## **Sean Collins**

251 Frankfort Sq. Columbus OH, 43206 | 330-814-1577 | Sean.Collins2@osumc.edu

Passionate researcher specialized in epidemiology, bioinformatics, computer science, and laboratory science with over 5 years of healthcare experience. Adept at statistical modeling, data analysis, and numerous statistical software packages.

#### **TECHNICAL SKILLS**

- **Epidemiology:** Genetic Epidemiology, Infectious Disease Epidemiology, Epidemiology of Chronic Disease, Microbiology, Surveillance, Data Analysis
- Quality: ASQ Member, Hem/Onc/BMT Division Quality Control, Auditing, Document control, SOP development and standardization
- **Biostatistics:** linear, logistic, conditional, and Poisson regression, Cox regression, survival analysis, repeated measures analysis
- Computing: R, STATA, Python, Java, SAS, SQL, Microsoft Office Suite, Database Design
- **Bioinformatics:** PyMol, BLAST, NCBI Database Utilization, and Protein Structure Analysis, UCSC genome browser, RefSeq

### **EDUCATION**

The Ohio State University College of Public Health, Columbus OH M.S. Epidemiology – 3.3 GPA

August 2015 – May 2019

Walsh University, North Canton, OH B.S. Bioinformatics, B.S. Biology – 3.6 GPA **Diploma with Honors, Cum Laude** 

August 2011 – May 2015

#### **EXPERIENCE**

# Research Consultant, Center for Clinical and Translational Science

The Ohio State University Wexner Medical Center, Columbus Ohio

July 2020 – Present

- Resource planning, distributing grant funding to researchers, using metrics to inform continuous improvement projects, Voucher Award Program Administrator
- Pilot Program Administrator: Accept applications for Pilot Grant Funding, collect academic and community reviewers, organize, and administrate study section discussion, score, and make funding recommendation, manage all aspects of funding and invoicing. Process applications for over 50 projects per year, award, and mange 10 projects
- Maintain compliance for all publications resulting from research supported by our grant. Communicate with multiple investigators to ensure proper citation. Format manuscripts suitable for publication

## Instructor, College of Nursing,

January 2020 - Present

## The Ohio State University Wexner Medical Center

- Teach online courses for Data Management for Clinical Trials and Project Management for Clinical trials.
- Educating students on how to properly run and manage a clinical trial, including proper data use and storage. Multiple data software included such as REDCap, Qaultrics, and Datatrak

Research Analytics Specialist, Center for Clinical and Translational Science

The Ohio State University Wexner Medical Center, Columbus Ohio

August 2017 – July 2020

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- Resource planning, distributing grant funding to researchers, using metrics to inform continuous improvement projects
- Core Voucher Award Program Administrator: accept applications for vouchers for fee-based services at multiple service providers across the university, allowing investigators to procure preliminary data for grant submissions. Process applications for over 200 projects per year, mange awards for over 150 projects.
- Used SQL to query database to collect metrics to support 16 programs for grant renewal application

# Research Analyst, Nationwide Children's Hospital, Columbus, Ohio January 2016 – August 2017

- Data management, and Quality Control for Cancer Registry, maintain and update patient records, data collection, and providing requested data to doctors for cancer research
- Developed Bone Marrow Transplant Quality Index to score performance based on metrics like number central line associated infections, time to antibiotics at admission, days to revaccination post-transplant etc.
- Commission on Cancer (COC) Accreditation coordinated application and successful acquisition of CoC Accreditation

#### **ACADEMIC PROJECTS**

## College of Public Health Thesis Research - Clostridium difficile Infection in Dogs and Humans

- Tested fecal samples from dogs and humans for *C. difficile*, tested positive samples for antibiotic resistance patterns
- Performed statistical modeling to determine if dog and humans are infected with same strains

## **Genome Annotation Project – Department of Energy**

- Sought to discover new genes with possible renewable energy applications
- Utilized DOE software, UCSC Genome Browser, and RefSeq to annotate genes and hypothesize on possible functions
- Collaborated with other researchers to contribute to an ever-growing gene database

# Honors Research and Thesis - Molecular Cloning and Sequencing of Myotis lucifugus CD8 Gene

- Extracted DNA from Bat feces
- Isolated CD8 genes using primers developed from BLAST analysis of similar CD8 genes
- Used Polymerase Chain Reaction to copy genes for pyrosequencing

#### HONORS AND ORGANIZATIONS

- Eagle Scout, Boy Scouts of America
- **Presidential Scholarship**, Walsh University Full Tuition
- Sigma Zeta, Math and Science National Honors Society