

# MILLERCOMM2022

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## Alysson Muotri

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Wednesday  
April 6, 2022  
4:00 pm CDT

Zoom presentation

University of Illinois  
Urbana-Champaign

# Human Brain Organogenesis

## Creating a Nervous System Outside the Womb



The study of human neurodevelopment is affected by the inaccessibility of the pre-natal human brain in utero. Brain organoids have successfully been used to study molecular and cellular alterations, but the study of neural networks was never possible due to the inability to generate complex network behavior in vitro. Professor Muotri's lab has developed new methods that provide novel opportunities for investigating and manipulating the role of network activity in the developing human cortex. He will discuss the applications for neurodevelopmental disorders, brain evolution, as well as the ethical and moral implications of these findings.

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