

## ERFAHRUNGSBERICHT Studienaufenthalt im Rahmen der Promotion an der Julius-Maximilians-Universität 2013-2016

Country of origin: Bulgarien

University in Bavaria: Julius-Maximilians-Universität Würzburg

Subject of study: Pharmazie

## **I. Practical experience and tips**

I am quite pleased that I can describe my academic experience in Bavaria (University of Würzburg), which became possible due to the support of BAYHOST. Herewith I decided to emphasize some important points and challenges, as I hope that the gained experience can serve not only for my personal development, but also to be of help for everyone who is going to seek realization in a similar field.

As I was certain that the level of the research in Bavaria is quite high I decided to prepare myself theoretically and practically before coming to Germany. For this reason I took advantage of the opportunity for a volunteer work with cell culture models at the Medical University's Faculty of Pharmacy in Sofia. In addition, I expanded my knowledge in the biomedical methodology and issues investigated by the working group where I was accepted as a PhD student.

The administrative procedures for admission at the Graduate School of Life Science (GSLS) were a bit time-consuming and complex. My diploma was extra checked for equivalence with a German Master and my Master thesis in Bulgarian along with an abstract in English was requested. A very good knowledge of English or German was required, but a language certificate was not obligatory. The administrators were complaisant and there were no problems with this procedure.

Würzburg is a very nice city. It is neither too big, nor too small. It is famous for its history and wine and maybe therefore a lot of tourists are visiting it every year. The local people are very friendly and helpful. The University of Würzburg (Julius-Maximilians-Universität Würzburg) not only hosts around 20,000 students, but it is also the biggest employer in the region. The University has ten faculties which are provided with modern equipment for teaching and research. The library is very huge and offers variety of literature, several reading rooms (very useful for learning German), and PC-pool.

As in every student town finding an accommodation in Würzburg is also a problem, even bigger for the PhD students, which are not eligible for most of the students' dormitories. Luckily, the accommodation (at the Nurse Home of the University Hospital) I initially stayed had been provided by the institute. I would suggest everyone who is coming to Würzburg to start searching for an accommodation as soon as possible. As a rule, summer is the season when the students move out, so the chances to find a place to stay are bigger. Searching in the region around Würzburg



might also be of help. Some places with a good transport connections to Würzburg are Gerbrunn, Zellingen, Zell am Main, Hoechberg, Rottendorf, and Kitzingen. I would also recommend the following website: <a href="https://www.mainpost.de/anzeigen/suchen/immobilien">www.mainpost.de/anzeigen/suchen/immobilien</a>.

For the first time I arrived in Würzburg directly from Sofia by bus. It took around 22 hours. It was okay, because I brought a lot of luggage, but a bit exhausting. Otherwise, I would recommend flights. The Frankfurt International Airport is nearby and there is a fast train connection. Even better in my opinion is flying to Nuremberg as there is a low-cost flight from Sofia and one can use Bayern-Ticket for favorable train connection.

If someone asks me what I do not like in Würzburg, probably without any doubt I would answer that this is the public transportation. The problem is the unequal frequency of the busses. There are two or three busses with almost equal routes. They come one after another and for the next 30–60 minutes there is no transportation. If one works hard in the lab, for instance until 8 p.m. getting back home might appear to be difficult. I can also recommend transportation by bike.

In my opinion the scholarship provided by BAYHOST is sufficient to cover the basic costs of living, such as accommodation, food, and semester ticket. My rent was approximately 220 €, but the average for Würzburg is around 300 € for a single room. A typical lunch in the university canteen costs between 2.30 and 4.00 €. Semester ticket plus tuition fees are around 100 € per semester. A typical student health insurance costs 80-90 €. However, one should be aware of some unexpected expenses that can always emerge abroad (i.e. emergency travel back home). If one does not receive an additional funding from the university (as in my case), I would strongly recommend a part-time job (which hat to be approved by BAYHOST beforehand).

Regarding the free time, Würzburg offers great entertainment for the young people. There are a lot of fests, concerts, and speaking tandems. Sport is also very accessible and the facilities are good. However, for me personally the spare time was very sparse, because of the big pressure to develop the project and to produce data over the limited period of time.

## **II.** Academic experiences and further qualifications

I perform my PhD study at the institute for Pharmacy and Food Chemistry and my major is Pharmacy. I am quite content with the conditions in the laboratory, but also with the opportunity to take part in the seminars of the Institute and to attend the lectures of the German Pharmaceutical Society (DPhG). I was able to visit some courses to improve my qualifications and skills. The most important of them were Animal Care course (enabling me to work with experimental animals), First Aid course, Dangerous Goods training, and End Note course. In addition, I took part in two international scientific conferences — one in Shanghai (China) and another in Plovdiv (Bulgaria). Both conferences addressed the topics I am interested in and I was able to learn new things and to exchange experience and ideas with scientists from all around the world.

I initiated my doctoral studies at the Institute of Pharmacology and Toxicology, University of Würzburg. Although the research topic was intriguing, the project developed more and more in



direction basic biological research. I met hardly any support with this challenge and I took a hard decision - to reorient myself to a laboratory and project which fit better to my pharmaceutical background. I am very grateful to BAYHOST for the help and the confidence during this time.

Presently, I am satisfied with my work because I can identify myself with my project very well and I feel myself well-integrated in the department. My relations with the other researchers and the supervisor are pretty good. Together we discuss scientific and technical problems and we help each other. The most important things I learned here until now were how to present my work in the best possible way and how strategically to write an application for project funding. These skills are essential for my desired future career as a scientist or clinical researcher. Importantly, our working group has several international collaborations, some of them from East Europe.

The topic of my dissertation is "Cellular Effects of Polyphenols in Type 2 Diabetes Mellitus (T2DM) and Metabolic Syndrome". I find this project important because of the worrying statistics on the prevalence and the increasing incidence of diabetes, especially in the developing countries. The World Health Organization alarms that currently 8.5 % of the world population is diagnosed with diabetes. The hope that our work can contribute to the knowledge of how to treat and prevent T2DM reinforces my motivation. The project addresses two main pathways intended to achieve the beneficial effects of polyphenols in T2DM: modulation of the endothelial nitric oxide synthase (eNOS) activity and modulation of the incretin pathway. To fulfil the established aims, several biomedical methods were acquired and developed. The obtained data during the two and a half years of BAYHOST funding is convincing, but not sufficient to finish my dissertation. Anyway, the outcome of our consistent work was a base for grant application which was successful and will provide us funding for one and a half year to finish the project and to write the dissertation.

The last three years were very fruitful and exciting for me. Here in Bavaria I learned a lot about the development of scientific project and experimental design. Moreover, the PhD study is not only an important prerequisite for successful academic career, but also during it one has the chance to acquire diverse skills such as time-management and structured task-organization which will definitely be an advantage in my future work.

## **III. Plans and activities after the BAYHOST-funding**

The most important step in near future will be to bring my research to successful end and to defense my thesis. It will be possible to achieve it due to the funding provided from FAZIT Stiftung. As a next step I consider finding of practical application of my qualifications and skills gained during the BAYHOST funding period. I am open for new experience and new challenges. In any case I am keen to support Bulgarian education and science as this is very important for the future of my country and will try to find the most fruitful way to do that. As a conclusion I would like to share that BAYHOST provided me great opportunity for an amazing international experience which helped my personal and professional development. As I underwent some severe tests I gained more knowledge, life experience and self-confidence.