

2024 ANNUAL REPORT



OUR MISSION:

THE BIO/DIVERSITY PROJECT IS AN ENVIRONMENTAL SCIENCE
OUTREACH PROGRAM HOUSED WITHIN THE WOMEN IN SCIENCE AND
ENGINEERING (WISE) PROGRAM AT THE UNIVERSITY OF ARIZONA.
THE BIO/DIVERSITY PROJECT AIMS TO INCREASE THE DIVERSITY OF
VOICES INCLUDED IN DISCUSSIONS OF ENVIRONMENTAL PROBLEMS
AND THE DEVELOPMENT OF THEIR SOLUTIONS. BY INCREASING
ACCESS TO INNOVATIVE ENVIRONMENTAL SCIENCE OPPORTUNITIES
AND TRAINING, MENTORING, AND WORK EXPERIENCE, WE AIM TO GET
STUDENTS EXCITED ABOUT ENVIRONMENTAL SCIENCE AND SUPPORT
THEM ALONG THEIR JOURNEYS INTO THE WORKFORCE.

THE WISE PROGRAM IS HOUSED IN THE SOUTHWEST INSTITUTE FOR RESEARCH ON WOMEN (SIROW), A REGIONAL RESEARCH AND RESOURCE CENTER DEDICATED TO IMPROVING THE LIVES OF WOMEN AND GIRLS AND ADDRESSING GROUP-BASED DISPARITIES.



THE BIO/DIVERSITY PROJECT 2023-2024 PROGRAM SUMMARY

WISE's Bio/Diversity Project aims to increase access to innovative environmental science education opportunities and training, mentoring, and work experience along the K-16+ educational pipeline.

2023-2024 Program Summary

In the 2023-2024 academic year, The Bio/Diversity Project hosted 30 undergraduate students from 14 different majors across 7 colleges. UArizona students dedicated 10 hours per week each semester, totaling 5,120 hours to serving our local Tucson community!

Outreach during the Fall semester focused on essential environmental science topics, including species diversity, adaptations of desert plants and animals, causes and consequences of biodiversity decline. In the Spring semester, youth applied these concepts to develop pollinator conservation projects at their schools. Projects included building bird feeders, planting pollinator-friendly plants and seeds, installing wildlife cameras, and conducting data analysis and data visualizations.

The Bio/Diversity Project launched a new data science track of our environmental science outreach internship program. Led by PI Dr. Katy Prudic and coordinated by Dr. Ellen Bledsoe and Elena Greenberg, the new data science outreach is an NSFfunded collaborative research opportunity. "Building Capacity in Data Science through Biodiversity, Conservation, and General Education" provides outreach interns robust training and mentorship from local experts and pairs interns with high school teachers to facilitate data science curriculum through UArizona interns installed hummingbird feeders the lens of biodiversity conservation.



UArizona interns gathered for a field trip up Tumamoc Hill.



UArizona interns engaged local students about the importance of biodiversity conservation.



and wildlife cameras as part of their pollinator conservation project.

THE BIO/DIVERSITY PROJECT

2023-2024 PROGRAM SUMMARY

IN THE 2023-2024 ACADEMIC YEAR:

700+ 6th-9th grade participants



More than half (57%) of partner teachers had 2 or more years of experience as a mentor with the program.

30

UArizona student interns



All 6th-9th grade participants attended **Title 1 schools in metro Tucson.**

7

TUSD & FWUSD partner teachers



More than 2/3 (70%) of the 6th-9th grade participants were **BIPOC youth**.

400+

hours of classroom instruction



Through hands-on, place-based, culturally responsive science activities, youth developed a **sense of belonging** in environmental science.

2023-2024 PROGRAM EXPANSIONS:

1. **Spanish language curriculum development and instruction for bilingual classrooms:** This year we **doubled** the number of participating bilingual students from 100 to 200.

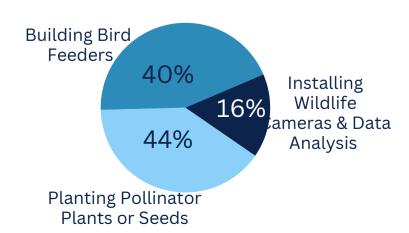
2. Data science modules and introductory coding lessons:

More than 1/4 of all 6th-9th grade students participated in the data science modules. High school students engaged with **3 introductory coding lessons** while middle school students developed **foundational data literacy skills**.

PARTICIPATING CLASSROOMS BY GRADE LEVEL

9th Grade 18% 23% 6th Grade 36% 7th Grade

SCHOOL-BASED CONSERVATION PROJECTS



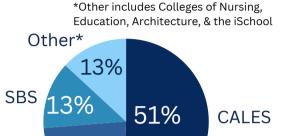
THE BIO/DIVERSITY PROJECT 2023-2024 INTERN COHORT SUMMARY

This year, the Bio/Diversity Project supported 30 UArizona student interns across the Fall 2023 and Spring 2024 semesters. Students were selected from a competitive application process and were paid for their time in the program.

