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# Charles Yin

## Curriculum Vitae

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### Education

- 2014–2021 **Doctor of Medicine (MD)**, Western University, London, Ontario.  
Schulich School of Medicine & Dentistry  
MD/PhD Program
- 2016–2019 **Doctor of Philosophy (PhD)**, Western University, London, Ontario.  
Department of Microbiology and Immunology  
Thesis: Defective Macrophage Efferocytosis in Atherosclerosis  
Advisor: Dr. Bryan Heit
- 2010–2014 **Honours Bachelor of Science (BSc Hons)**, McMaster University, Hamilton, Ontario.  
Integrated Science Program  
Thesis: Signal Transduction Mechanisms of the Macrophage Scavenger Receptor A (SR-A)  
Advisor: Dr. Dawn M.E. Bowdish

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### Publications

#### Book chapters

- Evans AL, Blackburn JWD, **Yin C**, Heit B. Quantitative efferocytosis assays. In: Botelho R, ed. *Phagocytosis and Phagosomes*. New York: Springer. 2017. p25-41.
- Lee KM, **Yin C**, Verschoor CP, Bowdish DME. Macrophage Function Disorders. In: Delves P, ed. *eLS 2013*, Chichester: John Wiley & Sons Ltd. 2013. 12pp.

#### Peer-reviewed articles

- Yin C**, Heit B. Cellular responses to the efferocytosis of apoptotic cells. *Front Immunol*. Under Review. IF: 6.8.
- Cowley EC, **Yin C**. Antiplatelet and anticoagulant strategies following left ventricular assist device explantation or decommissioning: a scoping review of the literature. *ASAIO J*. Under Review. IF: 2.7.
- Cowley EC, Miller MR, **Yin C**, Kelly LM. Correlation between medication administration-related errors in Parkinson's disease patients and timing of pharmacy-led Best Possible Medication Histories (BPMH). *Can J Hosp Pharm*. 2021;74(1):15-20. IF: 0.9.
- Wavell C, Sokolowski A, **Yin C**, Klingel M, Nagpal AD. Clinical effectiveness of durable continuous-flow left ventricular assist device (LVAD) therapy in non-ischemic versus ischemic cardiomyopathy: a systematic review and meta-analysis. *Can J Surg*. 2021;64(1):E39-47. IF: 2.3.
- Peitrobon A, Cook EK, **Yin C**, Chan DCH, Marvasti TB. International training considerations of Canadian clinician-scientist trainees - a national survey. *Clin Invest Med*. 2020;43(4):E2-7. IF: 1.2.
- Yin C**, Vrieze AM, Rosoga M et al. Efferocytic defects in early atherosclerosis are driven by GATA2 overexpression in macrophages. *Front Immunol*. 2020;11:594136. IF: 6.4.

Taefehshokr N, **Yin C**, Heit B. Rab GTPases in the differential processing of phagocytosed pathogens versus efferocytosed apoptotic cells. *Histol Histopathol*. 2020;35:18252. IF: 1.8.

Levit A, **Yin C**, Lewis JF. Fourth Annual Clinician Scientist Trainee Symposium at the Schulich School of Medicine & Dentistry. *Clin Invest Med*. 2020;42(4):E46-9. IF: 1.2.

**Yin C**, Moszczynski AJ, Blom JN, Johnson TPE, Jones DL. Advancing the understanding of research in medical education through collaborative learning: the Collaboration of Practitioners and Researchers Seminar Series. *BMC Med Ed*. 2019;19:457. IF: 1.9.

**Yin C**, Argintaru D, Heit B. Rab17 mediates intermixing of phagocytosed apoptotic cells with recycling endosomes. *Small GTPases*. 2019;10(3):218-26. IF: 9.0.

Taruc K, **Yin C**, Wootton DG, Heit B. Quantification of efferocytosis by fluorescence microscopy. *J Vis Exp*. 2018;138:58149. IF: 1.3.

**Yin C**, Blom JN, and Lewis, JF. The 2nd annual clinician scientist trainee symposium, August 22, 2017, London, Canada. *Clin Invest Med*. 2018;41(1):E34-6. IF: 1.2.

**Yin C**, Heit B. Armed for destruction: formation, function and trafficking of neutrophil granules. *Cell Tissue Res*. 2018;371(3):455-71. IF: 3.4.

