

WORK EXPERIENCE

Assistant Program Coordinator/STEM Instructor

Makerspace's primary instructor, assists with functioning of M.C.C./TIME operations and events, official illustrator and graphic designer. Duties include creating media and deliverables within short deadlines, and collaboration with local businesses/organizations for long and short-term community-focused projects.

Milton Community Center, Milton, PA 📍

PT Feb '25 – present 📅

4-H STEM Educator Assistant

Traveling STEM educator in Snyder, Union, and Northumberland counties. Multi-discipline experiments, workshops and classes, coding projects, geology day events, organizational collaboration, community outreach, etc.

Penn State Ag Extension, Selinsgrove, PA 📍

FT Dec '23 – Oct '25 📅

Artist/Owner

Graphic design and illustration. Combining digital and traditional mediums, focusing on mechanical and botanical subjects. Individual & commercial work.

Circuit.Breaker studio, remote 📍

PT Jan '21 – present 📅

Automated Testing Lab Assistant

Receiving and Processing [2nd Shift]. Rotated between many duties including but not limited to: maintaining Cobas Roche 8100, handling patient information and critical samples in an efficient manner, processing routine bloodwork, ER samples, fluids, CSF, stroke patient samples, high-volume offsite receipt, and pathology.

Geisinger Medical Center, Danville, PA 📍

FT Jan '23 – Oct '23 📅

Physical Science Tech GS-4

Sediment Tech at USGS OKI Sediment Lab. Trained on laser diffraction particle analyzer for determining particle size percentages in special projects. Proficient with suspended sediment tests & SLEDs. Cargo handling included: intake, logging, packing, + prepping sediment vessels for return to home labs. Lifting 50-60+ lb sample crates in/out of high shelving for 6-8 hours. Retrieving sample batches & checking dates.

Louisville, KY 📍

FT Feb '22 – Jun '22 📅

EDUCATION

GPA: 3.74 M.S. Biology

Thesis title: *Assessing the impacts of anthropogenic acidification on autotrophic stream biofilms using pulse amplitude modulation fluorometry.*

Main foci: microbial ecology, aqueous geochemistry, hydrology, bedrock geology

📍 Bloomsburg University of Pennsylvania

📅 2019 – 2022

GPA: 3.05 B.S. Environmental Geoscience

Thesis title: *Determining the origin of intracameral deposits in the Orthocerid genus Arionoceras.*

Main foci: calcite deposition, petrographic microscopy, SEM imaging, cathodoluminescence imaging

Minor: Russian & Eastern European Studies

📍 Bloomsburg University of Pennsylvania

📅 2015 – 2019

WORK CONT'D

Graduate Researcher

Performed extensive biological and aqueous geochemical analyses on water and algal samples. Presented thesis and other projects at multiple conferences [local]. Near daily field work and heavy lifting/strenuous labor in suboptimal conditions. Daily lab work with hazardous materials [solvents, acids, bacterial and fungal materials, sharps.]

📍 Bloomsburg University of Pennsylvania

📅 PT Aug '19 – Dec '22

Teaching Assistant, Microbiology Lab Tech/Manager

Lab management - followed weekly reports, managed chemical inventory, occasionally made new SOPs. Required to prep for Microbiology teaching labs [plates, tubes, slants, autoclaving, scheduled cleanings]. Teaching assistant for various professors. Wrote multiple successful grants for continued funding. Monitored + maintained aquaria for invertebrate microplastics project.

📍 Bloomsburg University of Pennsylvania

📅 PT Aug '19 – Dec '22

WORK CONT'D

Undergraduate Researcher

Orthocerid research - primary investigator. Processed fossils for imaging. Achieved SEM solo operation certification. Presented work at multiple conferences [local, international]. Cleared to operate geologic saws and wet table grinders without supervision.

Bloomsburg University of Pennsylvania 📍

PT Aug '18 – Jul '19 📅

Bennick Farm

Part-time/on demand farmhand. Primary duties include unloading peeps and baling/stacking hay.

Sunbury, PA 📍

PT May 2012 – present 📅

SELECTED PUBLICATIONS

Assessing the impacts of anthropogenic acidification on autotrophic stream biofilms using pulse amplitude modulation fluorometry

M. I. Bennick and S. T. Rier 📑

Bloomsburg University of PA [2022] 📅

M. S. Thesis 🔗

Determining the origin of intracameral deposits in the Orthocerid genus *Arionoceras*

M. I. Bennick, C. Venn, and A. Van Rythoven 📑

GSA '19: Best UG Poster [Geobio-Geomicro Div.] 📅

DOI: 10.1130/abs/2019AM-338024 🔗

Various effects of microplastics on red crayfish (*Procambarus clarkii*)

M. Simko, T. Shughart, M. Bennick, & C. Collins 📑

Poster Session, COST Resarch Day [S '20] 📅

Crayfish Poster 🔗

SKILLS & CERTIFICATIONS

Software, Programming, & Skills

- | | |
|----------------------|-----------------------|
| ●●○ R Studio | ●●● Clip Studio Paint |
| ●●● Microsoft Office | ●●● Google Suite |
| ●●○ LATEX | ●●○ C++ |
| ●●○ SLEDS | ●●● Adobe Suite |
| ●○○ GIS | ●●● Invert Collection |

Instruments

- Optical Microscopy ● Thin Section Imaging
- Cathodoluminescent Microscopy
- Petrographic Microscopy ● Sonde
- Walz Mini PAM II ● SEM ● Spectrophotometer
- Laser Diffraction Particle Size analyzer

Professional Development

- AbSciCon - Providence RI - May 5-10 '24
- Polar Impact Mentorship Initiative
- GSA '19 - presenting ● GSA '18 - networking
- Paleo Field Crew Member '18 - PEFO NP

Awards, Grants, & Achievements

- \$2000 Travel grant - AGU AbSciCon - 2024
- \$560 grant - Penn State 4H - Bambu A1 3D Printer
- \$302 grant - Penn State 4H - Arduino Education Kit
- COST Research Day: Hon. Mention [Biology '20 + '21]
- COST Research Day: Hon. Mention [EGGS 2019]
- Dept. travel grants - '18-19
- PEG - Professional Experience Grant 2018
- COST - Research Grant 2018

Certifications, Clearances, & Memberships

- Adult First Aid/CPR/AED [ARC 01.07.25 #01PFOUM]
- PA Safe Check Childline Clearance [completed via PSU]
- PA SP Criminal Background Check [completed via PSU]
- Fingerprinting [completed via PSU]
- Astrobio Scicomm Guild [06.2023 - present]
- AGU Membership [03.2024]