

Women in Science and Engineering Initiative McMaster University

Year End Report 2017-2018





1280 Main Street West Hamilton, ON L8S 4L8

Email: wiseinitiative@gmail.com

Website: http://science.mcmaster.ca/wise/

THE MCMASTER WISE INITIATIVE

The WISE Initiative was formed after a survey of female graduate students conducted during the summer of 2006 revealed a strong need for a forum at McMaster University in which female graduate students can identify, discuss, and learn about gender-related issues specific to their field of work and study. This year, WISE joined the Graduate Students Association as a registered club.

Mission:

The McMaster Women in Science and Engineering (WISE) Initiative is an integrated network of academics and professionals in science and engineering whose mission it is to support, celebrate and advocate for women in science and engineering at McMaster University.

Objective & Strategy:

Our main objectives are to create a supportive network of female mentors, increase issue-specific education for students, and facilitate interdisciplinary collaboration and communication. The WISE Initiative uses a multifaceted approach, through:

Support:

- Networking: Social events and Mentor the Month lecture series
- Fostering academics: Professional development workshops and our annual multi-disciplinary research conference (Current Research in Engineering, Science and Technology, CREST)
- Showcasing research by undergraduate and graduate students in STEM

Celebration:

- Mentor of the Month lecture series, highlighting outstanding female mentors at McMaster and within the Hamilton community
- Panel discussions of invited speakers within academia and industry

Advocacy:

- Instigating and facilitating discussion with senior administrations regarding women in science and engineering
- Communicating with other WISE groups across Canada



2017-2018 WISE INITIATIVE STEERING COMMITTEE MEMBERS

Name	Position	Department	Email
Rana Attalla	EngSci Girl Coordinator	Biomedical Engineering	attallr@mcmaster.ca
Alison Bayzat	VP External	Software Engineering	bayzatam@mcmaster.ca
Harsukh Benipal	Steering Committee	Health Research Methodology	benipahk@mcmaster.ca
Carla Brown	Advisory Committee	Chemistry & Chemical Biology	brownce4@mcmaster.ca
Roopali Chaudhary	Advisory Committee	Pathology & Molecular Medicine	chaudr8@mcmaster.ca
Julia de Lange	VP External	Biomedical Engineering	delangej@mcmaster.ca
Brittany Duggan	Branding & Supplies Coordinator	Medical Sciences	dugganb@mcmaster.ca
Lisa Dyce	Co-President	Neuroscience	dycel@mcmaster.ca
Yasamin Fazliani	Website Coordinator	Electrical Engineering	fazliay@mcmaster.ca
Hanna Haponenko	Mentor of the Month Coordinator	Psychology, Neuroscience & Behaviour	haponeh@mcmaster.ca
Rachelle Ho	Co-President	Psychology, Neuroscience & Behaviour	homr@mcmaster.ca
Ritchie Ly	Website and Social Media	Chemistry & Chemical Biology	lyr2@mcmaster.ca
Daeria Lawson	Mentor of the Month Coordinator	Health Research Methodology	lawsod3@mcmaster.ca
Alice Li	Mentor of the Month Coordinator	Chemistry	liaj2@mcmaster.ca



Celine Ling	EngSci Girl Coordinator	Biomedical Engineering	lingcs@mcmaster.ca
Ritchie Ly	Social Media Coordinator	Chemistry & Chemical Biology	lyr2@mcmaster.ca
Stellena Mathiaparanam	VP Finance	Chemistry & Chemical Biology	mathis2@mcmaster.ca
Sylvia Mills	CREST Coordinator	Neuroscience	millssi@mcmaster.ca
Anna Parackal	Steering Committee	Health Research Methodology	Anna Parackal
Anna Park	Mentor of the Month Coordinator	Psychology, Neuroscience & Behaviour	Anna Park
Molly Pottruff	Advisory Committee	PERD, Health Sciences	Molly Pottruff
Lyndsay Rayner	Social Events Coordinator	Biology	Lyndsay Rayner
Tamara Rosner	CREST Coordinator	Psychology, Neuroscience & Behaviour	Tamara Rosner
Michelle Saoi	VP Finance	Chemistry & Chemical Biology	saoime@mcmaster.ca
Kara Tsang	VP Internal	Biochemistry & Biomedical Sciences	tsangkk2@mcmaster.ca

For a directory of the 2018-2019 Steering Committee, please see our 2018-2019 Prospectus.