Novakowski KE, Yap NVL, **Yin C** et al. Human-specific mutations and positively-selected sites in the macrophage receptor with collagenous structure (MARCO) confers functional changes. *Mol Biol Evol*. 2018;35(2):440-50. IF: 14.8.

**Yin C**, Steadman PE, Apramian T et al. Training the next generation of Canadian clinician-scientists: charting a path to success. *Clin Invest Med*. 2017;40(2):E95-101. IF: 1.2.

**Yin C**, Daoust K, Young A, Tebbs EJ, Harper DM. Tackling community undernutrition at Lake Bogoria, Kenya: the potential of Spirulina (*Arthrospira fusiformis*) as a food supplement. *Afr J Food Agric Nutr Dev*. 2017;17(1):11603-15. IF: 0.6.

**Yin C**, Kim Y, Argintaru D, Heit B. Rab17 mediates differential antigen sorting following efferocytosis and phagocytosis. *Cell Death Dis*. 2016;7(12):e2529. IF: 6.0.

Danby S, **Yin C**. A review of issues concerning implementation of cardiac rehabilitation programs. *UWO Med J*. 2016;85(2):66-8. IF: n/a.

**Yin C**, Danby S. A review of housing-first strategies in reducing rates of substance use amongst people experiencing homelessness. *UWO Med J*. 2016;85(1):35-7. IF: n/a.

Novakowski KE, Huynh A, Han S ... **Yin C** et al. (2016). A naturally-occurring transcript variant of MARCO reveals the SRCR domain is critical for function. *Immunol Cell Biol*. 94(7):646-55. IF: 3.9.

**Yin C**, Law J. Community-acquired pneumonia and pneumococcal vaccination in the elderly. *UWO Med J*. 2016;84(2):23-5. IF: n/a.

Armstrong SM, Sugiyama MG, Fung KYY ... **Yin C** et al. A novel assay uncovers an unexpected role for SR-BI in LDL transcytosis. *Cardiovasc Res*. 2015;108(2):268-77. IF: 7.0.

Law J, **Yin C**. A day with an orthoptist. *UWO Med J*. 2015;84(1):23-4. IF: n/a.

Su B, Rudak P, **Yin C**. The metabolism of L-arginine and its importance in immune function. *Meducator*. 2014;26:15-8. IF: n/a.

Gao C, Hindra H, Mulder D, **Yin C**, Elliot MA. CRP is a global regulator of antibiotic production in *Streptomyces*. *mBio*. 2012;3(6):e00407-12. IF: 6.7.

#### Peer-reviewed conference abstracts

**Yin C**, Vrieze AM, Akingbasote J et al. The hematopoietic transcription factor GATA2 is a novel regulator of apoptotic cell clearance by macrophages in atherosclerosis. *J Immunol*. 2020;204(Supplement):146.3. IF: 4.9.

**Yin C**, Ge Y. Teaching medical students political advocacy skills through experiential learning: lessons from the 2019 Canadian Federation of Medical Students (CFMS) Day of Action. *Can Med Ed J*. 2020;11(2):e90-1. IF: n/a.

**Yin C**, Vrieze AM, Akingbasote J et al. The hematopoietic transcription factor GATA2 is a novel regulator of apoptotic cell clearance by macrophages in atherosclerosis. *J Am Coll Cardiol*. 2020;75(11-S1):2228. IF: 18.6.

**Yin C**, Barra L, Nagpal AD, Heit, B. Gene expression profiling of lesion-resident macrophages in human atherosclerosis. *Atherosclerosis*. 2018;32:106. IF: 4.3.

### Non-peer reviewed articles

Lawal S, Matthews R, Deng M, Tao J, Ge Y, **Yin C**. Advocacy in Medical Education: Perspectives from CFMS Student Leaders. *Canadian Federation of Medical Students*. Published April 2020.

**Yin C**, Ge Y. Assessing the Impact of Attending the CFMS Day of Action on Medical Students' Understanding of and Competencies in Political Health Advocacy. *Canadian Federation of Medical Students*. Published October 2019.

Ge Y, **Yin C**. 2018 CFMS National Day of Action on Indigenous Mental Wellness Follow-Up and Summary Report. *Canadian Federation of Medical Students*. Published March 2018.

