**Ryan DeBose-Boyd**

Phone: (214) 930-4755

Email: [Ryan.DeBose-Boyd@bcm.edu](mailto:Ryan.DeBose-Boyd@bcm.edu)

GitHub Link: <http://github.com/ryan96db>

Website: <https://ryan96db.github.io/>

**EDUCATION**

**Pursuing Ph. D. in**

**Quantitative & Computational Biosciences**

Baylor College of Medicine **2020-Present**

**BS in Biology, *magna cum laude* 2019**

Texas A&M University – Commerce, Commerce, Texas

**TEACHING EXPERIENCE**

**Peer Tutor** **2016 – 2018**

*Academic Services Center, Texas A&M University - Commerce*

* Assisted students in completing their assignments for courses including General Chemistry, General Biology, General Physics, Pre-Calculus, and Calculus.
* Helped explain science and math concepts in a way that was easy to understand.

**RESEARCH EXPERIENCE**

**Research Technician II 2019-2020**

*Department of Molecular Genetics, UT Southwestern Medical Center*

* Became familiar with Linux bash and HPC Cluster environments through helping out with technical tasks around the lab.
* Performed structural biology scientific research, using methods such as fast protein liquid chromatography (FPLC), transfection, mini-prep, and mutagenesis to study the mechanisms involved with the Hedgehog (Hh) signaling pathway.
* Using Linux bash, helped backup cryo-electron microscopy data to AWS S3.
* Helped remove false-positive particles and low-quality images in RELION, a structural analysis software package.

**Undergraduate Intern** **6/2018-8/2018**

*Department of Molecular Genetics, UT Southwestern Medical Center*

* Performed and interpreted multiple qPCR assays in order to test the effects of different drugs on lipolysis induction that is present in animals with Cachexia.
* Compiled data from lab experiments into figures or tables and shared knowledge at

weekly lab meetings.

**Undergraduate Researcher** **2017-2018**

*Texas A&M University- Commerce, Commerce, Texas*

* Used lab techniques such as immunofluorescence and western blot to determine a potential relationship between the G1P3-induced endocytotic pathway and β-catenin in breast cancer cells.
* Presented results from lab experiments at weekly lab meetings.
* Effectively communicated lab results at the 14th Annual Pathways Student Research Symposium.
* Mentored new lab members on basic lab procedures while keeping up with own

research and classwork.

**Undergraduate Intern**  **5/2016 – 7/2016**

*Department of Molecular Genetics, UT Southwestern Medical Center*

* Performed several techniques such as immunoblot analysis, immunoprecipitation, and PCR to genotype various transgenic, knockout, and knockin strains of mice.

**HONORS AND AWARDS**

President’s List, Texas A&M University – Commerce, Commerce, TX **2016-2017**

**PRESENTATIONS**

Texas A&M University System 14th Annual Pathways Symposium **2017**

* *E-Cadherin Endocytosis Alters B-catenin Expression and Localization in Breast Cancer*

**ORIGINAL SCIENTIFIC MANUSCRIPTS**

1. Qi X, Friedberg L, DeBose-Boyd R. Sterols in an intramolecular channel of Smoothened mediate Hedgehog signaling. *Nature Chemical Biology. Published 14 September 2020.*