camh | womenmind

womenmind™ Mentorship Program

A Mentorship Program for Women Scientists

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About the *womenmind* Mentorship Program

Preface

To improve the advancement of women in the sciences, a working group, supported by *womenmind*™, led the design of a new mentorship program in 2022. Based on a thorough needs assessment, the need for both hub (i.e., group) and dyadic (i.e., 1:1) models for mentorship was illuminated. The new program will centre on a hub model of mentorship, comprised of varying levels of experience and rank. There will also be an option to form dyadic mentorship relationships that can be supported through the hubs, particularly for those without access to dyadic mentorship opportunities.

Inclusion Statement

"Women" refers to a broad gender categorization that does not necessarily relate to one's sex recorded at birth. We use the term for anyone who self-identifies as such, regardless of gender expression or gender identity.

This program aims to be inclusive of all women, supporting people from diverse and intersecting backgrounds and experiences. We acknowledge the impact that implicit bias and systemic discrimination can have in the design of new and existing programs and welcome feedback regarding barriers to access, program requirements, or other issues of importance.

Overview

In 2021, the CAMH Equity Task Force for Women Scientists (ETFWS) released a report that recommended establishing a formal mentorship program, prioritizing mentorship programming for women. To support this recommendation, CAMH Research with the support of *womenmind* developed a formal mentorship program for women scientists (the "Program"), broadly aimed at closing the gender gap in the sciences.

Women are more likely than men to value mentoring as an important part of their career development, yet fewer women report receiving mentoring (Shen *et al,* 2021), as reflected in the literature and CAMH's ETFWS report. The literature suggests that women may have specific mentoring needs and can benefit from women mentors. Mentorship is one important method to address gender disparities and bias (Farkas *et al,* 2019). Effective mentoring can enhance career satisfaction and professional development and has been linked to career choice, including the decision to pursue and remain in an academic career (Bhatia *et al,* 2015).

Research has consistently shown that large gender disparities exist in workplace advancement and barriers to career success in the sciences, which disproportionately affect women (Farkas *et al,* 2019). These disparities are greater for women with intersecting identities, such as sexual orientation, gender identity, race, indigeneity, disability, and socio-economic disadvantage (Beech *et al*, 2013; Shandera *et al*, 2021). Barriers to advancement include inadequate mentoring, which is critical for success and may perpetuate the underrepresentation of women in senior leadership positions.

To address this gap in mentorship, Dr. Isabelle Boileau and Dr. Hayley Hamilton co-chaired a committee of scientists (*see Appendix A*) to design and implement CAMH's new mentorship program for women scientists. The Program provides formal mentorship and guidance to women scientists at CAMH to enhance their leadership and career advancement skills.

The objectives of the Program are to:

- identify and address the unique challenges experienced by women scientists at CAMH to help inform the path of career growth;
- provide diverse forms of mentorship that better address the unique experiences and questions faced by women in science;
- expand networking opportunities, perspectives and strengthen leadership skills through a multi-faceted, measurable and innovative mentorship program to support career development among women scientists at CAMH; and
- evaluate the Program and its potential for spread, scale and sustainability to address gaps and support scientists across CAMH.

Hub Mentorship Model

In the fall of 2021, a needs assessment was completed, including a literature review, environmental scan, and three unique focus group engagement sessions with scientists at CAMH. The majority of scientists identified the hub and dyadic models as their top two choices for mentorship, defined as follows:

- **Hub**: A group model of mentorship, including varying levels of experience and rank.
- **Dyadic:** One-on-one (1:1) model of mentorship between a senior and junior scientist.

To meet the needs identified by women scientists at CAMH, we have developed a hub model, which will be composed of multiple colleagues, including near-peers and those at different stages of their academic careers, who will provide mentorship and career advice to one another through regularly scheduled meetings (Paetow *et al,* 2018). The hubs will provide access to a variety of scientists and networks to support 1:1 relationship development, as needed. The hub is modeled after the 'mastermind groups' and 'mosaic mentoring' networks, where individuals benefit from the combined intelligence and accumulated experience of the participants involved (Paetow *et al,* 2018; Khatchikian *et al*, 2021). Furthermore, Guise *et al* (2017) reported that team mentoring is beneficial to women's career development and research advancement. Reported advantages include:

- providing a diverse palate of approaches to career opportunities and challenges;
- modeling differences in success and career paths;
- expanding networking and sponsorship opportunities;
- expanding ideas and brainstorming; and
- advancing science by strengthening study designs.

Given the relatively small number of women in senior positions (for example, there are 11 senior scientists who are women at CAMH, as of July 2021), this model expands the pool of potential mentors by using a mosaic of vertical and peer mentoring through a mix of scientists at various career stages (Paetow *et al,* 2018; Welsh *et al*, 2012). Benefits of this modified model include increased opportunities to network and gain new perspectives, as well as the opportunity for mutual mentorship and growth for early, mid and senior career scientists as each member of the

hub will have the opportunity to both mentor and be mentored (Ahmadmehrabi, 2021). Hubs may also act as a platform to facilitate dyadic relationships. An evaluation of the 2023 inaugural cohort revealed growth in several areas of professional development. Participants reported an increase in networking opportunities, prospects for scientific collaborations, greater awareness of career paths within CAMH, and the value for pragmatic career development advice. Additionally, the evaluation revealed that participants gained confidence in both providing mentorship as well as pursuing further scientific collaborations.

