Post-doctoral Associate Position Available in the Colas Lab (Cardiovascular Biology and Disease Modeling)

The Colas laboratory is focused on developing new therapies for cardiovascular disease. Cardiovascular disease, including heart failure and arrhythmias, remains a major cause of human mortality worldwide despite advances in clinical management. Our research combines *in vitro* disease models using cardiovascular cells generated from induced pluripotent stem cells (iPSCs) with state-of the art high throughput screening methods to define disease mechanisms, identify drug targets and develop drug leads.

- Id genes are essential for early heart formation. *Cunningham et al. Genes Dev. 2017*
- An Automated Platform for Assessment of Congenital and Drug-Induced Arrhythmia with hiPSC-Derived Cardiomyocytes. *McKeithan et al. Front Physiol. 2017*
- Model system identification of novel congenital heart disease gene candidates: focus on RPL13. *Schroeder et al. Hum Mol Genet. 2019*
- Patient-specific genomics and cross-species functional analysis implicate LRP2 in hypoplastic left heart syndrome. *Theis et al. Elife. 2020*.
- PGC1/PPAR drive cardiomyocyte maturation at single cell level via YAP1 and SF3B2. Murphy et al. *Nat Commun. 2021*
- Conserved Transcription Factors Control Chromatin Accessibility and Gene Expression to Promote Cell Fate Stability and Restrict Reprogramming in Differentiated Cells. *Missinato et al. Biorxiv*

The Colas lab is searching for a postdoctoral fellow to conduct independent research in the field of iPSC modeling of heart disease and therapeutic target discovery. Candidates with expertise in cardiac physiology, and/or iPSC biology, are encouraged to apply.