**Ryan Stephen O’Dell**

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**EDUCATION**

2017

**SUNY Upstate Medical University, Syracuse, NY**

* Doctor of Medicine, anticipated May 2017
* USMLE Step 1 Score (June 2009): 227
* USMLE Step 2 CK Score (July 2016): 244
* USMLE Step 2 CS (November 2016): Pass

**SUNY Upstate Medical University, Syracuse, NY**

* Doctor of Philosophy, Neuroscience and Physiology, anticipated May 2017. Advisor: Eric C. Olson, Ph.D.
* Dissertation (March 2015): *Reelin Signaling Coordinates Dendritic Initiation and Cellular Positioning by Neurite Stabilization,* **defended with honors**

2007

**University of Rochester, Rochester, NY**

* Bachelor of Science, Neuroscience, magna cum laude. Honors thesis: *Operant Conditioning of Neuromuscular Connections in the Primate Motor Hand Representation*. Advisor: Marc H. Schieber, M.D./Ph.D.
* Bachelor of Arts, Spanish, magna cum laude. Honors thesis: *Hay moros en la costa: la figura literaria del flaneur en La colmena y la coleccion de fragmentos de una sociedad en decadencia*. Advisor: Claudia Schaefer, Ph.D.

**RESEARCH EXPERIENCE**

**Graduate Student**, *Department of Neuroscience and Physiology, SUNY Upstate Medical University.*

2009-2015. Advisor: Eric C. Olson, Ph.D.

* Investigated the role of the secreted ligand Reelin in early cortical development (layer 6 neuron orientation, dendritogenesis, and dendrite dynamics/stabilization).

**Undergraduate Research Technician**, *Department of Neurology, University of Rochester Medical Center.*

2003-2007. Advisor: Marc H. Schieber, M.D./Ph.D.

* Cared for and handled primate subjects, participated in multi-neuronal recording from primate motor cortex during hand/finger movement tasks, assisted with EMG implants and primate craniotomies for placement of recording chamber.

**Undergraduate Research Technician**, *Dept. of Pathology and Laboratory Medicine, University of Rochester Medical Center.*

2003-2007. Advisor: Nancy Wang, Ph.D.

* Learned the basis of and conducted fluorescent *in situ* hybridization (FISH) and karyotyping.

**Graduate Education in the Biomedical Sciences Summer Program**, *Dept. of Neurology, University of Rochester Medical Center.*

Summer 2005. Advisor: Marc H. Schieber, M.D./Ph.D.

* Operant Conditioning of Neuromuscular Connections in the Primate Motor Hand Representation

**PROFESSIONAL EXPERIENCE**

**Summer Migrant Clinic Volunteer**, *SUNY Upstate Medical University*

2008-2009

* Took histories, gave physical exams, acted as Spanish translator

**Undergraduate Mentee to Clinical Neurologist**, *St. Mary’s Hospital, Rochester, NY*

Summer 2006

* Shadowed and assisted Dr. Marc H. Schieber, M.D./Ph.D. in order to gain experience in a clinical setting and observe the daily routines, problems, and intricacies of a clinical neurologist, conducted supervised basic physical and neurological exams

**PUBLICATIONS**

* Davidson AG, **O’Dell R**, Chan V, and Schieber MH (2007) Comparing effects in spike-triggered averages of rectified EMG across different behaviors. J Neurosci Methods. 163(2):283-94.
* Davidson AG, Chan V, **O’Dell RS,** and Schieber MH (2007) Rapid Changes in Throughput from Single Motor Cortex Neurons to Muscle Activity. Science. 318(5858):1934-1937.
* **O'Dell RS**, Ustine CJ, Cameron DA, Lawless SM, Williams RM, Zipfel WR, Olson EC (2012) Layer 6 cortical neurons require Reelin-Dab1 signaling for cellular orientation, Golgi deployment, and directed neurite growth into the marginal zone. Neural Dev. 7:25.
* Nichols AJ, **O'Dell RS**, Powrozek TA, Olson EC (2013) *Ex utero* Electroporation and Whole Hemisphere Explants: A Simple Experimental Method for Studies of Early Cortical Development. J. Vis. Exp. (74).
* **O’Dell RS**, Cameron DA, Zipfel WR, and Olson EC (2015) Reelin prevents apical neurite retraction during terminal translocation and dendrite initiation. J Neurosci 35(30):10851-10865. **Cover Article.**
* Blanden AR et al (2015). Synthetic metallochaperone ZMC1 rescues mutant p53 conformation by transporting zinc into cells as an ionophore. Mol. Pharmacology. 87(5):825-31. **Contributing author.**
* **O’Dell RS,** and Schwartz TL. Second and Third Generation Antipsychotics; A Comprehensive Handbook. Bloomington (IN): AuthorHouse; 2016.
* Schwartz TL and **O’Dell RS** (2016). Neural implications of psychotherapy, pharmacotherapy, and combined treatment in major depressive disorder. Mens Sana Monographs (in press).

