



Brain Hypoxia: Mechanisms of Resilience and Tolerance

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Message from the Guest Editor

Dear Colleagues,

A significant number of common diseases, including neurological and neuropsychiatric ones, occur as a result of the damaging effect on the brain of various adverse factors, among which the leading role is assigned to hypoxia—a condition of insufficient oxygen. Resistance to hypoxia can be increased through the application of various techniques and medications leading to hypoxic tolerance of the brain. Uncovering the molecular mechanisms of underlying processes will allow us to accumulate the information necessary for the development of new successful preventive and therapeutic approaches.

This Special Issue will accept articles on the molecular basis of neuronal reactions to hypoxia or ischemia, the contribution of neuron–glial interactions, neuroprotective or pro-degenerative roles of hypoxia-inducible factors, in particular HIF-1, and the mechanisms of pre- and postconditioning impacts. A puzzle of the complex interaction between multiple molecular pathways will be the focus of this Special issue to identify perspective targets for protective pharmacological interventions.

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Guest Editor



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