New Initiatives

The venerable 19th century mansions that grace the streets of many of our cities require periodic updating so that they retain their essential character and charm but also function optimally in today’s world. In the same spirit, we will be introducing some new features to the *Journal of Neurophysiology*. We do not intend to change the essential character of the Journal, but rather see these new initiatives as “updating” the Journal so that it better meets the needs of our authors and readers in the coming years. Nonetheless, peer-reviewed papers that describe the results of original research in neurophysiology will always provide the structural integrity of the *Journal of Neurophysiology*.

Innovative Methodologies

Research in neurophysiology depends on the development of new methods of data collection, analysis and interpretation. Because of the importance of method development for our field, we are instituting a new category of paper, called “Innovative Methodology”. These papers are intended to describe in a full and complete manner the new method and to demonstrate that it can be used in the collection and analysis of neurophysiological data. The new methods described must be more than an incremental change in existing technique, must be described adequately for the implementation of the method in other laboratories, and must describe the limitations and advantages of the new method.

Translational Physiology

During the past decade we have witnessed numerous examples of findings in basic research that have led to significant insight into important clinical disorders. For example, basic research on the structure and function of ion channels was critical to the understanding that many human neurological diseases are channelopathies. While the core mission of the *Journal of Neurophysiology* remains the publication of the results of basic research on all kinds of neurophysiological problems and preparations, in keeping with the rest of the journals published by the American Physiological Society, the *Journal of Neurophysiology* will also feature papers with direct clinical implications. These papers will be published under the heading Translational Physiology, and are intended to facilitate the information transfer from basic neurophysiological investigations to clinical applications. The impetus for this kind of paper is described in the editorial that follows by John Hall, Past President of the APS, and reflects the exciting time in which we find ourselves. Today, more than ever, it remains the case that unexpected connections between fundamental principles discovered through basic science will inform the search for new therapies for the treatment of mental illness and neurological disorders. Our publication of papers in Translational Physiology highlights the significance of basic research in neurophysiology for understanding the processes that can and do go awry in the devastating disorders of the human nervous system.

Eve Marder, Chief Editor
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