

Rachelle Richards

810 Commons Circle Dr. SW #122, Mt. Vernon, IA 52314 | 563-555-1212 rrichards18@cornellcollege.edu

Education

CORNELL COLLEGE, MT. VERNON, IA

MAY 2018

Biochemistry and Molecular Biology, Civic Engagement minor
GPA: 3.55

Research Experience

FIELD RESEARCH IN BIODIVERSITY, DR. JAYNE WILLIAMS, HAITI

JANUARY 2016

Field Research Team Member

- Conducted biodiversity research on a unique tritrophic community made up of host plant, fly, and parasitic wasp, located in Central and South America.
- Located and collected specimen in the field while observing changes that the host plant underwent
- Processed and logged all field collected specimen
- Provided detailed microscopic descriptions about all discoloration and marks on puparia that could be attributed to parasitism
- Collaborated with field team to collect and transport home largest field collection to date

CORNELL SUMMER RESEARCH INSTITUTE, DR. JAYNE WILLIAMS, CORNELL COLLEGE

MAY 2016-JULY 2016

Biology Research Assistant

- Worked in the laboratory isolating and amplifying DNA from *blepharoneuræ*
- Edited DNA sequences to generate phylogenetic trees that explore niche overlap
- Analyzed trends between multiple sources of data in order to organize and visualize past research
- Synthesized research data for poster presentations
- Collaborated with team members in different parts of the country

Academic Laboratory Experience

CELL AND MOLECULAR BIOLOGY, RESEARCH PROJECT, CORNELL COLLEGE

APRIL 2016

- Determined the number of Cytochrome C Oxidase subunit I genes found in DNA of potatoes
- **Applied Skills:** plasmid and mitochondrial DNA isolation, differential centrifugation, Southern Blot analysis, gel electrophoresis, restriction digestion, Dot Blot analysis

GENETICS, RESEARCH PROJECT, CORNELL COLLEGE

OCTOBER 2016

- Experimentally determined conditions to successfully isolate and amplify microsatellites within mummichog (*Fundulus heteroclitus*) genome
- **Applied Skills:** Genomic DNA isolation, differential centrifugation, UV spectrophotometry, restriction digestion, gel electrophoresis, PCR amplification

Employment

CORNELL CIVIC ENGAGEMENT OFFICE, MT. VERNON, IA

MAY 2015-PRESENT

Mentoring Program Coordinator

- Coordinate mentoring program that tutors students at the local middle school
- Oversee mentoring program that assists elementary students develop reading skills in Iowa City IA
- Regularly correspond with students and community partners regarding scheduling and events

CORNELL STUDENT LIFE OFFICE, MT. VERNON, IA

MARCH 2015-PRESENT

Orientation Leader, Peer Advocate

- Provide a welcoming and supportive environment for first year students transitioning to college
- Lead a diverse group of students through community-building activities and introductions to campus resources
- Adhere to NSO schedule while remaining flexible to accommodate last minute changes or down-time

CORNELL ADMISSIONS, MT. VERNON, IA

AUGUST 2016-PRESENT

Tour Guide

- Provide informed and personal tours to prospective students
- Relate to a diverse background of students and connect them to campus
- Cultivate strong communication skills and poise when speaking to people of all ages

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Volunteer Experience

CORNELL SUCCESS LAB, MT. VERNON, IA

- Tutor 5th and 6th graders at Mt. Vernon Middle School in afterschool program in reading, science and math

SEPTEMBER 2014-PRESENT

CORNELL LUNCH BUDDIES, MT. VERNON, IA

- Mentor 3rd grade student once a week by being a positive role model

SEPTEMBER 2014-MAY 2016

ALTERNATIVE WINTER BREAK, XELA, GUATEMALA

- Taught English to students ages 12-16
- Played and assisted children with disabilities at special needs orphanage

JANUARY 2-JANUARY 10 2015

ALTERNATIVE SPRING BREAK, GRUNDY COUNTY, TENNESSEE

- Worked in local communities fixing homes for people affected by rural poverty

MARCH 7-MARCH 14 2015

ALTERNATIVE SPRING BREAK, ATLANTA, GEORGIA

- Assisted a youth development program in tutoring during their after-school program

MARCH 3- MARCH 13 2016

References

Professor Craig Tepper, PhD, Professor of Biology, Cornell College
ctepper@cornellcollege.edu

Professor Marty Condon, PhD, Professor of Biology, Cornell College
mcondon@cornellcollege.edu