

ANDREW BORGMAN

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EDUCATION

Grand Valley State University, Grand Rapids, MI

2011 - 2013

M.S. in Biostatistics

Member of Mu Sigma Rho Statistics Honor Society

Overall GPA: 3.97

Aquinas College, Grand Rapids, MI

2007 - 2011

B.S. in Mathematics

Minors in Physics & Accounting

President of Pi Mu Epsilon Mathematics Honor Society

Overall GPA: 3.98 (Summa Cum Laude)

EXPERIENCE

Van Andel Research Institute

April 2013 - Present

Biostatistician I – Bioinformatics & Biostatistics Core

Grand Rapids, MI

- Perform statistical consulting for researchers at VARI and MSU College of Human Medicine
- Handled basic statistical inquiries; investigated and implemented advanced methodologies
- Conducted power analyses via exact methods or simulations
- Researched, implemented and compared pipelines for the analysis of NGS data
- Researched and implemented tools for integrated analysis of multiple high-throughput genomic, transcriptomic and proteomic assays
- Deployed and administrated GitLab backed git version control system to improve project tracking and project reproducibility
- Co-developed and co-instructed an introductory statistics course for Van Andel Institute Graduate School

Van Andel Research Institute

December 2011 - April 2013

Statistical Analyst – Lab of Canine Genetics & Genomics

Grand Rapids, MI

- Lead statistician in high-throughput genomics lab
- Designed pipelines for conducting genome-wide association studies (GWAS)
- Implemented population genetics analyses using high density SNP genotyping data
- Developed workflows for the analysis of whole genome and whole transcriptome next-generation sequencing data

Grand Valley State University

August 2011 - April 2013

Graduate Assistant – School of Social Work

Grand Rapids, MI

- Helped to integrate Chalk & Wire curriculum assessment tool for department evaluation
- Performed data aggregation and statistical analysis to show curricula met NASW standards
- Provided general technical support for students and faculty
- Presented paper on data driven curriculum development at the Las Vegas National Social Science and Technology Conference

RESEARCH SUPPORT

Henry Ford Health System

September 2013 - September 2014

Hermelin Brain Tumor Center

- VARI collaboration with Henry Ford Health System
- Major goal the development of analytical techniques for integrating information gleaned from multiple high-throughput omics assays to identify networks/pathways suggesting novel therapeutic targets, targets of existing drugs, and combinational strategies for glioblastoma treatment.

Grand Valley State University

August 2012 - December 2012

Presidential Research Grant

- The goal of this project was to leverage high-performance computing technologies to clean and analyze a large data set from an experimental offshore LiDAR buoy stationed in Lake Michigan.

PUBLICATIONS

1. Neff MW, Beck JS, Koeman JM, Boguslawski E, Kefene L, Borgman A, et al. Partial deletion of the sulfate transporter SLC13A1 is associated with an osteochondrodysplasia in the miniature poodle breed. PloS one. 2012;7(12):e51917.

AWARDS & CERTIFICATES

- GVSU Intern of The Year (2011-2012)
- Outstanding Mathematics Senior Award (2011)
- Outstanding Physics Student of the Year (2010)
- SOA Exam P
- SOA Exam FM

TECHNICAL STRENGTHS

Programming Languages

R, Python, C++, C#

Web Development

HTML/HTML5, CSS, JS, Django web framework

Databases

MySQL, PostgreSQL, MongoDB (noSQL)

Linux / Other

BASH, Sed, AWK, git, GitLab

Bioinformatics Tools

GATK, EdgeR, DEseq, GSEA, PLINK