

2024-2025

EARTH GRANT DEMONSTRATION

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RESEARCH WORK

My time at the Ramirez-Andreotta Integrated Environmental Science and Health Risk Laboratory has helped me develop several quantitative and qualitative research skills.

While I did learn the procedure for several wet lab tasks, including soil monitoring for heavy metals, I mostly assisted in learning research and statistics.

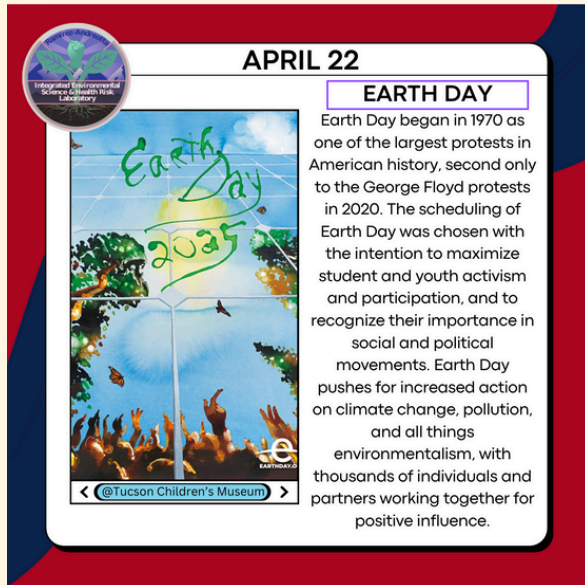
I developed skills in EXCEL's Crystal Ball extension by Oracle to develop statistics on heavy metal concentrations in community/household-grown produce. We have also been using this data for training in R statistical models and coding experience.

I am now learning NVivo, a qualitative coding software in which we have been developing codes to describe the themes that have become apparent in our learning research of STEAM education in rural Arizona. This includes not only the development but also the application, where I had the opportunity to assist in designating codes to learning artifacts.

I have also been able to help a graduate student take on a massive literature review, where I have read hundreds of peer-reviewed articles' abstracts to evaluate whether or not they meet the inclusion criteria. We are continuing onto stage 2, where I am reading the complete article, where I will include or exclude a given article for its ability to contribute to the review this graduate student is developing.

OUTREACH WORK

Here are some examples of environmental outreach/education I got the wonderful opportunity to assist with! These are some examples, but our lab does a lot of work with in-person, hands-on community engagement that was great to be a part of this year, and I can't wait to continue the outreach!



We use our social media accounts to spread awareness about relevant environmental issues, upcoming engagement events, and environmental awareness holidays.



We also help middle/high school children develop their professional skills in STEAM, and I was able to assist in a presentation to develop the students' data presentation skills as they prepare to voice their environmental concerns to their community.

THANK YOU !