Automating Multi-Probe Insertions to Improve the Efficiency and Reproducibility of Electrophysiology Experiments

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Ephys Copil allows scien presented b
Manua is Inac Manual reco on average. without user
<i>Ephys Copil</i> locations to <i>Ephys Link</i> to and drives no locations wite
histology AP displacement (µm)
- Int bio
How t Images den
Selecti 1. Pick a 2. Snap 3. Make region
Automa 1. Align a 2. Select





ys Copilot Automates Insertions

ilot removes the need for scientists to micromanage individual probes and allow for more abstract control over them. This ntists to focus on collecting high-quality data rather than setting up a recording. Ephys Copilot leverages the unified API access by Ephys Link to accomplish automation.



to Run a Multi-Probe Experiment

monstrate with 1 probe for clarity

ing a Target Insertion

region

- a virtual probe to the region
- fine adjustments to reach the target



Selecting a target insertion in Pinpoint

ating an Insertion

a probe connected to a manipulator to Bregma

the target insertion and let *Ephys Copilot* automatically drive to the target coordinate 3. Place the probe on the dura and drive through

4. Let *Ephys Copilot* automatically drive the probe down to the target depth at a controlled speed

Automate an insertion with Ephys Copilot

Live Probe Position Mirrored in Virtual Space

