

## **Field report for Marshall plan association**

### **Jose Manuel Villarejo Ramos**

#### **General impression of your research stay abroad**

Boston is an international city with an amalgamation of cultures. The weather varies to extreme values in both winters and summer but there is always temperature control inside the buildings. Boston has many nearby natural parks and museums (Kennedy museum, natural history, Isabella-Steward, etc). The Wyss Institute is in a very central location within the medical campus of Harvard. It was relatively easy in reaching the Institute however, extreme weather conditions such as storms on certain days could hinder the commute significantly. There are several buses that connect to the Institute, and Uber is much more useful than in Europe as it enables one to share travel expenses with others travelling in the same direction. The Wyss institute is located on the 2<sup>nd</sup> and 5<sup>th</sup> floors two main levels within a research building with several research departments from different hospital facilities. I had the freedom to manage my own time for my experiments since the working schedule was flexible. Moreover, I did not encounter any bureaucratic issues and it was quite straightforward to obtain and get reimbursed for research materials.

#### **Quality of the host institution**

The Wyss Institute at the Harvard Medical School is a high quality research institution which strives for excellence in their publications. I also had the opportunity to attend many conferences and seminars from visiting scientists. Their facilities have all the necessary equipment, tools, and materials both from the biological and the engineering perspectives, allowing the use of different tools to perform experiments. They have several cell culture rooms (including a big stock material room), various 3-D printers, and other engineering rooms (clean room, laser cutting room). There is plenty of office spaces other than the main laboratory area, which are used for having lunch, taking coffee, or just using the computer. Researchers could also use the available coffee machine, fridges, and microwaves.

#### **Contacts within the host institution, inclusion in the organization**

I believe that a considerable amount of effort went into creating a positive and collaborative environment for all workers there. From time to time, recommendations showing different management techniques were sent on email. Moreover, further than the previously mentioned meetings and conferences which were really helpful in order to make new contacts, there was a warm and friendly atmosphere when it came to welcoming and saying goodbye to fellow coworkers. My group had lab meetings every Friday, where one group member would discuss his/her research progress, whilst having breakfast together. This internship was extremely also useful for establishing contacts with other research groups in Vienna, since my supervisor was a previous collaborator with a group leader in TU Wien. This networking aided in broadening of my knowledge base as I learned about other research areas not directly related to my project, which are relevant for my future scientific career. For instance, I enjoyed learning about new 3-D printing techniques from the bio-printing group at the Wyss institute, which could be potentially remarkable for the 3Dmres European project (where the Medical University of Vienna is a collaborator).

**Recommendations for future Marshall Plan students and fellows**

I strongly suggest directly contacting the desired research group by email in order to obtain the internship. The Wyss Institute at the Harvard medical school has fulfilled all my expectations from one of the best universities in the world. Hence, I highly recommend to all future fellows to apply for the internship at the Wyss Institute of biologically inspired engineering.