Ge Y, **Yin C**. CFMS National Day of Action 2018 on Indigenous mental wellness. *CFMS Ann Rev*. 2018;10-1.

Ge Y, **Yin C**. Approaching health advocacy with a new model for the 2018 National Day of Action. *CFMS Ann Rev*. 2018;9-10.

**Yin C**. Training the next generation of Canadian clinician scientists: challenges and opportunities on the road ahead. *CMAJ Blogs*. Published August 2016.

**Yin C**, Zhou ET, Apramian T et al. Supporting clinician-scientist training in Canada. *Canadian Federation of Medical Students (CFMS) Policy Statement*. Passed at: CFMS Spring General Meeting 2016.

Lee H, **Yin C**. Summary chart of active Canadian clinics. In: Berlin N, Purdy K (Eds.), *Developing and Sustaining Student Run Clinics: A Toolkit* (p. 15-20). Published September 2016.

**Yin C**. Lung health policy in Ontario: time for a breath of fresh air. *Scrub-In*. 2015;10(2):16-7.

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### Seminars and Invited Talks

- 2019 Day of Action QI study: preliminary findings for AGM 2019. Canadian Federation of Medical Students 2019 Annual General Meeting, St. John's, NL.
- 2019 Macrophage dysfunction in atherosclerosis and cardiovascular disease. John A. Thomas Award Lecture, London, ON.
- 2019 Gene expression profiling of macrophages in early human atherosclerosis reveals profound defects in efferocytosis. Lawson Health Research Institute - Talks on Fridays, London, ON.
- 2018 A clinical overview of congenital heart disease. Collaboration of Practitioners and Researchers Seminar Series 2018-2019. London, ON.
- 2018 Bridging the gap: building a culture of translational research at the Schulich School of Medicine and Dentistry. 3rd Annual Clinician-Scientist Trainee Symposium, London, ON.
- 2018 Gene expression profiling of intima-infiltrating macrophages in human atherosclerosis. Lawson Health Research Institute - Talks on Fridays, London, ON.
- 2017 Training the next generation of Canadian clinician-scientists: charting a path to success. 2nd Annual Clinician-Scientist Trainee Symposium, London, ON.

- 2017 Characterizing defective macrophage efferocytosis in atherosclerosis. Lawson Health Research Institute - Talks on Fridays, London, ON.

## Conferences and Meetings

- 2020 Wavell C, Sokolowski A, Klingel ML, **Yin C**, Nagpal AD. Clinical effectiveness of durable continuous-flow LVAD therapy in ischemic vs non-ischemic cardiomyopathy: a systematic review and meta-analysis. Canadian Cardiovascular Congress. Virtual Meeting.
- 2019 **Yin C**, Akingbasote J, Pawlak EN et al. Gene expression profiling of macrophages in early human atherosclerosis reveal profound defects in efferocytosis. Gordon Research Conference on Atherosclerosis. Newry, MN.
- 2019 **Yin C**, Akingbasote J, Pawlak EN et al. Gene expression profiling of macrophages in early human atherosclerosis reveal profound defects in efferocytosis. Canadian Student Health Research Forum. Winnipeg, MB.
- 2019 **Yin C**, Akingbasote J, Pawlak EN et al. Gene expression profiling of macrophages in early human atherosclerosis reveal profound defects in efferocytosis. London Health Research Day. London, ON. (Podium Presentation).
- 2019 **Yin C**, Akingbasote J, Pawlak EN et al. Gene expression profiling of macrophages in early human atherosclerosis reveal profound defects in efferocytosis. Canadian Society for Immunology Scientific Meeting. Banff, AB. (Podium Presentation).
- 2019 **Yin C**, Barra L, Nagpal AD, Heit B. Gene expression profiling of intima-infiltrating macrophages in early human atherosclerosis. 8th NIF Winter School on Advanced Immunology. Singapore. (Podium Presentation).
- 2018 **Yin C**, Akingbasote J, Pawlak EN et al. Gene expression profiling of intima-infiltrating macrophages in human pre-atherosclerotic disease. CSCI-CITAC Young Investigators Forum. Toronto, ON.
- 2018 Wavell C, Sokolowski A, Klingel ML, **Yin C**, Nagpal AD. Clinical effectiveness of durable continuous-flow LVAD therapy in ischemic vs non-ischemic cardiomyopathy: a systematic review and meta-analysis. Cardiac Surgery Research Day. London, ON. (Podium Presentation).
- 2018 **Yin C**, Akingbasote J, Pawlak EN et al. Gene expression profiling of intima-infiltrating macrophages in human pre-atherosclerotic disease. Society for Leukocyte Biology Annual Meeting. Phoenix, AZ. (Podium Presentation).
- 2018 **Yin C**, Akingbasote J, Pawlak EN et al. Gene expression profiling of intima-infiltrating macrophages in human pre-atherosclerotic disease. Infection and Immunity Research Forum. Stratford, ON.
- 2018 **Yin C**, Barra L, Nagpal AD, Heit B. Gene expression profiling of lesion-resident macrophages in human atherosclerosis. International Symposium on Atherosclerosis. Toronto, ON.
- 2018 **Yin C**, Sauve A, Binakaj M, Ge Y. Engaging medical students in Indigenous health advocacy: the 2018 CFMS Day of Action on Indigenous mental wellness. Indigenous Health Conference. Toronto, ON.
- 2018 **Yin C**, Barra L, Tweedie EJ, Nagpal AD, Heit B. Gene expression profiling of intima-infiltrating macrophages in human atherosclerosis. London Health Research Day. London, ON. (Podium Presentation).
- 2018 Silverberg S, Annan H, **Yin C**, Ge Y, Bryce J. Learning through advocacy: experiential education through the Canadian Federation of Medical Students National Lobby Day. Canadian Conference on Medical Education. Halifax, NS.
- 2017 **Yin C**, Nagpal AD, Heit B. Gene expression profiling of lesion-resident macrophages in human atherosclerosis. CSCI-CITAC Young Investigators Forum. Toronto, ON.
- 2017 **Yin C**, Steadman PE, Apramian T et al. Training the next generation of Canadian clinician-scientists: charting a path to success. Canadian Science Policy Conference. Ottawa, ON.

