

## Neuroscience Seminar Series

---

**Friday, May 25<sup>th</sup>, 2018 at 11:30**

Salle des Conférences (R229)

Centre Universitaire des Saints-Pères

45 rue des Saints-Pères, 75006 Paris

# Joshua Sanes

*Director of the Center for Brain Science*

*Harvard University, USA*

## *Assembling neural circuits: cells and synapses*

*The retina is a leading model system for elucidating mechanisms that govern neural circuit assembly and function. Visual information is passed from retinal photoreceptors to interneurons to retinal ganglion cells (RGCs) and then on to the rest of the brain. Each of >40 RGC types responds to specific visual features, depending on which of the >70 types of interneurons synapse on it. As an example, I will focus on RGCs that respond selectively to motion in a single direction, summarizing genetic, morphological and physiological studies that have led to identification of some mechanisms that underlie assembly of the circuit that generates their direction-selectivity. I will then discuss single-cell transcriptomic methods we are using to comprehensively identify cell types and candidate recognition molecules in both rodent and primate retina.*

Those interested in meeting with the speaker please contact  
[manuel.marin@parisdescartes.fr](mailto:manuel.marin@parisdescartes.fr)



UNIVERSITÉ  
PARIS  
DESCARTES

MEMBRE DE

USPC  
Université Sorbonne  
Paris Cité