WISE INITIATIVE EVENTS (2017-2018)

WISE New Member Information Night (September 12th, 2017)

Graduate students, post-doctoral fellows, and faculty in the sciences and engineering were invited to attend a reception held in the Life Science Building (LSB) Student Lounge. The main objectives of the event were to provide an opportunity for students and faculty to network with members in different departments and encourage joining the WISE executive committee. The reception was attended by approximately 50 people.

Mentor of the Month Lecture Series (December 2017 - July 2018)

In October 2014, WISE launched our Mentor of the Month lecture series where a female faculty or industry mentor is invited to lead an interactive discussion on career development, gender equity issues and/or non-academic aspects of being a female in STEM.

This past year, our monthly series was consistently well attended by 25-35 undergraduate and graduate students, postdoctoral fellows and faculty. This past year's mentors and topics were:

- Dr. Rosa daSilva: "Being Ready for Opportunities: It's Not All About Luck!" (December 6, 2017)
- Dr. Elizabeth Hassan: "The Power of Positive Framing" (January 30, 2018)
- Dr. Kalaichelvi Saravanamuttu: "How Can We Make Mentorship More Inclusive?" (March 2, 2018)
- Dr. Romina Brignardello-Petersen: "Securing Advantage from Disadvantage" (April 26, 2018)
- Dr. Heather Sheardown: "The Joys and Perils of Working with Industry" (June 27, 2018)
- Dr. Sara Andres: "The Advantages and Opportunities of Graduate School" (July 17, 2018)

WISE Winter Social (December 14, 2017)

To end the Fall Semester, WISE held a mug decorating and holiday movie social that welcomed all undergraduate and graduate students. The aim of this event was to provide a safe space for women and allies in STEM to meet and socialize in a casual setting. Furthermore, it provided students with a more intimate setting to meet and talk to the WISE executive team to learn more about our mission, objectives and future events in the



upcoming year. Approximately 30 students attended and each went home with a unique mug to remember the night by!

WISE Current Research in Engineering, Science, and Technology (CREST) Annual Meeting (March 9-10, 2018)

Our 11th annual research conference, CREST (formerly the WISE International Women's Day Conference) was held on March 9-10, 2018. The two day conference consisted of three interactive workshops, two career panels (academic and non-academic careers) and a total of 20 oral presentations from undergraduate and graduate students conducting research in STEM. Over the course of the two days, approximately 100 people attended the conference. Our keynote talk was given by Dr. Myra Fernandes, a Professor in Cognitive Neuroscience and adjunct in the Research Institute of Aging at the University of Waterloo and recipient of numerous prestigious awards and recognitions. Furthermore, this was the second year of our community outreach program, EngSci Girl, that catered towards high school students interested in pursuing an education and career in STEM. Proceeds from the Wine & Cheese Receptions were donated to the "Organization for Women in Science for the Developing World", a not-for-profit international forum providing research training, career development and networking opportunities to female scientists from the developing world, and the McMaster Biology Greenhouse, who kindly loaned plant displays for CREST.

Below are detailed highlights of each of the events held at the conference. Additional details can be found in the conference proceedings, which are available on our website.

