Special Issue

Contemporary Spinal Surgery: Surgical Optimization and Technological Innovation

Message from the Guest Editors

Spine surgery and neuroscience are continuously evolving fields; this has been evident especially in the last few years. This Special Issue aims to discuss research and insights from experts in the field to explore the latest trends, challenges and innovations in spine surgery and the field of neuroscience. We welcome original research articles and reviews that address, though are not limited to, the following topics: minimally invasive techniques and innovations in surgical approaches; neuroplasticity and regeneration after spinal cord injury; pain neuromodulation; disc regeneration; stem cell-based therapies for spinal cord injury; the use of robotic systems in spine surgery; regenerative medicine in spinal disorders; the surgical treatment of spinal vascular malformations and tumors; strategies for optimizing patient recovery and reducing hospital stays; telehealth in spine care; the potential of artificial intelligence in enhancing surgical decision-making and patient management; and the role of endoscopy in spine surgery.

Guest Editors

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You are invited to contribute a research article or a comprehensive review for consideration and publication in *Brain Sciences* (ISSN 2076-3425). *Brain Sciences* is an open access, peer-reviewed scientific journal that publishes original articles, critical reviews, research notes, and short communications on neuroscience. The scientific community and the general public can access the content free of charge as soon as it is published.

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