

EDUCATION

PhD, Human Genetics

Johns Hopkins University School of Medicine

August 2019 - Current

Bachelor of Science, Biomedical Engineering

George Washington University

May 2019

RESEARCH EXPERIENCE

Graduate Student Researcher

Department of Genetic Medicine, Johns Hopkins University

Advisor: Loyal Goff, PhD

August 2019 – Current

- Analyze high-resolution transcriptomic data to understand the role of cellular diversity in the enteric nervous system
- Characterize the lineage and functional states of a mesoderm-derived cell population in enteric ganglia
- Leverage disease-implicated gene sets from genome-wide association studies to identify targetable cell populations in the gastrointestinal tract
- Designed and implemented an R package to identify changes in transcriptional profiles over continuous cellular states, as well as contribute to publicly-used transfer learning tool, ProjectR

Research Intern

NSF Research Experiences for Undergraduates: Bioengineering and Biomanufacturing

Department of Biological Sciences, Rensselaer Polytechnic Institute

Advisor: Douglas Swank, PhD

June – July 2018

- Managed *Drosophila* lines and executed crosses to select for desired mutant genotypes
- Conducted molecular genetics tests to verify the expression of a myosin variant
- Generated and analyzed muscle force data in varying concentrations of free phosphate to characterize contractile properties

PUBLICATIONS

Straight, C.R., Bell, K.M., **Slosberg, J.N.**, Miller, M.S., Swank, D.M. (2019). A myosin-based mechanism for stretch activation and its possible role revealed by varying phosphate concentration in fast and slow skeletal muscle fibers. *American Journal of Physiology – Cell Physiology*. doi: 10.1152/ajpcell.00206.2019

ONLINE PREPRINTS

Zheng, S.C., Stein-O'Brien, G., Augustin, J.J., **Slosberg, J.**, Carosso, G.A., Winer, B., Shin, G., Bjornsson, H.T., Goff, L.A., Hansen, K.D. (2021). Universal prediction of cell cycle position using transfer learning. *BioRxiv* doi: 10.1101/2021.04.06.438463

Kulkarni, S., Saha, M., Becker, L., Wang, Z., Li, G., Leser, J., Kumar, M., Bakhshi, S., Anderson, M., Lewandoski, M., **Slosberg, J.**, Nagaraj, S., Vincent, E., Goff, L.A., Pasricha, P.J. (2020). Neural crest-derived neurons are replaced by a newly identified mesodermal lineage in the post-natal and aging enteric nervous system. *BioRxiv*. doi: 10.1101/2020.08.25.262832.

HONORS & AWARDS

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| Freudenthal Prize , George Washington University | May 2019 |
| <ul style="list-style-type: none"> Awarded to the top-ranked graduating senior in the School of Engineering and Applied Sciences | |
| Benjamin Cruickshanks Award , George Washington University | May 2019 |
| <ul style="list-style-type: none"> Awarded to the top-ranked graduating senior in the Department of Biomedical Engineering | |
| Award for Best Biomedical Engineering Capstone Design Project , George Washington University | May 2019 |
| <ul style="list-style-type: none"> Recognized for excellent device design, implementation, and presentation (below) among all teams | |

POSTER PRESENTATIONS

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| Obstacle Avoidance: Helping Visually Impaired Individuals Navigate Their Environment. Bailes, S., Lynch, A., Martinez, A., Melotte, S., Slosberg, J. | |
| <ul style="list-style-type: none"> Capstone Showcase, George Washington University School of Engineering & Applied Sciences | May 2019 |
| <ul style="list-style-type: none"> Symposium on Community-Engaged Scholarship, George Washington University Honey W. Nashman Center for Civic Engagement and Public Service | April 2019 |
| Expressing Human Cardiac Myosin in Transgenic Fruit Flies. Slosberg, J. , Glasheen, B., Swank, D. | |
| <ul style="list-style-type: none"> Summer Research Symposium, Rensselaer Polytechnic Institute | July 2018 |

SERVICE AND LEADERSHIP

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|---|--------------------|
| Peer Tutor , George Washington University School of Engineering & Applied Sciences | 2018 – 2019 |
| <ul style="list-style-type: none"> Led individual and group review sessions for physics coursework | |
| Fundraising Chair & Executive Board Member , Biomedical Engineering Society, George Washington University Chapter | 2017 – 2019 |
| <ul style="list-style-type: none"> Organized and executed professional development events, such as resume workshops and career panels, for 200 biomedical engineering students | |

TECHNICAL SKILLS

Scripting and analysis: R, Bash, Python
Managers for distributable and reproducible research: Git, Conda, Singularity, Snakemake