



Département de psychiatrie
Centre de neurosciences psychiatriques
Site de Cery
CH-1008 Prilly - Lausanne

Centre de Neurosciences Psychiatriques

CNP SEMINAR

ANNOUNCEMENT

Friday, June 24, 2016, 11 a.m.

“Accelerated grey and white matter ageing in schizophrenia”

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Invited by Paul Klauser & Kim Do Cuénod
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**Salle Hironnelle, Hôpital Psychiatrique de Cery
Site de Cery, CH-1008 Prilly-Lausanne**

Schizophrenia is a disorder that mimics brain changes found with advancing age. However, the trajectory, timing and extent of grey matter (GM) and white matter (WM) changes during the course of the illness remain unclear. I will present neuroimaging evidence of accelerated brain ageing in the largest white matter neuroimaging sample of patients with schizophrenia (N=300+). I will argue that schizophrenia is a whole-brain disorder, with significant loss of grey matter evident in all cortical lobes by middle age, accompanied by widespread disruptions in the white matter connectome. Our findings suggest that schizophrenia is characterized by an initial, rapid rate of grey matter loss that slows in middle life, followed by the emergence of a deficit in WM diffusion properties that progressively worsens with age at a constant rate. This is joint work with Dr Vanessa Croyley, Dr Paul Klauser and the Australian Schizophrenia Research Bank.

Selected Publications:

1. Zalesky A, Fornito A, Seal ML, Cocchi L, Westin CF, Bullmore ET, Egan GF, Pantelis C (2011) Disrupted axonal fiber connectivity in schizophrenia. **Biol Psychiatry**. 69(1):80-9.
2. Zalesky A, Pantelis C, Croyley V, Fornito A, Cocchi L, McAdams H, Clasen L, Greenstein D, Rapoport JL, Gogtay N (2015) Delayed Development of Brain Connectivity in Adolescents With Schizophrenia and Their Unaffected Siblings. **JAMA Psychiatry**. 72(9):900-8.
3. Fornito A, Zalesky A, Breakspear M (2015) The connectomics of brain disorders. **Nat Rev Neurosci**. 16(3):159-72.