

# New trends in neuroscience: the challenge of Functional Neurology

Dear Reader,

The rapid development of the neurosciences necessitates continuous updates over a wide range of disciplines, ultimately converging towards a general understanding of the central nervous system (CNS) – its working as well as its possible mechanisms of impairment and recovery.

Experimental and clinical research is making enormous progress and novel findings are published in specialized journals practically every day. However, it is often hard to connect these numerous investigations, mostly due to the intrinsic multi-level organization of the CNS and the corresponding variety of experimental approaches. We feel that it is urgent to develop an integrative viewpoint in order, as far as possible, to connect the different levels of investigation, from basic to applied research, from the laboratory to the clinic, and vice versa. With this in mind, *Functional Neurology* is changing its editorial board and is undergoing a comprehensive renewal. The new *Functional Neurology* will thus provide an ideal interdisciplinary platform for new developments in brain science, with special attention to frontier technology and translational research.

The new *Functional Neurology* will focus on *new trends in neuroscience*, rapidly publishing high-level peer-reviewed articles on topics ranging from basic to applied and clinical research. The mission of the journal is to facilitate the diffusion of new ideas, findings and methods over a range of scientific areas. It intends to promote advanced research on brain functions, and more generally on the CNS, highlighting in particular technological advances and translational studies. The journal will publish original research articles as well as comprehensive reviews, letters to the editors, commentaries and brief reports on case studies or group studies that can provide new insight into the mechanisms of CNS function, damage and repair. The journal will also publish special issues on selected topics, as well as guidelines and reports of relevant scientific meetings. These will cover various aspects of neurophysiology, neuroimaging, neuropathology and clinical neurology. For example, we have plans to publish issues on long-term synaptic plasticity and its implications for brain functioning and repair, on channelopathies and synaptopathies, on translational CNS drug development, and on brain imaging and stimulation. Broader issues in cognitive neuroscience, neuropsychology, neuroethics and the history of neuroscience relevant to the main targets of the journal will also be considered. *Functional Neurology* will thus provide a broad interdisciplinary platform for new developments in these disciplines.

In order to assure this interdisciplinary approach, the editorial board, led by *Egidio D'Angelo (Professor of Physiology, Pavia, Italy)*, *François Boller (Professor of Neurology, Bethesda, USA)*, *Enrico Mugnaini (Professor of Cell and Molecular Biology, Chicago, USA)*, and *Claudia Wheeler-Kingshott (Senior Lecturer in MR Physics, London, UK)*, is assisted by an advisory board of internationally recognized scientists and an enthusiastic group of equally renowned consulting editors, covering, with their respective areas of expertise, the broad range of knowledge required to accomplish the proposed renewal of the journal.

The new *Functional Neurology* will offer free open access. It utilizes an easy-to-use submission platform; it is connected to the main reference managers to allow quicker processing of papers, and submission procedures can be easily carried out online through the website. All articles will be available for immediate general access upon acceptance. The journal is currently a quarterly publication and our aim is to devote some issues to selected topics in the area of the neurosciences. As the need arises, the publishers will, in the near future, consider increasing the frequency of publication. All relevant information can be found on the website <http://www.functionalneurology.com>.

*Editor-in-Chief*

Egidio D'Angelo (Pavia, Italy)

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