# NICHOLAS CARLOS BUITRAGO-POCASANGRE

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Meticulous and fast-learning researcher skilled in molecular techniques and able to clearly communicate information from the scientific to the general population in both English and Spanish

## EDUCATION

**MS Neuroscience** | University of Hartford | Aug 2017 – Aug 2020 | GPA: 3.9/4.0

**Intraoperative Neuromonitoring Graduate Certificate** | University of Connecticut | Summer 2018

**BS Psychology** | University of Connecticut | Aug 2012 – May 2016 | GPA: 3.5/4.0

## SKILLS

Biochemical Assays, Data Analysis, Experimental Design, Flow Cytometry, Prism, Histology, Immunology, LDMS, Neuroscience, Public Speaking, PBMC Isolation, RT-qPCR, Spectrometry, and SSPS

## RESEARCH EXPERIENCE

**Neuroimmunology Project Manager** | Yale Medical School | Mar 2021 – Present | Dr. David Hafler

- Manage projects exploring immunity of ocrelizumab in MS, TIGIT/PD-1 in GBM, and microbiome of RBD and PD particularly interested in B-cells, T-cells, monocytes, and various cytokines
- Perform flow cytometry on human blood, brain, and CSF samples for basic science and clinical trial research
- Responsible for several core research management system, such as Freezerworks, LDMS, and OnCore

**Full-Time Research Assistant** | Qx Therapeutics | Mar 2020 – Mar 2021 | Dr. Dan Wu

- Research drug development for lung injuries involving BAL, genotyping mice, and IP and IV injections

**"Ketogenic Diet in Alzheimer's"** | University of Hartford | Dec 2018 – Mar 2020 | Dr. Paola Sacchetti

- Thesis project was a pilot study that used transgenic mice for behavior, blood collection, nuclear and RNA extraction, enzymatic protein assays, PCR, RT-qPCR, and raw data analysis using PRISM and SSPS
- Presented at NEURON Conference (2020) and Partnership for Innovation and Education Seminar (2019)

**"Probiotics in Alzheimer's"** | University of Hartford | Oct 2017 – Dec 2018 | Dr. Paola Sacchetti

- Dissected brains, cut neural tissue on cryostat and vibratome, optimized several antibody protocols for immunofluorescent and colorimetric histology, imaged slides with QCapture, and counted cells using ImageJ

**Lab Manager** | Murine Behavioral Neurogenetics Facility | May 2016 – Aug 2017 | Dr. R Holly Fitch

- Oversaw collaborative projects across departments and trained undergraduate students to run behavioral neuroscience experiments, such as Operant Chamber Box and Morris Water Maze

**"Neurobiology of Sound"** | University of Connecticut | May 2015 – May 2016 | Dr. Heather Read

- Behavioral lab work focused on the neurobiology of sound perception aimed to develop new strategies for prosthetic hearing devices, speech recognition, and identifying auditory processing disorders

## PUBLICATIONS

- Kim, D., Biancon, G., Bai, Z., VanOudenhove, J., Liu, Y., Kothari, S., Gowda, L., Kwan, J. M., Buitrago-Pocasangre, N. C., Lele, N., Asashima, H., Racke, M. K., Wilson, J. E., Givens, T. S., Tomayko, M. M., Schulz, W. L., Longbrake, E. E., Hafler, D. A., Halene, S., Fan, R., Microfluidic Immuno-Serolomic Assay Reveals Systems Level Association with COVID-19 Pathology and Vaccine Protection. Small Methods 2023, 2300594. https://doi.org/10.1002/smtd.202300594

## OTHER WORK EXPERIENCE

**Biology Graduate Teaching Assistant** | University of Hartford | Aug 2017 – Dec 2019 | Jon Larsen

**Front Desk Receptionist** | Counseling & Psychological Services | Aug 2018 – Dec 2019 | Dr. Jeffrey Burda

**Server** (seasonal) | Cornerstone Caterers | Nov 2012 – Nov 2019 | Gary Stone

## HONORS

Partnership for Innovation and Education Program | REACH Scholarship | Research & Teaching Assistantship