# Zachary Danielson

(801) 602-4584

zacdanielson32@gmail.com

1272 N Lakeview Dr, Provo, UT 84604

#### Education

### **Bachelor of Science in Genetics and Biotechnology**

Expected April 2016

Brigham Young University-Provo, UT

• Emphasis in Animal Genetics

• GPA: 3.7

**Associate of Science** 

April 2010

**Utah Valley University** 

GPA: 3.77

## **High School Graduate**

May 2010

**Utah County Academy of Sciences** 

# Work Experience

Research Assistant

May 2014-August 2014

Plant Genetics Resources Unit, USDA-ARS, Geneva, NY

Gennaro Fazio

630 W. North St., Geneva, NY 14456

(315) 787 2480

- Used Geneious to analyze and map Illumina reads from 35 different apple genomes to a reference chromosome
- Utilized Genome Studios to analyze 20,000 SNP reads
- Extracted DNA and RNA samples from 200+ samples for SNP marker mapping
- Harvested tissue from 100s of apple trees to be used in sequencing, SNP mapping, and HPLC

#### **Research Assistant**

May 2010-April 2011, August 2013-April 2014

Genetics and Biotechnology Lab, BYU Provo, UT

Jeff Maughan

5144 LSB, Provo, UT 84602

(801) 422-8698

- Collected and analyzed DNA samples from grain Amaranth leaf tissue
- Researched SNP markers in Amaranth
- Planted and harvested Amaranth grain populations
- Assisted in the implementation of a hydroponic growing system for Amaranth
- Non-presenting author of poster detailing SNP mapping of grain Amaranths

Team Member July 2013-Present

Chick-fil-a, Orem, UT

Terry Crook

484 W. Bulldog Blvd, Provo, UT 84604

(801) 374-2697

- Filled catering orders worth \$100+
- Processed weekly shipments of 200+ items
- Interacted with customers on a daily basis to provide help and service

#### **Volunteer Representative**

June 2011-July 2013

The Church of Jesus Christ of Latter-day Saints

- Lead group of 16 individuals and provided monthly training
- Provided weekly training to 8 individuals

# Zachary Danielson

(801) 602-4584

zacdanielson32@gmail.com

1272 N Lakeview Dr, Provo, UT 84604

#### Skills and Awards

- Life Sciences Departmental Scholarship, 4 semesters (2013-2015)
- Brigham Young University Academic Scholarship, 2 semesters (2010-2011)
- Eagle Scout Award-Boy Scouts of America
- Fluent in Spanish
- Molecular Biology Techniques including: PCR, BigDye, DNA extraction, spectrophotometry
- Bioinformatics programs and techniques including: Geneious, Galaxy, ApE, basic skills in python and command line in Linux, C++

## Relevant Courses

- Organic Chemistry
- General Microbiology
- Science of Biology
- Biological Anthropology
- Bioethics
- Molecular Biology
- Biochemistry
- Comparative Physiology and Anatomy
- Technical Communication

- Cell Biology
- Genetics
- Mentored Lab Techniques
- Genomics
- Introduction to Bioinformatics
- Reading in Biotechnology
- Intro to Computer Programming
- Advanced Molecular Biology & Lab
- Mentored Research Experience

#### <u>Publications and Presentations</u>

 Smith SM, Nielsen KE, Danielson ZS, Jellen EN, Maughan PJ (2011) Development, Characterization And Linkage Mapping Of Single Nucleotide Polymorphisms In The Grain Amaranths (Amaranthus spp.). Plant and Animal Genome XIX Conference, January 15-19, 2011, San Diego, CA (Poster Abstract)

# Zachary Danielson