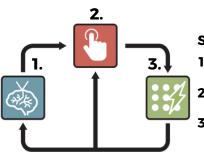
# **CLOSED-LOOP MEASUREMENTS**



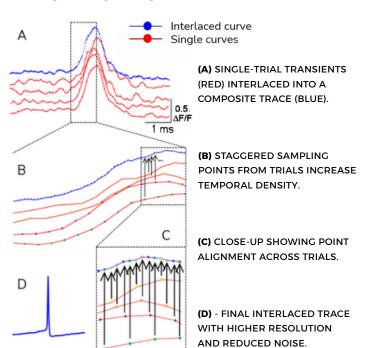
#### STEPS:

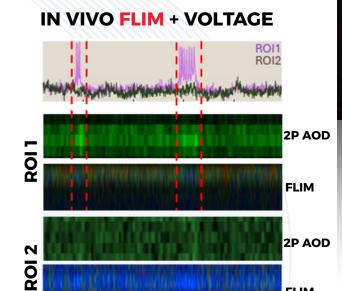
- 1. IMAGING START
- 2. CHANGE IS TRIGGERED
- 3. IMAGING CHANGES. THEN IMAGING CONTINUES

CLOSED-LOOP IMAGING CONCERNS CHANGING IMAGING SETTINGS DATA DURING THE MEASUREMENT, IT CAN BE A BUTTONPUSH, A BEHAVIOR CHANGE. OR ANYTHING IN BETWEEN, IT CAN EFFECT PHOTOSTIMULATION OR IMAGING PATTERN, CHANGING IMAGING REGION, OR ANYTHING YOU CAN IMAGINE

#### **SUB-INTERVAL TEMPORAL**

#### **MAGNIFICATION**





SIMULTANEOUS FLIM AND VOLTAGE MEASUREMENT IN VIVO. ROI 1 SHOWS SIGNALS WITH BOTH IMAGING TECHNIQUES SIMULTANEOUSLY, WHILE ROI2 STAYS SILENT TOGETHER.

FLIM



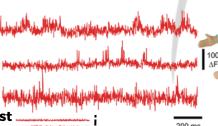


THINKING AHEAD

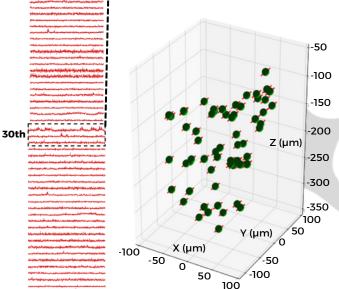
#### **3D VOLTAGE IMAGING**

#### **ADVANCEMENTS**

- SCANNING AT OVER 100 KHZ
- TEMPORAL SUPER RESOLUTION
- 3D REAL-TIME MOTION CORRECTION
- ADVANCED ROI SCANNING
- UNPARALLEL SNR
- SUBTHRESHOLD SIGNALS
- 6 DEGREES OF FREEDOM



200 ms

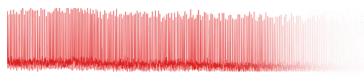


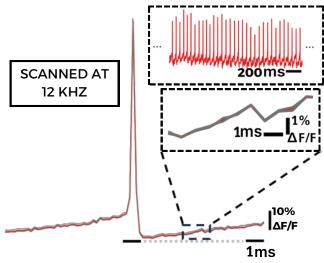
1.5 ∆F/F

200 ms

60th

#### **TEMPORAL SUPER RESOLUTION**





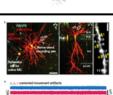
### **RECENT PUBLICATIONS**

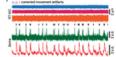
**MOCULUS: AN** IMMERSIVE VIRTUAL **REALITY SYSTEM FOR** MICE INCORPORATING STEREO VISION

JUDÁK, L., DOBOS, G., ÓCSAI, K. ET AL. NAT METHODS 22, 386-398 (2025).

**SYNAPTIC BASIS OF FEATURE SELECTIVITY IN HIPPOCAMPAL NEURONS** 

GONZALEZ, K.C., NEGREAN, A., LIAO, Z. ET AL. NATURE 637, 1152-1160 (2025).

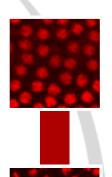




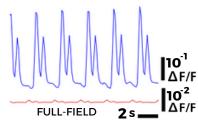


## **P&P TOUR HIGHLIGHTS**

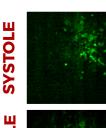
**MITOSIS** IN FRUITFLY



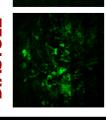
A HEARTSTOPPER PERFORMANCE!

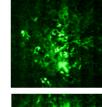


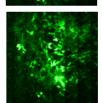
**FLUORESCENCE** 



STOL









**WITHOUT** 

**3D-RTMC** 

