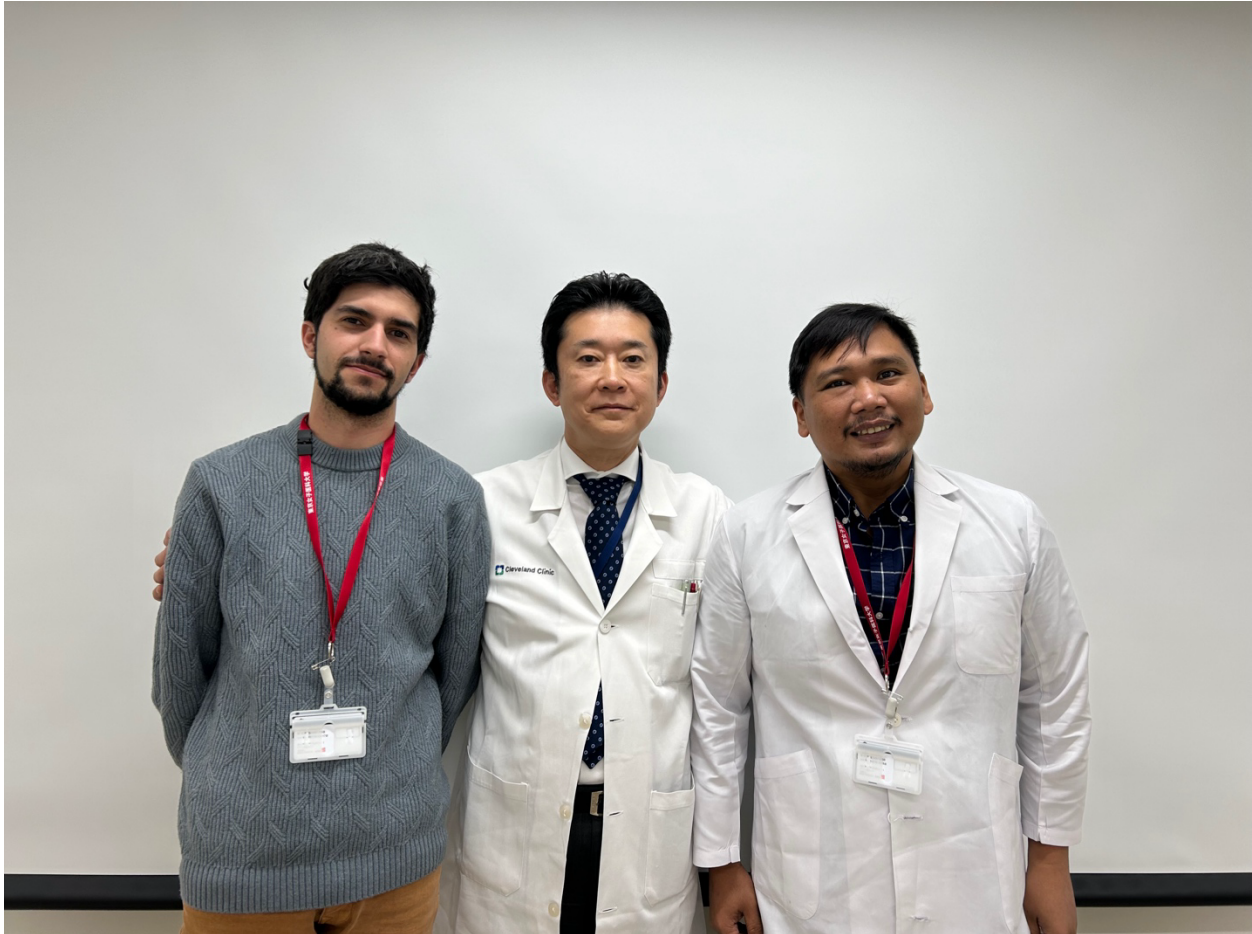


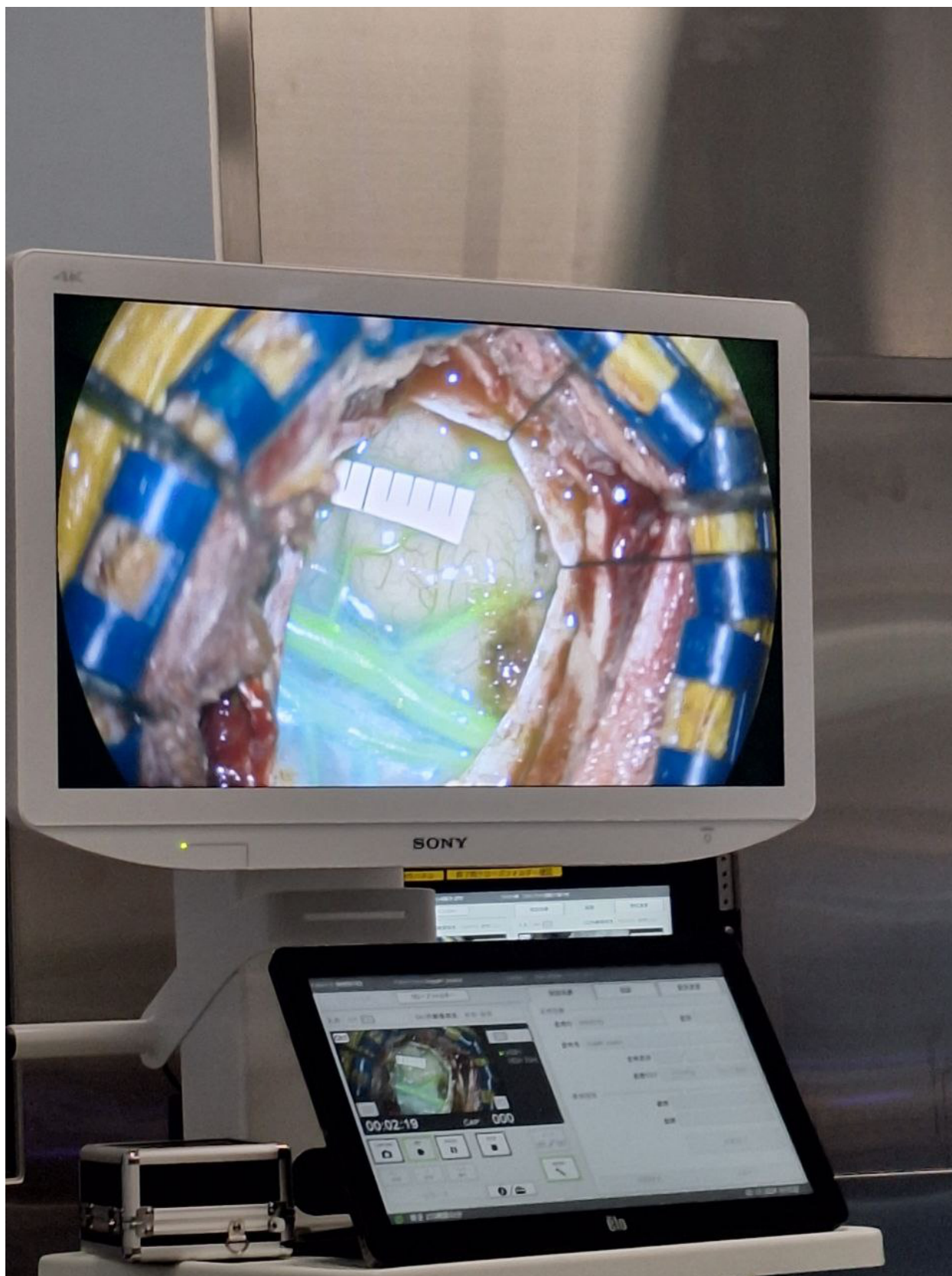
TWMU Adachi Medical Center: Exit Report

It is my second time to train in Japan, this time for advanced clinical training for intraoperative neuromonitoring here in Tokyo Women Medical University- Adachi Medical Center (AMC). I was welcomed and oriented by the Chief of the Department himself, Professor Yuichi Kubota, on my first day, and on the 3rd day, I was already in the operating room, observing and learning the things I needed to do in my 3 months training. During the first week, I was already exposed to several Intraoperative Neuromonitoring (IONM) techniques including auditory brainstem response (ABR), abnormal muscle response (AMR), somatosensory evoked potential (SEP) and motor evoked potential (MEP). During my second week, I am already attaching electrodes for these monitoring techniques.



