**University of Ottawa** Sep 2019 - Apr 2023 *Honours Bachelor of Science (H.BSc) in Translational and Molecular Medicine (CGPA: 9.97/10) Ottawa, ON*

**Cardiff Sixth Form College** Sep 2018 - Jun 2019 *General Certificate of Education Advanced Subsidiary Level (Avg: 100%) Cardiff, UK*

**NSERC - Undergraduate Student Research Awards (USRA)** ($7500) May 2023 - Aug 2023

**TMM Summer Training & Work in Biomedical Research Scholarship** ($8200) 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

**Large-scale phenogenomic analysis of human cancers uncovers frequent alterations affecting SMC5/6 complex components in breast cancer** (under revision in NAR Cancer) *Shamayita Roy, Arvin Zaker, Arvind Mer & Damien D’Amours*

**Text-Mining Based Feature Selection for Anticancer Drug Response Prediction** (submitted to Brief. Bioinform.) *Grace Wu, Arvin Zaker, Shivanshi Tripathi, Arvind Mer*

**Comprehensive analysis of drug response metrics in patient-derived xenografts** (in preperation) *Arvin Zaker, Arvind Mer*

**Poster and Seminar Presentation “Analysis of Drug Response in Patient-Derived Xenograph”** Feb & Sep 2022 *Faculty of Medicine, University of Ottawa Ottawa, ON*

**Poster and Presentation “Discovery and Characterization of Bacteriophage Arzan”** Dec 2021 *Faculty of Medicine, University of Ottawa Ottawa, ON*

**Poster “Role of Adenosine Receptors on mice skeletal muscle fatigue kinetics”** Apr 2021 *Faculty of Medicine, University of Ottawa Ottawa, ON*

* **Programming languages**: R, Python, Bash
* **Software**: ImageJ, Imiris, Microsoft Office Suite
* **Bioinformatic skills**: Transcriptomic and genomic analysis, bioinformatic pipeline development
* **Lab techniques**: phage extraction and amplification, fluorescent imaging, electrophysiological recordings

**Bioinformatics Researcher - Honours** Sep 2022 - Present *University of Ottawa Ottawa, ON*

* Supervisor: Dr. Arvind Mer
* Creating computation tools for analyzing cancer drug response
* Developing novel *in vivo* 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** Jan 2022 - Aug 2022 *University of Ottawa Ottawa, ON*

* 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
* Utilizing text mining algorithms for biomarker discovery

**Undergraduate Trainee - SEA-PHAGES program** Sep 2021 - Dec 2021 *University of Ottawa 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
* Phage discovery and categorization (Arzan and Khorshid)

**Research Assistant - UROP program** Nov 2020 - Jul 2022 *University of Ottawa 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

**Family Visitor and Program Assistant (Volunteer)** Feb 2020 - May 2020 *Garry J Armstrong Long Term Care Centre Ottawa, ON*

* Communicated effectively with residents
* Aided residents to perform group activities
* Channeled residents’ questions to the nursing staff

**Stock Manager and Coordinator (Volunteer)** Sep 2018 - Jun 2019 *Scope Charity Shop 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)** Sep 2018 - Jun 2019 *Tenovus Cancer Care Charity Shop 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

**Lets Talk Science Presenter** Jan 2021 - Present *University of Ottawa Ottawa, ON*

**Founder of the University of Ottawa Canadians Sharing Locally and Globally** Dec 2020 - Present *University of Ottawa Canadians Sharing Locally and Globally Ottawa, ON*

**Volunteer Coordinator & Co-Chair at Best Buddies club** Sep 2020 - Present *Best Buddies club Ottawa, ON*

**Founder and Coordinator of Hands on Health Magazine** Jun 2020 - Present *Interprofessional Health Association (IPHA) club Ottawa, ON*