

Regan Brokaw

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Education:

B.S. Medical Laboratory Sciences | Miami University | Oxford, Ohio | December of 2022

B.A. Biology | Miami University | Oxford, Ohio | December of 2021

Associates of Arts | The Ohio State University | April 2019 | Cumulative GPA: 3.4/4.0

High School Diploma | Clear Fork High School | May 2019 | Cumulative GPA 3.99/4.0

Undergraduate Research:

First Year Research Experience | UNV 171 C | Fall 2019

Conducted neuroscience research on fruit flies that could be applied in the future to patients with paralysis. We are looking at why the glial cells in humans are unable to morph the way the fruit flies are able to.

- Mutate fruit fly genes to inhibit the degradation of the neural lamella
 - Genetically mutated to inhibit the MMP2 enzyme which is responsible for the degradation
 - We then looked at how the terminal nerve trunk was affected
 - Abdominal motor function was changed and we observed these results
- Identified Male and Virgin Female flies along with stages in the flies life cycle
 - Identify virgin females to increase the population of the mutated fly for continued experimentation
- Writing a Proposal to fund next semesters research

Work Experience:

Ziplining Guide & Photographer & Front Desk | **Tree Frog Canopy Tours** | **Glenmont, OH** | May 2018 - Present

- Instructed on the way the equipment is to be used by explaining, then showing, then allowing the participants to try it themselves in a controlled environment
- Established trust with participants by learning names, getting to know them more by asking questions and talking them through moments they were scared.
- Executed rescues quickly and efficiently by practicing and training outside of work.
- Respond accurately under pressure by not panicking and moving with purpose and authority to keep the group under control.
- Scheduled tours at front desk by getting group information, explaining the required actions participants must be able to perform and restrictions.
- Communicated information to guides about participants when on front desk by recording important notes and being discreet when explaining the situation.
- Marketed photos by pointing out the pictures on the television and informing groups of the prices and rates.
- Evaluated risks by being aware of the weather, equipment safety on course and on the participant, and of the participants response and mood.
- Problem Solved when participants refused to perform a specific and required act in order to complete the tour by giving them a different option they might personally feel more secure doing.
- Observed and inspected the course, my participants, and the environment

Ski and Snowboard Instructor | **Snow Trails Ski Resort** | **Mansfield, Oh** | December 2016 - Present

- Coordinated Lesson plans around the children's skill level and personal needs, the children should have been able to learn the skills in order to move up to a higher level.
- Encouraged learning by first pointing out where the children were excelling then offering tips to improve themselves.
- Taught proper technique by using examples and showing, explaining, and allowing the children to try it themselves.
- Established trust by learning names and talking to them about things they like to do. I would talk to them through being scared of heights or of falling. Being supportive of them while they learn something new is extremely important in order for them to feel comfortable.
- Motivated by

Volunteering:

- **Richland County Humane Society** | January 2018 - Present | Mansfield, ohio
 - Aided with animal maintenance by cleaning kennels, playing outside with them
 - Promoted the animals to possible parents to adopt them by initiating conversations and included positive qualities of the dog.
- **Grew a garden and donated the food to people** | February 2018 - August 2018 | Mansfield, Oh.
 - Learned Agricultural skills
 - Weeded and cared for the plant

Clubs

- **Genetics Club**
- **Anthropology Club**
- **Anatomy and Physiology Club**