Me and another fellow from France, Ilias, with Professor Kubota, during one of our Tuesday lunch conference on our second week of Fellowship.

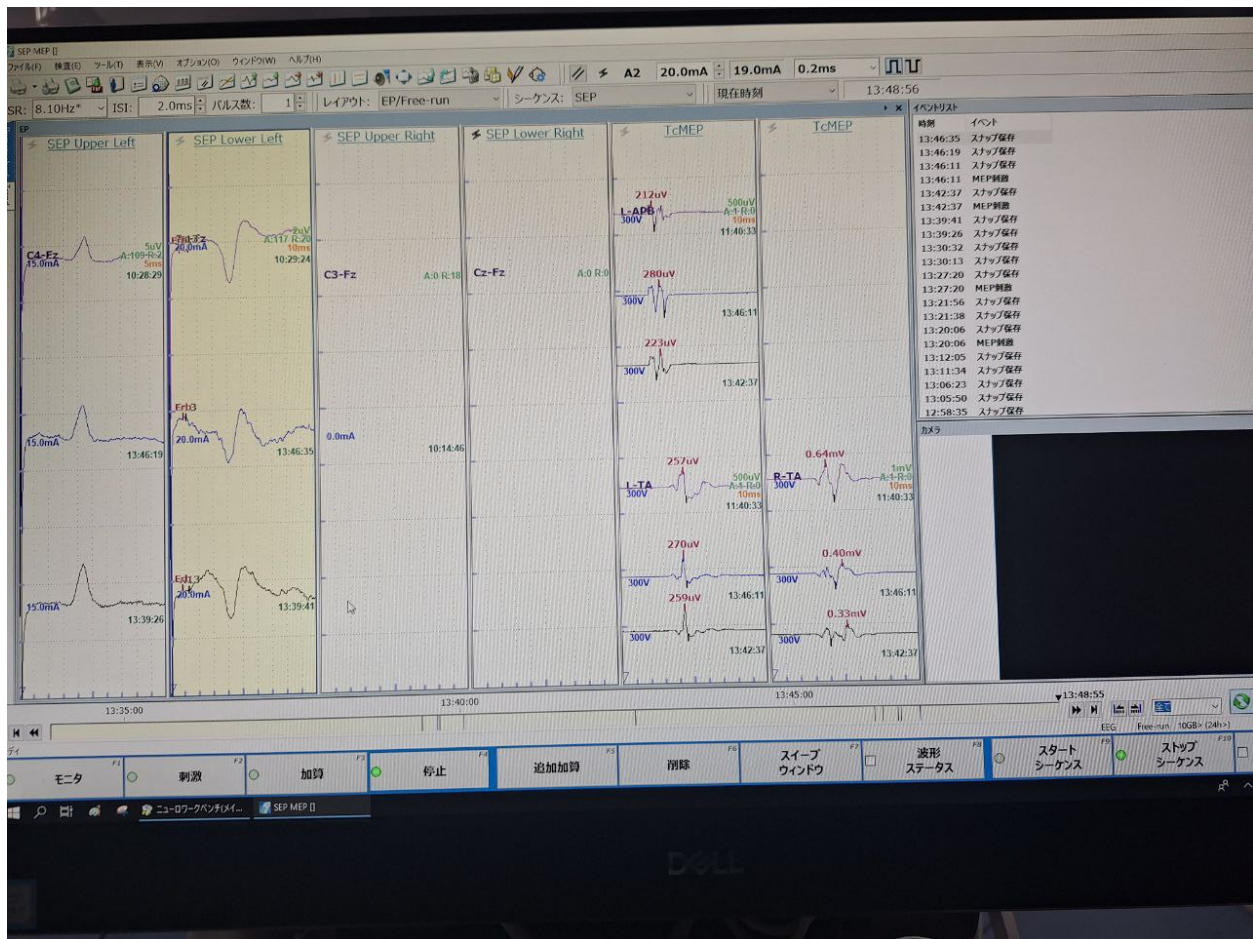
Within a month, I have seen already a lot of surgical cases. These include multiple microvascular decompression of the facial and trigeminal nerves, excision of brain tumor, clipping of aneurysms, spinal surgeries like scoliosis correction and laminectomies, and lobectomies among others. These require varying intraoperative monitoring techniques. Specifically for spine surgeries, Professor Yamamoto and Inazuka Sensei introduced me to transpharyngeal MEP monitoring which requires lower intensity than the usual Transcranial MEP for these kinds of surgeries. For frontal lobectomies, different work ups may be needed prior to operation, which include cortical EEG mapping and central sulcus phase reversal EEG techniques which Professor Kubota happily taught me.



