

EXPERIENCE WITH THE COMMON BEAN COORDINATED AGRICULTURAL PROJECT



Hannah Walters
2010 Undergraduate
Intern at Colorado
State University



Colorado State University Interns

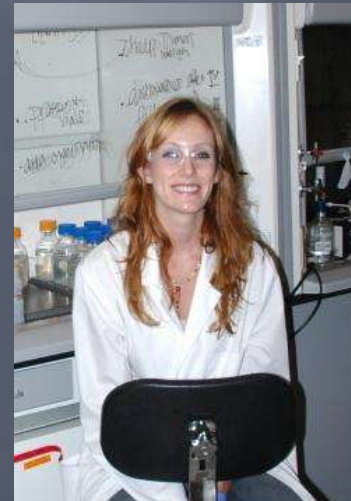
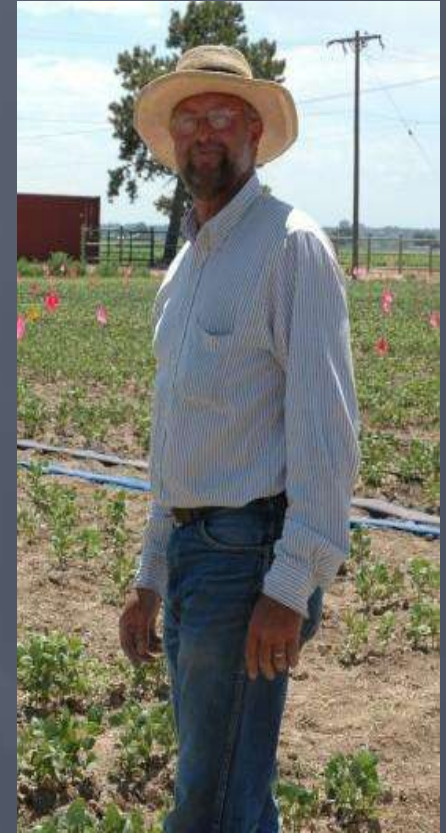


Two Undergraduates: Hannah Walters and Sarah Dominic

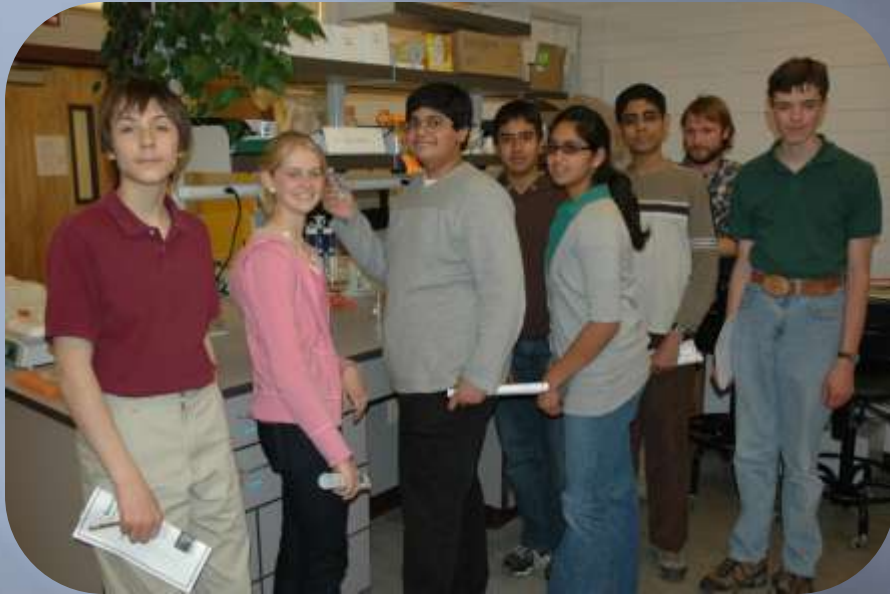
Three High school Interns: Colton Heeney, Bryan Fischer, Jordan Leone

Others Involved

- ▣ Mark Brick
- ▣ Barry Ogg
- ▣ Leslie Brick
- ▣ Glenn Brown



Outreach at Colorado State



Ridgeview High School Visit to CSU



Jordan's presentation at Ridgeview High School

School that where contacted

- Ridgeview Classical High School
 - Poudre High School
- Both in Fort Collins



Experience Overview

▣ Spring

- Sarah and I worked in the Greenhouse
- Helped set up breeding nursery

▣ Summer

- Helped over see the high school interns
- Field Work
- Lab Work (Fiber and Molecular)
- Website
- Worked within the department
- Tours (Sugar Beets and Pioneer)

▣ Fall

- Harvest
- Greenhouse

Planting



Tractor Planting



Sarah Staking F1



Hannah hand planting F1

Greenhouse



Glenn Teaching the high school interns about inoculating white mold



- ▣ Inoculation
 - White Mold
 - BCMV
 - Rust
- ▣ Crossing
- ▣ Seed Increases

Fiber Lab

- ▣ Fiber Analysis
 - Both the High school interns and undergrads got experience running fiber analysis



Molecular Lab



- ▣ Undergrads got hands on experience in the lab
- ▣ High school got to tour and see what is done in the lab



Field Work

- ▣ Planting
- ▣ Weeding
- ▣ Taking flowering notes
- ▣ Plant counts
- ▣ Setting up drip Irrigation
- ▣ Harvesting



Irrigation set up in Greeley, CO.



Work within the Department



- ▣ Other work
 - Help with the wheat harvest
 - Dig for Worms
 - Spread bio solid



Evaluation of Heirloom Dry Beans to Promote Genetic Diversity



Evaluation of 34 landraces of beans to find out
adaptation to Northern Colorado

Presented findings at ASA-CSSA-SSSA National Meetings in Long Beach, CA.

PICTURE OF TOP COMMON BEAN ENTRIES

**Snowcap
Bean**



**Kilimajaro
Speckled**



African Yellow



**Swedish
Brown**



Ameythis



Yellow Indian Women



UI 114 Pinto



Kronis Purple



Flor de Mayo



Learned

- ▣ Awareness of plant breeding and its importance
- ▣ Exposed to scientific method
- ▣ Basic principals of the Dry Bean Breeding
- ▣ Lab Work
 - Fiber
 - DNA
- ▣ Greenhouse Work

Advise

- ▣ More information about the science of plant breeding
- ▣ More education for interns
 - Weekly meeting explaining a concept
- ▣ Continue with tours
- ▣ Side project

Summary

"The Bean CAP internship provided me with a great first job experience. Not only did I receive an introduction into the job world, but I was also exposed to the field of plant sciences and agriculture. It was an invaluable experience for me, as I plan to pursue a career in the plant sciences."

Bryan Fischer, 2010 High School Intern

- ▣ This is a good opportunity for students to gain experience in the plant breeding field
- ▣ I would like to pursue a career in plant breeding
- ▣ I have applied to graduate school at Washington State University

Acknowledgment

- ▣ USDA- NIFA
- ▣ Colorado State University
- ▣ CSU Dry Bean Breeding
 - Mark Brick & Barry Ogg
 - Leslie Brick & Glenn Brown