

## *SBS Seminar Announcement*

### **Genome-wide RNA binding networks in stem cells and neurodegeneration**

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#### **Abstract**

RNA binding proteins modulate key aspects of RNA processing in eukaryotic cells, often by binding in a sequence-specific or structure-specific manner to nascent and mature RNAs. Errors in RNA binding protein-RNA interactions lead to severe genetic diseases. My lab focuses on identifying the cis-regulatory elements embedded with RNA molecules and understanding how RNA binding proteins control gene regulation in the context of stem cell biology, neural development and neurological diseases. I will discuss our recent findings that ubiquitously expressed RNA binding proteins seem to cause neurological defects in ALS and our ongoing work with specifying networks of RNA binding protein-RNA interactions using genome-wide methods, computational approaches and single-cell studies.

**Monday, 25 Mar 2013 3.00pm to 4.00pm SBS Classroom 2 (SBS-01n-22)**

**Host: Assistant Prof Francesc Xavier Roca Castella**