

## Clinical Challenge:

Continuous, long term, automated HFO identification: the Michigan experience

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The University of Michigan (Ann Arbor, USA) has recorded 15 intracranial EEG over the last 2 years from adult and pediatric patients. All consented patients have their entire intracranial+scalp EEG simultaneously recorded from a clinical (1024 Hz) and a research (30 kHz) amplifier. All clinical and research data are saved from the entire visit. Scalp records are then sleep scored for the entire visit. A validated automated HFO detector, designed specifically for use on long term recordings, then detects HFOs on the entire 24/7 record. We are building this massive database to identify robust spatiotemporal relationships between HFOs and seizures.