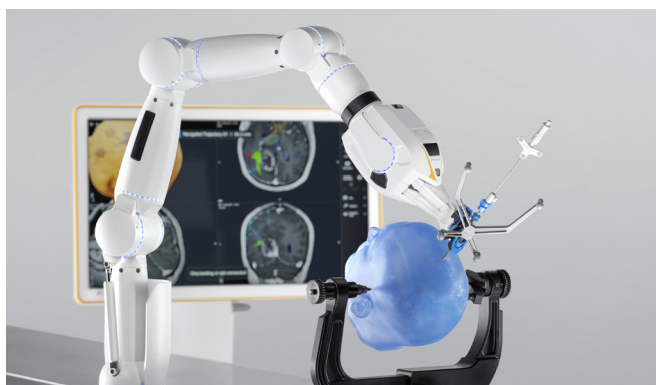


Portfolio

Cirq robotics for Cranial Procedures



Cirq is a slim and modular robotic platform designed to assist surgeons precisely when and where support is needed. The combination of advanced planning features, accurate registration options and real-time optical tracking facilitates precise stereotactic procedures. The robot assists the surgeon with the alignment and placement of SEEG electrodes and biopsy needles while removing the need to fixate the patient in a frame, thereby reducing patient discomfort.



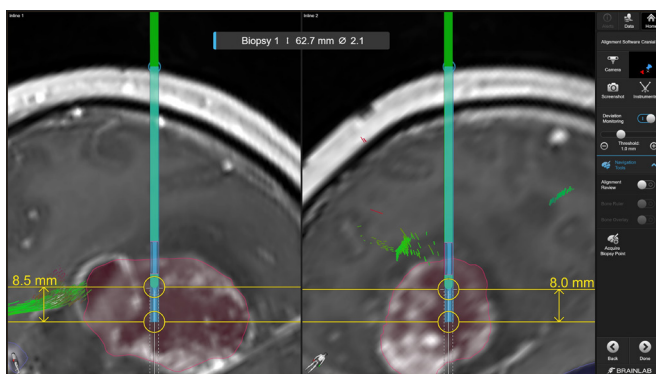
Cranial Biopsy

- Minimal invasive approach through small 3.4 mm drill diameter
- Surgeon is in full control through constant tracking of the Disposable Pre-calibrated Biopsy Needle
- Trajectories can be adapted intraoperatively
- Stable Biopsy Needle guidance with custom Alignment Bone Anchor
- Save the position of your biopsy with the click of a button

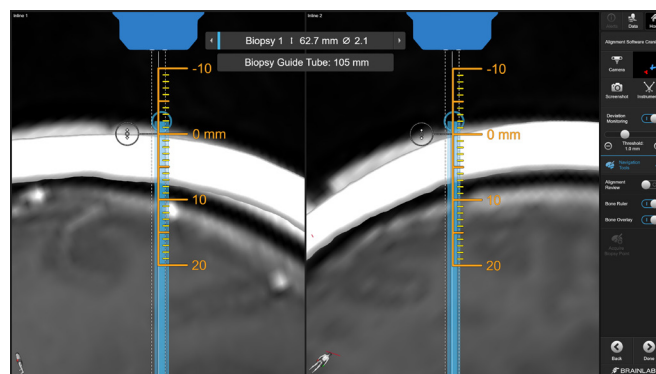


Stereotactic Electroencephalography (SEEG)

- Brainlab offers an integrated epilepsy workflow with solutions for hypothesis, planning, electrode placement and resection surgery.
- Real-time tracking of instruments with deviation monitoring to enable accurate bone anchor placement
- Navigation guided measurement of drill depth and distance of the bone anchor to the target point
- Minimize movement during the procedure with the SEEG Drill Kit which enables controlled drilling through the Alignment Guide Tube



Real time tracking of the Biopsy Needle allows for constant visualization of the cutting windows position to ensure full control of the sample collection. Acquiring the position of the sample can add valuable information for the histology or during the resection.



Setting the right depth for the drill stop is crucial to ensure safe drilling. Bone Overlay and Bone Ruler intuitively display the required information at the right time in the workflow.