When I started my career in physics, there were fewer than 10% women in my class. I did not think much about that, other than to think that other women were surely pursuing other majors that better suited their interests. I worked under the assumption that liking math, engineering, physics or philosophy was just a matter of taste. I also thought that were I to become a researcher, I would be considered solely on the quality of my work, which of course would speak for itself. I no longer believe that, but I do believe that we should aim to build a scientific community that works like that.

Nothing egregiously discriminating happened to me. But over the years the same subtle and consistent message was sent to me in small but persistent doses of not being as good as my male counterparts. I was one of the top students in my physics class, but when a professor came recruiting graduate students, I was not considered (nor was another top female student). I started going to conferences, and soon realized that some older professor would get very interested in me, but not because of the work you have done. I was told by the director of an institution I worked at that the reason he had bypassed me in my duties as director of graduate studies was because I had a family and he did not want to bother me to work over the holidays. I was told by a university dean, for why I would not be allowed to have graduate students, that “it is not you. It is the position”. I have been introduced in a talk by the sole statement “she works with <name of male collaborator>”. I have been asked questions at meetings where the questioner was addressing my male collaborator sitting in the audience, not me. And yes, I have fallen for all of this.

I bought into the idea of taking a lesser profile “trailing spouse” job that would give me all the freedom to do good work without the dull responsibilities of academia. If I can transmit any message to any women starting out in science, it is: do not fall for that one. Yes, you will do good work, and yes, you will have more time to go to school breakfasts or parent conferences, but you will have a hell of a time being recognized for your work. Academic positions are tough with may stresses – to get funding, to train and mentor students well, to give teaching the time and importance it deserves, to do substantive research. We should address those problems as a genderless community, and not as we do now where women consistently are taking the lesser jobs.

People like me may think we are taking these jobs consciously, but we are not. We settle for second-class jobs because we are told that is the highest we can achieve (I was, by the chair of a department I joined). We are not helping by falling for that one. Universities offering these lesser jobs are not helping either. Special meeting for a mostly male faculty audience to discuss integration are pointless. Special meetings for a minority of female faculty to promote inclusion are pointless and further discriminating. The way to decrease the gender gap instead is to put more women in positions that matter; to put more women in the rooms where things happen; to make more women chairs of departments; to appoint more women to committees important enough that no one would decline an invitation, instead of putting them in a room by themselves to discuss inclusion. Advocating for women and other minorities starts by promoting their presence all the way long the academic career from undergraduate to full professor or CEO of a company.

I ran a workshop on RNA structure and function six times from 2003 to 2018. When I started, I got offended when a grant reviewer pointed out that there was not much female participation. I assumed that if they were relevant females in the field, surely I thought of them. Since then, I have learned from my first hand experience about subtle unconscious gender bias. I have also seen first hand how the venue (a beautiful science institute in the mountains) not providing childcare support affects women scientists significantly more than men. When I co-organized the most recent meeting in 20018, we used a local summer camp, and had a good community of about 6 children between the ages of 7 and 13. But we were not ready for infants, and that too hurts women’s careers. Now, I re-think over and over again the list of invited participants, looking for women in the background who doing good work with lesser recognition. In the last meeting in 2018, participants were 25% female. Still far from ideal, and I intend to keep working for that to consistently increase every time.

Working towards a gender balance requires efforts at all levels. Some issues are about policy (equal pay, equal opportunities, reporting harassment, programs directly targeting minorities), about image (women in high profile positions attract more women), and about infrastructure (daycare facilities) on the part of the institutions. Some are a simple matter of attitude. I recently attended a fair at my daughter’s high school. When we approached the engineering workshop, a middle aged man in disappointment told us (a bunch of professional women with their daughters) how “girls did not go much” for engineering. Mayyyybe a female engineer with an engaging attitude would make a difference?

All gender biases exact a cost. I resigned from the position where my functions were curtailed by the director because I had a family. I was not happy in a second-tier university job that did not allow me to train graduate students. Now, I work at
a biotech company doing causal machine learning with one of the most equal gender distributions I have ever experienced. In the coming years, I hope to contribute so that the cost is much lower for future generations of women scientist. And because I know it was not me “but the position”, and I care about training the next generation of scientists, it is that I am seeking an independent faculty position to keep working on the science I want to do.