After learning of Larry Summer's remarks that garnered considerable media attention, I couldn't decide whether to laugh or cry. His remarks vindicated for me and other women faculty in math, science and engineering (hereafter MSE) that there remains in academe a less-than-hospitable working environment for women, where blatant discrimination does not exist but subtle biases, due to the academic culture, abound.

If even Harvard's President isn't sure whether "innate differences" between men and women are responsible for discouragingly small percentages of women MSE faculty at elite universities, then it is likely he is not alone in harboring such "doubts". Apparently Summers and many others remain blissfully unaware of the many studies that show no statistically significant, persistent difference between boys' and girls' aptitudes for math (c.f. Angier and Chang's Jan. 24 N.Y. Times article).

So it is clear why I might have cried. Why might I have laughed? Perhaps out of relief, because finally, I can turn to my male colleagues who keep insisting there are no more problems for women in academia and I can tell them what my inner soul has been saying all these long years: the problems remain, and until systemic change comes to universities, we will never see equal numbers of men and women on MSE faculty.

I think the media has missed the reason for the paltry numbers of women MSE faculty, to say nothing of Summers missing it as well. It has nothing to do with aptitude. The aptitude is there. Believe me: having chaired faculty search committees, having spoken with other search committees, we all observe the same thing. Many incredibly talented women are getting their Ph.D.'s in MSE these days. And departments would jump at the chance to hire these talented women. But they aren't applying. Why?

Women are voting with their feet, to stay out of a culture they perceive as unhealthy. To give a new twist to that famous election slogan coined by Cathy Trower, "It's the culture, stupid." Women are the canaries in the coal mines, and by golly they smell the toxic fumes. (A couple of anecdotal statistics: 1/3 of Chemistry Ph.D.'s are now awarded to women. Yet when I ran a search at UCLA, only 5 percent of the applicants were. The Chemistry Chair at Indiana the same year asked me to explain how 5 out of 6 of their best Ph.D.s that year were women, but only 3 percent of his applicant pool were.)

So what's the problem? Debra Rolison speaking at Barnard said it best: "Academic science still echoes the standards . . . in which round-the-clock scholarship by men doing science was historically sustained by a sociological and emotional infrastructure first provided by
monasteries and then by wives." My female colleagues and I have wryly joked for years that we need wives. But we don't have that option and the joke is not very funny. If I recall correctly, over half of male academics have wives who do not work. Summers remarked that perhaps women didn't want to work the 80-hour weeks necessary to be at the top. Hmm . . . I would posit that most people, not just women, would prefer a less than 80-hour work week, so as to meaningfully engage family and friends. Moreover, since when is quantity valued over quality? Though my work hours were curtailed by becoming a mother, this in no way curbed my professional success; I simply learned to be efficient with every precious work minute, so at home I could concentrate on family.

The current culture will not bring more women to MSE faculties. So here is the crux: women want what most men have: to not choose between family and career. The current culture makes this possible only with enormous sacrifice. Women figure out the culture, living in it as graduate students. By contrast, they see industry jobs, often with on-site child care, allowing both family and career to blossom. Then why should they choose academe?

In closing, let's not forget the urgency of this issue. The nation is experiencing a wave of retirements in MSE over the next decade unseen in its history (due to the expansion of MSE faculty in the 1960s after Sputnik). This is a time for real systemic changes that could correct the tremendous gender imbalance on our faculties, but only if we act NOW. Otherwise, it will be another 40 years before another opportunity arises to change the face of academic science; when the new crop of faculty hired now retire. I'd hate to wait that long.

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