



Preface to the Special Issue entitled “The Future of Translational Epilepsy Research”

Epilepsy research is at a crossroads at the present time. There is increasing pressure on investigators to make new advances that will have a high impact on the field – with less time and resources. However, challenges also are present because of the unparalleled depth of the existing literature and new technical capabilities. Although there often is a sense that demands are more intense in one part of epilepsy research than another, in fact, pressures exist on all: clinical scientists and basic scientists alike. Both senior investigators and junior investigators feel ‘squeezed,’ making it hard for senior individuals to train and support the next generation of researchers in epilepsy.

In this environment, how does one set aside the difficulties and focus on the greater goal of developing better diagnostics and treatments for epilepsy? How can one ‘think outside the box’ to develop entirely new ideas and ‘cures’?

One way is to highlight the work of promising young investigators for the broader community as early as possible, providing opportunities for them to communicate their research findings in published form, and become better known. These are substantial hurdles, and critical skill for their long-term success. Written communication is not only important to disseminate research findings, but it is also important for grant proposals. It is especially demanding for those individuals for whom English is not the first language – many of the individuals who are junior epilepsy researchers today. In that spirit, the idea for this Special Issue was born.

The idea originated in a highly successful Special Issue of *Epilepsy & Behavior* entitled “The Future of Clinical Epilepsy Research”, which was published in 2011 under the superb guidance of Guest Editor Bruce Hermann. In that issue, senior investigators who were members of the Editorial Board of *Epilepsy & Behavior* were asked to work with young investigators. The junior scientists were chosen by the Editorial Board members because of their exceptional potential to make advances in clinical epilepsy research – i.e., the young scientists were ‘rising stars.’ The senior authors then worked with the junior investigators to describe the research already conducted by the junior author and place it in the context of the current clinical epilepsy research environment.

The success of that Special Issue led to the idea of a second Special Issue that would include basic research in epilepsy. This second Special Issue sought a more ‘bench-to-bedside’ or ‘translational’ approach where young investigators representing every area of epilepsy

research could participate. Although the word ‘translation’ has been used in many ways, here it is used with the intent to be inclusive, allowing the spectrum of epilepsy research to be included. In addition, each author has been asked how their research area could address the goal of prevention and cure of the epilepsies. What, in their view, is the most important advance that would break down an existing research impasse in their subspecialty? In turn, this exercise could encourage all investigators – both junior and senior – to think what we, as a collective epilepsy research community, need to do to make the most significant advances in patient care in the future.

These goals presented challenges to authors – and also an editorial challenge. How should one organize the different areas of epilepsy research in such an issue – is there a better way than the typical organization, where basic and clinical research is divided, and within each division, there is further separation of surgery, pharmacology, pediatrics, and imaging (to name only a few examples)? This type of separation may be necessary to organize articles into a manageable and well-accepted framework, but is it ideal if we intend to encourage translation? In a way, dividing basic and clinical research articles perpetuates a trend against translation, where basic researchers tend to read and think about their own research and, likewise, clinical researchers isolate clinical studies from basic science.

In an attempt to change this trend, we have placed articles where the authors who are “basic” in orientation are adjacent to articles that are complementary. In the end, we hope that this Special Issue is one small step forward for the young investigators – and one large step forward for translational research in epilepsy.

Helen E. Scharfman

The Nathan Kline Institute for Psychiatric Research, USA

New York University Langone Medical Center, USA

The Nathan Kline Institute for Psychiatric Research,

140 Old Orangeburg Rd., Bldg 35, Orangeburg, NY 10962, USA.

Fax: +1 845 398 5422.

E-mail addresses: hscharfman@nki.rfmh.org,

helen.scharfman@nyumc.org.

URL: <http://www.scharfmanlab.com>.