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Brain Channelopathies: From Molecular Mechanisms to Therapeutic Approach

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Deadline for manuscript submissions: closed (15 March 2023)

Message from the Guest Editor

Dear Colleagues,

Brain channelopathies are a primary cause of numerous brain disorders, including epilepsy, pain, headache, ataxia, and tinnitus, among others. In most cases, the cause genetic or autoimmune loss of function of voltage-gated or ligand-gated ion channels whose function cannot be compensated

for by other channels sharing a similar function. For instance, loss of potassium channel function was found to be at the origin of temporal lobe epilepsy as well as headaches. Ion channels interact

with regulatory proteins, the absence of which can directly lead to the loss of ion channel function.

In this Special Issue, we expect to shed new light on key cellular and molecular pathways involved in brain channelopathies. We are anticipating contributions from cellular neurophysiologists as well as cellular neurobiologists.

The current Special Issue will accept original studies and state-of-art reviews in the field of brain channelopathies, written by scientists active in the field.

For further information, please visit Special Issue website.









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