# **Zachary Siegfried**

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### **EDUCATION**

**George Washington University Milken Institute of Public Health,** *Washington, D.C.* (Aug 2021 - May 2023) *Expected: Master of Public Health in Biostatistics* 

- Graduate Teaching Assistant: PUBH 6853 Data management and analysis
- Relevant coursework: Linear regression, Survival analysis, Categorical analysis, Bioinformatics algorithms, Computational biology, HPC and Cloud, Epidemiological methods, Clinical trial design

University of Virginia, Charlottesville, VA (Aug 2017 – May 2021)

BS in Chemistry with a Specialization in Biochemistry, Minor: Bioethics

• Men's Rugby Team (Vice Captain), Alpha Sigma Phi (Events Chair), Biology Society, Bioethics Society

## **EXPERIENCE**

## Data Analyst at Cellular Longevity, Inc., dba Loyal, Remote, (Jul 2022 – present)

- Analyzing biomarker/timepoint clinical trial data using R, running statistical comparison tests and generating various data visualizations. Generating linear models to identify biomarker-drug associations. Analyzing biomarker assay sensitivity
- Designing data pipelines in python to more efficiently and accurately analyze timepoint data.
  Automating clinical trial data analysis pipeline. Collaborating to help build companywide bioinformatics data infrastructure on Git Hub
- Working with canine DNA sequence and methylation data to assess the impact of various environmental factors on health. Analyzing large genomic datasets on AWS
- Learning about the inner workings of a biotech startup company including how different data types are managed, how code is built cooperatively and how computer biology and engineering teams collaborate with clinical R&D teams on large-scale drug development research projects

#### **Bioinformatics Analyst at MindSpec**, *McLean*, *VA* (*May 2021 – Jun 2022*)

- Performed meta-analysis on the relation of autism spectrum disorder and motor coordination deficits in collaboration with Columbia University. Study was aimed at expanding diagnosis criteria in children
- Handled large amounts of numerical, categorical and genomic data in Excel. Assisted in building statistical methodology to analyze data trends. Generate visual representations of data using R

## Research Assistant at the University of Virginia, Charlottesville, VA (Aug 2019 – May 2021)

 Carried out health policy research into the financial reimbursement of telemedicine providers by insurance companies. Performed financial forecast modeling using new healthcare policy and compiled data to publish two research papers

#### Bioethics Intern at the UVA Health System, Charlottesville, VA (Jan – May 2020)

 Worked with the Director of Medical Center Procurement to assist the UVA health system in ethical PPE acquisition strategies during the early stages of the coronavirus pandemic

## **SKILLS**

Computer software - Python, R, SQL, Java, Git, AWS, Linux Shell, Excel, APIs

## **RESEARCH PUBLICATIONS**

Pamela B. DeGuzman PhD, RN | Zack Siegfried B.S. | Alec Scicchitano B.A. | Neha Jain | Setareh Abooali | (2021) Improving Equitable Access to Care Via Telemedicine in Rural Public Libraries. *Public Health Nursing*.