- 2017 **Yin C**, Yohan K, Argintaru D, Heit B. Rab17 mediates differential antigen sorting following efferocytosis and phagocytosis. Infection and Immunity Research Forum. London, ON. (Podium Presentation).
- 2017 **Yin C**, Yohan K, Argintaru D, Heit B. Rab17 mediates differential antigen sorting following efferocytosis and phagocytosis. Society for Leukocyte Biology Annual Meeting. Vancouver, BC. (Podium Presentation).
- 2017 **Yin C**, Nagpal AD, Heit B. Investigating defective macrophage efferocytosis in atherosclerosis. Canadian Society for Immunology Scientific Meeting. Banff, AB.
- 2017 **Yin C**, Yohan K, Argintaru D, Heit B. Rab17-mediated vesicular trafficking acts to prevent presentation of apoptotic cell-derived antigens. London Health Research Day. London, ON.
- 2016 **Yin C**, Nagpal AD, Heit B. Defective macrophage efferocytosis in atherosclerosis. CSCI-CITAC Young Investigators Forum. Toronto, ON.
- 2016 **Yin C**, Nagpal AD, Heit B. Defective macrophage efferocytosis in atherosclerosis. Infection and Immunity Research Forum. London, ON.
- 2016 **Yin C**, Nagpal AD, Barra L, Heit B. Defective macrophage efferocytosis in atherosclerosis. Canadian National Medical Student Research Symposium. Winnipeg, MB. (Podium Presentation).
- 2014 **Yin C**, Bowdish DME. Signal transduction mechanisms of the macrophage scavenger A (SR-A). CSCI-CITAC Young Investigators Forum. Toronto, ON.
- 2014 **Yin C**, Han J, Symons S, Colgoni A. Fostering Active Learning and Leadership Through Student-Run Journals. STLHE Annual Meeting. Kingston, ON.
- 2014 **Yin C**, Bowdish DME. Signal transduction mechanisms of the macrophage scavenger A (SR-A). Ontario-Quebec Undergraduate Immunology Conference. Toronto, ON. (Podium Presentation).
- 2014 **Yin C**, Bowdish DME. Signal transduction mechanisms of the macrophage scavenger A (SR-A). Buffalo Immunology Conference. Buffalo, NY.
- 2012 **Yin C**, Tu Z, Dorrington M, Bowdish DME. A tale of two receptors: MARCO-mediated enhancement of TLR2 signaling. Infection and Immunity Research Forum. London, ON.
- 2012 **Yin C**, Tu Z, Dorrington M, Bowdish DME. A tale of two receptors: MARCO-mediated enhancement of TLR2 signaling. IIDR Trainee Research Day. Hamilton, ON.
- 2012 **Yin C**, Gao C, Elliot MA. High-throughput discovery of antibiotics in *Streptomyces*. AAAS Annual Meeting. Vancouver, BC.

