
EDUCATION

- **University of Toronto** Toronto, ON
Honours Bachelor of Science, Human Biology & Psychology *June 2018*

RESEARCH & DESIGN EXPERIENCE

- **Bioengineering Department, University of Toronto** Toronto, ON
Biomedical Engineering Capstone Design Project *Sept 2017 – Apr 2018*
 - Designed, & prototyped an electronic medical device to alleviate post-surgical complications in pediatric patients
 - Developed an Android game for interactive assessment of lung function using Unity3D, C# & Maya
 - Used SolidWorks to design device components for 3D printing
 - Identified stakeholder requirements through a user-centered approach by conducting informational interviews
- **Pharmacy and Microbiology Departments, University of Toronto** Toronto, ON
Research Student *Sept 2015 – Apr 2017*
 - Identified and conducted lab experiments to investigate antimicrobial resistance and synthetic biology applications
 - Employed bioinformatics software (CLC Workbench, MEGA, etc.) and Excel to analyze results
 - Presented research findings in manuscript style reports, on posters, and on Powerpoint to faculty and students
- **Pennsylvania State University** Hershey, PA
Research Assistant, Physiology Department *Summer 2014, 2015*
 - Experimentally investigated the effect of ambient air pollution on lung disease
 - Collected, analyzed, and visualized data from experiments using statistical methods on MS Excel
 - Presented orally and on posters at international (EB 2015) and national (GWIS, WiSE, CUCOH, & OQUIC) conferences

LEADERSHIP EXPERIENCE

- **City of Toronto - Youth Nutrition Advisory** Toronto, ON
Committee Member *Jan 2017 – Dec 2017*
 - Created plans to increase nutrition awareness for the City of Toronto's youth spaces in high-priority areas
 - Organized workshops to engage at-risk youth aged 12 - 20 in adopting a healthy nutrition plan
- **University of Toronto Biomod Team** Toronto, ON
Founder and President *Sept 2014 – Aug 2016*
 - Managed a team of 60 life science and engineering undergraduate students to research, design, and prototype a biomolecular design project
 - Coordinated team finances by communicating with, and establishing relationships with internal and external sponsors to pitch the project to secure over \$6000 in funding
- **Journal of Undergraduate Life Sciences** Toronto, ON
Editor *Sept 2016 – Apr 2017*
 - Peer-reviewed primary and review articles written by undergraduate students for clarity, scientific proficiency and provide constructive feedback to the authors
 - Articles were subsequently edited by professors and published in JULS, the UofT undergraduate student journal

PUBLICATIONS

- Cabello N, Mishra V, **Sinha U**, DiAngelo SL, Chroneos ZC, Ekpa NA, Cooper TK, Caruso CR, Silveyra P. 2015. Sex differences in the expression of lung inflammatory mediators in response to ozone. *American Journal of Physiology*
- Clark ST, **Sinha U**, Zhang Y, Wang PW, Donaldson SL, et al. PBP3 is a common adaptive target among *P. aeruginosa* isolates from cystic fibrosis patients treated with β -lactams. *International Journal of Antimicrobial Agents*. (Pending Review)
- **Sinha U**, Fuentes N, Spinelli AM, Caruso C, Nicoleau M, DiAngelo S, Mishra V, Chroneos ZC, Silveyra P. ATF3 regulation of the lung inflammatory response to ozone. (Pending Submission)