

# FIELD REPORT

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Submitted at the

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Bachelor program

*“Medical and Pharmaceutical Biotechnology”*

IMC Fachhochschule Krems

Supervised by: Dr. Torsten Meissner and Prof. Chad A. Cowan, PhD

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### *Overall Impression*

Personally, I can describe my whole internship and stay in the U.S. with one very informal word: awesome. I felt welcomed and integrated in the lab group from the very first moment on. I am very thankful, that I had the opportunity to gain my first research experience in such a laboratory, with such intelligent, and kind co-workers. Not only, did I spend a lot of the time doing research on my own small project in lab, but I was also attending several interesting talks of researchers from all over the world, who are doing research on a broad variety of fields. Furthermore, I enjoyed a lot of non-work related activities, for example traveling around in the U.S., and several enjoyable lab outings together with my co-workers. I think breaking out of my comfort zone in Austria, and starting to experience something new has been the best decision in my life so far, and I owe my deepest gratitude to the Marshall Plan Foundation for making this experience possible in the first place.

### *Quality of the Research Institution*

Harvard University consists of more than 250 research programs and departments, one of which is the Harvard Department of Stem cell and Regenerative Biology (HSCRB), where I was doing my internship. It is part of the Faculty of Arts and Sciences and the Harvard Medical School and is located in Cambridge, Massachusetts directly on Campus. HSCRB shows big commitment to education of undergraduate, graduate and medical students, and incorporates 20 laboratories, whose research focus lies on a broad range of topics. The latter include stem cells, cancer, metabolic diseases, directed differentiation, immune tolerance and nervous system development, just to name a few examples.

I was part of the Cowan Lab, which consists of 8 post-doctoral fellows, 4 technical assistants, one lab manager, one graduate student, and several undergraduate researchers. Their focus lies on the understanding of genetic variations and their impact on cardiovascular and metabolic diseases. The laboratory has great expertise in genome editing in human pluripotent stem cells and disease modelling. My research project addressed protective variants in Type 1 Diabetes, and since it is an autoimmune disease, I performed my research in collaboration with the adjacent

Strominger Lab, which is also part of HSCRB, and put their focus on immunology and immune recognition.

### *Contacts and Integration within the Research Institution*

I received help from my mentor from the very first moment on, as he supported me with writing the research proposal for the Marshall Plan Foundation application. His help and support continued when my internship started and was shared by everybody else in the lab. Apart from everybody's help concerning work related questions, I was integrated in the Lab groups from the very first moment on, by taking part in Journal Clubs, Lab Meetings and several Lab Outings.

### *Organization at the Place of Study*

The organization at the place of study was excellent, which I experienced from the first moment on, as they completely arranged my visa. In the laboratory itself, I was allowed to use all resources, and I even had my own desk, where I could work. Whenever I needed anything concerning bureaucracy, it was taken care of immediately.

### *Recommendations for Future Marshall Plan Students/Fellows*

For future Marshall Plan students, I can only recommend leaving behind all fears and worries of going abroad, breaking out of the comfort zone and experiencing something new. Regardless of what kind of internship you are going to do abroad, it is going to be a flood of new impressions, new cultures, new experiences, and particularly, new friendships.

### *Contact E-mail after the Completion of the Research Stay*

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