Frontal lobectomy with electrocorticography, phase reversal SEP, SEP and MEP IONM monitoring.

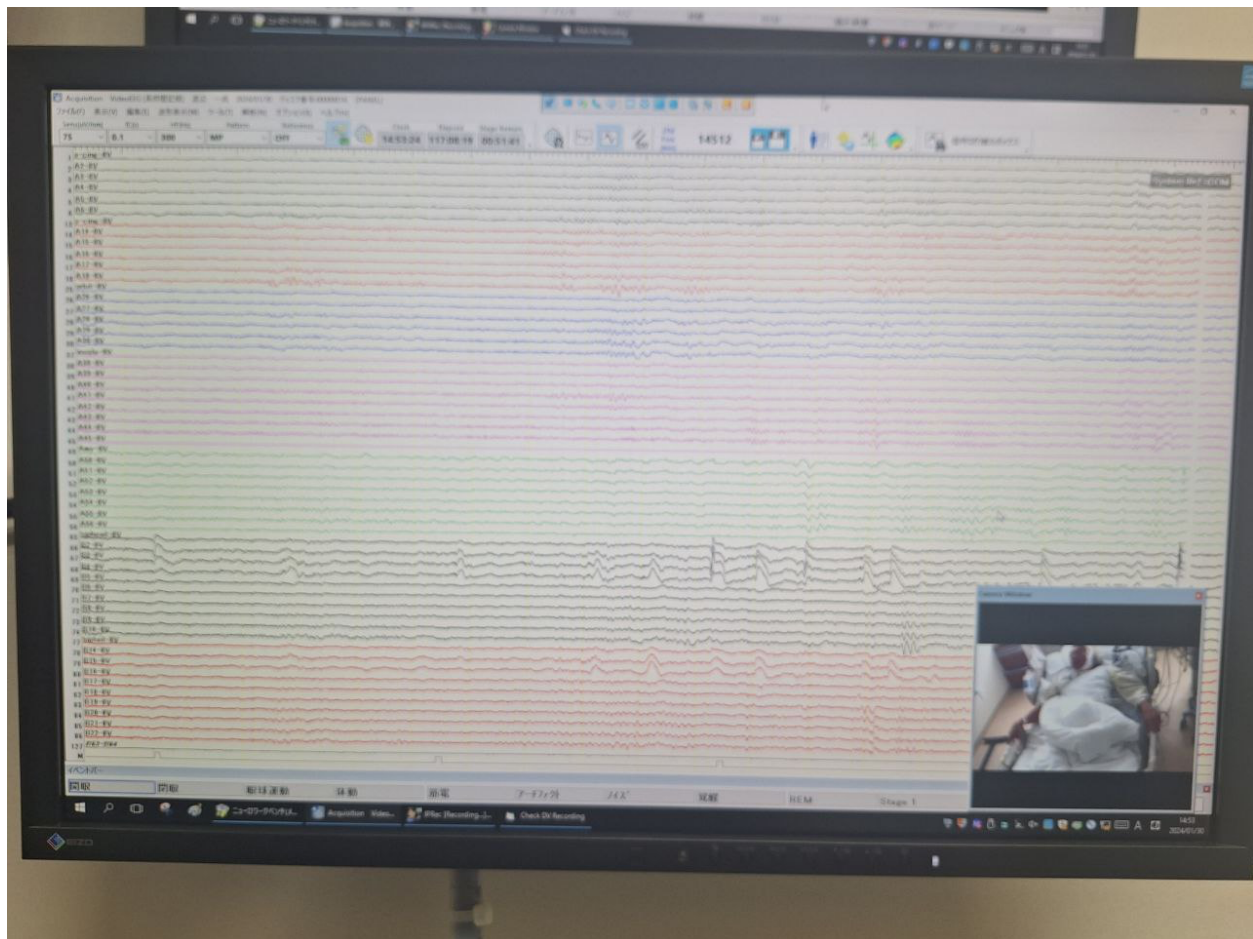


Brain specimen of one of our lobectomies.



Post surgical MEP and SEP of one of our brain resection procedures. Fortunately nothing significant happened during the procedure.

During the second month, aside from the cases above, I have also witnessed 2 anterior temporal lobectomies with amygdalohippocampectomy surgeries which required MEP and SEP monitoring. As AMC is an epilepsy center, I must relearn how to put the EEG electrodes and read long duration video EEGs with the guidance of Professor Kubota. The technicians and fellows also were more than willing to teach me those skills. I also witnessed how they perform stereotactic electroencephalography (SEEG) with direct cortical stimulation to localize irritative lesion prior to its resection. This was performed by Yokosoka Sensei. I was also taught the proper work up for these kinds of cases. Moreover, I have also witnessed 2 surgeries involving the seller area which required visual evoke potential (VEP) and electroretinogram monitoring techniques to check the visual function. Within my 2 months training, I have already completed the basic IONM skills I needed to learn and on the second half of my second month, I was already entrusted the sole role of monitoring neurosurgical cases.



One of our SEEG monitoring.

There are more to learn in AMC aside from IONM. The morning conferences required me to be adept in reading different imaging modalities for stroke, traumatic brain injury, tumor and epilepsy cases. Aside from cranial CT scan, the hospital readily offers advanced MRI, digital subtraction angiography, FDG PET among others. The morning rounds also exposed me on how Japanese doctors tend to their patient needs and the Journal Club every Tuesday updates us on the latest studies not only about Neurosurgery, but also Dementia, Stroke, IONM etc.

