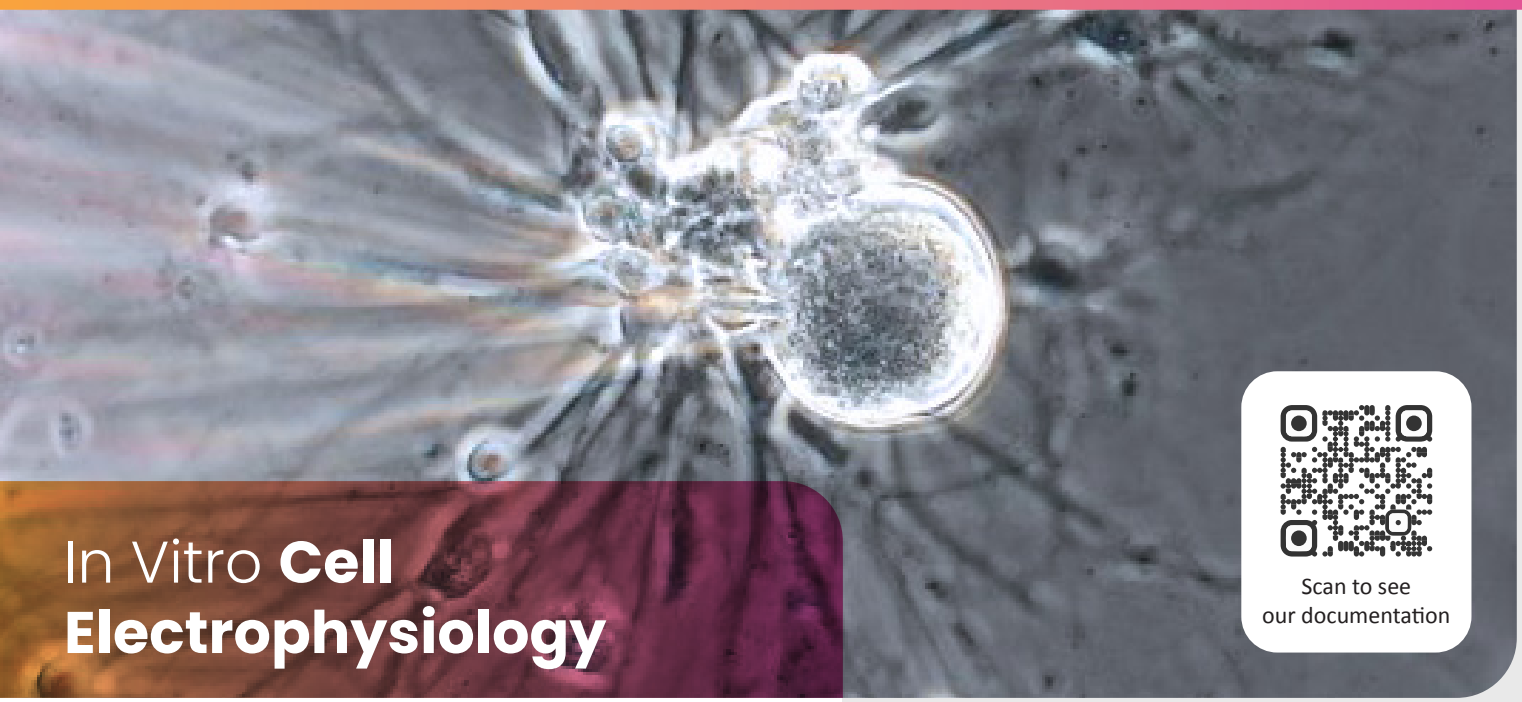
neuroservices ALLIANCE

THE **CNS ELECTROPHYSIOLOGY CRO**



In Vitro **Cell Electrophysiology**

Scan to see our documentation

Our Solutions

We provide assays tailored to your specific research needs, focused on electrophysiology and optophysiology recordings of neurons and DRG sensory neurons from various species as well as human iPSC-derived neurons.

- Characterization of cell lines
- Mechanism of action
- Target engagement
- Compound efficacy / potency

About us

Our Cell Electrophysiology lab opened up in the heart of the San Diego Biotech ecosystem in 2020.

Our local team benefits from 15+ years of Electrophysiology experience and has already performed more than 50 studies for various clients.

Contact us

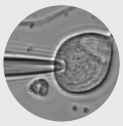
NsA - In Vitro Brain Slice Electrophysiology

Aix-en-Provence (FR) Bordeaux (FR)

San Diego (USA)

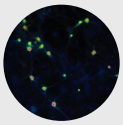
contact@neuroservices-alliance.com

Our Techniques



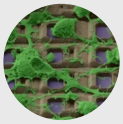
Patch Clamp

In vitro evaluation of compounds under the most physiologically relevant conditions.



Calcium Imaging

Real-time monitoring of neuronal networks activity, select areas of interest.



HD-MEA

Understand the global firing activity of neuronal culture.