## Scholarly and Professional Activities

### Professional Societies

Canadian Medical Association  
 Ontario Medical Association  
 American College of Physicians, Ontario Chapter  
 Clinician-Investigator Trainee Association of Canada  
 American Association for the Advancement of Science  
 American Association of Immunologists  
 Canadian Society for Immunology  
 Society for Leukocyte Biology  
 American College of Cardiology  
 Canadian Cardiovascular Society  
 Society for Teaching and Learning in Higher Education

### Scholarly Journals

- 2016–2018 Associate Editor, UWO Medical Journal
- 2014–2016 Departmental Editor, UWO Medical Journal
- 2013–2014 Associate Editor, iScientist
- 2010–2011 Junior Editor, The Meducator

### Journal Peer Review

- Canadian Journal of Cardiology
- CJC Open
- Clinical and Investigative Medicine
- Scientific Reports
- Teaching and Learning in Medicine
- Advances in Medical Education and Practice
- Journal of International Medical Research
- Cell and Tissue Research

### Committee Membership

- 2017–2019 **Member**, *Students Making Actual Research Together (SMART) Committee, Schulich School of Medicine & Dentistry*, London, Ontario.  
Served on a student-run committee that advised undergraduate medical students at the Schulich School of Medicine & Dentistry on how to seek out research positions and experience during their pre-clerkship and clerkship years. Offered one-on-one mentorship and advice for 1-2 students per year.
- 2017–2018 **Chair**, *Day of Action Research Committee, Canadian Federation of Medical Students*, Ottawa, Ontario.  
Chaired national committee responsible for developing evidence-based policy recommendations on improving Indigenous mental health in Canada. Our recommendations were presented to over 60 federal policymakers during meetings held on Canadian Federation of Medical Students (CFMS) Day of Action in 2018.
- 2016–2017 **Departmental TA Steward**, *Public Service Alliance of Canada Local 610*, London, Ontario.  
Served as initial point of contact for Western University Department of Microbiology & Immunology teaching assistants with disputes involving the University as their employer. Acted as the primary liaison between the department teaching assistants and the Union.
- 2015–2017 **Chair**, *MD/PhD Program Trainee Seminar Series Organizing Committee, Schulich School of Medicine & Dentistry*, London, Ontario.  
Organized bi-monthly seminars on research and career development given by both senior clinician-scientist faculty at Western University and Western MD/PhD Program alumni for current trainees within the Western University MD/PhD and Clinician Investigator Program training programs.
- 2015–2017 **Member**, *Government Affairs and Advocacy Committee, Canadian Federation of Medical Students*, Ottawa, Ontario.  
Represented Western University on a national committee on health advocacy. Organized advocacy skills training sessions and lectures on various health advocacy topics attended by an average of 40-50 medical students.
- 2015–2017 **Member**, *Political Advocacy Committee, Schulich School of Medicine & Dentistry*, London, Ontario.  
Served as *de facto* member of a committee of all Schulich medical students involved in political advocacy at the national, provincial and municipal levels. Coordinated joint advocacy initiatives at the local level within the medical school and in the community.
- 2015–2016 **Chair**, *Clinician-Scientist Training Working Group, Canadian Federation of Medical Students*, Ottawa, Ontario.  
Chaired working group responsible for developing evidence-based policy recommendations on supporting Canadian clinician-scientist training, which were adopted by CFMS at its 2016 Spring General Meeting.

