

# Arvin Zaker

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## EDUCATION

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<b>University of Ottawa</b> <i>Honours Bachelor of Science (H.BSc) in Translational and Molecular Medicine (CGPA: 9.96/10)</i>	Sep 2019 - Present Ottawa, ON
<b>Cardiff Sixth Form College</b> <i>General Certificate of Education Advanced Subsidiary Level (Avg: 100%)</i>	Sep 2018 - Jun 2019 Cardiff, UK
<b>Allameh Helli 3 Exceptional Talent School</b> <i>Iranian High School certificate (Avg: 19.75/20)</i>	Sep 2015 - May 2018 Tehran, IR

## AWARDS & ACHIEVEMENTS

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

## POSTERS & PRESENTATIONS

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<b>Seminar Presentation "Analysis of Drug Response in Patient-Derived Xenograph"</b> <i>Faculty of Medicine, University of Ottawa</i>	Apr 2022 Ottawa, ON
<b>Poster and Presentation "Analysis of Drug Response in Patient-Derived Xenograph"</b> <i>Faculty of Medicine, University of Ottawa</i>	Feb 2022 Ottawa, ON
<b>Poster and Presentation "Discovery and Characterization of Bacteriophage Arzan"</b> <i>Faculty of Medicine, University of Ottawa</i>	Dec 2021 Ottawa, ON
<b>Poster "Role of Adenosine Receptors on mice skeletal muscle fatigue kinetics"</b> <i>Faculty of Medicine, University of Ottawa</i>	Apr 2021 Ottawa, ON
<b>Poster "Insulin Pump Belt Manufacturing"</b> <i>Allameh Helli 3 Exceptional Talent School</i>	May 2018 Tehran, IR
<b>Poster "Jack-knife Construction Crane Optimization"</b> <i>Allameh Helli 3 Exceptional Talent School</i>	May 2017 Tehran, IR

## SKILLS

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- **Programming languages:** R, Python
- **Software:** ImageJ, Imiris, Microsoft Office Suite
- **Operating systems:** Linux, Windows
- **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

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<b>Summer student - TST program</b> <i>University of Ottawa</i>	May 2021 - Present Ottawa, ON
<ul style="list-style-type: none"><li>• Supervisor: Dr. Arvind Mer</li><li>• Developing computation tools for analyzing drug response of immunodeficient mice</li><li>• Performing survival analysis of novel DNA repair complexes</li><li>• Investigating the link between cancer gene biomarkers and drug response</li></ul>	

<b>Undergraduate Trainee - Laboratory rotations</b> <i>University of Ottawa</i> <ul style="list-style-type: none"> <li>• Supervisor: Dr. Arvind Mer</li> <li>• Utilized the R programming language in genomic data analysis</li> <li>• Optimized programs analysis of large datasets</li> <li>• Investigated the link between cancer gene biomarkers and drug response</li> </ul>	January 2021 - April 2021 Ottawa, ON
<b>Undergraduate Trainee - SEA-PHAGES program</b> <i>University of Ottawa</i> <ul style="list-style-type: none"> <li>• Supervisor: Dr. Adam Rudner</li> <li>• Performed environmental sampling and phage extraction techniques</li> <li>• Utilized cell-based assays for characterization of the phage</li> <li>• Performed DNA extraction and genomic analysis via gel electrophoresis</li> <li>• Used Python and ImageJ to analyze the restriction digest pattern of phages</li> </ul>	Sep 2021 - Dec 2021 Ottawa, ON
<b>Research Assistant - UROP program</b> <i>University of Ottawa</i> <ul style="list-style-type: none"> <li>• Supervisor: Dr. Jean-Marc Renaud</li> <li>• Designing experiments and setting up research equipment for data collection</li> <li>• Performing experiments on mouse muscles using electrophysiological equipment</li> <li>• Performing antibody staining, fluorescent imaging, and analysis of muscle tissue in the Imiris program</li> </ul>	Nov 2020 - Present Ottawa, ON

## WORK EXPERIENCE

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<b>Family Visitor and Program Assistant (Volunteer)</b> <i>Garry J Armstrong Long Term Care Centre</i> <ul style="list-style-type: none"> <li>• Communicated effectively with residents</li> <li>• Aided residents to perform group activities</li> <li>• Channeled residents' questions to the nursing staff</li> </ul>	Feb 2020 - May 2020 Ottawa, ON
<b>Stock Manager and Coordinator (Volunteer)</b> <i>Scope Charity Shop</i> <ul style="list-style-type: none"> <li>• Communicated with a team of volunteers and employees</li> <li>• Created accounting records to manage incoming donations</li> <li>• Priced items during sales events</li> <li>• Rearranged store merchandise to ensure customer satisfaction</li> </ul>	Sep 2018 - Jun 2019 Cardiff, UK
<b>Sales Associate (Volunteer)</b> <i>Tenovus Cancer Care Charity Shop</i> <ul style="list-style-type: none"> <li>• Coordinated with a team of volunteers</li> <li>• Managed sales and provided excellent customer service</li> <li>• Aided in designing marketing campaigns to promote the store's merchandise</li> <li>• Tracked customer donations and returns</li> </ul>	Sep 2018 - Jun 2019 Cardiff, UK

## VOLUNTEER EXPERIENCE

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<b>Lets Talk Science Presenter</b> <i>University of Ottawa</i>	Jan 2021 - Present Ottawa, ON
<b>Founder of the University of Ottawa Canadians Sharing Locally and Globally</b> <i>University of Ottawa Canadians Sharing Locally and Globally</i>	Dec 2020 - Present Ottawa, ON
<b>Volunteer Coordinator at Best Buddies club</b> <i>Best Buddies club</i>	September 2020 - Present Ottawa, ON
<b>Founder and Coordinator of Hands on Health Magazine</b> <i>Interprofessional Health Association (IPHA) club</i>	Jun 2020 - Present Ottawa, ON
<b>Childcare work experience</b> <i>Cylch Meithrin Trelai Child Care Center</i>	April 2019 Cardiff, UK
<b>Fundraising event participant</b> <i>Allameh Helli 3 High School</i>	Jan 2016 Tehran, IR