Kexin Zhang

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EDUCATION

Bachelor of Science in Biomedical Engineering Bachelor of Arts in Psychology Major

Class of 2022

Case Western Reserve University

- Cumulative GPA: 3.789
- cum laude

Master of Science in Biology

Class of 2024

Case Western Reserve University

• Cumulative GPA: 4.0

VOLUNTEERING EXPERIENCE

Friendly Visit Volunteer at Nursing Home (2018-present)

Eliza Bryant Village and McGregor Home, Cleveland Ohio

- The program was established based on the idea that social interaction is necessary for one's mental and physical health.
- Weekly visit to the assigned residents who had restrictions of leaving their beds/ rooms
- Assisted nurse when necessary
- Had worked with 11 residents since the beginning of the program
- Organized reflection session with the volunteer group after each visit

Food Bank (2018 - present)

Greater Cleveland Food Bank, Cleveland Ohio

- The program works with the Supplemental Nutrition Assistance Program (SNAP) to deliver foods to low-income families
- selected food from the donation warehouse
- Weighted the food for distribution
- Packaged and labeled the food box for delivery

UH Emergency Medicine Volunteer (2023 - present)

University Hospital, Cleveland Ohio

- Escorted patients/ visitors to the registration desk, the patient's room, or the examining room as appropriate
- Answered call lights from patients' room
- Changed beds, sanitized and restocked patient and examine room
- Comfort rounding with patients
- Run specimens to labs

WORK EXPERIENCE

Teaching Assistant (2022- present)

Department of Biology, Case Western Reserve University

- Helped managing the classroom of 210 students
- Assisted in designing the homework
- Graded students' assignment
- Provided feedback for students' projects
- Held helping sessions every week during the semester

RESEARCH EXPERIENCE

Undergraduate Volunteer Researcher (2019-2022)

Department of Genetics and Genome Science, Case Western Reserve University

- Maintained fly stocks for the lab
- Run mating assay over 60 genes to test the effect on female drosophila's mating acceptance
- Identified three proteins that have significant impact
- Poster presentation at the 62rd Annual Drosophila Research Conference

Hand Motion Tracker (2021)

Department of Biomedical Engineering, Case Western Reserve University

- Aimed at providing objective assessment of the progression of arthritis at hands
- Designed a wearable device that tracked the angles of finger bending and the time frame of hand movement
- Projected real-time hand movement on laptop screen through MATLAB programming

Graduate Research Assistant (2022- present)

Department of Biology, Case Western Reserve University

- Identified one gene that causes major deficit in female drosophila's mating behavior
- Made genetic crosses to test the effect of the gene in a specific type of neuron
- Performed brain dissection
- Applied immunohistochemistry, confocal microscopy, image analysis, and statistical analysis to determine the effect of the gene

SHADOW EXPERIENCE

Shadowing at Physical Therapy (2021)

University Hospital, Cleveland Ohio

- Observed the works of a physical therapist
- Learned the basic procedures in a rehabilitation clinic
- Helped on side tasks for maintenance
- Assisted the patients on their exercise under the supervision of a physical therapist

Shadowing at Anesthesiology & Pain Management (2023)

Cleveland Clinic, Cleveland Ohio

- Observed procedures including epidural steroid injection, celiac plexus nerve block, lumbar sympathetic block, radiofrequency ablation, dorsal root ganglion stimulation, stellate ganglion block, and trigger point injection
- Observed X-rays and ultrasound imaging for procedure guidance

Shadowing at Women's Health (2023) Cleveland Clinic, Cleveland Ohio

- Observed hysterectomy
- Observed clinic consultation of fibroid, endometriosis, and adenomyosis