

LA-UR-22-31525

Approved for public release; distribution is unlimited.

Title: My Journey to becoming a Process Engineer at LANL

Author(s): Wheeler, Meagan Daniella

Intended for: Presentation for SAGE Journey Program

Issued: 2022-10-31



Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by Triad National Security, LLC for the National Nuclear Security Administration of U.S. Department of Energy under contract 89233218CNA000001. By approving this article, the publisher recognizes that the U.S. Government retains nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy. Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.



My Journey to becoming a Process Engineer at LANL

Meagan Wheeler

November 12th, 2022

How'd I get into Process Engineering?

- I grew up in Nambé and attended Pojoaque Valley Schools
- Started off as a LAESF Scholar
 - This pushed me to get an internship at LANL
 - First generation student
- Completed my undergraduate degree at Northern Arizona University
 - In chemistry and mechanical engineering
- I was encouraged to pursue my masters by my former mentor and applied for a GEM fellowship
 - I was awarded the fellowship and attended Colorado School of Mines and received a degree in Metallurgical and Materials Engineering
- Upon graduating I began full time at LANL as a process engineer in the foundry

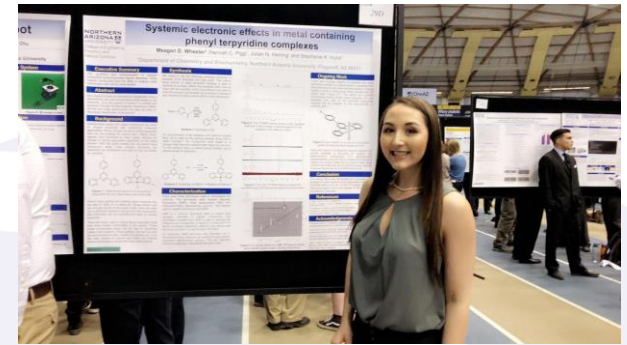


Figure 1: Undergraduate research symposium.

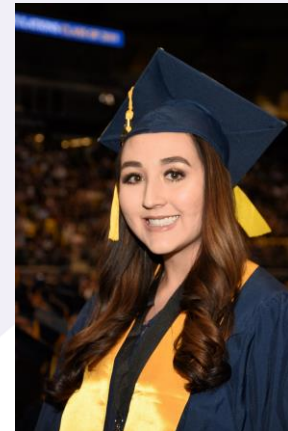


Figure 2: Graduation from Northern Arizona University.



Figure 3: Graduation from Colorado School of Mines.

A Typical Day in the Foundry

- Always start the day with a pre-job
 - We discuss what all we're going to be doing prior to the job occurring
- Half of my day is spent in the foundry processing plutonium
 - Hands on work with the technicians
- The other half of my day is spent working through data obtained from my process
 - This is completed so I can optimize my process
 - I also work through maintenance requests and train new engineers



Figure 4: Images of casting operations inside glovebox.

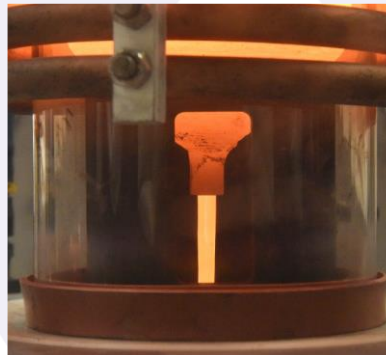


Figure 5: Images of casting operations.

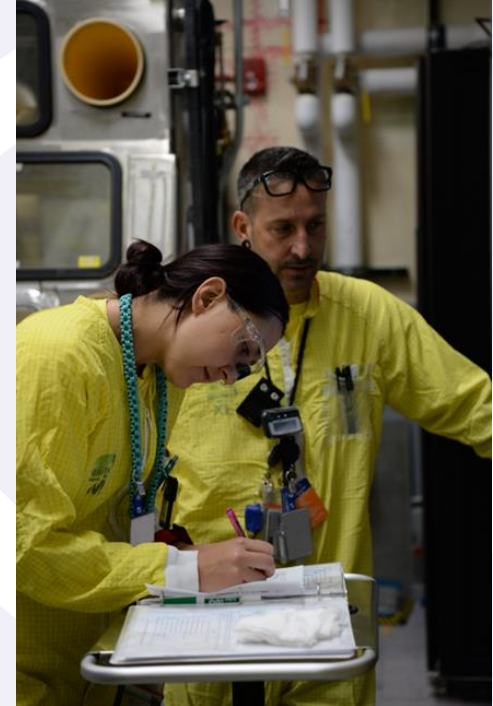


Figure 6: Myself and the technicians.

My Inspiration

- My family
 - They've always pushed me to be the best person I can be
 - Encouraged me to pursue what I'm passionate about
- My mentors
 - Other women in STEM
 - Jere Freeh, Dr. Stephanie Hurst, Michele Decroix, Erika Esquivel.
 - Alonso Archuleta, Bill Peach



Figure 7: My dad and I at an awards banquet.

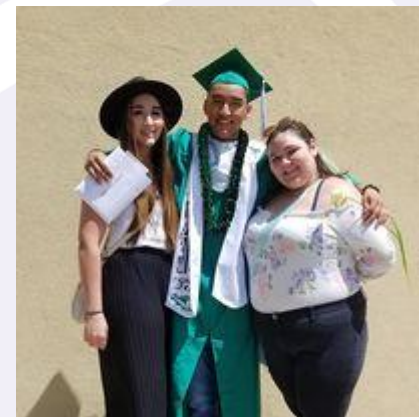


Figure 8: My nephew, sister and I at his high school graduation.



Figure 9: My undergraduate research team with Stephanie Hurst circled.



Figure 10: Michele DeCroix.



Figure 11: Jere Freeh



Figure 12: Erika Esquivel

Some Tips and Advice

- Explore your interests early
 - Looking back, it would have been nice if I had more time to develop my skills and see what I truly enjoy academically
- Make connections
 - Growing your network young helps a lot when you need help later in your career
- Go to the school you enjoy
 - The university I went to for undergrad wasn't prestigious, but I ENJOYED myself there and made connections I wouldn't trade for an experience at any other university

