

# LAUREN MAZUROWSKI, M.S., E.I.T.

lauren.mazurowski@yale.edu

## EDUCATION

---

|            |   |          |
|------------|---|----------|
| <b>PhD</b> | Yale University, Chemical and Environmental Engineering<br>Advisor: Dr. Menachem Elimelech  | May 2026 |
| <b>MS</b>  | University of Nevada, Reno, Civil and Environmental Engineering<br>Thesis: "Method Optimization and Investigation of SARS-CoV-2 Monitoring in Wastewater using Viral Genetic Markers and Environmental Factors"<br>Advisor: Dr. Krishna Pagilla<br>3.80 GPA | May 2021 |
| <b>BS</b>  | University of Nevada, Reno, Environmental Engineering<br>3.78 GPA   | May 2019 |

## HONORS AND AWARDS

---

|  |   |
|--|---|
| <b>National Science Foundation Graduate Research Fellowship</b>              | 2020-2025<br>\$138,000 worth of funding to pursue a Master's and PhD in environmental engineering   |
| <b>Graduate Dean's Merit Scholarship</b>                                     | 2019-2021<br>\$10,000 merit-based scholarship, within the Graduate School of UNR  |
| <b>U.S. Department of State Benjamin A. Gilman International Scholarship</b> | 2016<br>Enables students of limited financial means to study or intern abroad, allowed me to spend fall semester 2016 studying in Chiang Mai, Thailand                    |
| <b>Rotary Club Achievement Beyond Obstacles Scholarship</b>                  | 2015-2021<br>Awards scholarships to deserving students who have triumphed over hardships, demonstrated personal leadership and courage, and yet show academic improvement |
| <b>Wallace Environmental Engineering Scholarship</b>                         | 2018<br>\$1,200 merit-based scholarship, awarded to a promising student in the environmental engineering program at UNR   |
| <b>Nevada Women's Fund Scholarship</b>                                       | 2020<br>Awards individual education scholarships to women identifying critical social needs that share the NWF mission to strengthen and empower our community            |
| <b>NAHAS Scholarship</b>   | 2015-2019<br>Awarded to individuals who demonstrate a high level of community involvement during their high school and undergraduate careers and maintain a 3.0 GPA       |
| <b>College of Engineering Dean's List</b>                                    | Five Semesters Undergraduate Career   |

At the University of Nevada, Reno, you must earn a 3.75 GPA in a minimum of 12 credits to make the Dean's List

## RESEARCH EXPERIENCE

---

**Yale University** 2021 to 2026

**Graduate Researcher**, Dr. Menachem Elimelech

- Conducts research to understand the precise separation and recovery of copper ions from mining wastewater streams through the development and integration of copper-selective membranes in a continuous-flow, electro dialysis (ED) process

**University of Nevada, Reno** 2019 to 2021

**Graduate Researcher**, Dr. Krishna Pagilla

- Performs wet lab research to analyze SARS-CoV-2 concentrations in wastewater, and connects data back to community prevalence, conducting a daily sampling campaign that includes water quality matrix analysis, PEG precipitation, ultrafiltration, RT-qPCR, and RT-ddPCR
- Currently in the process of understanding disease modeling using Matlab and R to optimize computational efficiency and minimize system input
- Conducts weekly tests to monitor total coliforms at a local wastewater treatment plant
- Completed an internal literature review on the subject of advanced oxidation processes to reduce contaminants of emerging concern in reclaimed effluent

**University of Nevada, Reno** 2018 to 2019

**Undergraduate Researcher**, Dr. Krishna Pagilla

- Performed wet lab research using environmental engineering practices in order to optimize coagulation and flocculation dosage for the Southern Truckee Meadows Water Reclamation Facility
- Used Shimadzu TOC-L TOC Analyzer, made standards, safely disposed of waste, accurately calibrated lab equipment, and analyzed samples for pH, E.C., temperature, turbidity, U.V., and alkalinity

## TEACHING EXPERIENCE

---

**University of Nevada, Reno** Jan. 2020 to May 2020

**Teaching Assistant**, Natural Resources and Environmental Science

- NRES 433-Environmental Chemicals: Exposure, Transport, and Fate
- Responsible for holding office hours throughout the semester in order to help students of a diverse background through homework sets

**University of Nevada, Reno** Aug. 2017 to Dec. 2017

**Teaching Assistant**, Engineering

- Supervised and taught Engineering 100 lab, an undergraduate course averaging 600 students per semester, covering the following topics: hovercraft/general engineering design
- Assisted students in Engineering 100 with questions on their hovercraft projects, and troubleshooting various mechanical problems
- Coordinated grading and labs with a team of teaching assistants

- Responsible for the stockroom, and that all tools and equipment were functioning safely

## **PRESENTATIONS AND INVITED LECTURES**

---

**Keynote Address**, “Achievement Beyond Obstacles,” Reno Rotary Crab Feed, April 2019.

**Keynote Address** “Advanced Water Treatment Challenges in Northern Nevada,” Nevada System of Higher Education Board Meeting, June 2020.

