

# Beijing Declaration of International Association of Neurorestoratology

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On behalf of the International Association of Neurorestoratology

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With rapid development of basic and clinical advancement on neurorestoration, neurorestoratology has become a distinct medical discipline.

Wide neurological impairment due to neurodegeneration and neural injury is a major factor reducing human longevity and quality of life. Neurorestoratology seeks appropriate interventional strategies to solve this problem.

Neurorestoratology is the discipline that studies neurorestorative strategies and mechanisms of neural regeneration, repair and replacement of damaged components of the nervous system, neuroplasticity, neuroprotection, neuromodulation, vasculogenesis, and immune regulation. The goal of neurorestoratology is to restore, promote, and maintain the integrity of impaired or lost neuronal functions and structures.

The research of neurorestoratology covers causes and treatments of neurotrauma, neurodegeneration, cerebrovascular anoxia or ischemia, edema, demyelination, sensory and motor disorders, and neuropathic pain, as well as neural damage and dysfunction resulting from toxic, physical and chemical factors, immune, infectious, inflammatory, hereditary, congenital, developmental, and other causes of neural injury.

Neurorestorative interventions (including physical therapy and neurorehabilitation) include pharmaceutical or chemical therapies, modulation by electro-magnetic stimulation, cell therapy, biomaterials and bioengineering, restorative surgery, and combinations of the above. Cell therapies may become a key clinical therapeutic option for acute, subacute, and chronic central nervous system (CNS) diseases or damage.

Functional recovery is the objective of neurorestoratology, requiring close integration of neurorestorative and neurorehabilitative therapies, as well as the practice of clinical and preventive medicine to minimize complications of neural degeneration and damage.

Functional recovery is possible after CNS injury and neurodegeneration. Neurorestoratology recognizes the importance of small functional gains that have significant effects on the quality of life. This recognition has influenced and encouraged many clinicians and health care providers to adopt new approaches to treating patients with CNS damage and neurodegenerative diseases.

Neurorestoratology supports the highest standards for clinical trials to evaluate the safety and efficacy of its neurorestorative therapies, the establishment of validated outcome measures, and ethical treatment of patients.

The International Association of Neurorestoratology (IANR) develops guidelines for neurorestorative therapies, seeks and encourages translational medicine development of new therapies, promotes multicenter collaboration, and will contribute to the training of people in the field globally.

The International Association of Neurorestoratology is committed to educating and encouraging doctors, health care organizations, and governmental agencies to adopt rational and evidence-based policies to facilitate neurorestorative therapies for CNS injury and neurodegenerative diseases.

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## Disclosure

The authors report no conflicts of interest in this work.

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