

PROGRAM

Monday, March 16

SESSION 1: Welcome and Inaugural Lecture

- 5:30–6:00 P.M.** Arrival and Registration
- 6:00–6:15 P.M.** **Welcome Address**
Sam Lhatoo (UT Health Houston, USA)
- 6:15–7:00 P.M.** **Gran Turismo, Robots, and the Next 10 Years of AI**
Peter Stone (The University of Texas at Austin, USA)
- 7:00–9:00 P.M.** Refreshments

Tuesday, March 17

- 7:00–7:30 A.M.** Breakfast 

SESSION 2: Decoding and Encoding Brain Signals

Chairs: Sunil Sheth, Lara Jehi

- 7:30–7:50 A.M.** **BrainGate: Decoding Movement and Addressing Disability With AI**
Syd Cash (Harvard University, USA)
- 7:50–8:10 A.M.** **Decoding Psychiatric Symptoms Using Intracranial Recordings**
Kristin Sellers (University of California, San Francisco, USA)
- 8:10–8:30 A.M.** **Speech Decoding from the Human Hippocampus**
Sameer Sheth (Baylor College of Medicine, USA)
- 8:30–8:50 A.M.** **Minimally Invasive Wireless Stimulators to Treat Brain Network Disorders**
Steve Goetz (Motif Neurotech, USA)
- 8:50–9:10 A.M.** **TBA**
Jayme Strauss (Precision, USA)

9:10–9:20 A.M. Panel Discussion

9:20–9:30 A.M. Platform 1

9:30–9:40 A.M. Platform 2

**9:40 A.M.–
1:30 P.M.** Break ☕

SESSION 3: AI Approaches in Neurological Care

Chairs: GQ Zhang, Hongfang Liu

**1:30–1:50 P.M. AI Applications in Real-World Data for Comparative Effectiveness
Research in Epilepsy**
Lara Jehi (Cleveland Clinic, USA)

1:50–2:10 P.M. The Frontier Between AI and Quantum in Network Research
Shehryar Sheikh (Cleveland Clinic, USA)

2:10–2:30 P.M. Medical Digital Twins That Change Care
Hongfang Liu (UT Health, USA)

2:30–2:50 P.M. AI and Symbolic Medicine
GQ Zhang (UT Health, USA)

2:50–3:10 P.M. From Digital Phenotyping to Causal Inference in Neurology
Lidia Moura (Harvard University, USA)

3:10–3:20 P.M. Panel Discussion

3:20–3:30 P.M. Platform 1

3:30–3:40 P.M. Platform 2

3:40–4:00 P.M. Break ☕

SESSION 4: Advances in Genetic Diagnosis

Chairs: Dennis Lal, TBA

4:00–4:20 P.M. LLMs for Rare Epilepsies
Zohreh Talebizadeh (Global Genes, USA)

4:20–4:40 P.M. Variant Position to Phenotype Using AI
Eduardo Perez-Palma (University of Santiago, Chile)

4:40–5:00 P.M.	Long-Term Comorbidity Outcome Prediction in Genetic Epilepsies <i>Dennis Lal (UT Health, USA)</i>
5:00–5:20 P.M.	AI-Driven Discovery of qEEG Biomarkers in Genetic Epilepsies <i>Jillian McKee (The University of Pennsylvania)</i>
5:20–5:40 P.M.	TBA <i>Ingo Helbig (The University of Pennsylvania)</i>
5:40–5:50 P.M.	Panel Discussion
5:50–6:00 P.M.	Platform 1
6:00–6:10 P.M.	Platform 2

6:10 P.M.	Prize Announcements – Video Seizure Detection Challenge
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6:15 P.M.	Close
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Wednesday, March 18

7:00–7:30 A.M.	Breakfast 
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SESSION 5: Image and Video AI

Chairs: Christian Meisel, Shobi Sivathamboo

7:30–7:55 A.M.	AI-Driven Image Synthesis for Seizure Localization? <i>Kate Davis (University of Pennsylvania, USA)</i>
7:55–8:20 A.M.	Seizure Prognostication Using Neuroimaging AI <i>Zeke Gleichgerrcht (Emory University, USA)</i>
8:20–8:45 A.M.	Mobile Video Seizure Diagnosis – What's Next? <i>Christian Meisel (Charité –Universitätsmedizin Berlin, Germany)</i>
8:45–9:10 A.M.	Privacy Preserving Video Detection of Seizures <i>Shobi Sivathamboo (Monash University, Australia)</i>
9:10–9:20 A.M.	Panel Discussion
9:20–9:30 A.M.	Platform 1
9:30–9:40 A.M.	Platform 2
9:40 A.M. –12:30 P.M.	Break 

SESSION 6: Seizure Detection and Prediction

Chairs: Kate Davis, Ben Brinkmann

- 1:30–1:50 P.M.** **The AI of Seizure Timing: Prediction Using EEG**
Maxime Baud (The University of Bern, Switzerland)
- 1:50–2:10 P.M.** **Wearable Seizure Forecasting Using Non-EEG Signals**
Ben Brinkmann (Mayo Clinic, USA)
- 2:10–2:30 P.M.** **Digitally Enhanced Remote Monitoring in Epilepsy Ambulatory Care: Changing the Care Model**
Mark Richardson (King's College, UK)
- 2:30–2:50 P.M.** **Multi-Modal Approaches to Seizure Prediction**
Tobias Loddenkemper (Harvard University, USA)
- 2:50–3:10 P.M.** **Democratizing Seizure Detection Tools With AI**
Philippe Ryvlin (University of Lausanne, Switzerland)
- 3:10–3:20 P.M.** **Panel Discussion**
- 3:20–3:30 P.M.** **Platform 1**
- 3:30–3:40 P.M.** **Platform 2**
- 3:40–4:00 P.M.** Break ☕

SESSION 7: Sleep and Epilepsy

Chairs: Sandor Beniczky, Birgit Frauscher

- 4:00–4:25 P.M.** **AI in the Analysis of Long-Term EEGs**
Sandor Beniczky (Aarhus University, Denmark)
- 4:25–4:50 P.M.** **Sleep Cycles in Ultralong EEG**
Birgit Frauscher (Duke University, USA)
- 4:50–5:15 P.M.** **AI for Adaptive Closed-Loop Neuromodulation**
Sridevi Sarma (Johns Hopkins University, USA)
- 5:15–5:40 P.M.** **Digital Twins in Epilepsy Surgery**
Rachel Smith (University of Alabama, USA)

5:40–5:55 P.M. **Panel Discussion**

5:55–6:10 P.M. **Platform 1**

6:10–6:25 P.M. **Platform 2**

6:25 P.M. **Prize Announcements**

6:30 P.M. Close

Thursday, March 19

7:00–7:30 A.M. Breakfast 

SESSION 8: AI in Intracranial EEG

Chair: Samden Lhatoo

7:30–7:55 A.M. **The Brain Data Science Platform and Automated Clinical EEG Analysis**
Brandon Westover (Harvard University, USA)

7:55–8:20 A.M. **AI-Driven Imaging and Electrophysiology for Precision Neuromodulation**
Remi Patriat (University of Minnesota, USA)

8:20–8:45 A.M. **Automated Annotation of Intracranial EEG**
Brian Litt (University of Pennsylvania, USA)

8:45–9:10 A.M. **HFOs and Seizures: Dynamical Systems Analyses Using AI**
Bill Stacey (University of Michigan, USA)

9:10–9:20 A.M. **Panel Discussion**

9:20 - 9:30 A.M. **Platform 1**

9:30 - 9:40 A.M. **Platform 2**

9:40 A.M. Closing of Conference