It’s hard to believe in equal career opportunity as a female in medicine when you are consistently reminded of your gender. At least that’s Sally Kang’s impression. When the medical student at the University of Toronto (starting third year in August) applied for a summer surgery scholarship several months ago, the male interviewer asked, “Have you thought about family medicine?” She reminded the interviewer she was there for a surgery scholarship but the interviewer pushed further: “Are you sure you don’t want to do family? It’s definitely much more friendly—lifestyle-wise—for you.” Kang said she was taken aback. “It just felt really uncomfortable to me.” She ended up not pursuing the scholarship. Kang said she feels like now that she’s in medicine, “I’m more reminded that I’m a female. Since I’ve started medical school and as I delve into different specialties, surprisingly, the more pushback I am getting (because of my gender).” The interviewer may have thought his comments were in Kang’s best interests, but would he have asked a male medical student the same questions? Gender bias in medicine can be a subtle thing, but as we found when we asked hundreds of physicians and trainees in our Gender Equity in Medicine Survey, when it comes to career opportunity and advancement in medicine, gender still matters. Indeed, in response to the statement, “As my career progresses, I feel as though my gender plays an increasingly important role in determining my career opportunities,” 69% of female respondents agreed while 33% of male respondents agreed.

Medical schools in Canada are fairly evenly divided on gender (just slightly more women than men). Then something happens: as physicians are trained and begin working it appears as if something prevents as many females as males from advancing in their careers. Indeed, the gender gap in academic medicine was quantified at the research institute attached to St. Michael’s Hospital in Toronto in an article published in CMAJ Open in February 2017. The research team found that the institute included 30.1% women and 69.9% men—a 39.8% gender gap. Meanwhile, data from the Association of Medical Faculties of Canada show women do not fill half of the leadership in academic medicine. There are two female deans at the 17 medical schools in Canada and 22% of the full professors are women at the nation’s medical schools.
As well, there are multisite data from the Association of American Medical Colleges showing that women make up only 23% of full professors in the United States.

Where are the women at the full professor level? In leadership roles at departmental levels? Chairs? Chiefs?” asked Dr. Reena Pattani, a general internist at St. Michael’s Hospital in Toronto. “Women make up about 24% or less of full professors, which you can’t account for purely on the basis of parental leaves or time delays—women have been comprising half of the medical student body since the (1990s).”

**Mentor shortage**

According to Dr. Pattani, the cause of the gap is multifactorial. It may be that a lot of key networking happens informally—at bars after work, sporting events—rather than through formal structures. If women can’t access these informal networks, they may not be considered for career advancement or opportunities when they are available.

Mentorship may also be a factor. When there are few women in the upper echelons, in terms of sponsorship, these women are already maximizing their resources to support junior women. There just may not be enough senior female sponsors for the number of junior women looking for one. Same-gender mentors can be important role models—it’s difficult to imagine being in a specialty, or occupying a leadership position, when you don’t see people like you occupying those positions.

The advice to medical students about specialty choice includes: find something you like, something you are good at and something where you find people like you. To Kang, the second-year medical student interested in surgery, this advice falls flat. “When they say that, a part of me feels a bit hesitant,” she said. “Find my people. But what if ‘my people’—a part of me feels a bit hesitant.”

The issue of female role modelling in medicine was highlighted in an article in *JAMA Internal Medicine* in May 2017 that focused on the representation of women among academic Grand Rounds speakers. The paper found that women were much less likely to present at Grand Rounds than men, even after adjusting for their representation within different areas of medicine. Discussing the results, the researchers wrote: ‘Speaker selections convey messages of “this is what a leader looks like;” and women’s visibility in prestigious academic venues may subconsciously affect women’s desires to pursue academic medicine. The lower a field’s female visibility, the more likely women are to consider male stereotypes necessary for success.’

Indeed, Mei Wen—currently about to enter her third year of medical school at the University of Toronto—said she was “pressed” about considering family medicine instead.

As a resident, Dr. Wen was taken aback when during an interview for a surgery scholarship she was “pressed” about considering family medicine instead.

**Implicit bias**

Dr. Arielle Berger, a geriatrician with the University Health Network in Toronto, said she believes implicit bias is the biggest barrier to equity and diversity in medicine—and to leadership in general. “We all walk through life with innate ideas of what makes a ‘good doctor’ or a ‘good leader’: I think we tend to gravitate to people who are similar to ourselves, to our backgrounds, and that perpetuates future leaders being similar to past leaders. I don’t think anybody sits down and says to themselves, ‘I’m going to promote this man because I like men more than women,’ but I do think that there are subconscious beliefs at play when men are offered leadership roles more often than women.”

Gendered language and behaviours may also subtly shape a work environment to be less friendly to female professional advancement. Many physicians and trainees interviewed for this article stated that patients often refer to male medical students as “doctor,” yet females with the same level of training are more likely to be referred to as “nurses.” If the language that is used within a clinical work place perpetuates a culture in which male physicians and trainees are assumed to be of higher rank, this likely affects a female physician’s real and perceived career opportunity in comparison to her male colleagues. Dr. Kimberly Mendel, a plastic surgeon in Kingston, Ont. said: “I have many patients who call me by my first name despite the fact that I never ever introduce myself by my first name and always introduce myself as ‘Dr.’ To assume it is OK to call me by my first name is a subtle undermining of my knowledge and skill by removing the title of my academic achievement—and this happens to my female colleagues all the time. It happens at conferences too—male panel members or speakers will be introduced as ‘Dr.’ and females by their first name. It’s daily, it’s ongoing, and these microaggressions add up to a hostile work environment and I suspect contribute to the burnout rates of female docs. It’s a never-ending struggle.”

Gendered expectations of work and lifestyle may be so ingrained that they affect the training process itself. Beyond being questioned about why they may want to pursue a certain training opportunity, female trainees sometimes feel they receive less rigorous training than male colleagues. According to emergency physician Dr. Melissa Yuan-Innes of Cornwall, Ont., “It can be subtle. For example, a urology resident noticed that a consultant would ask her about her husband or her weekend, but when her male compatriot came on, he’d quiz him mercilessly. The consultant was trying to be nice to her, but she knew she wasn’t learning as effectively.”

**Career opportunity**

When it comes to career opportunity, male and female doctors see things differently:

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<thead>
<tr>
<th>CAREER OPPORTUNITY</th>
<th>MALE</th>
<th>FEMALE</th>
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<tbody>
<tr>
<td>“Where I work/train there is equal opportunity for male and female medical staff and trainees.”</td>
<td>84% Agree</td>
<td>70% Agree</td>
</tr>
<tr>
<td>“Where I work/train male and female doctors are equally represented in leadership positions.”</td>
<td>74% Agree</td>
<td>37% Agree</td>
</tr>
<tr>
<td>“I receive less recognition for the same work than my colleagues of the opposite sex.”</td>
<td>13% Agree</td>
<td>54% Agree</td>
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**GENDER EQUITY SURVEY**

The common advice to medical students is to find something they are passionate about. The career choice should not only match their interests, but also their values and beliefs at play when men are offered leadership roles more often than women.

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<td>33% Agree</td>
<td>69% Agree</td>
</tr>
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**ABOUT THE AUTHOR**

Emily Hughes is entering her third year of medical school at the University of Toronto. To complement her career as a physician, she is an aspiring journalist and has a background in campus radio hosting and production. Her motivation to work on this project came out of her surprise at the findings of a 2016 *JAMA Internal Medicine* paper, “Sex Differences in Physician Salary in U.S. Public Medical Schools,” which found that after multivariable adjustment, male physicians were compensated an average of $19,878 more annually than female physicians.