**Keynote Address**, “Using Wastewater Based Epidemiology in the COVID-19 Crisis,” Boulder City Sunrise Rotary Club, July 2020.

**Conference Speaker**, “Investigation of SARS-CoV-2 Presence in Wastewater and Monitoring of Community Prevalence,” Nevada Water Environment Association, April 2021.

**Lecturer**, “Viruses in Wastewater,” University of Nevada Reno, CEE 753 Biological Unit Operations, April 2021.

**Speaker**, “Viruses in Wastewater and Why It Matters to You!” Reno South Rotary Club, April 2021.

**Keynote Address**, “The Importance of Community Impact,” GratisGives Check Presentation, May, 2021.

**Speaker**, “Viruses in Wastewater and Why It Matters to You!” Sunrise Rotary Club of Reno, June 2021.

## **PROFESSIONAL TRAINING**

---

**Lumos and Associates**, Engineering Technician, Civil Engineering, June 2019-April 2021

- Develops plans and estimate costs for installation of systems, utilization of facilities, or construction of structures. Conducts water modeling and construction management for various projects, including site inspection and detection of design malfunctions
- Drafts detailed dimensional drawings and designs layouts for water resource projects in order to ensure conformance to specifications, using Civil3D, WaterCAD, and AutoCAD

**Cardno**, Engineering/Environmental Technician, Environmental Engineering, Summer 2018

- Completed construction monitoring in order to re-license the Waugh Lake Dam in Inyo National Forest
- Monitored and assisted in the construction of fish trappings in order to re-license a dam along the Kaweah River
- Conducted field surveys to assess the damages resulting from extensive burns in the Sierra Nevada region

**Vidler Water Company, Engineering Intern, Civil Engineering, Summer 2016**

- Assisted project hydrologist with field data collection and compilation by maintaining field equipment such as: transducers, totalizing rain gauges, storm flow data loggers, air temperature sensors, etc.
- Completed a Biological Survey Report prepared for U.S. Forest Service in order to approve the re-location of multiple precipitation sensors
- Surveyed stream profiles and slopes for Tule Desert, Clover Valley, Kane Springs Valley, Garden Valley

**CERTIFICATIONS**

---

**Fundamentals of Engineering, Environmental**

NCEES, Greenville, SC, April 2019

Description: Advanced licensure for engineers and surveyors

**Civil3D Advanced Training**

CADMaster's, Inc., Sacramento, CA, Jan. 2020

Description: Obtained advanced training in drafting pipe networks, corridors, superpositions, sewer networks, and other components to Civil3D

**10-hour Construction Safety and Health, OSHA, Jun. 2020**

Description: Obtained training on how to conduct and maintain a safe construction site, as well as understanding general safety and health hazards for entry-level workers

**COMMUNITY SERVICE**

---

**Student Association for International Water Issues (SAIWI)**

Treasurer, Reno, 2018-2019

Graduate President, Reno, 2019-2020

Graduate Member, Reno, 2020-2021

- Responsible for planning and coordinating a project collaboration in Victoriano San Lorenzo, Panama, where a slow sand filter and water supply tank were designed and built, and community education on the impact of sanitation on public health was conducted

**Nevada Water Environment Association**

Undergraduate Treasurer, Reno, 2018-2019

Graduate Treasurer, Reno, 2019-2020

- Responsible for planning a free city-wide film showing of Brave Blue World, an educational documentary about the importance of clean water in our modern world, and innovative treatment technologies

**Rotary Club, Midtown Reno Chapter**

Member, Reno, 2019-Present

- Currently serving as a Rotary Eighth Grade Leadership Female Adult Mentor for the annual 3-day leadership retreat for eighth graders

**Girls on the Run Sierra Chapter**

Coach and Youth Female Mentor, Reno, 2020-Present

**Annual Northern Nevada Clothing and Blanket Drive for the Homeless**

Director, Reno, 2017-2020

**LANGUAGES**

---

**English:** Native Language

**French:** Basic proficiency

**Spanish:** Basic proficiency

**COMPUTER SKILLS**

---

**Programs:** AutoCAD, Civil3D, WaterCAD, MathCAD, Excel

**ACCOMPLISHMENTS**

---

- Completed the **Camino De Santiago** (500-mile pilgrimage in Spain by foot)
- Testified at the **Nevada State Legislature** to successfully pass SB-86, a bill advocating for early-onset victims of dementia and their families
- **Recognized by Nevada Governor Brian Sandoval** in the 2021 UNR Engineering Graduation speech as a student who has contributed significant research work to the state of Nevada