720-980-2971   Denver, CO   karla.velalopez@cuanschutz.edu

Karla Vela Lopez
STUDENT ASSISTANT

COMPUTATIONAL BIOLOGY   •   BIOINFORMATICS   •   COMPUTER SCIENCE

Education

2020 - Present

University of Colorado Denver- Graduate School
MS Biomedical Sciences and Biotechnology
Biomedical Data Science Graduate Certificate

2011 - 2016

University of Colorado Denver
BS Biology and Psychology

Employment and Research Experience

2/2023 - Present

Student Assistant, JRaviLab | PI: Dr. Janani Ravi
University of Colorado Anschutz Medical Campus - Aurora, CO

Project: Host-responses to infection

Developing a computational approach that leverages publicly available non-infectious disease and drug perturbation transcriptome data that can help identify host-responses of various infections. These characterizations can then help identify potential and novel host-directed therapeutics.

Collaborator: Dr. Arjun Krishnan

9/2021 – 2/2023

Student Assistant, Sandoval Lab | PI: Dr. Darleen Sandoval
University of Colorado Anschutz Medical Campus - Aurora, CO

Sandoval Lab conducts various research projects that are focused on deeply understanding the role of the gut-brain-axis and how it regulates body weight and metabolism. The overall goal of all research efforts done by the lab is to gain more knowledge on how this axis plays a role on the physiology and pathophysiology of obesity and Type 2 diabetes mellitus. The techniques used to investigate the relationship of the gut-brain-axis on body weight and metabolism are bariatric surgery, the use of genetic mouse models, and metabolic phenotyping that includes *in vivo* assessment of glucose and lipid metabolism.

Project: Contributed to most of the labs different projects by helping each trainee conduct their animal tests, supporting the mouse surgeon during bariatric surgery procedures, using imaging platforms to calculate cell size, collecting mouse body weights, helping with pre-operative care of mice, feeding special diets to mice, and recording the data.

Computer Skills Programming Languages: R, Python, C++ (Novice)
Computational Tools: Unix/Linux, Terminal, Git

Languages English Native language

Spanish Native language