

## The Nobel Prize as a turning point

Scientists from 100 countries of the world work at the Max Planck Institutes. Here they write about their personal experiences and impressions. Mohamed El-Brolosy from Cairo is a doctoral student at the Max Planck Institute for Heart and Lung Research in Bad Nauheim. He talks about the cultural and structural differences between Germany and Egypt, explains the bureaucratic obstacles that can hinder research in Egypt, and describes how karate is helping him improve his German.

I was one of those children who always wanted to know "What? How? Why?". As my parents are both academics – my father is a pharmacist, my mother a science teacher – I came into contact with science at an early age. However, as it turned out, the turning point was the award of the Nobel Prize for Chemistry to Ahmed Zewail in 1999. It was tremendously inspirational for me to see an Egyptian scientist being presented with the Nobel Prize, even though I was only seven years old at the time and didn't know exactly what a Nobel Prize was.

My research focuses on genetic compensation: how can living organisms adapt to mutations and prevent defects from occurring? I am trying to find out how cells identify and fight genetic changes by producing larger quantities of other genes that take over the function of the mutated gene. In April 2017, I received a two-year grant from Boehringer Ingelheim. Afterwards, I would like to continue my scientific career as a postdoc at a prestigious laboratory in Europe or the U.S.

Apart from the good structure and organization, what I like most about Germany is how open people are towards people from other countries. It was relatively easy for me to get into conversations with others – not only at the Institute, but also in everyday situations like on the train.





Mohamed El-Brolosy, 25, studied pharmacy and biochemistry at the German University in Cairo. After obtaining his Master's degree, he moved to the International Max Planck Research School for Molecular Biology in Goettingen, from which he graduated with another Master's degree. Since May 2016, he has been working for his doctorate under the supervision of Didier Stainier at the Max Planck Institute for Heart and Lung Research in Bad Nauheim. Mohamed was Vice President of the Student Union at the German University in Cairo and has been the Secretary General and deputy spokesperson of the Max Planck PhDNet since January 2018.

On the other hand, what I miss most here is the sun. The weather often got me down during my first few months in Germany. Even vitamin D pills only helped to some extent. All the same, it was interesting to experience other weather conditions - snow, for example. I'd only ever seen it on television. I once went skiing with my Goettingen group. I must have fallen over a hundred times, and next day I was black and blue, but it was still great fun.

After science, my greatest passion is karate. I had my first karate lessons when I was just five years old. When I was growing up, I won several international competitions. Just recently, I came first in the German University Championship competition. What's more, karate is the perfect opportunity for me to improve my German. I've been learning German since I was ten years old, but the lessons mainly focused on grammar - which is actually rather different from the grammar used by Germans every day.

In Germany, the conditions for scientists are definitely better than in my native country. There are not many research facilities in Egypt – and most of them are only modestly equipped. You also have to deal with all kinds of bureaucratic obstacles. That makes me all the more grateful to be able to do research in Germany in perfect conditions. At the same time, I am well aware that others aren't as fortunate as I. There are so many intelligent minds in Egypt, but most of them simply don't have the money to pursue their ideas and projects.

Fortunately, there are initiatives such as the German University in Cairo. As I myself benefited directly from these, I want to give something back to my country. I dream of an Egyptian research institution which is as well organized and equipped as the Max Planck Institutes. Everybody should have the opportunity to study and do research – regardless of their origins or social status. It might sound rather kitschy, but ultimately this is exactly what it's all about: making an impact and making the world a little bit better. That's why I'm a scientist.