2023-2024 INTERN COHORT (N=30)*

DEMOGRAPHICS 96% CISGENDER WOMEN **45**% BIPOC **14**% FIRST-GENERATION

COLLEGE ENROLLMENT



23%

Science

Bio/Diversity Project student interns represent a variety of academic disciplines. This past year, students received academic credit through 14 different departments at UArizona. The top 6 majors were Environmental Science (23%), Natural Resources and the Environment (20%), Environmental Studies (10%), Biology (7%), Ecology and Evolutionary Biology (7%), and Animal Science (7%).

The Bio/Diversity Project provides weekly professional development opportunities for UArizona student interns in the form of weekly seminars. This year, we expanded our curriculum topics, nearly doubled the number of guest speakers and coordinated 2 new intern cohort field trips.



Would recommend the program to their peers



Felt more connected to the Tucson community



Felt more connected to others on campus



Felt that the program helped them achieve academic or professional goals this year

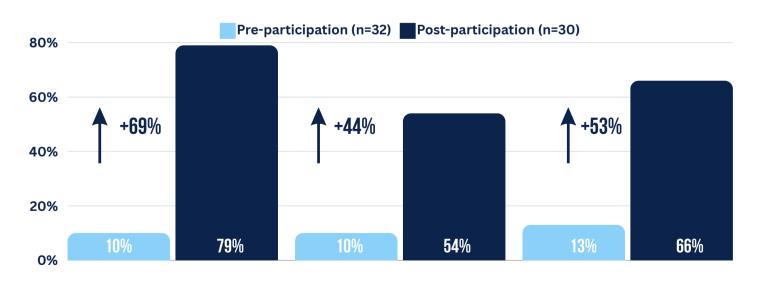
THE BIO/DIVERSITY PROJECT 2023-2024 INTERN IMPACT SUMMARY

We surveyed **UArizona student interns** immediately before and after participating to learn more about the overall impact of the experience. Results shown below indicate the experience helped **build confidence in their academic and professional development abilities, knowledge and skills related to environmental science communication, and motivation to participate in future environmental advocacy efforts.**

After the internship, UArizona student interns reported that they feel:



Survey results demonstrate **notable increases in knowledge**, particularly on DEI issues, the Tucson community, and curriculum development.



"I feel extremely or very knowledgeable about issues of diversity, equity, and inclusion in environmental orgs"

"I feel extremely or very knowledgeable about the Tucson community" "I feel extremely or very knowledgeable about curriculum development"

THE BIO/DIVERSITY PROJECT

2023-2024 INTERN TESTIMONIALS

2023-2024 UARIZONA INTERN TESTIMONIALS

"I THINK THAT THIS EXPERIENCE HAS GIVEN ME OUTSTANDING OPPORTUNITIES TO IMPROVE UPON MY SCIENCE COMMUNICATION SKILLS WHICH WILL BE VITAL IN ACHIEVING MY SCIENCE RELATED CAREER GOES TO BE AN ENVIRONMENTAL SCIENTIST OR WILDLIFE BIOLOGIST."





"THE BIO/DIVERSITY PROJECT HAS ALLOWED ME TO SEE GROWTH AND WONDER IN THE EYES OF YOUNG SCIENTISTS HERE IN TUCSON"

"AFTER TEACHING WITH THE BIO/DIVERSITY PROJECT, I FEEL SO MUCH MORE CONNECTED TO TUCSON, TO THE YOUTH COMMUNITY, TO THE SONORAN DESERT, AND TO EDUCATORS AROUND ME. TEACHING HAS FELT SO COMMUNITY-ORIENTED WHERE I HAVE NOT MADE THE SAME CONNECTIONS IN RESEARCH. I WANT TO CONTINUE EXPLORING WHERE THIS PASSION TAKES ME, AWAY FROM SEEMINGLY "STERILE" RESEARCH LIFE TO ONE FILLED WITH ENRICHING RELATIONSHIPS."





"I THINK THE MOST IMPORTANT THING THAT THIS INTERNSHIP HELPED WITH WAS BRIDGING THE GAP BETWEEN TAKING CLASSES AND GETTING REAL-WORLD EXPERIENCE. IT WAS AMAZING TO HAVE THE OPPORTUNITY TO SEE WHAT TEACHING IS REALLY LIKE, AND I AM EVEN MORE CONFIDENT THAT I WANT TEACHING TO BE A PART OF MY CAREER."

THANK YOU TO OUR 2023-2024 SPONSORS!

AND THE 15 INDIVIDUALS & FAMILIES WHO DONATED DURING OUR CROWDFUNDING CAMPAIGN!

















