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Former name; Cell Membranes and Free Radical Research

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Alzheimer



Pain

Stress

Depression

Paralysis

Brain Research School

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AIM AND SCOPES

Journal of Cellular Neuroscience and Oxidative Stress is an online journal that publishes original research articles, reviews and short reviews on the molecular basis of biophysical, physiological and pharmacological processes that regulate cellular function, and the control or alteration of these processes by the action of receptors, neurotransmitters, second messengers, cation, anions, drugs or disease.

Areas of particular interest are four topics. They are;

A- Ion Channels (Na⁺- K⁺ Channels, Cl⁻ channels, Ca²⁺ channels, ADP-Ribose and metabolism of NAD⁺, Patch-Clamp applications)

B- Oxidative Stress (Antioxidant vitamins, antioxidant enzymes, metabolism of nitric oxide, oxidative stress, biophysics, biochemistry and physiology of free oxygen radicals)

C- Interaction Between Oxidative Stress and Ion Channels in Neuroscience

(Effects of the oxidative stress on the activation of the voltage sensitive cation channels, effect of ADP-Ribose and NAD⁺ on activation of the cation channels which are sensitive to voltage, effect of the oxidative stress on activation of the TRP channels in neurodegenerative diseases such Parkinson's and Alzheimer's diseases)

D- Gene and Oxidative Stress

(Gene abnormalities. Interaction between gene and free radicals. Gene anomalies and iron. Role of radiation and cancer on gene polymorphism)

READERSHIP

Biophysics	Biochemistry
Biology	Biomedical Engineering
Pharmacology	PhysiologyGenetics
Cardiology	Neurology
Oncology	Psychiatry
Neuroscience	Neuropharmacology

Keywords

Ion channels, cell biochemistry, biophysics, calcium signaling, cellular function, cellular physiology, metabolism, apoptosis, lipid peroxidation, nitric oxide, ageing, antioxidants, neuropathy, traumatic brain injury, pain, spinal cord injury, Alzheimer's Disease, Parkinson's Disease.

4th International Brain Research School

Abstract Book

of

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Isparta, Turkey

with collaboration of
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and Trade Limited Company
& Neuroscience Research Center,
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SPEAKERS

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Title Mouse models for retinal degeneration

Xinhua SHU

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Retina is a part of central nervous system. Retinal degeneration is characterized by the death of photoreceptor cells, causing partial vision loss or even blindness. Retinal degeneration includes inherited retinal degeneration such as retinitis pigmentosa (RP) and complex retinal degeneration such as diabetic retinopathy. In this talk, I will discuss the disease mechanisms and current treatment of inherited retinal degeneration. I will also discuss techniques for retinal degeneration in mouse models. I will demonstrate how to dissect mouse retina and retinal pigment epithelial (RPE) cells.

Keywords; Retinal degeneration; Diabetes; Retinal pigment epithelial; Mouse.