PARKER KNIGHT

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EDUCATION

B.S. in Mathematics, University of Florida, Gainesville, FL

Expected Graduation: December 2020

GPA: 3.98

EXPERIENCE

Research Assistant Bacher Group, Dept. of Biostatistics, University of Florida	Aug. 2019 - Present $Gainesville, FL$
Research Intern Randolph Group, Fred Hutchinson Cancer Research Center	June 2019 - Aug. 2019 Seattle, WA
$ \begin{array}{c} \textbf{Software Engineer Intern} \\ ITProTV \end{array} $	May 2018 - Aug. 2018 $Gainesville, FL$
Research Assistant Febo Lab, McKnight Brain Institute	April 2018 - April 2019 $Gainesville, FL$
Research Assistant Bruijnzeel Lab, McKnight Brain Institute	Sept. 2016 - April 2019 $Gainesville, FL$

PUBLISHED WORK

Peer Reviewed Articles

- · Bacher, R., Chu, L., Argus, C., Bolin, J., **Knight, P.**, Thomson, J., Stewart, R., Kendziorski, C. (2020). Enhancing biological signals and detection rates in single-cell RNA-seq experiments with cDNA library equalization. *Submitted to Nucleic Acids Research*.
- · Darden, D.B., Bacher, R., Brusko, M.A., **Knight, P.**, ... & Efron, P. (2020). Single cell RNA-seq of human myeloid derived suppressor cells in late sepsis reveals multiple subsets with unique transcriptional responses: a pilot study. *Accepted in Shock: Injury, Inflammation, and Sepsis: Laboratory and Clinical Approaches*.
- · **Knight, P.**, Chellian, R., Wilson, R., Behnood-Rod, A., Panunzio, S., Bruijnzeel, A.W. (2020). Comprehensive evaluation of sex differences in the elevated plus-maze test and large open field test in adult Wistar rats. *Submitted to Behavioural Brain Research*.
- · Chellian, R., Behnood-Rod, A., Wilson, R., Wilks, I., **Knight, P.**, Febo, M., Bruijnzeel, A. W. (2020). Exposure to smoke from high-but not low-nicotine cigarettes leads to signs of dependence in male rats and potentiates the effects of nicotine in female rats. *Pharmacology Biochemistry and Behavior*, 172998.
- · Chellian, R., Wilson, R., Polmann, M., **Knight, P.**, Behnood-Rod, A., Bruijnzeel, A. W. (2020). Evaluation of sex differences in the elasticity of demand for nicotine and food in rats. *Nicotine and Tobacco Research*, 22(6), 925-934.
- · Tan, S., Xue, S., Behnood-Rod, A., Chellian, R., Wilson, R., **Knight, P.**, Panunzio, S., Lyons, H., Febo, M., Bruijnzeel, A. W. (2019). Sex differences in the reward deficit and somatic signs associated with precipitated nicotine withdrawal in rats. *Neuropharmacology*, 160, 107756.
- · Bruijnzeel, A. W., **Knight, P.**, Panunzio, S., Xue, S., Bruner, M. M., Wall, S. C., Pompilus, M., Febo, M., Setlow, B. (2019). Effects in rats of adolescent exposure to cannabis smoke or THC on emotional behavior and cognitive function in adulthood. *Psychopharmacology*, 236(9), 2773-2784.

PRESENTATIONS

Poster Presentations

- · "Estimation and inference for high dimensional, doubly-structured regression models", Fall Undergraduate Research Symposium, Gainesville, FL, October 2019
- · "Virtual Reality-based Learning Games for Computer Science Education", Spring Undergraduate Research Symposium, Gainesville, FL, April 2019
- · "Sex Differences in Rodent Behavior: a Hierarchical Clustering Analysis", UF College of Medicine Poster Session, Gainesville, FL, February 2019
- · "Machine Learning Classification of Ultrasonic Animal Vocalizations", Undergraduate Research Symposium, Gainesville, FL, November 2018
- · "Adolescent Cannabis Smoke Exposure Does Not Affect Anxiety or Depressive-like Behavior in Male and Female Rats in Adulthood", Center for Addiction Research and Education Spring Symposium, Gainesville, FL, April 2018
- · "Long Term Behavioral Effects of Cannabis Smoke in Rats", Fall Undergraduate Research Symposium, Gainesville, FL, November 2017

HONORS AND AWARDS

Honorable Mention in COMAP's Mathematical Contest in Modeling	2020
Cold Spring Harbor Laboratory Undergraduate Research Program (Declined)	2019
Fred Hutchinson Summer Undergraduate Research Program (\$4750)	2019
College of Liberal Arts and Sciences Dean's List	All Semesters
Anderson Scholar with High Distinction	2018
University Scholars Research Scholarship (\$1750)	2018
University Scholars Research Scholarship (\$1750)	2017
Student Honors Organization	2016

ACADEMIC SERVICE

Learning Assistant

Aug. 2018 - April 2019

Dept. of Mathematics, University of Florida

Gainesville, FL

· Courses taught: Analytical Geometry and Calculus 1, Analytical Geometry and Calculus 2

Director of Multimedia

May 2018 - April 2019

Center for Undergraduate Research, University of Florida

Gainesville, FL

Peer Advisor

August 2017 - May 2018

Center for Undergraduate Research, University of Florida

Gainesville, FL

SKILLS

Languages: R, Python, Haskell, C++, JavaScript

Software: Linux, Git, Docker, SQLite