



CDB SEMINAR

Pierre Vanderhaeghen

Institute of Interdisciplinary Research (IRIBHM),
University of Brussels

Tuesday, April 15, 2008

16:00~17:00 C1F CDB Auditorium

From Stem Cells to Neuronal Networks, from Mouse to Man: Genetic Mechanisms of Development and Evolution of the Cerebral Cortex

Summary

The cerebral cortex is the most complex structure in our brain, with dozens of different neuronal subtypes characterized by specific patterns of gene expression, morphology, and connectivity. The genetic mechanisms of development and evolution of the cerebral cortex have major implications for our understanding of several neurological and neuropsychiatric diseases. Here we will present recent work from the lab on the intrinsic mechanisms of cortical neuron specification, and the development of a novel system of in vitro corticogenesis from embryonic stem cells. We will also present ongoing studies on the developmental mechanisms that may underly the emergence of human-specific features in the cerebral cortex during evolution, through the identification of specific gene expression programmes in the human embryonic brain.

Host:

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