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Foreword

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It is an exciting time to be a pediatric epileptologist. In addition to the growing number of antiepileptic drugs, an array of new imaging techniques, and several devices that are now available to help improve seizure control, there also is a rapidly growing list of genetic mutations that are reported to contribute to epilepsy. The clinical care of children and neonates with epilepsy benefits from clinicians who are adept at using genetic testing. It allows us to answer the parent's omnipresent question "Why does my child have epilepsy?" In addition, a genetic diagnosis may currently or in the future improve our ability to identify the best anti-epileptic drugs for a patient, no longer having to take a trial and error approach. While still only a dream, hopefully soon, we will have tailored gene therapy approaches for the more devastating forms of epilepsy.

The increase in the number of genetic epilepsy diagnosis has also created several challenges for those of us in practice. As much of clinical epilepsy diagnosis is based on symptom pattern recognition it requires epileptologist to continually increase the numbers of patterns that they can recognize. The papers on *MEF2C, PCDH19, CDKL5, KCNQ2* and copy number variants will help expand our ability to recognize patterns and successfully diagnose more patients. In order for a diagnosis to be made we must also be able to order the appropriate test and then interpret the results. These challenges are greatest for those of us who trained prior to the era of genetic medicine, due to our lack of knowledge about nomenclature and the burgeoning technology available for genetic testing. Once the diagnosis is made it is important to convey this information to not only the parents but also sometimes to the extended family. The family will need to understand the implications for the index case as well as future pregnancies. The paper by Sheidley and Poduri on genetic testing and counseling will help with conveyance of this necessary information.

It is my hope that the articles in this special issue will help improve all aspects of epilepsy care from diagnosis, therapy and genetic counseling. Epilepsy is frequently a genetic disorder and clinicians have to keep up with field of epilepsy genetics to provide quality care.

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