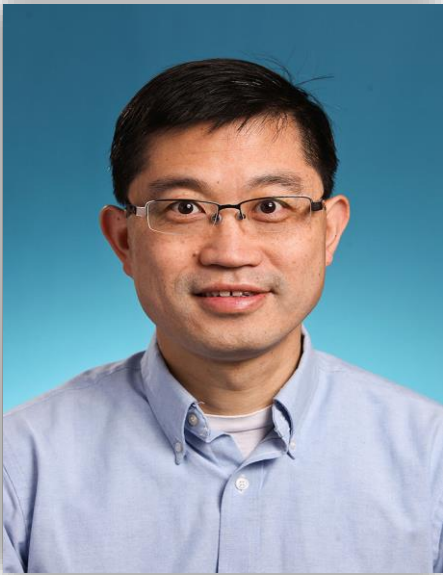


## ***Weekly Colloquium***

Tuesday, 11/21/2017, 12:30pm, Billings Building – Rosedale Conference Room

### **“The intersection of cortical gliogenesis and brain tumorigenesis at the single-cell level”**

**Q. Richard Lu, Ph.D.**  
**Professor, Department of Pediatrics**  
**Scientific Director, Brain Tumor Center**  
**Cancer & Blood Diseases Institute**  
**Cincinnati Children’s Hospital Medical Center**



Research in Richard Lu Lab aims to understand how distinct glial cell subtypes (oligodendrocytes, astrocytes and Schwann cells) in the central and peripheral nervous systems are generated, how they are regenerated after injury, and how their progenitors are transformed into cancerous cells under pathological conditions. A major focus of Richard Lu lab research is to elucidate the transcriptional, posttranscriptional, epigenetic and signaling regulatory networks that govern gliogenesis, myelination and glioma formation. By using various animal models, the research goal in Dr. Richard Lu’s lab is to dissect the etiological mechanisms of neurological diseases including multiple sclerosis and developmental neurological disorders, and develop effective therapies towards myelin repair and nerve regeneration, while blocking brain tumor initiation and progression.

#### **Recent Publications:**

He, D., Jincheng Wang, Yulan Lu, Yaqi Deng, Chuntao Zhao, Lingli Xu, Yinhuai Chen, Yueh-Chiang Hu, Wenhao Zhou, **Lu QR**. (2017) “lncRNA Functional Networks in Oligodendrocytes Reveal Stage-Specific Myelination Control by a lncOL1/Suz12 Complex in the CNS” *Neuron*. 2017 Jan 18;93(2):362-378

He D, Marie C, Zhao C, Kim B, Wang J, Deng Y, Clavairoly A, Frah M, Wang H, He X, Hmidan H, Jones BV, Witte D, Zalc B, Zhou X, Choo DI, Martin DM, Parras C, Lu QR. Chd7 Cooperates with Sox10 and Regulates the Onset of CNS Myelination and Remyelination. *Nature Neuroscience*. (2016). doi:10.1038/nn.4258

Wu LM, Wang J, Conidi A, Zhao C, Wang H, Ford Z, Zhang L, Zweier C, Ayee BG, Maurel P, Zwijsen A, Chan JR, Jankowski MP, Huylebroeck D, **Lu QR**. (2016) “Zeb2 recruits HDAC-NuRD to inhibit Notch and controls Schwann cell differentiation and remyelination”. *Nature Neuroscience*. 2016 Jun 13. doi: 10.1038/nn.4322.