- 2015–2016 **Co-President**, *Pathology and Laboratory Medicine Interest Group, Schulich School of Medicine & Dentistry*, London, Ontario.  
Organized lectures on topics of interest in the field of pathology and laboratory medicine. Coordinated with the Department to bring 10 highly-motivated medical students on a tour of the pathology laboratories and attend histopathology rounds.
- 2015–2016 **Co-President**, *Schulich Translational Research Club, Schulich School of Medicine & Dentistry*, London, Ontario.  
Organized lectures on research during medical school, including a panel on research opportunities attended by over 80 medical students. Coordinated with the school research office to develop a research resource document that was distributed to all pre-clerkship medical students at Western University.
- 2014–2016 **Student Representative**, *Infection and Immunity Course Committee, Schulich School of Medicine & Dentistry*, London, Ontario.  
Responsible for liaising between students and course chairs on concerns regarding the Infection and Immunity course. Represented the student perspective in recommending improvements to course structure. Led a review on key concepts in basic immunology attended by over 50 students.
- 2014–2015 **Member**, *Political Advocacy Committee, Ontario Medical Students Association*, Toronto, Ontario.  
Represented Western University on an Ontario provincial committee on health advocacy. Participated in organizing a leadership skills workshop attended by over 40 medical students from all 6 Ontario medical schools.

## Teaching and Mentorship

### Coordinator

- 2017–2018 Western University, Medical Student Longitudinal Research Experience

### Teaching Assistant

- 2016–2017 Western University, MICROIMM 3610F, Microbiology Laboratory  
2013–2014 McMaster University, ISCI 1A24, Integrated Science I (Science Literacy Component)

### Student Mentorship

- 2020–2021 Amena Aktar, PhD Student  
2017–2018 Neha Sharma, Medical Student  
2017–2018 Jonathan Hu, Medical Student  
2017–2018 Christopher Wavell, Medical Student  
2017–2018 Andrew Sokolowski, Medical Student  
2016–2017 Janakan Somasundaram, Honours Thesis Student  
2015–2016 Dean Argintaru, Honours Thesis Student  
2015–2016 Sara Ndombele, Honours Thesis Student  
2014 Kazi Akther & Priynka Dhillon, IIDR Research Interns  
2014 Phil Lauman, ISCI 3A12 Project Student  
2013–2014 Jason Robotham, YES Mentorship Student  
2012–2013 Leonard Rivet, YES Mentorship Student  
2012 Jason Fan, IIDR Research Intern

### Other Teaching and Mentorship Activities

- 2019 Biology Undergraduate Society Medical School Information Session  
2019 Southwestern Academic Health Network Interprofessional Education Day Facilitator  
2018-2019 Professional Foundations of Nursing Interprofessional Health Care Team Panel

2017 Canadian Medical Hall of Fame Discovery Days in Health Sciences Career Panel

## Volunteering and Community Engagement

- 2019–present **Volunteer Judge**, *Thames Valley Science and Engineering Fair*.  
Judged and provided expert feedback on projects from students in Grades 6-12 at a local science fair in London, Ontario. Additionally, provided feedback and expert advice to students selected annually to participate in the Canada-Wide Science Fair.
- 2019–2020 **Grants Coordinator**, *Student Run Clinics Association*.  
Led grant-writing and other fundraising activities of the Student Run Clinic Association, a group dedicated to fostering collaboration between Student Run Clinics in Canada.
- 2017–present **Panelist**, *Team Canada ISEF Selection Panel*.  
Member of the panel that selects highly motivated and talented students in Grades 6-12 to compete at the International Science and Engineering Fair (ISEF) annually on behalf of Team Canada. Provided feedback and expert advice to help students selected to improve their projects prior to competing at the international level.
- 2016–2019 **Founding Co-President**, *Alliance of Students Providing Interprofessional Resources and Education*, London, Ontario.  
Led a 15-member board of directors in overseeing health promotion sessions, interprofessional education workshops and the development of a primary care clinic focused on the unmet health needs of marginalized groups in London, Ontario. Contributed to a toolkit on student-led clinics endorsed by CFMS and OMSA.
- 2016–2018 **Volunteer**, *Retiring with Strong Minds*, London, Ontario.  
Prepared and delivered seminars on my doctoral research to seniors citizens at an audience-appropriate level. Delivered seminars at 3 long-term care homes and seniors' centers attended by an average of 10-20 people.
- 2014–2018 **Board Member**, *Thames Valley Science and Engineering Fair*, London, Ontario.  
Oversaw a regional science fair with more than 300 participants and a budget of over \$40,000 annually. Previously served as a volunteer judge for 4 years. Since 2017 has sat on the panel that selects students to represent Canada at the Regeneron International Science and Engineering Fair.
- 2015–2016 **Coordinator**, *Let's Talk Science - Western University*, London, Ontario.  
Liaised between 170 educators and 200 volunteers and was responsible for recruitment, training and engagement of volunteers. Worked with two other coordinators to deliver nearly 400 science activities reaching 15,000 local students and youth annually. Previously served as a volunteer with Let's Talk Science for over 3 years.
- 2011–2014 **Member, Executive Committee**, *McMaster Undergraduate Research in Science Association*.  
Co-founder of the association and responsible over the course of 3 years for internal organization, finances and web presence. Responsible for creation of financial practices and accounting within the organization and creating and maintaining the association's web page. Supervised organizational growth from a new club to a leading student organizations at McMaster University.

