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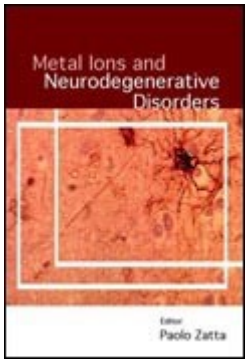

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Metal Ions and Neurodegenerative Disorders

Edited by: **Paolo Zatta** (*Director of the "Metalloproteins" Section of CNR-Institute for Biochemical Technologies, University of Padova, Italy*)

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Iron and Neurodegeneration

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Iron and Neurodegeneration

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Iron-related pathology is present in many neurodegenerative diseases, and the effects of iron mismanagement can serve as either primary or secondary causes of neurodegeneration. There are many mechanisms by which iron mismanagement can precipitate neurodegeneration, including misregulation of iron import and export, iron deficiency or accumulation, and oxidative damage resulting from loss of iron homeostasis. While the crucial role of iron in neurodegeneration is, in general, beginning to be appreciated, the mechanisms by which loss of iron homeostasis in the brain occurs are still unclear and questions regarding opportunities for therapeutic intervention involving iron chelation remain unanswered.

Keywords: Iron transport; brain iron accumulation; neurodegeneration; oxidative stress