Keynote Speaker:

Our Keynote Speaker this year was Dr. Myra Fernandes, a Professor in Cognitive Neuroscience and adjunct in the Research Institute of Aging at the University of Waterloo. Dr. Fernandes has been recognized with numerous honours and distinctions throughout her career including the Canadian Psychological Association's President's New Researcher Award, and the Ontario Ministry of Research & Innovations Research Excellence Award. Her research aims to identify cognitive processes and key brain structures supporting memory using a variety of methodologies in young adults, in aging individuals, and in those with a past head injury or concussion. She was the first recipient of the Women in Cognitive Science Canada Mentorship Award and her research is frequently featured in newspapers, magazines, radio interviews, blogs, and science documentaries worldwide, from journalists in the areas of Psychology, Law, Medical Sciences, Business, Biology, and Technology. Dr. Fernandes' keynote talk titled "Understanding the Landscape for Women in Science: Creating Opportunities and Strategies for Success" touched on the experiences and challenges she faced while establishing her career and discussed the myriad of



opportunities and ways to get involved in science and engineering, from the programs females select to study, the questions females feel bold enough to ask in seminars, to the importance of self-assurance when presenting research findings at conferences. She also recommended some strategies to stay organized, create opportunities, and develop supportive connections in order to define one's role and forge a reputation in STEM.

Research Presentations

The conference featured oral presentation sessions by 20 students from different disciplines across the Faculties of Science and Engineering. The talks were judged by post-doctoral fellows and faculty volunteers based on the clarity of presentation and ability to communicate to a general science audience. Three winners were recognized with prizes made possible through our funding.

Best Oral Presentations

1st Prize: Alexis Bullock (Kinesiology)

2nd Prize: Kim Madden (Health Research Methods)

Honourable Mention: Lydia Hicks (Psychology, Neuroscience & Behaviour)

Workshops

We held three interactive workshops at CREST 2018. Our first workshop, titled "Open Access: Why and How?" discussed the benefits of making scholarly work freely available online and compliant with the Tri-Agency Open Access Policy, the process of doing so, as well as resources for accessing and reading paywalled research without breaking the bank. The workshop was facilitated by a female graduate student at McMaster, Haley Kragness, who is very involved in science communication and open access initiatives. Our second workshop "Creative Problem Solving: How to Generate and Optimize Ideas for Success" by Carol Chong, marketing consultant and Director at Sklar, Wilton and Associates, provided attendees with fun, creative, and effective tools & techniques to help generate and optimize ideas. Our final workshop, "What, Why, How: A Discussion on Microaggressions in the Workplace" was lead by the McMaster Women in Engineering Society (WIE), National Society of Black Engineers (NSBE), and McMaster EngiQueers. This workshop invites members of the STEM community to join in a conversation about microaggressions in the workplace in order to educate oneself, open up about personal experiences, and discuss ways to create a more diverse and inclusive STEM culture.

Career Panels

As in previous years, we presented two very popular career panels, one for careers in academia and one for careers in industry. Each panel includes females in STEM fields who



shared their personal experiences and offered invaluable advice for charting a unique career path. Our Academic Panel featured Dr. Laura Cirelli (Psychology, University of Toronto Scarborough), Dr. Barbara Fenesi (Education, University of Western Ontario), Dr. Myra Fernandes (Psychology, University of Waterloo), Dr. Sharona Greenberg (Chemistry & Chemical Biology, McMaster University), and Dr. Nidhi Jain (Mechanical Engineering, McMaster University). Our Industry Panel Featured Dr. Carla Brown (Research Chemist, Xerox Research Centre), Dr. Trina Foster (Executive Director, Ontario Centre for Workforce Innovation), Ewelina Kusmider (Vaccines Pricing Analyst, Public Affairs and Reimbursement, GSK), Dr. Fiona Manning (Research Analyst, Canadian Institute for Advanced Research), and Ivana Postic (Ph.D. Candidate, Chemical Engineering, McMaster University).

