

Ricardo Dolmetsch, Ph.D.

M.I.N.D. Institute Distinguished Lecturer Series – February 8, 2012

Ricardo Dolmetsch, a professor of neurobiology at Stanford University, will discuss “Using iPS Cells and Mouse Models to Study Autism” during the next UC Davis MIND Institute Distinguished Lecturer Series presentation. The lecture will take place on Wednesday, Feb. 8, from 4:30 p.m. to 6 p.m. in the MIND Institute auditorium at 2825 50th St., Sacramento.

A native of Colombia, Dolmetsch received his graduate degree in neurobiology from Stanford University and postdoctoral training at Harvard Medical School. He has been recognized with multiple awards for his work including a Searle Scholar and McKnight Scholar Award, the Society for Neuroscience Young Investigator Award in 2007 and the NIH Director’s Pioneer Award in 2008.

Dr. Dolmetsch’s research is devoted to understanding the underlying neurobiology of autism and other neurodevelopmental disorders. He is particularly interested in how electrical activity and calcium signals control the development of the brain and how this is altered in children with autism spectrum disorders.

Dr. Dolmetsch’s group has developed methods for using induced pluripotent stem cells to study human brain development and for identifying cell and molecular phenotypes associated with disease. His laboratory has also made significant contributions to calcium signaling including the identification of signaling pathways that connect calcium channels to gene activation and the identification of the mechanisms of activation of store operated calcium channels. The lab has also developed several new technologies to study cell signaling including enzyme complementation systems to measure protein interactions in cells and light-activated signaling proteins to control biochemical cascades.

Selected Publications:

R.E. Dolmetsch, & D.H. Geschwind. The Human Brain in a Dish: The Promise of iPSC-Derived Neurons. *Cell* **145**, 831-834 (2011)

M. Yazawa, B. Hsueh, X. Jia, A. M. Pasca, J. A. Bernstein, J. Hallmayer and **R. E. Dolmetsch**. Using induced pluripotent stem cells to investigate cardiac phenotypes in Timothy Syndrome. *Nature* **471**, 230-4 (2011).