fields</li> <li>• Considerations for projector setup, screen setup, supine stimulation</li> </ul>                 | MEGIN trainer<br>Jeremy Gurumendi<br>NM26082A-B Guidelines to MEG Data Acquisition | 1.5 hour |
| Expert-led, hands-on virtual guidance for data processing and analysis (expert demonstrates, trainee practices) <ul style="list-style-type: none"> <li>• Prepare MRI and single sphere model</li> <li>• Pre-process raw data using MaxFilter</li> <li>• Prepare events for functional mapping</li> <li>• Source localization of evoked fields</li> </ul> | Paul Ferrari, PhD<br>NM25775A-B Guidelines to MEG Data Analysis Software           | 1.5 hour |

## Workshop 4: Practical considerations and hands-on practice for performing quality auditory mapping together with receptive language mapping (Papanicolaou protocol)

|   | Resources   | Duration |
|---|---|----------|
| Lecture discussing practical quality control considerations for mapping   | John Mosher, PhD  | 0.5 hour |
| Trainer-led, hands-on virtual guidance for data acquisition (trainer demonstrates, trainee practices) <ul style="list-style-type: none"> <li>• Prepare the MEG system</li> <li>• Prepare the patient</li> <li>• Record magnetic evoked fields</li> <li>• Considerations for adjusting stimulus volume and patient engagement with target words</li> </ul> | MEGIN trainer<br>Teri Williard<br>NM26082A-B Guidelines to MEG Data Acquisition | 1.5 hour |
| Expert-led, hands-on virtual guidance for data processing and analysis (expert demonstrates, trainee practices) <ul style="list-style-type: none"> <li>• Prepare MRI and single sphere model</li> <li>• Pre-process raw data using MaxFilter</li> <li>• Prepare events for functional mapping</li> <li>• Source localization of evoked fields</li> </ul>  | Roozbeh Rezaie, PhD<br>NM25775A-B Guidelines to MEG Data Analysis Software      | 1.5 hour |

## Workshop 5: Practical considerations and hands-on practice for performing quality motor mapping

|  | Resources   | Duration |
|--|---|----------|
| Lecture discussing practical quality control considerations for mapping  | John Mosher, PhD and Matti Hamalainen, PhD  | 0.5 hour |
| Trainer-led, hands-on virtual guidance for data acquisition (trainer demonstrates, trainee practices) <ul style="list-style-type: none"> <li>• Prepare the MEG system</li> <li>• Prepare the patient</li> <li>• Record magnetic evoked fields</li> <li>• Considerations for finger tapping, self-paced or stimulus driven</li> </ul>                     | MEGIN trainer<br>Nao Matsuda<br>Seppo Ahlfors, PhD<br>NM26082A-B Guidelines to MEG Data Acquisition | 1.5 hour |
| Expert-led, hands-on virtual guidance for data processing and analysis (expert demonstrates, trainee practices) <ul style="list-style-type: none"> <li>• Prepare MRI and single sphere model</li> <li>• Pre-process raw data using MaxFilter</li> <li>• Prepare events for functional mapping</li> <li>• Source localization of evoked fields</li> </ul> | Steven Stufflebeam, MD<br>NM25775A-B Guidelines to MEG Data Analysis Software                       | 1.5 hour |

# How to sign up for the WISE Technologist

We are pleased to announce attendees of all 5 workshops in the WISE Technologist series can earn 20 CEU credits from ASET.

Access to all 5 training workshops costs \$2,000 per site. If you are interested in registering users at your site for all 5 workshops in the WISE Technologist series, please email Elizabeth Bock at [elizabeth.bock@megin.fi](mailto:elizabeth.bock@megin.fi).