Assays

Cloned channels and receptors
Stable cell lines & transfected cell lines

Primary neuron culture from rodent brain
Cortical and Hippocampal neurons

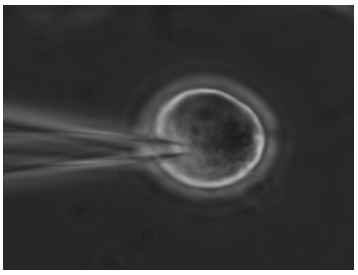
Primary neuron culture from DRG
Rodent, Dog, Non-Human Primate DRG sensory neurons

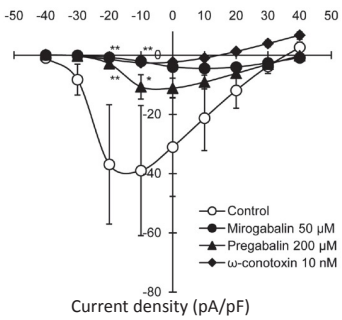
Human iPSC-derived neurons & sensory neurons
Patient, Mutated and Normal / Healthy iPSC neurons

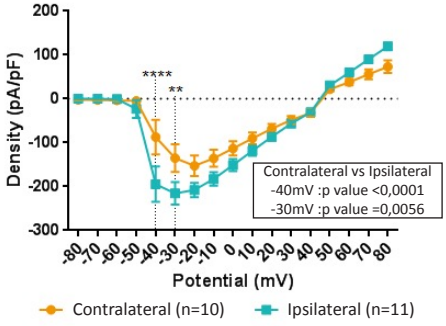
Sample **Data**

Patch Clamp

Ca^{2+} voltage-gated calcium channel recording in Rat DRG Sensory Neurons

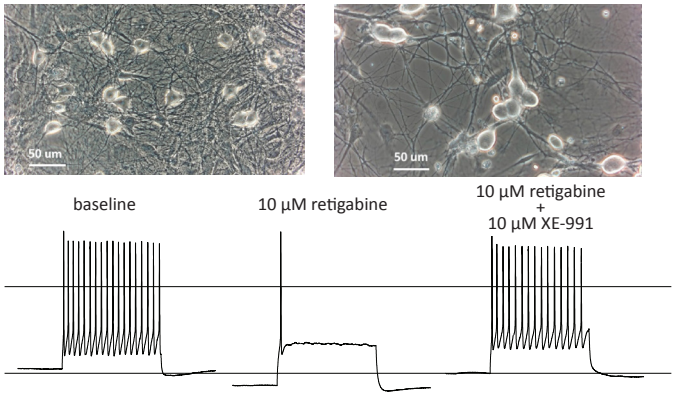




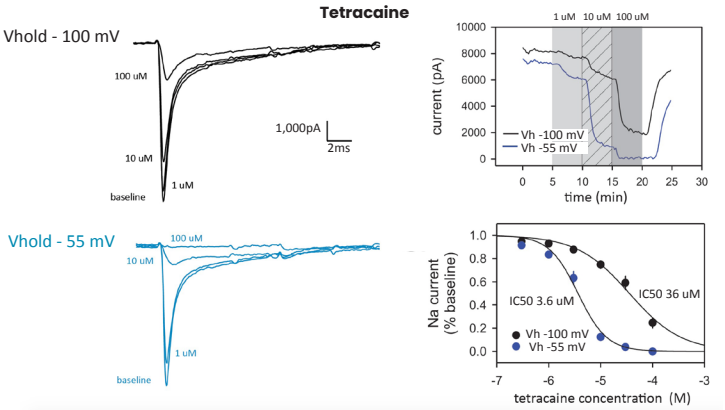


Human iPSC-Derived Neurons

Intrinsic excitability measurement



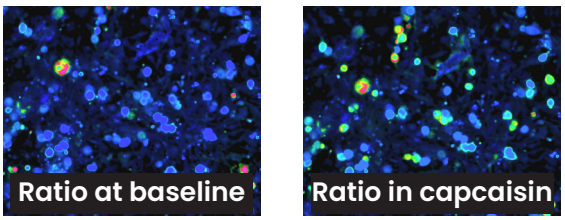
Na voltage-gated sodium channel recording

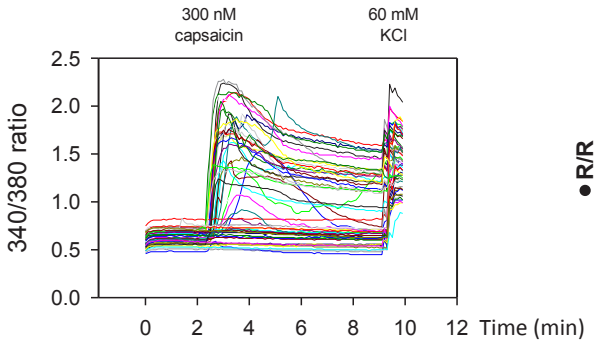


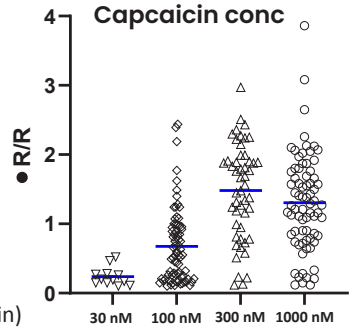
Calcium Imaging

Calcium signalling in rat DRG sensory neurons.

300 nM capsaicin (TrpV1 agonist) elicited calcium responses in ~50% of sensory neurons.







HD-MEA

Spontaneous network activity

Retigabine exhibited conc-dependent block of rat cortical neuron excitability.

With the partnership of maxwell BIOSYSTEMS