JoVE General

JoVE: General is our primary reference resource which includes techniques and protocols from biological, medical, chemical and physical research. Areas of techniques covered include, but are not limited to:

- Developmental Biology
- Molecular biology
- Bioinformatics
- Marine biology
- Environmental biology
- Veterinary medicine
- Non-pathogenic microbiology
- Plant Biology

JoVE Neuroscience

JoVE: Neuroscience includes techniques from a wide variety of fields, focusing on those intended to lend insight into the structure, function, physiology and pathophysiology of the central and peripheral nervous systems. Areas of techniques covered include, but are not limited to:

- Systems neurobiology
- Electrophysiology
- Development and neural plasticity
- Cellular and molecular neurobiology
- Animal behavioral testing
- Human and animal brain imaging
- Psychophysics
- Neurobiology of disease

JoVE Immunology and Infection

JoVE: Immunology and Infection (JoVE I2) includes video articles demonstrating seminal and novel techniques in the fields of immunology and infectious diseases. The scope of the section includes but is not limited to protocols that address the following topics:

- Basic biology of pathogenic bacteria, fungi, parasites, viruses, and infectious prions
- Biology and roles of vectors in microbe life cycles
- *in vitro* and *in vivo* modeling of pathogenesis
JoVE Clinical and Translational Medicine

JoVE: Medicine is a primary reference and educational resource for scientists and physicians. Articles typically document medical procedures, case reports, clinical trials and translational medicine with direct bedside application. Areas of techniques covered include:

- Animal models of diseases
- Surgical subspecialties
- Internal medicine
- Clinical trials
- Behavioral health
- Best medical practice
- Medical and nursing teaching resources

JoVE Bioengineering

JoVE: Bioengineering focuses on techniques in which the principles of engineering, mathematics and physics are applied to problems associated with the life sciences. This rapidly growing area of research includes but is not limited to:

- Advanced Instrumentation
- Cell and Tissue Engineering
- Computational Biology
- Synthetic Biology
- Bio-MEMS and Microfluidic Devices
- Nanotechnology
- Biomimetics and Biomaterials
JoVE Applied Physics

JoVE: Applied Physics focuses on the experimental disciplines within physics, as well as mechanical and electrical engineering. Interdisciplinary fields such as materials science and chemical physics are welcomed. Instrumentation is encouraged from all fields especially optics, photonics, and astronomy. The scope of the section includes but is not limited to:

- Atomic, molecular, and optical physics
- Condensed matter physics
- Solid state physics
- Plasma physics
- Fluid mechanics
- Mechanical engineering
- Electrical engineering
- Materials science and engineering

JoVE Chemistry

JoVE: Chemistry focuses on the methodology within chemistry and chemical preparation within multidisciplinary fields. The chemistry section welcomes articles about new methodologies and new twists on existing methodologies. The scope of this section includes but is not limited to:

- Organic chemistry
- Inorganic chemistry
- Physical chemistry
- Analytical chemistry
- Biochemistry
- Chemical biology
- Molecular biology
- Preparation, use, and analysis of novel materials and structures
- Spectroscopic techniques
- Molecular self-assembly and recognition
**JoVE Section Content**

### JoVE Behavior

JoVE Behavior (opening in June, 2013) includes both observational and experimental techniques that seek to understand human and animal behavior, implicated brain regions, related physiological changes, and underlying genetic causes.

The scope of section includes but is not limited to:

- Cognition (Attention, Decision Making, Reasoning)
- Sexual and Motivational Behaviors
- Social Behaviors
- Learning and Memory
- Sleep and biological rhythms
- Language Processing
- Addiction
- Emotion
- Control of Moeme
- Consciousness

### JoVE Environment

JoVE Environment (opening in September, 2013) is a multidisciplinary section devoted to the publication of research methods employed in environmental science and green technologies, from biofuels to oceanography to atmospheric sciences. Special consideration is given to experimental techniques and approaches aimed at understanding the Earth, protecting natural resources and creating a more sustainable and environmentally-conscious planet.

The scope of this section includes but is not limited to:

- Renewable energy and sustainable materials
- Environmental engineering
- Basic and applied ecology
- Ecotoxicology and ecological health
- Marine biology and oceanography
- Soil and agricultural sciences
- Forestry and botany
- Atmospheric science and climate modeling
- Geosciences