

# Editorial

“Of what use a newborn babe?” was Oersted’s response to a question from the audience as to the value of electromagnetism following his demonstration that a compass needle could be deflected by passing current through a nearby wire. Such is the immediate reaction anytime something new is encountered: What is it, and why do we need it? This perplexity arises from the certain conclusion of a proof derived from the objective facts: we seem to have managed quite well up to now without it. But as functional as a world before cell phones and email seemed, how dysfunctional would the world now appear without them? Time changes, and Science is change. Scientific journals track and pioneer those changes.

What is this new journal that you now hold in your hands? Simply put, it is founded upon the anatomical fact that the brain is an organ, not a tissue. Despite this obvious fact, glial science and neuronal science have existed largely independently. This new journal derives from the view that these traditional divisions are conceptual, rather than biological barriers, and it seeks to break down these barriers and achieve a synthesis that will bring with it a better understanding of nervous system function. From the level of cell–cell communication, a perspective is gained to visualize the system and begin to resolve behavior of the organism, or to look inward from the cell membrane and follow the molecular pathways leading deep into the nucleus to control the transcription of genes.

Why do we need another journal? The two powerful forces that impel any new journal are at work here: (1) This is a new and expanding field of science, which is developing from the interface between two areas of research that have operated separately in the past. (2) The current outlets for scientific

publication in this field are not adequately meeting this need. Certainly research on neuron–glial interactions can be found in either neuron or glia journals, but they must be mined by sifting through pages of other important results that comprise the bulk of mature journals in either field. Moreover, scientists in the two fields are not communicating with each other. If this new scientific discipline is to grow and flourish, it requires a forum that is receptive to this new science, equipped to understand and evaluate it, and to disseminate it efficiently to the scientific community.

This journal, *Neuron Glia Biology*, welcomes the best research in cell–cell interactions in the brain and peripheral nervous system. The focus is on neuron–glial interactions, but it encompasses cell–cell interactions more broadly, including communication among glia, and neurons, and, for instance neuro-immune or neurovascular interactions. This level of nervous system function has been difficult to investigate – impossible to capture in a test tube, and until recently nearly impenetrable from the organismal level. There is little question, however, that interactions at the intercellular level are critical in understanding brain development, function, and disease, and that new methods are developing to access the nervous system on this scale. The neuroscientists on the distinguished Board of Editors of this new journal have united in the hope that as new information, understanding, and techniques develop, *Neuron Glia Biology* will serve to both track and pioneer scientific progress into the future.

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