Porcine Models of Neurotrauma and Neurological Disorders

Guest Editors:

Dr. John O'Donnell
1. Center for Brain Injury and Repair, Department of Neurosurgery, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA
2. Center for Neurotrauma, Neurodegeneration and Restoration, Corporal Michael J. Crescenz Veterans Affairs Medical Center, Philadelphia, PA, USA

Dr. Dmitriy Petrov
Center for Brain Injury and Repair, Department of Neurosurgery, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA

Message from the Guest Editors

Translation from lab to clinic has a dismal record in the fields of neurotrauma and neurological disorders. This is due in part to the challenging heterogeneity of the clinical population common to all translational research, but it is also due to the unique challenges of recreating the mechanisms and manifestations of human neurological injury/disorders in small animals. Large IND/IDE enabling animal models are an essential component of successful pipelines for moving discoveries from bench to bedside in other fields, and neuroscience has made significant progress toward establishing such pipelines in its many unique subfields. Due to their size, neuroanatomy, and other factors, swine have proven to be ideal for providing high-fidelity, clinically relevant studies to bridge the gap between small animals and humans. Herein, we provide detailed descriptions of the sophisticated swine model systems that have been developed to empower translational research in neurotrauma and neurological disorders.

Special issue

Editor-in-Chief

Prof. Dr. Felipe Fregni
1. Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q1 (*Pharmacology & Pharmacy*) / CiteScore - Q2 (*Medicine (miscellaneous)*)

Contact Us