EngSci Girl

We had another successful year of WISE's community outreach program, EngSci Girl, at CREST 2018. The aim of this program is to provide an opportunity for high school level students to interact with undergraduate and graduate students in STEM at McMaster, get exposed to recent and exciting research through attending students' oral research presentations and creating "3 Minute Thesis"-style presentations based on these talks, and learn more about the growing opportunities in STEM by attending talks held by professors and industry professionals. This year, we implemented a Student Mentors panel featuring current undergraduate and graduate level students in various engineering and science programs at McMaster. Approximately 30 high school students registered for this program.





Above: CREST Coordinators Tamara Rosner and Sylvia Mills introduce our Keynote, Dr. Myra Fernandes. *Below:* Our Academic Panelists weigh in on their experiences as female faculty members in STEM fields.







Above: EngSci Girl Coordinators Rana Attalla and Celine Ling introduce the 3MT challenge. Below: EngSci Girl attendees hear from undergraduate and graduate students on the Student Mentor panel.







This year's Industry Panelists *(above)* speak to CREST attendees *(below)* about their career paths and transitions from graduate school to industry professions.





WISE Summer Social (July 10, 2018)

Our final social for the 2017-2018 year consisted of a tour of the McMaster Nuclear Reactor Tour facilitated by three graduate student tour guides at the Reactor. After the tour, appetizers and refreshments were served at the Phoenix and attendees were able to closely interact with WISE executive members in a more casual setting. Being the last event of the year, the social was held to celebrate all the hard work of the executive team in carrying out many successful events throughout the year. Overall, there were approximately 15 attendees at the social.

See Appendix 2 for a list of WISE Initiative events from 2006-2018.

FINANCIAL REPORT (2017-2018)

The WISE committee approached various internal and external sources to raise the necessary funds to cover our budget. We were thrilled to receive many positive words of encouragement for our initiative and were able to raise almost \$8,000! A full list of our 2017-2018 Sponsors can be found in Appendix 1.

TABLE 1: General Expenses (2017-2018)

mibble in demotial emperators (2017, 2018)	
	Item Total
Social Events (see list of WISE events, pp. 3) - New Member Information Night - Mentor of the Month events (6 total) - WISE December Social - WISE Summer Social	\$120.82 \$1197.91 <mark>\$129.78</mark> \$138.92
WISE CREST Annual Meeting 2018 (see Table 2, below)	\$4,287.76
Subtotal (without conference):	\$2,361.94
Total Expenses:	<mark>\$7,314.43</mark>



TABLE 2: Expenses for WISE CREST Annual Meeting (2017-2018)

	Description	Item Total
Administrative	Advertising, "Thank-you" cards, Room Bookings with AV Rental etc., Name Tags	\$965.18
Food Services	Breakfast, lunch, wine & cheese social, coffee	\$2674.51
Finishing Touches	Floral arrangements, Gifts for Panelists, Speakers & Keynote, Prizes for Best Talks	\$308.23
Conference Package	Proceedings	\$299.84
Travel	Travel for Keynote, Parking for Panelists	\$40.00
Total Conference Costs:		\$4,287.76



APPENDIX 1

WISE INITIATIVE 2017-2018 SPONSORS

The 2017-2018 WISE Initiative steering committee would like to extend their great appreciation to the following McMaster sponsors, without whom our goals would be impossible to achieve.

Platinum Level (\$1000)

Office of the Associate Dean, Science
Office of the Dean & Vice-President, Faculty of Health Science

Gold Level (\$500 - \$999)

Department of Chemical Engineering
Department of Mathematics and Statistics
Department of Mechanical Engineering
Department of Psychology, Neuroscience and Behaviour
Department of Surgery

Silver Level (\$250 - \$499)

Department of Electrical & Computer Engineering
Department of Chemistry and Chemical Biology
Department of Kinesiology
Department of Materials Engineering
McMaster Alumni Association
McMaster Integrative Neuroscience Discovery & Study (MiNDS)
Graduate Students Association (GSA)
Canadian Union of Public Employees (CUPE) Local 3906

