



東北大学脳科学 GCOE セミナーのお知らせ

日時 2008 年 3 月 21 日 (金) 13:00～14:30

会場 星陵キャンパス・5 号館2階 201 セミナー室

演者 Andrew Allen Pieper 博士

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演題 Neuronal PAS Domain Protein 3 and Hippocampal Neurogenesis in Schizophrenia

Schizophrenia is a devastating mental illness with inadequate treatment options that afflicts 1% -2% of people worldwide and typically follows a lifelong debilitating course with high morbidity and mortality. Neuronal PAS Domain Protein 3 (NPAS3), a brain specific transcription factor that controls postnatal hippocampal neurogenesis, is disrupted in some patients with schizophrenia. Abnormal hippocampal functioning is a core component of schizophrenia that may be related to faulty postnatal hippocampal neurogenesis and the development of cognitive symptoms in patients. These symptoms comprise some of the most severe and difficult to treat aspects of schizophrenia, and we are conducting an in vivo screen to discover small, drug-like molecules with hippocampal neurogenic efficacy. Our hope is that these efforts will lead to the development of new drugs to treat cognitive symptoms in patients with schizophrenia. We will generate a novel striatal model of Huntington's disease in which cells bearing D1 receptors are progressively ablated in the post-natal brain. The application of such models and the challenges they present will be described.