Comparative Hardwood Genomics’ Outreach Component with The University of West Alabama

Presenter - Dr. Ketia Shumaker
Associate Professor of Biological & Environmental Sciences
@ The University of West Alabama
“...substantive research experiences will be provided to minority undergraduate students in collaboration with The University of West Alabama.”
The University of West Alabama

- Livingston, AL
- Public University
- ~5,100 students
- Bach. & Master Degree Programs
- 12:1 Student:Teacher
- Minority Serving Institution
UWA to PSU: The Process

- Selection
- Preparation
- Information Session for Interns & Their Support Team
- Travel to the Research Site at Penn State University
- Going from the Lab Bench to the Poster, Oral, & Manuscript
- Professional Preparation
- Coming Back Home Developing Research Ambassadors

Comparative Genomics of Hardwood Tree Species

http://www.hardwoodgenomics.org
* Rebecca Carroll & Chicko Jones
* Studied the Gene Expression Patterns of Tree Species Exposed to Ozone
* Poster Presentation @ Hershey Medical Center’s Undergraduate Research Symposium on July 31, 2014
* Future Presentations
* Check out their research poster

http://www.hardwoodgenomics.org/
Summary of Outreach’s Impact
Since 2011 until now...

- 10 UWA Undergraduate Interns
- Research Presented at 16 Different Conferences
- 5 Presentation Awards (regional and national)
- Increased Plant Research Opportunities at UWA
Survey Highlights

2011 - 2013 Post Survey Report (n=6; out of 8)

- Increased likelihood to apply to graduate school in life science (section 3)

- 100% believe that underrepresented groups can excel in plant science/biotechnology (section 4.13)

- “Penn state internship was an amazing experience and I feel so grateful to have had the opportunity to participate in it. It gave me a lot of experience and confidence.” (section 4)

- “This internship should go on as long as possible. It gives us so much experience and fundamentals in the science field. This experience not only applies to biology but to all other sciences as well....” (section 7)
2014 Cohort Pre/Post Survey Reports (n=2)
Overall more positive responses in the Post-Survey vs. the Pre-Survey

How Do We Continue This Positive Impact?