Donations in Kind

McMaster University Campus Store McMaster Science Society



APPENDIX 2

WISE INITIATIVE EVENT HISTORY

2017-2018 Events

WISE New Member Information Night (September 12, 2017)

Mentor of the Month:

- Dr. Rosa daSilva: "Being Ready for Opportunities: It's Not All About Luck!" (December 6, 2017)
- Dr. Elizabeth Hassan: "The Power of Positive Framing" (January 30, 2018)
- Dr. Kalaichelvi Saravanamuttu: "How Can We Make Mentorship More Inclusive?" (March 2, 2018)
- Dr. Romina Brignardello-Petersen: "Securing Advantage from Disadvantage" (April 26, 2018)
- Dr. Heather Sheardown: "The Joys and Perils of Working with Industry" (June 27, 2018)
- Dr. Sara Andres: "The Advantages and Opportunities of Graduate School" (July 17, 2018)

WISE Winter Social: Mug Decorating & Holiday Movie Night (December 14, 2017)

WISE Current Research in Engineering, Science, and Technology (CREST) Annual Meeting & EngSci Girl (March 9-10, 2018)

WISE Summer Social: McMaster Nuclear Reactor Tour & Refreshments at the Phoenix! (July 10, 2018)

2016-2017 Events

WISE New Member Information Night (September 20, 2016) Mentor of the Month:

- Susan Searls Giroux: "The University We Are For" (October 5, 2016)
- Kim Jones: "Shifting Gears The Benefits of a Crooked Path" (November 16, 2016)
- Gillian Goward: "Going Incognito: Using Merit to Minimize Gender Identity and Succeed in a Professional Career" (December 14, 2016)
- Sarah Dickson: "Maintaining Work-life Balance" (January 26, 2017)
- Emily Cranston: "How to land your dream job, even if you're not sure what it is yet!" (February 15, 2017)
- Judith West-Mays: "Getting out of the comfort zone" (April 19, 2017)
- Alison Sills: "The Third Pillar" (May 24, 2017)
- Dawn Bowdish: "Speaking as an expert...Finding your scientific voice and using it for the greater good" (June 21, 2017)
- Irina Pushkareva: "Finding YOUR Way" (July 19, 2017)



WISE Winter Social: Cookie-Decorating and Hot Chocolate (December 7, 2016) WISE Current Research in Engineering, Science, and Technology (CREST) Annual Meeting & EngSci Girl (March 10-11, 2017)

WISE Summer Social: McMaster Museum Tour & Refreshments at the Phoenix! (July 27, 2017)

2015-2016 Events

New Member Information Night (September 10, 2015) Mentor of the Month:

- Meet the Faculty Mentors Social (October 28, 2015)
- Michelle Dion: "Networking: Why it's (always) important, why we (sometimes) hate doing it, and how to do it effectively (more often) (November 11, 2015)
- Kathryn Grandfield: "What I learned through international research" (December 9, 2015)
- Deborah Sloboda: Work-life integration for female academics" (January 20, 2016)
- Natalia Nikolova: "Challenges faced by female academics in male-dominated disciplines" (February 24, 2016)
- Maureen MacDonald and Stuart Phillips "An expose of married academic life" (April 21, 2016)

WISE INITIATIVE EVENT HISTORY (CONTINUED)

- Elizabeth Rowan: "My time working in government" (May 18, 2016)
- Sandra Montiero: "Finding work-life balance in academia A personal story of success" (June 22, 2016)
- Sorina Dumitrescu: "Reflections on my journey from student to academic" (Jul 20, 2016)

December Social (December 15, 2015)

WISE Current Research in Engineering, Science, and Technology (CREST) Annual Meeting (March 10-12, 2016)

WISE August Social (August 18, 2016)

2014-2015 Events

New Member Information Night (September 9, 2014)

Mentor of the Month (October 2014 - August 2015)

Cookie Decorating Night (December 15, 2014)

WISE Current Research in Engineering, Science, and Technology (CREST) Annual Meeting (March 6-7, 2015)

