I was not a ‘math miracle’ either. In secondary school I struggled with the typical teenage problems, and I was not really interested in the future. I did not know what I wanted and where I wanted to go, and I had some problems with subjects other than math, like languages. At some point, however, I changed school and I became very focused, got good grades, and asked for more assignments. Maybe I just left the ‘teenage phase’.

Struggles and university life

When I graduated high school, I still did not know what I wanted to study. My parents were very supportive and told me to do whatever made me happy. I knew that I was good at mathematics, but I did not want to study pure mathematics, so I chose to study physics. In a certain way I think I was inspired by my parents. Firstly, my mum, because she always told me she was good at math. My dad is even more exceptional at math, but he never went to university. He just has a high level of mathematical understanding.

The first year at university was a struggle for me, because I did not know what I was doing there. It seemed to me as if everyone was convinced they were doing what they wanted to do, and I was not. I started to skip lectures because I felt sad and a bit lost. In Mexico, classes are much smaller than in Belgium. There is a maximum of 30 or 40 people in one class, so the professors know you by name. One day, a professor approached me after lectures and asked me why I had been skipping classes. When I told him why, he said: “Well, if you are in the desert and you do not know where to go or where the nearest city is, you cannot just keep standing still, you need to walk. No matter if it is the longest path or the shortest, you need to try and walk.” So that is what I did. I really wanted to work for my passion, but I did not know what my passion was, so I just tried to walk. That professor really inspired me to go on and finish physics successfully. Without that talk, I might have been somewhere else right now.
Know your limits
I feel that my life is balanced now, but I learned the hard way. I did a joint PhD between Germany and Sweden, so I was constantly going back and forth. Sometimes I was only in one place for a month, and in that time I needed to do as much as possible. I worked like crazy. There was a point at which my body just said: “You cannot do it like this anymore.” So I needed to redefine my lifestyle to find a balance, which was not an easy task. Now I feel like I know my limits and I try not to cross them.

I also realized that, after working 8 or 9 hours in an office, I was too tired to think clearly. It is easy to think that working more hours is efficient, but it does not work like that. When I was too tired from working for a long time, I often had to redo some things the next day. Now I just try to stop, refresh my mind, do some sport activities or relax, this way I can tackle a problem in a better way the next time.

International female scientists versus local male scientists
At the department, I see more men than women, but I do not feel as if men are favored in a different way than women are. The interesting thing is that in some groups, all or most of the women are from abroad, and the men are local people. I observed this in Germany as well.

It makes me wonder about the social, cultural, and governmental views towards women pursuing a career in sciences. Are female scientists being recruited and supported enough?

The question of a gender quota is a tricky one. If you want to change gender bias, it has to be achieved through our upbringing in the first place. Quota can be a good option, but perhaps not the ideal solution. On one hand, we need more role models, and establishing a quota is a good way to create them, to make a crack in the old system. On the other hand, education, investing in women’s education and more government action plans should be the key to a long term solution. All the well-known scientists that come to mind are men who lived more than 100 years ago. We should show that there are also good female scientists, and tackle that lack of knowledge. Within my department, I really like it that my promotor tries to include everyone. He puts a lot of passion in his work and helps all of his PhD students in an equal manner.