

Arvin Zaker

✉ azake040@uottawa.ca | ☎ (613) 614-9254 | 🌐 github.com/ArvinZaker

EDUCATION

University of Ottawa <i>Honours Bachelor of Science (H.BSc) in Translational and Molecular Medicine (CGPA: 9.96/10)</i>	Sep 2019 - Apr 2023 (Expected) Ottawa, ON
Cardiff Sixth Form College <i>General Certificate of Education Advanced Subsidiary Level (Avg: 100%)</i>	Sep 2018 - Jun 2019 Cardiff, UK

AWARDS & ACHIEVEMENTS

TMM Summer Training (TST) program , University of Ottawa (\$8200)	May 2022 - Aug 2022
Work in Biomedical Research (WiBR) Scholarship , University of Ottawa (\$3500)	May 2022 - Aug 2022
UROP Scholarship , University of Ottawa (\$1000)	Dec 2020 - Apr 2021
Dean's Honour List & Merit Scholarship , University of Ottawa (\$1000 per term)	Sep 2019 - Present
Admission Scholarship , University of Ottawa (\$3000)	Sep 2019 - Apr 2020
Academic Excellence Scholarship , Cardiff Sixth Form College (\$14000)	Sep 2018 - Jun 2019

POSTERS & PRESENTATIONS

Poster and Seminar Presentation "Analysis of Drug Response in Patient-Derived Xenograph" <i>Faculty of Medicine, University of Ottawa</i>	Feb & Sep 2022 Ottawa, ON
Poster and Presentation "Discovery and Characterization of Bacteriophage Arzan" <i>Faculty of Medicine, University of Ottawa</i>	Dec 2021 Ottawa, ON
Poster "Role of Adenosine Receptors on mice skeletal muscle fatigue kinetics" <i>Faculty of Medicine, University of Ottawa</i>	Apr 2021 Ottawa, ON

SKILLS

- **Programming languages:** R, Python, Bash
- **Software:** ImageJ, Imiris, Microsoft Office Suite
- **Bioinformatic skills:** Transcriptomic and genomic analysis, bioinformatic pipeline development
- **Lab techniques:** Cell-based assays, phage extraction and amplification, fluorescent staining and imaging, electrophysiological recordings, PCR, western blot
- **Operating systems:** Linux, Windows

RESEARCH EXPERIENCE

Bioinformatics Researcher - Honours <i>University of Ottawa</i>	Sep 2021 - Present Ottawa, ON
<ul style="list-style-type: none">• Supervisor: Dr. Arvind Mer• Creating computation tools for analyzing cancer drug response• Developing novel <i>in vivo</i> drug response quantification metrics• Correlational study between cancer gene biomarkers and drug response• Open source package development and developing analysis pipelines	
Undergraduate Trainee - Laboratory rotations & TST program <i>University of Ottawa</i>	Jan 2021 - Sep 2021 Ottawa, ON
<ul style="list-style-type: none">• Supervisor: Dr. Arvind Mer• Utilized the R programming language in genomic and transcriptomic data analysis• Cancer phenotype and survival analysis of novel DNA repair complexes• Data extraction and processing from Pan-cancer databases	

Undergraduate Trainee - SEA-PHAGES program
University of Ottawa

Sep 2021 - Dec 2021
Ottawa, ON

- Supervisor: Dr. Adam Rudner
- Performed environmental sampling and phage extraction techniques
- Utilized cell-based assays for characterization of the phage
- Performed DNA extraction and genomic analysis via gel electrophoresis
- Used Python and ImageJ to analyze the restriction digest pattern of phages

Research Assistant - UROP program
University of Ottawa

Nov 2020 - Jul 2022
Ottawa, ON

- Supervisor: Dr. Jean-Marc Renaud
- Designing experiments and setting up research equipment for data collection
- Performing experiments on mouse muscles using electrophysiological equipment
- Performing antibody staining, fluorescent imaging, and analysis of muscle tissue in the Imiris program

WORK EXPERIENCE

Family Visitor and Program Assistant (Volunteer)
Garry J Armstrong Long Term Care Centre

Feb 2020 - May 2020
Ottawa, ON

- Communicated effectively with residents
- Aided residents to perform group activities
- Channeled residents' questions to the nursing staff

Stock Manager and Coordinator (Volunteer)
Scope Charity Shop

Sep 2018 - Jun 2019
Cardiff, UK

- Communicated with a team of volunteers and employees
- Created accounting records to manage incoming donations
- Priced items during sales events
- Rearranged store merchandise to ensure customer satisfaction

Sales Associate (Volunteer)
Tenovus Cancer Care Charity Shop

Sep 2018 - Jun 2019
Cardiff, UK

- Coordinated with a team of volunteers
- Managed sales and provided excellent customer service
- Aided in designing marketing campaigns to promote the store's merchandise
- Tracked customer donations and returns

VOLUNTEER EXPERIENCE

Lets Talk Science Presenter
University of Ottawa

Jan 2021 - Present
Ottawa, ON

Founder of the University of Ottawa Canadians Sharing Locally and Globally
University of Ottawa Canadians Sharing Locally and Globally

Dec 2020 - Present
Ottawa, ON

Volunteer Coordinator at Best Buddies club
Best Buddies club

Sep 2020 - Present
Ottawa, ON

Founder and Coordinator of Hands on Health Magazine
Interprofessional Health Association (IPHA) club

Jun 2020 - Present
Ottawa, ON

Childcare work experience
Cylch Meithrin Trelai Child Care Center

Apr 2019
Cardiff, UK

Poster "Insulin Pump Belt Manufacturing"
Allameh Helli 3 Exceptional Talent School

May 2018
Tehran, IR

Poster "Jack-knife Construction Crane Optimization"
Allameh Helli 3 Exceptional Talent School

May 2017
Tehran, IR