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Boston Visit Fall 2019

Report by the GRK 2381 doctoral researchers

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The research training group GRK 2381 “cGMP: From Bedside to Bench” is an international doctoral program at the University of Tübingen with partners at various research institutions in Boston (Tufts University, Boston University, MGH and Harvard Medical School). The first cohort of doctoral researchers has nine fellows. Each of them is co-mentored by a principal investigator (PI) in Boston and will spend a three-month research internship in the partner laboratory in summer 2020. In order to establish a good working relationship with our co-mentors and plan our prospective research stay, a preparatory visit to Boston took place in November 2019. The trip was part of the TÜ-BOS exchange program for junior scientists supported by the Reinhard Frank-Stiftung. The four doctoral students selected as representatives of the GRK 2381 were Mariagiovanna Barresi, Alexandra Böttcher, Thomas Pham, and Malte Roeßing. They were accompanied by the GRK’s vice speaker and training coordinator Prof. Robert Lukowski.

As a major point of the agenda, the delegation from Tübingen presented the GRK 2381 and TÜ-BOS exchange program at the cGMP Forum held on 14th November 2019 in Boston (hosted by Novartis). Our doctoral training program was introduced to the Boston research community by a talk given by Prof. Lukowski as well as by a poster that was prepared and presented by the doctoral researchers (see picture below). By this means, we were able to personally interact with other attendees from academia and industry investigating the second messenger cyclic guanosine monophosphate (cGMP). There was great interest in our poster and we had fruitful discussions about the TÜ-BOS program and our research projects.



The GRK 2381 doctoral researchers presenting their poster at the cGMP Forum at Novartis in Cambridge, MA.

From left to right: A. Böttcher, M. Roeßing, T. Pham, M. Barresi (copyright R. Lukowski)

We also met with the Boston coordinator of our training program, Prof. Michele Jacob (Tufts University School of Medicine), to start organizing our three-month research visit in summer 2020 and to get an idea about the motivation of each co-mentor to participate and host the respective student. Prof. Jacob's input on how to approach each co-mentor and plan the future project was very valuable. In addition, we have drafted a preliminary curriculum for our prospective Boston stay. Prof. Jacob connected us to one of her post-doctoral researchers, who provided valuable information on the visa application process, accommodation, and transportation, based on her own experience as a German working in Boston. We could also explore different neighborhoods and get a feeling for daily life in Boston, including options for public transportation. We prepared a list of potential joint housing opportunities for all nine doctoral candidates of our cohort and contacted the property owners.

During our 11-day visit, we had also personal meetings with most of our Boston co-mentors. This was an excellent opportunity for the visiting doctoral researchers to get to know their prospective hosting PIs and laboratories, discuss their research projects and plan the next steps of their collaboration. We also had the opportunity to follow experimental procedures in the Boston laboratories. Furthermore, we visited interesting seminars and lectures at Harvard University, MIT, and Tufts Medical Center.

Moreover, we had the opportunity to build connections to the pharmaceutical industry by meeting with representatives of Ironwood, Cycleron and Novartis. A round table meeting at Cycleron Therapeutics with Dr. Emmanuel Buys and Prof. Lukowski was followed by a tour of their facilities and a meet and greet with Cycleron's CEO Dr. Peter Hecht and CIO Dr. Andy Bush (see picture below).



Laboratory tour at Cycleron Therapeutics in Cambridge, MA.

From left to right: P. Hecht (CEO), M. Roeßing, T. Pham, R. Lukowski, A. Bush (CIO), E. Buys, A. Böttcher, M. Barresi (copyright R. Lukowski)

In conclusion, our Boston visit in November 2019 was very successful. It allowed the GRK 2381 junior scientists to network with their partners in Boston and to establish solid grounds not only for their three-month research stay in summer 2020, but also for the TÜ-BOS exchange program in general. We would like to thank the DFG and the University of Tübingen for supporting the GRK 2381 and, in particular, the Reinhard Frank-Stiftung for supporting our Boston visit in November 2019 in the framework of the TÜ-BOS exchange program for junior scientists.