New Insights into Genetic Neurological Diseases

Message from the Guest Editors

Dear Colleagues,

Significant advances in next-generation nucleic acid sequencing systems have revealed the causes of many neurological disorders and their syndromes due to previously unexpected mutations in protein-encoding genes and non-coding RNAs. In addition, it has been determined familial mutations and fragility mutations in prominent neurological diseases such as Alzheimer’s disease and Parkinson’s disease, as well as tumors derived from ectoderm, cause these diseases or increase the possibility of developing pathological conditions. Therefore, in this Special Issue, research on the gene mutations and fragility mutations related to the causes of new human neurological diseases, how these gene mutations lead to diseases, or new therapeutic methods for neurological diseases caused by existing mutations will be focused on in vitro studies and reviews using cell lines and disease-derived cells, and in vivo studies and reviews that clarify using experimental animals such as flies, zebrafish, and mice. However, not limited to the scope of these studies, we would like to cover a wide range of research on hereditary mutations.