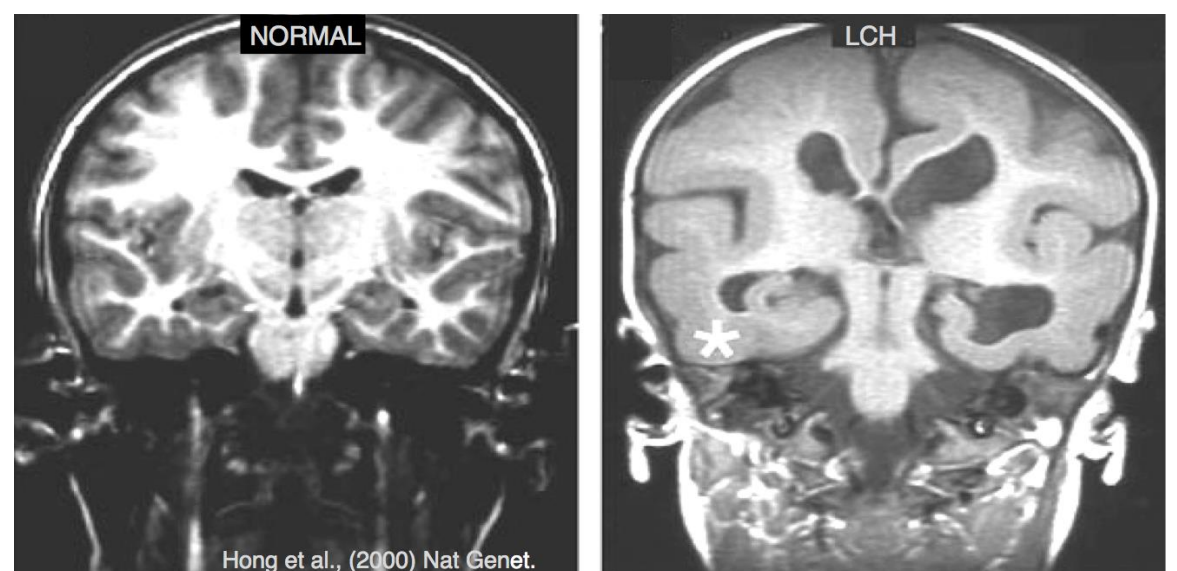
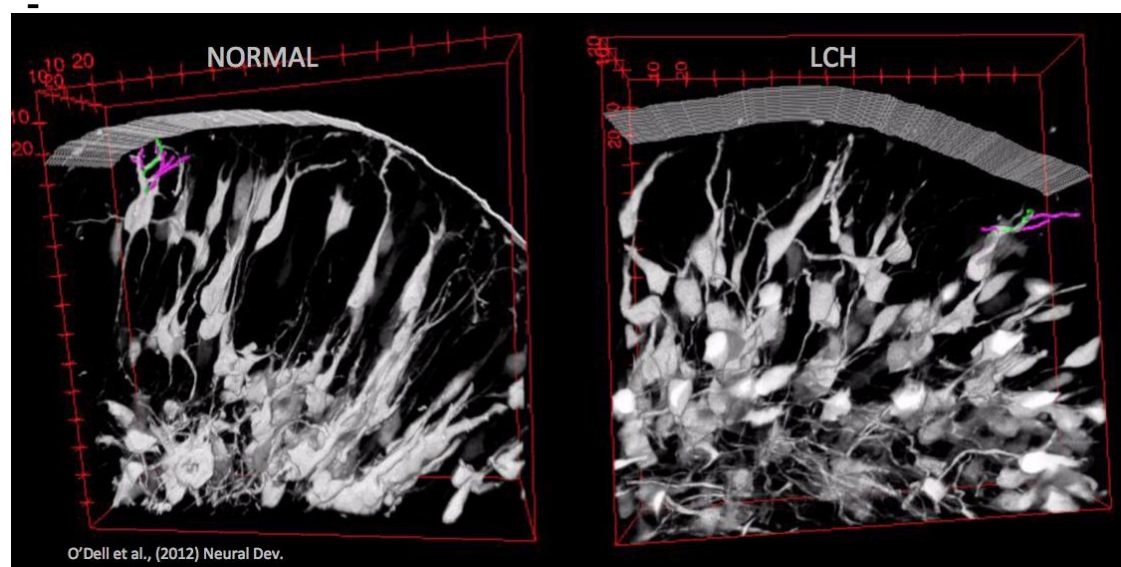


Putting Dendrites In Their Place: The Role of the Reelin-Signaling Pathway In Organizing Brain Structure

Eric Olson
Associate Professor
Department of Neuroscience and Physiology
SUNY Upstate Medical University

Science I, Room 121
4-5 p.m. Friday, April 28th

My laboratory studies an early period of brain development when immature neurons are just beginning to establish the basic wiring pattern of the brain. We use multiphoton microscopy to create 3D “movies” of mouse brain development which are then analyzed. This imaging allows us to determine how mutations and toxins contribute to diseases like intellectual disability, autism and fetal alcohol syndrome. The presentation will start with a description of normal and abnormal brain development leading into our studies of Lissencephaly with Cerebellar Hypoplasia (LCH), a disorder caused by deficiency in a gene called Reelin. I will then discuss the cellular and biochemical processes controlled by Reelin and how this understanding of Reelin biology is providing new insights into brain development and disease.



About this seminar series:

This series is offered regularly to provide our student community with opportunities to learn about scientific research or professions. Speakers may include our own department faculty or students, as well as biologists and other professionals from elsewhere.

Come to learn about the science, and enjoy some refreshments!

About the speaker:

Dr. Olson has been on the faculty at SUNY Upstate since 2003. He received his Ph.D in Biology from the University of California, San Diego in 1996. He was a Post-Doctoral Fellow in the Biology Dept. at UCSD and then in the Dept. of Neurology at the Beth-Israel Deaconess Medical Center and Harvard Medical School. He earned his Bachelor's Degree in Biology and Biochemistry from the University of Colorado, Boulder.

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