

# Alana Gonzalez

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## EDUCATION

### Grand Valley State University

*Bachelor of Science*

Major: Chemistry, Emphasis in Biochemistry

Minor: Biology

Allendale, MI

Graduation Date: April 2026

GPA: 3.6

## RELEVANT COURSEWORK

- Organic Chemistry
- Criminal Justice
- Anatomy and Physiology
- Cell and Molecular Biology
- Instrumental Analysis
- Analytical Chemistry
- Physical Chemistry
- Green Chemistry
- Bacterial Physiology

## SKILLS & TECHNIQUES

### Chemistry/Biochemistry

- Bioinformatics (sequence alignments)
- Agarose gel electrophoresis
- Restriction analysis of DNA
- Western blot
- PCR amplification of DNA
- Bradford and CENTA assays
- SDS – PAGE

### Forensics

- Scene, impression, and fingerprint photography
- Preliminary serology analysis
- Arson evidence collection
- ELISA
- Latent print analysis using powders, cyanoacrylate fuming, and enhancement chemicals

## RELATED EXPERIENCE

### Crime Scene Technician Intern

*Kent County Sheriff's Department, Scientific Support Unit*

January–May 2023

Grand Rapids, MI

- Employed techniques such as crime scene photography, latent print and impression processing, and video enhancement
- Provided evidentiary analysis and digital evidence to law enforcement personnel and authorized agencies

## RESEARCH PROJECTS

### Latent Fingerprint Processing

*Kent County Sheriff's Department*

Spring 2024

- Compared the degree of enhancement of types of latent fingerprints using fluorescent chemical genipin on various types of colored paper

### Recombinant Expression and Characterization

Fall 2023

#### of TEM-1 $\beta$ -lactamase in *E.coli*

*Grand Valley State University*

- Isolated and amplified the TEM-1 gene using PCR, ligation into pET-28a recombinant plasmid, and induction by engineered T7 tag
- Determined success through Western blot, SDS-PAGE, and kinetic assays