



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

Centre de Neurosciences Psychiatriques

CNP SEMINAR

ANNOUNCEMENT

Friday, March 18, 2016, 11 a.m.

“The role of parvalbumin within the Pvalb interneurons: from firing properties of individual neurons to complex behaviors altered in autism spectrum disorders (ASD)”

Prof Beat Schwaller

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In the last 20 years an increasing number of genetic and chromosomal mutations have been pointed out in association to Autism Spectrum Disorders, and the respective animal models have been created. While none of these models can recapitulate the syndrome, they are helpful in disentangling the endophenotypes of the disorder, and for clarifying its neural bases. Prof Schwaller pointed out the excitatory/inhibitory balance as a major function affected in ASD and demonstrated how congenitally reduced functionality of parvalbumine neurons eventually results in behavioral peculiarities that relate to ASD.

Selected Publications:

- 1) [Filice F](#)¹, [Vörckel KJ](#)², [Sungur AÖ](#)³, [Wöhr M](#)⁴, [Schwaller B](#)⁵. Reduction in parvalbumin expression not loss of the parvalbumin-expressing GABA interneuron subpopulation in genetic parvalbumin and shank mouse models of autism. [Mol Brain](#). 2016
- 2) [Wöhr M](#)¹, [Orduz D](#)², [Gregory P](#)³, [Moreno H](#)⁴, [Khan U](#)⁴, [Vörckel KJ](#)¹, [Wolfer DP](#)⁵, [Welzl H](#)⁶, [Gall D](#)², [Schiffmann SN](#)², [Schwaller B](#)³. Lack of parvalbumin in mice leads to behavioral deficits relevant to all human autism core symptoms and related neural morphofunctional abnormalities. [Transl Psychiatry](#). 2015