

# Student experience in Biomedicine at Karolinska Institutet



## **A**ndreea Mesesan

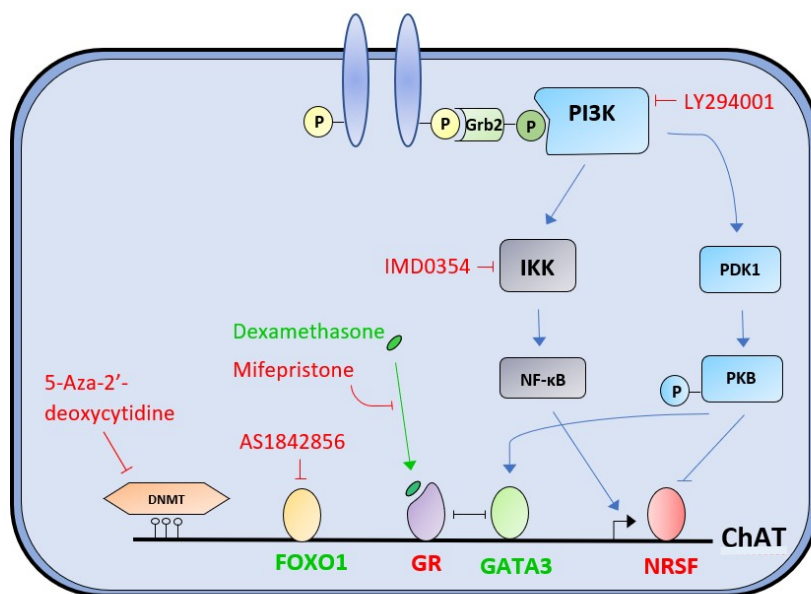
is a Master's student in Biomedicine at KI. She is 25 years old and comes from a small town in Switzerland. She grew up in three different countries namely Greece, Romania and Switzerland, therefore she has an international background. Andreea always loved the nature, as a child she participated in scout activities and enjoyed the freedom in the camps outdoors. She was always interested in natural sciences and had a special interest to deepen her knowledge in medicine and about the human body. In her free time, she likes to do sports. Andreea regularly goes climbing and she likes to be in the mountains, especially in the winter, for skiing and snowboarding.

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Andreea heard about Karolinska Institutet during her Bachelor studies in biomedicine in Fribourg in Switzerland. She was thrilled by the opportunities that Karolinska Institutet and Stockholm offered for students. Also, the attraction of going abroad to another country with different people, other customs and conventions seemed exciting. “Since I grew up very internationally, going abroad wasn't a problem for me, but rather a challenge.” Andreea

chose this unique and different path and was happy to do so, she finds that at the end it was the right decision.

Andreea had her first research experience in the laboratory of Peder Olofsson at Bioclinicum, located at the Karolinska Hospital in Solna. “First of all, I was overwhelmed by the amount of information I got.” She performed experiments in order to study how T cells regulate blood pressure. It is known that there are T cells in the spleen that produce acetylcholine, which in turn causes a vasodilation. How the production of acetylcholine is regulated, is still not well-known. The figure shows the general pathway and transcription factors studied. “My task was to extract T cell from human blood and to study gene expression of ChAT after adding different agents to these T cells in vitro. For sure, it was not easy to get into the subject area, as there was no literature to find. It was exciting because everything we performed in the lab was the first time ever.”



Right now, she is doing another project for her Master’s thesis in Nils-Göran Larsson laboratory at Biomedicum, located at the Karolinska Institutet’s Campus. “The research is in a totally different area; I’m working with mitochondria now; however, it is nice to see different fields of research.” She is working on mitochondrial genome mutations and how they contribute to cancer development. She has moved from pure cell culture to mouse experiments. She participates in studying one of the first murine models for mitochondrial genome influence on somatic processes. “I definitely have made a lot of progress during my time as a student at Karolinska Institutet. I am learning about thinking during performing and evaluating new results.” Andreea says she saw how problems are put into practice and then how the scientific studies can be presented, for instance in abstracts and posters.

As closing words Andreea says: “I enjoy my time very much as a student in Stockholm. In the first year, the courses were manageable and the days not too long, so there was free time left for other activities. I remember ice skating on the frozen sea, visiting Uppsala, Sigtuna and the north of Sweden, going on a cruise to the Baltic countries, attending the Nobel lectures and having fun at international dinners and parties.”

Andreea is definitely open regarding her future career. She could continue study or work in Stockholm or she might move back to Zurich. These decisions will depend on the possibilities and offers she will have while finalizing her Master’s degree. “I am interested in doing a PhD and to spend more time in research and academia.”

Andreea Mesesan talked to Julia Borgström and Britta Wahren for the Wikiki.se pages  
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