**PRESENTATIONS**

**Poster Presentation.** European Congress of Radiology (ECR) Annual Meeting in Vienna, Austria. (March 2017) **AND** SUNY Upstate Medical University Student Research Day (March 2017)

Patel S, Badar Z, Ringer M, Christiano P, **O’Dell R**, and Yegorov A. A retrospective analysis of lower extremity fracture detection in our Emergency Department with emphasis on importance of ankle and foot radiographs

**Poster Presentation (Electronic Exhibit).** American Roentgen Ray Society (ARRS) Annual Meeting in New Orleans, LA. April/May 2017

**O’Dell R**, Sasson J, Stuver R, Badar Z, and Ezhapilli S. Above, beyond, and below the region of interest: an analysis of incidental findings on spine MRI

**Oral Presentation.** SUNY Upstate's weekly radio program/podcast "HealthLink On Air", September 28th, 2016.

Schwartz TL and **O’Dell RS**. The second and third generation antipsychotics: an evidence-based discussion of current treatment indications, dosing strategies, efficacy, and side effect profiles.

**Poster Presentation.** Society for Developmental Biology 75th Annual Meeting in Boston, MA, 2016 Olson EC and **O’Dell R**. ‘Convergent effects of Reelin-deletion and ethanol on Golgi apparatus positioning during dendritic initiation in the cerebral cortex’

**Oral Presentation**. SUNY Upstate Medical University Ph.D. Dissertation Defense, 2015

**O’Dell R** and Olson EC. ‘Reelin Signaling Coordinates Dendritic Initiation and Cellular Positioning by Neurite Stabilization’

**Poster Presentation**. SUNY Upstate Medical University Annual Student Research Celebration **AND** University of Rochester Medical Scientist Research Symposium, 2015

**O’Dell R**, Cameron DA, Zipfel WR, and Olson EC. ‘Reelin Signaling Prevents Neurite Retraction from the Marginal Zone During the Simultaneous Processes of Terminal Translocation and Dendrite Initiation’

**Oral Presentation.** SUNY Upstate Medical University Annual Student Research Celebration **AND** SUNY Upstate Medical University Department Seminar, 2013

**O’Dell R** and Olson EC. ‘Dendritic Filopodial Dynamics in the Presence and Absence of the Secreted Ligand Reelin’

**Poster Presentation.**  SUNY Upstate Medical University Annual Biomedical Sciences Retreat at the Welch Allyn Lodge in Skaneateles, NY (2012) **AND** Society for Neuroscience in Washington, DC (2011)

**O’Dell R**, Ustine CM, Lawless SM, Cameron DA, Williams RM, Zipfel WR, and Olson EC. ‘Dendritogenesis and Orientation of Layer 6 Cortical Neurons During Early Cortical Development’

**Oral Presentation.**  SUNY Upstate Medical University Department Seminar (2012) **AND** SUNY Upstate Medical University Developmental Biology Interest Group (DBIG) Seminar (2011)

**O’Dell R** and Olson EC. ‘Reassessing Reelin’s Role in Early Cortical Development’

**Poster Presentation.**  Research Society on Alcoholism (RSA) in San Antonio, Texas **AND** the 25th Annual MD/PhD Student Conference in Keystone, Colorado, 2010

**O’Dell R** and Miller MW. ‘Ethanol Induces Concentration-Dependent Increases in Cell Cycle Kinetics in a Line of Murine Neural Stem Cells’

**Oral Presentation.**  SUNY Upstate Medical University Neurofest Fast Talk, 2010

**O’Dell R** and Miller MW. ‘Ethanol Induces Concentration-Dependent Increases in Cell Cycle Kinetics in a Line of Murine Neural Stem Cells’

**Oral Presentation.**  SUNY Upstate Medical University Departmental Seminar, 2010

**O’Dell R** and Miller MW. ‘The Effects of Ethanol in Heterotopic and Heterochronic Transplants’

**AWARDS AND HONORS**

Ruth L. Kirschstein National Research Service Award for Individual Predoctoral M.D./Ph.D. and Other Dual Doctoral Degree Fellows (Parent F30), *SUNY Upstate Medical University*

* “The In Vitro Effects of Ethanol on Neural Stem Cell Transplantation” Awarded under the mentorship of Michael W. Miller, Ph.D. (August 2010) *Award was declined due to rotation out of laboratory and modification of project/mentorship*

**PROFESSIONAL MEMBERSHIPS**

Society for Neuroscience 2006, 2011

Research Society on Alcoholism 2010

**HOBBIES, INTERESTS, AND ACTIVITIES**

* Ultra Marathon runner, completed: over 25 100 mile races, a 150 mile mountain race, 2 200 mile races, and a 244 mile run
* Board member of nationwide running club UltraRunning Matters, 2009-present