

Editorial

Translational Brain Rhythmicity – Open Access

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It is my distinct honor and privilege to have followed the invitation to become Founding Editor and Editor-in-Chief (EIC) of *Translational Brain Rhythmicity (TBR)*, an online peer-reviewed open access journal. In my capacity as EIC and on behalf of our Editorial Board members I would like to forward a very warm welcome to you, the readership of our new journal.

I would like to take the opportunity to thank our prospective authors, the editors and the anonymous reviewers for their dedication to contribute to the success of *Translational Brain Rhythmicity*.

Neuroscience is an extraordinary, fascinating scientific field composed of numerous subdisciplines such as neuroanatomy, neurochemistry, neuroendocrinology, neuropathology, neurophysiology, neuropharmacology, neurogenetics, molecular neuroscience, cellular neuroscience, behavioral neuroscience, affective neuroscience, system neuroscience, cognitive neuroscience, clinical neuroscience, computational neuroscience, cultural neuroscience, developmental neuroscience, neuroimaging, neuroinformatics, neurolinguistics and many more. However, none of these sub-disciplines remain isolated. Indeed, they all share - to a specific extend - common aspects and are to be investigated considering their interdependence. *Translational Brain Rhythmicity* covers the functional integration of these subfields and their impact on brain rhythmicity.

Research within the last decades has gained tremendous insight into the mechanisms of proper brain function but also pathophysiological aberrations responsible for neurological and neuropsychiatric diseases. Many of these important findings are related to alterations in biochemical pathways, signal transduction cascades and ion channel dysfunction, e.g. channelopathies, suggesting that we already know a lot but clearly not all about the molecular and cellular background of neurological and neuropsychiatric diseases and epileptic disorders.

In drug research and development, most novel pharmacotherapeutic approaches and recent interventions are based on molecular and cellular findings in neurons and in many cases these novel approaches have failed to exhibit efficacy/effectiveness and positive benefit-risk ratio in patients following independent scientific assessment of clinical trials. A very prominent example for this development is Alzheimer's disease in which most Phase III clinical trials failed within the last 10-15 years although many candidates were novel, first-in-class drugs and highly promising due to basic and preclinical research results.

This observation clearly tells us that there is much more we have to learn and we are still lacking sufficient information about the higher structural and functional organization of the central nervous system.

It feels mandatory to us to overcome the gap between basic neuroscience and system neuroscience and to contribute to the overall understanding of how the brain and its subsystems actually work and interact. This journal is thus dedicated to help unravel the functional

interdependence between molecular and cellular neuronal processes and their impact on neuronal ensemble activity, i.e. the physiology and pathophysiology of neuronal circuitries and networks.

Importantly, studies presented in *Translational Brain Rhythmicity* are not restricted to the mammalian or human brain but can also include CNS rhythmicity studies on brains or nervous systems of other taxa as long as they contribute to the overall understanding of highly differentiated CNS structures, neural circuitry rhythmicity and oscillations. The journal is specifically dedicated to translation of molecular, cellular and systemic neural experimental approaches from animal models to human neurological and neuropsychiatric diseases.

Methodologically, the journal is not only limited to cellular and systemic electrophysiological in-vitro and in-vivo techniques, but also to molecular, genetic and behavioral approaches that affect neuronal activity on the cellular and thus also the circuitry and network level. We also welcome submission of clinical trial results of CNS drugs that affect or exhibit modulation of brain dysrhythmia.

As a prominent forum of scientific exchange, *Translational Brain Rhythmicity* encourages submission of different manuscripts formats, e.g. full length original articles, short research letters, review articles, methodological manuscripts, case reports, clinical trial outcome reports, best-practice guides, commentaries, controversies, congress reports, and letters to the editor.

The Editorial Board of *Translational Brain Rhythmicity* ensures application of highest scientific standards confirming to the strict international peer-reviewing processes and editorial standards of the scientific community and *Translational Brain Rhythmicity* is in line with current COPE regulations.

Translational Brain Rhythmicity is published six times a year. In order to spread scientific information fast, the reviewing process is aimed to last no longer than 2 months. In order to disseminate outstanding manuscripts and their findings rapidly, a fast-track reviewing system is installed that guarantees online publication within two weeks. This approach enables *Translational Brain Rhythmicity* to timely react on fast, new developments in the field.

If you would like to push a specific topic in *Translational Brain Rhythmicity* we strongly encourage you to submit proposals for special issues in which you can serve as a guest editor. Besides, the editorial board of *Translational Brain Rhythmicity* will periodically announce calls for special issues on current hot topics.

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Finally, I strongly encourage you to submit your valuable research to *Translational Brain Rhythmicity* via editor.tbr@oatext.com. We hope that you will find *Translational Brain Rhythmicity* a useful and informative outlet for your research and a valuable source of information, evidence and critical debate.

If you have further questions please forward them to editor.tbr@oatext.com.

We hope to hear from you soon and highly appreciate your feedback.

Best wishes and take care,

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