

# Erica Lee Nettles

[enettles06@gmail.com](mailto:enettles06@gmail.com)

(570) 691-4702

## Education

**Cedar Crest College, Allentown, PA**

**Graduation: May 2021**

- Majoring in Biology, Minor in Global Diseases
  - Conduct microbiology research
  - Current cumulative GPA - 3.7
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## Work Experience

**Waitress: Myrtle May's Café, Minersville, PA**

**February 2015 – August 2021**

- Served customers while being cognizant of food safety protocol
  - Practiced communication skills with customer and coworkers in a fast-paced, team-based environment
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## Research

**Impact of Lysine Acetylation on *Mycobacterium smegmatis* survival in the presence of isoniazid**

- Investigate antibiotic resistance of the model organism of *M. tuberculosis* with a skewed protein regulatory circuit
- Aseptic technique, Kirby-Bauer methodology, media and culture preparation, MIC assays, cell survivorship assays

**Digging in the dirt: antibiotic producing soil microbe**

- Isolated and chemically characterized antibiotic producing soil microbes
- Gram stain, antibiotic susceptibility test, antibiotic chemical extraction, PCR and gel electrophoresis, gene sequencing

**Rethinking environmental education: an interdisciplinary approach**

- An interdisciplinary investigation of science, literature, and culture to strengthen environmental education efforts
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## Research Conferences

**Micronet Research Meeting**

**July 2019**

- Poster presentation of *Impact of lysine acetylation on Mycobacterium smegmatis survival in the presence of Isoniazid*

**Pennsylvania Academy of Science**

**April 2020 & April 2021**

- Abstract accepted 2020, conference canceled due to COVID-19 pandemic
- 2021: orally presented *Impact of lysine acetylation on Mycobacterium smegmatis survival in the presence of Isoniazid*

**National Conference for Undergraduate Research**

**April 2021**

- Orally presented *Rethinking environmental education: an interdisciplinary approach*
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## Accomplishments

**Beta Beta Beta**

**February 2019 - Graduation**

- Member and treasurer of the Cedar Crest Colleges national biology honors society chapter