Girls in Science Day (April 10 & 24, 2015)



Regional WISE Student Gathering (August 15, 2015)

Tour the McMaster Nuclear Reactor Facility with WISE (August 19, 2015)

2013-2014 Events

Meet n' Mingle Reception - for Students & Faculty (October 2, 2013)

Pottery Painting Night (November 28, 2013)

Whidden Lectures at McMaster: A Conversation with Joanna Aizenberg (January 21, 2014)

Tour the McMaster Nuclear Reactor Facility with WISE (February 12, 2014)

WISE Current Research in Engineering, Science, and Technology (CREST) Annual Meeting (March 7-8, 2014)

2012-2013 Events

Meet n' Mingle Reception - for Students & Faculty (October 23, 2012)

Planetarium Show (November 20, 2012)

Meet n' Mingle 2 Reception - for Students & Faculty (January 23, 2013)

WISE TED Talk Night (February 27, 2013)

WISE Current Research in Engineering, Science, and Technology (CREST) Annual Meeting (April 5-6, 2013)

WISE INITIATIVE EVENT HISTORY (CONTINUED)

2011-2012 Events

Student/Faculty "Meet & Mingle" Reception (September 14, 2011)

Movie & TED Talk Night (October 19, 2011)

WISE Colloquium (November 16, 2011)

WISE Charity Trivia Night (December 7, 2011)

Planetarium Show (January 18, 2012)

WISE Initiative 2012 CREST Conference (March 2nd & 3rd, 2012)

WISE TED Talk Night (April 18, 2012)

'Muffins n Mentors' (November 30, 2010 - January 14, 2011)

'Muffins n Mentors' - Dr. Terri Lewis (October 26, 2011)

- Dr. Leyla Soleymani (December 5, 2011)

2010-2011 Events

Welcome Pub Night (September 15, 2011)

Student/Faculty "Meet & Mingle" Reception (October 20, 2010)

TED Talk Night (November 17, 2010)

'Muffins n Mentors' (November 30, 2010 - January 14, 2011)



"1 Piece of Advice" (December 8, 2010)

Planetarium Show (January 20, 2011)

"A Treatment for Death by PowerPoint" (March 3, 2011)

WISE Initiative 2011 CREST Meeting (March 11-12, 2011)

'Muffins n Mentors' - Dr. Robin Cameron and Dr. Alison Sills (November 30, 2010)

- Dr. Laurel Trainor and Dr. Sue Becker (January 14, 2011)
- Dr. Sheila Singh (March 3, 2011)

2009-2010 Events

WISE Student/Faculty Meet & Mingle (October 29, 2009)

WISE Dinner and Movie Night, "Water" (November 10, 2009)

WISE Potluck and Movie Fundraiser (December 2, 2009)

WISE Initiative 2010 International Women's Day Conference (March 5-6, 2010)

2008-2009 Events

WISE Movie Night, "The Women" (April 8, 2009)

WISE Initiative 2009 International Women's Day Conference (March 6-7, 2009)

WISE Mentor Event (December, 2008)

WISE INITIATIVE EVENT HISTORY (CONTINUED)

WISE Movie Night, "Asking Different Questions: Women and Science" (November 10, 2008)

Welcome Social at the Hub (October 29, 2008)

2007-2008 Events

WISE Initiative 2008 International Women's Day Conference (March 7 & April 19, 2008)

Movie Night, "Gorillas in the Mist" (February 7, 2008)

WISE Initiative Colloquium 2007: Fall Term

Movie Night, "Proof" (November 21, 2007)

WISE Initiative Social at the Hub (September 18, 2007)

2006-2007 Events

WISE Initiative International Women's Day Conference (March, 2007)

WISE Initiative Colloquium 2006-07: Fall Term

WISE Initiative Colloquium 2006-07: Winter Term

WISE Initiative Round Table Conference, (September, 2006)