## Making Physiology Happen

Neurobiology Wired Lab Kit

iWorx offers complete solutions for the teaching of neurobiology, as well as advanced, high performance systems for research. The numerous "hands-on" experiments provide student involvement that enhances the overall learning experience.



Step-by-step instructions



45 labs and 100+ exercises



Adaptable to any lab manual



# **Neurobiology Kits Include:**

TA-ROAM Recorder with Amplifier, Built-in Pre-calibrated Sensors

- Isolated ECG/EMG/EEG iWire Module
- LabScribe<sup>TM</sup> Software
- Suction Electrode
- Patellar Reflex Hammer
- Intracellular Probe
- Goniometer
- Pulse, SPO2 and Temperature Sensor
- Grip Force Sensor
- Event Marker
- Muscle Twitch Sensor
- Lab Manual
- Force Transducer
- Nerve Bath Chamber

## **Neurobiology Measurements:**

- Membrane Potentials
- Action Potentials
- Muscle Contraction
- Frog ECG
- Mechano-Reflexes
- Nerve Conduction Velocity and more!

The NBK-TR Neurobiology Lab Kit includes everything you need to conduct a variety of lab experiments including: membrane potentials, action potentials, synapses, transmitters, and more.

#### Human Nerve:

- Auditory and Visual Reflexes
- Stretch Receptors and Reflexes
- Human Nerve Conduction Velocity
- Hand vs. Foot Reactions
- Hoffman Reflex using the Soleus Muscle
- Median Nerve Conduction Velocity
- The Six-Lead Electrocardiogram
- Motor Neuron Control
- Action Potential

#### Human Muscle:

- Grip Strength and Electromyogram (EMG) Activity
- EMG Activity in Antagonistic Muscles
- EMG and Arm Wrestling
- Oculomotor Muscle Activity
- Response, Work, Summation and Tetanus
  Contractions in Human Muscle
- Kinesiology Targeted Muscles
- Human Muscle Twitch

## Human PsychoPhysiology:

- Electroencephalography (EEG)
- Facial Expression Electromyograms
- Visual Evoked Potentials (VEP)
- Multisensory Reaction Times
- The Gaze Cue Paradigm
- Eriksen Flanker Test
- Posner Attention Test

### **Animal Nerve:**

- Membrane Potentials
- Neuromuscular Studies
- Compound Action Potentials
- Action Potentials in Earthworm
- Cockroach Leg Mechanoreceptors
- Cockroach Cercal Sense Organs
- Crustacean Stretch Receptors
- Crustacean Neuromuscular Junction
- Neuromuscular Junction in Crayfish
- Crayfish Motor Nerve

## Animal Muscle:

- Skeletal Muscle Summation and Tetanus
- Heart Muscle
- Crayfish Heart
- Crayfish Gut Pharmacology