Arvin Zaker

<u>azake040@uottawa.ca</u> | (613) 614-9254 | Ottawa, ON

EDUCATION

University of Ottawa	Sep 2019 - Present
Honours Bachelor of Science (H.BSc) in Translational and Molecular Medicine (CGPA: 9.96/	Ottawa, ON
Cardiff Sixth Form College General Certificate of Education Advanced Subsidiary Level (Avg. 100%)	Sep 2018 - Jun 2019 $Cardiff, UK$
Allameh Helli 3 Exceptional Talent School	Sep 2015 - May 2018
Iranian High School certificate (Avg. 19.75/20)	Tehran, IR

AWARDS & ACHIEVEMENTS

UROP Scholarship, University of Ottawa (\$1000)	Dec 2020 - Apr 2021
Merit Scholarship, University of Ottawa (\$1000 per term)	Sep 2020 - Present
Admission Scholarship, University of Ottawa (\$3000)	Sep 2019 - Apr 2020
Dean's Honour List, University of Ottawa (awarded each term)	Sep 2019 - Present
Academic Excellence Scholarship, Cardiff Sixth Form College (\$14000)	Sep 2018 - Jun 2019

POSTERS & PRESENTATIONS

Seminar Presentation "Analysis of Drug Response in Patient-Derived Xenograph" Faculty of Medicine, University of Ottawa	$\begin{array}{c} \text{Apr } 2022 \\ Ottawa, \ ON \end{array}$
Poster and Presentation "Analysis of Drug Response in Patient-Derived Xenograph" Faculty of Medicine, University of Ottawa	Feb 2022 Ottawa, ON
Poster and Presentation "Discovery and Characterization of Bacteriophage Arzan" Faculty of Medicine, University of Ottawa	$\begin{array}{c} \text{Dec } 2021 \\ Ottawa, \ ON \end{array}$
Poster "Role of Adenosine Receptors on mice skeletal muscle fatigue kinetics" Faculty of Medicine, University of Ottawa	$\begin{array}{c} \text{Apr } 2021 \\ Ottawa, \ ON \end{array}$
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

SKILLS

- Programming languages: R, Python
- Software: Image
J, 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
- Hardware assembly and troubleshooting

RESEARCH EXPERIENCE

Summer student - TST program

May 2021 - Present

 $University\ of\ Ottawa$

 $Ottawa,\ ON$

- Supervisor: Dr. Arvind Mer
- Developing computation tools for analyzing drug response of immunodeficient mice
- Performing survival analysis of novel DNA repailr complexes
- $\bullet\,$ Investigating the link between cancer gene biomarkers and drug response

Undergraduate Trainee - Laboratory rotations

University of Ottawa

January 2021 - April 2021 Ottawa, ON

• Supervisor: Dr. Arvind Mer

- Utilized the R programming language in genomic data analysis
- Optimized programs analysis of large datasets
- Investigated the link 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 - Present 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

Sepember 2020 - Present Ottawa, ON

Founder and Coordinator of Hands on Health Magazine

Jun 2020 - Present Ottawa, ON

Childcare work experience

Interprofessional Health Association (IPHA) club

April 2019 Cardiff, UK

Cylch Meithrin Trelai Child Care Center

Jan 2016

Fundraising event participant

Tehran, IR

Allameh Helli 3 High School