



## Colloquium

# Brain wiring and social behaviour: Insights into autism and schizophrenia

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Host: Gaia Novarino

One fourth of the population is estimated to be affected by a mental or behavioural disorder, including schizophrenia (SCZ), autism spectrum disorder (ASD) and intellectual disability (ID). These pathologies are typically associated with disturbed early neurodevelopment. CYFIP1 (Cytoplasmic FMRP Interacting Protein 1) is a strong candidate gene for several mental disorders. In humans the CYFIP1 gene is located on chromosome 15q11.2, a highly unstable region associated to ASD, SCZ and Epilepsy. In addition, CYFIP1 has two important functions: (1) it binds the RNA-binding protein Fragile X Mental Retardation Protein (FMRP) and (2) is part of the WAVE regulatory complex involved in actin dynamics. Therefore, CYFIP1 regulates local protein synthesis and actin remodeling, two key processes important for proper synaptic function and development. During my lecture I will discuss how using mouse and fly models as well patients' cells, we identified CYFIP1-mediated mechanisms involved in neuronal development and social behaviour. We propose that CYFIP1 may be a hub for different neurological and intellectual disability disorders.

**Monday, April 10, 2017 04:00pm - 05:15pm**

Raiffeisen Lecture Hall, Central Building



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