Making Physiology Happen

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

Animal and Human Wired Lab Kit





Step-by-step instructions



71 labs and 100+ exercises



Adaptable to any lab manual Qu

Quick setup

Animal and Human Physiology Kits Include:

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

- Isolated ECG/EMG/EEG iWire Module
- LabScribe[™] Software
- Spirometer Flow Head
- Blood Pressure Cuff and Valve
- Pulse, SPO2 and Temperature Sensor
- Non-Invasive Blood Pressure Sensor
- Heart Sound Monitor
- Grip Force Sensor
- Event Marker
- Muscle Twitch Sensor, Force Transducer
- Dissection Kit
- Nerve Bath Chamber
- Dissolved Oxygen Sensor
- Courseware

Animal Physiology Measurements:

- Muscle Contraction
- Frog ECG
- Action Potentials
- Cellular Metabolism
- Mechano-reflexes and more...

Human Physiology Measurements:

- ECG/EMG
- Blood Pressure
- Spirometry
- Reflexes and more...

Animal and Human Physiology Courseware

iWorx courseware includes over 80 experiments and 250 exercises in cardiovascular, neuromuscular and spirometric physiology, as well as all of the components and professionally developed courseware you need to conduct the labs. Use pre-configured teaching kits or iWorx unique LabsByDesign approach to simply choose only the equipment you need for the labs you want to teach.

Human Circulation:

- Blood Pressure, Peripheral Circulation, and Body Position
- Blood Pressure, Peripheral Circulation, and Imposed conditions
- Pulse Wave Velocity

Human Heart:

- The Electrocardiogram (ECG) and the Pulse
- Heart Sounds and the Electrocardiogram (ECG)
- The Effects of Exercise on the

Electrocardiogram (ECG) and the Pulse

- The Six-Lead Electrocardiogram
- The Diving Reflex
- Heart Rate Variability (HRV)

Human Muscle:

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

Human Spirometry:

- Breathing Parameters at Rest and after
 Exercise
- Breathing and Gravity
- Factors that Affect Breathing Patterns
- Lung Volumes and Heart Rate

Human Nerve:

- Auditory and Visual Reflexes
- Stretch Receptors and Reflexes with Reflex Hammer
- Stretch Receptors and Reflexes with Plethysmograph
- Human to Human Interface

Animal:

- Skeletal Muscle Work, Summation and Tetanus
- Smooth Muscle Contraction
- Byssal Retractor Muscle
- Frog Electrocardiogram
- Crayfish Heart
- Membrane Potentials
- Compound Action Potentials
- Cockroach Leg Mechanoreceptors
- Cockroach Cercal Sense Organs