Annika Jorgensen

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EDUCATION

Arizona State University

MS Biology: Computational Life Sciences, GPA: NA

2023- Current

Arizona State University

Honors BS Biophysics, GPA: 3.59

Tempe, AZ
2019–2023

Riverton High School
High School Diploma, GPA: 3.97
Riverton, UT
2015–2019

EXPERIENCE

Undergraduate Lab Aide-Dr. Melissa Wilson

Sex Chromosome Lab

- Analyzed sex differential expression of genes

- Ensured quality control of RNA-seq data
- Implemented biostatistical methods in R

Teaching Assistant

Arizona State University

- Educated students on writing bash scripts
- Educated students on SSH
- Educated students on sequence alignments

Compliance Editor

American Preparatory Academy

- Edited IEPs for special education students
- Managed projects special education services

Eco Rep

Eco Reps ASU

- Educated students about sustainability

Research Aide

SciHub ASU

- Led the Fluorescence Spectroscopy Project
- Constructed electric circuits using reflow soldering

November 2021- Present Tempe, AZ

- Constructed multivariate RNA-seq models
- Performed biochemical pathway analyses
- Searched and reviewed bioinformatics literature

Tempe, AZ

- Educated students on variant calling
- Educated students on SAM and BAM files
- Educated students on RNA-seq visualization

Fall 2021-Present

Draper, UT

Fall 2022

- Took notes for IEP quality assurance
- Converted special education files to digital format

Tempe, AZ

- Created engaging events focused on the environment

Summer 2020-Fall 2021

Tempe, AZ

Fall 2022

- Learned how to operate spectroscopy equipment
- Drafted market studies for products

Summer 2020-Spring 2021 Lehi, UT

Developed drug sales datasheet

Scrubbed large databases

- Created government official datasheet

- Drafted sales agreements for hospital partners

Publications

Civica Rx

• Annika Jorgensen, Elizabeth S. Borden, Musa Gabere, Karen Taraszka Hastings, Melissa A. Wilson, Kenneth H. Buetow, "Sex-Differential Expression Analysis in Viral-Mediated Hepatocellular Carcinoma.", In Progress

Conferences

- 1. **Annika Jorgensen**, Elizabeth S. Borden, Musa Gabere, Karen Taraszka Hastings, Melissa A. Wilson, Kenneth H. Buetow, "Sex-Differential Expression Analysis in Viral-Mediated Hepatocellular Carcinoma.", *UACC Cancer Research: Present and Future, September 2022*
- 2. **Annika Jorgensen**, Mary Carlson "TWIST 1 Expression Induced by TNF α & TGF β .", SLCC SME Symposium, May 2019

SKILLS

- R: Skilled in use of Differential Expression and Statistical analysis in R
- Python: Skilled in use of IDE and writing code
- MATLAB: Skilled in use of IDE and writing code
- Arduino: Skilled in operation of IDE and making circuits
- Mathematica: Skilled in accessing biological databases and operating symbolic math library
- Bash: Skilled in writing scripts for working with SAM & BAM files
- Sequence alignments: Can conduct sequence alignments and call variants
- Quality assessments: Can run quality checks on raw sequencing data

PROJECTS

Differential Expression Analysis

2021- Present

Working on Sex Differential Expression Analysis to discover genes sex deferentially expressed in Liver Cancer

Fluorescence Spectrometer Project

2021

The development of a portable fluorescence spectrometer used to detect skin cancer

TWIST 1 in HEK 293 cells

2019

TWIST 1 Expression Induced by TNF α & TGF β . The study of TWIST 1 expression in HEK 293 cells

PcO6 and Production of Biofilm

2018

The study of how PcO6 produces biofilm on root plating and in liquid medium.

Extracurricular Activities

• ASU Herstory Committee

Spring 2022

Tempe Vice-Chair. I worked on creating events centered around the women experience for the ASU Tempe Campus.

• SWE ASU

Outreach Director 2020 and K-12 Outreach Director 2021. I coordinate all volunteer and service events for SWE ASU

• LDS Hospital Summer 2019

 $Volunteered\ in\ ICU\ helping\ patients\ take\ walks,\ stocking\ medical\ supplies,\ and\ taking\ calls$