

Wong lab is hiring!

Post-doctoral position – Laboratory of Dr. Amy Wong, Developmental & Stem Cell Biology Program, Hospital for Sick Children

Description

We are looking for a talented PDF with excellent communication skills, is highly self-motivated and have excellent molecular biology skills to come join our team!

Our lab has two main research interests:

1. Lung lineage development

Our lab is interested in addressing two fundamentally important questions in lung lineage development:

1. How does the lung form from a group of embryonic progenitors and give rise to all the cell types in the human lung?
2. How does deregulation of developmental pathways affect the integrity and function of the epithelium in airway diseases such as Cystic fibrosis?
-Specifically, what role does CFTR mutations have on lung lineage development and how does this impact therapies?

2. Precision medicine for Cystic fibrosis therapy

Cystic fibrosis (CF) is a monogenetic disease that affects many major organs and tissues of the body with the most lethal effect in the airways. The CF gene first discovered here at SickKids in 1989 and since then several gene modifiers have also been identified that affect disease severity leading to variance in clinical outcomes. Our lab has great interest in developing stem cell-based tools to understand individualized disease and predict personalized pharmacological therapies for CF. We are developing high-throughput and high-content screening methods of 2D air liquid interface and 3D organoid models of human lung to test for pharmacological compounds from iPS cells from various CF mutations.

Qualifications

- Ph.D in a related field with extensive experience with human stem cell cultures (human ES and iPS cells specifically)
- Experience with single cell technologies (ie. scRNAseq, CYTOF, or Fluidigm), high throughput functional screens and in vivo animal models would be an asset.
- Must have extensive experience with molecular biology techniques including but not limited to flow cytometry, qRT-PCR, Westerns, IHC, and genetic manipulation using CRISPR technology.
- Experience with R and bioinformatics would be highly desirable.

- If you are self-motivated, well-organized, highly independent but also work well with others and unafraid of joining a young lab eager to trailblaze the field, please send your cover letter including a statement of your research career goal, an updated C.V and names and contacts of 3 referees to

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