The hospital is a treasure trove for research data. During my stay, I have completed 3 papers with the following titles, all of which are currently under review:

1. Utility of Intraoperative Blink Reflex in Trigeminal or Facial Nerve monitoring in Skullbase Surgeries: A Systematic Review
2. Chronological Changes in Transcranial Motor Evoked Potential Amplitude during Anterior Temporal Lobectomy in Patients with Temporal Lobe Epilepsy: A Single Center Study
3. Switching Carbamazepine to Lacosamide improves gamma glutamyl transpeptidase levels

Currently, I am still finishing my 4th and 5th papers with the help of Professor Kubota and Imazato Sensei. If you are a fellow interested in research then AMC is the right hospital.

Language has always been one of the barriers to fully maximize learning when a foreigner goes to Japan. However, as my training requires skills, language barrier is only minimal. Moreover, Professors Kubota and Chernov communicate in English when necessary. For my morning commute, the hospital is readily accessible with only 2 train rides from my apartment. The apartment was pre-arranged by Professor Chernov, who also helped me prepare the requirements for this training, several months prior to the start date. Every morning I am always welcomed by Ms. Obara.

Overall, I have chosen the right mentor and hospital to guide me in my fellowship. Unfortunately, I am not a neurosurgeon so I wasn't able to maximize all the things the hospital can offer. Nevertheless, if given the chance to become a neurosurgeon, I would pursue endovascular surgery and epilepsy surgery as AMC has a lot of stroke cases and has the latest technology in managing epilepsy cases. Moreover, Professor Kubota is more than willing to teach everything he knows about his specialty.



Our welcome party with TWMU Adachi Medical Center Staff. ©