Participating in the Mentorship Program

1. Participants will complete an expression of interest (EOI) to support the matching process to hubs.
2. Participants will be matched to a mentorship hub of 7-10 people based on goals and objectives, and other preferences identified in the EOI. Each hub will have a mix of experience and expertise.
3. Participants will complete mentor/mentee training via an orientation session.
4. Each hub will meet (in-person or virtually) six (6) times over 12 months, to meet and discuss the priorities of the hub.
    a. Each hub will identify a 'lead' for each meeting. It is encouraged that the lead role is shared across different members of the group throughout the year.
    b. Each hub will complete a Hub Terms of Reference that will outline their mentorship priorities and administrative obligations.
    c. Individual participants will track their goals and progress for the year. This will support tracking and evaluation of individual and programmatic progress.
5. Attendance at webinars, talks and workshops sponsored by the Program will be encouraged but not mandatory.
6. There will be an opportunity to renew membership in the Program after the initial 12 months.

Eligibility Criteria

- Participants who identify as a woman and/or non-binary (see inclusion statement at the top of the guidelines).
- Participants who hold a scientific appointment at CAMH (Scientific Associate, Scientist, Staff Scientist, Senior Scientist, Associate Scientist, Emeritus Scientist – internal, Senior Staff Scientist, Project Scientist or as defined by CAMH Research).
- Participants who hold a non-scientific appointment at CAMH and demonstrate plans to apply for a scientific appointment can submit a brief justification to be reviewed by the Program committee on a case-by-case basis (e.g., staff physician working towards increasing protected time for research).
- Participants without a scientific appointment but who conduct research as PI on a federally-funded research grant.
- As people of all genders are important to advance inclusion and equity in the sciences, men are encouraged to engage with the Program as 1:1 mentors or as guest speakers. However, please note that the hubs will be for individuals identifying as women and/or non-binary.

Matching Process

Participants interested in the Program will fill out an Expression of Interest (EOI). The EOI will ask the participant to indicate their priorities for topics to be covered in their mentorship hub (e.g., leadership skills, wellness and balance, communication skills; see suggested topic list below), as well as their perceived areas of strengths and development in relation to these topics. Program administration will confidentially match individuals to create hubs based on the information collected from the EOI.

Hubs are created on an annual basis; however, interested participants are encouraged to submit applications throughout the year and efforts will be made to support all requests.

Suggested Topics for Hub Discussions

The following topics were identified by over 22 women scientists from various career stages, areas of research and backgrounds who participated in one of three engagement sessions during the needs assessment phase. We recognize that obstacles can exist in attending engagement sessions and that not all voices are represented. Therefore, specific priority topics should be determined with the members of each hub. This list is a guide and it is not required that every topic be discussed.

Note: This list is not exhaustive.

Guidance on Promotion, Career Growth and Success

a) Pursuing career activities; identification of areas for progression and next steps (within own department and beyond); career advancement and development; leadership skills development; progress tracking; completing performance reviews based on relevant goals.
b) Achieving equal opportunity; navigating systemic barriers and access to opportunities for women.
c) Improving negotiation skills and self-advocacy; knowing what to ask for, how to ask, understanding processes; enhance self-promotion.

Creating Opportunities through Networking and Sponsorship

a) Providing opportunities to broaden networks, create connections and promote collaboration.
b) Creating opportunities to support career transition and growth, seeking and providing sponsorship, invitations to participate in team projects, articles, and grant submissions.

Guidance on Tactical Issues in Research and at CAMH

a) Understanding the structure of departments, leadership, and landscape of CAMH; navigating the system efficiently and effectively.
b) Administrative strategies and management skills in the context of research; for example, guidance on what is required to obtain support, space, budget, human resources and other administrative skills.
c) Support in navigating maternity and parental leave and other life-related experiences.

Wellness and Balance

a) Supporting promotion of work as part of the balance; respecting and understanding that circumstances are different for everyone.

b) Observing or sharing models of work/life balance; a place to share experiences that validates these challenges.
c) Advocating to change systems that disproportionately impact women scientists, supporting equity and inclusion (e.g., evaluation standards, mentorship, gender/diversity tax).

Research, Grant Writing and Access to Funding

a) Supporting grant strategy and writing; planning for future financial support; how to obtain initial and continued funding.
b) How to combine research with clinical work; obtaining protected research time.

Being a Woman in Science

a) Having someone who understands the lived experiences as a woman and appreciates differences reflected from a gendered perspective.
b) Addressing systemic issues and support through mentorship. For example: Intersectionality, racism, ageism, discrimination and creating a psychologically safe environment.

Conclusion

A significant gender gap persists at all levels of science, technology, engineering, art, mathematics and medicine (STEAMM) disciplines globally. Although progress has been made at increasing participation in higher education, women are still underrepresented in these fields and in leadership positions, further exacerbated for women from systemically marginalized groups.

