

Arvin Zaker

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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
Poster "Insulin Pump Belt Manufacturing" <i>Allameh Helli 3 Exceptional Talent School</i>	May 2018 Tehran, IR
Poster "Jack-knife Construction Crane Optimization" <i>Allameh Helli 3 Exceptional Talent School</i>	May 2017 Tehran, IR

SKILLS

- **Programming languages:** R, Python, Bash
- **Software:** ImageJ, Imiris, Microsoft Office Suite
- **Lab techniques:** Cell-based assays, environmental sampling, phage extraction and amplification, fluorescent staining and imaging, electrophysiological recordings, PCR, western blot
- **Languages:** English, Persian
- **Operating systems:** Linux, Windows
- **Other:** Hardware assembly and troubleshooting

RESEARCH EXPERIENCE

Bioinformatics Researcher <i>University of Ottawa</i>	May 2021 - Present Ottawa, ON
<ul style="list-style-type: none">• Supervisor: Dr. Arvind Mer• Developing computation tools for analyzing cancer drug response• Survival analysis of novel DNA repair complexes• Implementing machine learning algorithms to improve response detection• Open source package development and developing analysis pipelines	

Undergraduate Trainee - Laboratory rotations*University of Ottawa*

Jan 2021 - Apr 2021

Ottawa, ON

- Supervisor: Dr. Arvind Mer
- Utilized the R programming language in genomic data analysis
- Optimized programs analysis of large datasets
- Data extraction and processing from TCGA, METABIRC, and cBioPortal databases
- Correlational study between cancer gene biomarkers and drug response

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

Fundraising event participant
Allameh Helli 3 High School

Jan 2016
Tehran, IR