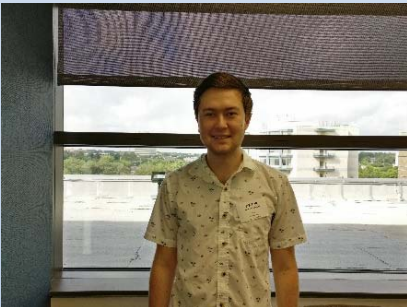


# Announcing our U54 Summer Research Students for 2017!

Dates of Summer Program: June 15-July 28  
Poster Presentations: August 9, 2017



**Christian Gonzalez:** Christian will work with Dr. Jason (Zhijie) Liu to analyze available GRO-seq, RNA-seq, and ChIP-seq data sets to find correlation between long non-coding RNAs (lncRNAs), estrogen receptor, and endocrine resistance in breast cancer. This analysis will help us to find function of lncRNA molecules in hormone response and endocrine resistance, and estrogen receptor's regulation function on these functional lncRNAs. We hope to find interactions of lncRNAs with gene regulation mechanisms of breast cancer cells and potentially show reasons for endocrine resistance in breast cancer patients.



**Brandon Lieberman:** Brandon will work in Dr. Chun-Liang Chen's lab to focus on castration resistant signaling systems in prostate cancer revealed by single-cell RNA-seq". Brandon will focus on the Hippo pathway and Ephrin pathway in the progression of advanced prostate cancer.



**Bianca Gonzalez:** Bianca will work with Dr. Nameer Kirma to study endometriosis as a non-malignant gynecologic condition associated with pelvic pain and infertility, and a precursor to the endometrioid ovarian cancer subtype. Our studies revealed the importance of gap junctions, involved in direct cell-cell communication, in the invasiveness of endometriosis. Studies will be conducted for RNA expression of gap junction genes at the bulk and single-cell levels to determine differential expression and cellular heterogeneity of primary eutopic endometrial cells from women with and without endometriosis. The studies are expected to delineate molecular changes associated with endometrial cells prone to endometriosis lesion development.

*Congratulations!*

**Developed and Sponsored By:**  
**The U54 Center for Cancer Systems Biology**