## Programming Languages

proficient Perl, LaTeX, HTML5/CSS, php, R  
beginner Java, Fortran90

## Licenses and Certifications

2017 Student Pilot Permit (Canada)  
2017 Professional Radio Operator Certificate - Restricted Aeronautical (ROC-A)  
2014 CPR - Level C  
2014 WHMIS

## Honours and Awards



2020 OMSA Conference Grant (\$250)  
 2019 Dr. R.G.E. Murray Microbiology & Immunology Graduate Student Seminar Award (\$500)  
 2019 Martin J. Inwood Award (n/a)  
 2019 Canadian Student Health Research Forum 2019 CIHR Travel Award (\$1,000)  
 2019 Feature Platform Presentation Award at London Health Research Day 2019 (\$650)  
 2019 Sandra Banner Student Award for Leadership (\$3,000)  
 2019 John A. Thomas Award (\$1,000)  
 2019 Dr. Federick W. Luney Graduate Travel Award (\$2,000)  
 2019 Canadian Society for Immunology 2019 Scientific Meeting Travel Award (\$500)  
 2019 NIF Winter School on Advanced Immunology Travel Fellowship (\$1,500)  
 2018 Society for Leukocyte Biology Presidential Award (Student Category) 1st Place (\$1,500)  
 2018 Graduate (>6 Months) and Post-Doctoral Poster Competition Winner at Infection and Immunity Research Forum 2018 (\$150)  
 2018 PSAC 610 Scholarship for Outstanding Research Contributions (\$400)  
 2018 Nellie Farthing Fellowship in Medical Sciences (\$3,000)  
 2018 Feature Platform Presentation Award at London Health Research Day 2018 (\$650)  
 2018 Dr. Federick W. Luney Graduate Travel Award (\$1,000)  
 2018 Canadian Federation of Medical Students Strategic Initiative Fund (\$1,632.60)  
 2018 International Symposium on Atherosclerosis 2018 Young Investigator Fellowship (\$350)  
 2017 1st Place Oral Presentation at Infection and Immunity Research Forum 2017 (\$400)  
 2017 Society for Leukocyte Biology Travel Award (\$750)  
 2017 Western University School of Graduate and Postdoctoral Studies Wall of Fame Inductee (n/a)  
 2017 Vanier Canada Graduate Scholarship (\$150,000)  
 2017 Dr. Federick W. Luney Graduate Travel Award (\$1,000)  
 2016-2019 Western Graduate Research Scholarship (\$4,500)  
 2016 CIHR Frederick Banting and Charles Best Canada Graduate Scholarship (\$17,500)  
 2015 CIHR MD/PhD Studentship (\$132,000)  
 2014 Jack Banham Hargreaves/Jessie Louisa Florence Hargreaves MD/PhD Award (\$40,000)  
 2014 1st Place at OQUIC 2014 (\$300)  
 2014 NSERC Undergraduate Student Research Award (\$6,000)  
 2013 T. Russell Wilkins Memorial Travel Award (\$4,600)  
 2012 NSERC Undergraduate Student Research Award (\$5,625)  
 2011-2013 Dr. Harry Lyman Hooker Scholarship (\$1,500)  
 2011 Ontario Genomics Institute Summer Research Fellowship (\$5,000)  
 2010-2013 Queen Elizabeth II Aiming for the Top Award (\$12,000)  
 2010 McMaster President's Award (\$3,000)  
 2010 Weizmann Institute of Science Summer Studentship (\$9,400)  
 2010 Bronze Medal, Canada-Wide Science Fair (\$100)