The overarching aim of this Program is to address these issues by providing innovative mentorship that specifically confronts the unique experiences faced by women in science.

The impact of the Program will be demonstrated through measurable improvements related to the achievements of women scientists, as well as improved career satisfaction and work-life balance.

For more information about the Program, contact Tierra at Tierra.Hohn@camh.ca.

Appendix A: *womenmind* Mentorship Program Working Group

The following scientists and staff formed the Mentorship Working Group, providing time and expertise into the design and implementation of the Program:

- Dr. Hayley Hamilton, *Co-Chair,* Senior Scientist
- Dr. Isabelle Boileau, *Co-Chair,* Senior Scientist
- Dr. Christin Schifani, Project Scientist
- Dr. Claire de Oliveira, Senior Scientist
- Dr. Dafna Kahana, Clinician Scientist
- Dr. Erica Vieira, Independent Scientist
- Dr. Meghan Chenoweth, Project Scientist
- Dr. Nicole Kozloff, Clinician Scientist
- Dr. Stephanie Penney, Independent Scientist
- Dr. Esha Jain, Liaison with CAMH Research Trainee Mentorship Program
- Jena Roy, Manager, *womenmind* Gift Implementation

References

Ahmadmehrabi, S., Farlow, J. L., Wamkpah, N. S., Esianor, B. I., Brenner, M. J., Valdez, T. A. Malekzadeh, S., Bradford, C. R., Francis, H. W. (2021). New Age Mentoring and Disruptive Innovation—Navigating the Uncharted With Vision, Purpose, and Equity. *JAMA Otolaryngol Head Neck Surg., 147(4),* 389-394.

Beech, B M., Calles-Escandon, J., Hairston, K. G., Langdon, S. E., Latham-Sadler, B. A., Bell, R. A. (2013). Mentoring Programs for Underrepresented Minority Faculty in Academic Medical Centers: A Systematic Review of the Literature. *Academic Medicine, 88*(4), 541-549.

Bhatia, K., Takayesu, J. K., Arbelaez, C., Peak, D., Nadel, E. S. (2015). An innovative educational and mentorship program for emergency medicine women residents to enhance academic development and retention. *Canadian Journal of Emergency Medical Care*, 17, 685-8. https://dx.doi.org/10.1017/cem.2015.17

Farkas, A.H., Bonifacino, E., Turner, R., Tilstra, S. A., Corbelli, J. A. (2019). Mentorship of Women in Academic Medicine: a Systematic Review. *Journal of General Internal Medicine, 34***,** 1322–1329. https://doi.org/10.1007/s11606-019-04955-2

Guise, J. M., Geller, S., Regensteiner, J. G., Raymond, N., Nagel, J. (2017). Team mentoring for interdisciplinary team science: lessons from k12 scholars and directors. *Academic Medicine*, *92*, 214-221. https://dx.doi.org/10.1097/ACM.0000000000001330

Halpern, L. R. (2021). The Odyssey of Mentoring: A Paradigm Shift from Baby Boomer to Millennial and Beyond. *Oral Maxillofacial Surg Clin N Am*, *33,* 435–447.

Khatchikian, A. D., Chahal, B. S., Kielar, A. (2021). Mosaic mentoring: finding the right mentor for the issue at hand. *Abdominal Radiology*, *46*, 5480-5484. https://dx.doi.org/10.1007/s00261-021-03314-2

Meschitti, V., Lawton Smith, H. (2017). Does Mentoring Make a Difference for Women Academics? Evidence from the Literature and a Guide for Future Research. *Journal of Research in Gender Studies 7(1),* 166–199.

Paetow, G., Zaver, F., Gottlieb, M., Chan, T. M., Lin, M., Gisondi, M. A. (2018). Online mastermind groups: a non-hierarchical mentorship model for professional development. *Cureus 10*(7): e3013. https://dx.doi.org/10.7759/cureus.3013

Shandera. S., Matsick, J. L., Hunter, D. R., Leblond, L. (2021). RASE: Modeling cumulative disadvantage due to marginalized group status in academia. *PLoS ONE, 16*(12): e0260567. https://doi.org/10.1371/journal.pone.0260567

Shen, M. R., Tzioumis, E., Andersen, E., Wouk, K., McCall, R., Li, W., Girdler, S., Malloy, E. (2021). Impact of mentoring on academic career success for women in medicine: a systematic review. *Academic Medicine*, 97(3), 444-458. https://dx.doi.org/10.1097/ACM.0000000000004563

University of Toronto, Dalla Lana School of Public Health. (2022). Collaborative Specialization in Women's Health. https://www.dlsph.utoronto.ca/programs/collaborative-specialization-in-womens-health/

Welch, J. L., Jimenez, H. L., Walthall, J., Allen, S. E. (2012). The women in emergency medicine mentoring program: an innovative approach to mentoring. *Journal of Graduate Medical Education, 4*, 362-6. https://dx.doi.org/10.4300/JGME-D-11-00267.1