



Final Report on Erasmus+ Internship

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Company: UCB Pharma S.A.

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1. Internship preparation

I am always passionate about working with the scientific community and helping them with solving complex problems. By keeping this in mind, I am hunting for the research area where I could see the integration of science and engineering happening. Recently, I found these possibilities in Organ-on-chip technologies and Biofabrication. They are highly expected to change the future dimensions of medical and healthcare industries.

Previously, I have gained experience in microfabrication but not in cell culture technology. Hence, I figured out my internship topic to be on cell culture. Fortunately, one of my senior co-students completed her internship with UCB Pharma, Belgium and she mentioned to me that her group is looking for new interns. Immediately, I followed-up with the formal application procedure, forwarding my CV, cover letter and university transcripts to the technical team. After a week, they scheduled a one hour technical interview through Skype. During the interview, the technical expert team from UCB evaluated my basic knowledge of biology and biotechnology engineering concepts. I successfully answered most of the questions and within two days after the interview, I got my internship confirmation. As an international student, I was supposed to forward the copy of my European residence permit to the UCB HR team for receiving the internship contract agreement. In the meantime, I also applied for Erasmus+ mobility scholarship through my university. Fortunately, I was selected to receive the scholarship grant from the Erasmus committee, which could be utilized for my stay in Belgium. For this, I was required to fill up some additional mandatory forms and a training agreement with UCB and my university (before and after internship). These forms required the signature of both parties to become valid. After completing all the procedures, I received 70% of the total scholarship grant before the start of the internship and remaining 30% would be issued after the internship completion.

I started connecting with some of my team members through LinkedIn to familiarizing with the working style, language usage and surrounding places around UCB. This helped me to know more about UCB, my team and also the places to visit in Belgium.

2. Accomodation and transportation

Braine l'Alleud site of UCB, is situated 30km south of Brussels. The best place to live is Braine l'Alleud or Waterloo or Rhode Saint Genese which is easy to reach by bike. Also Uccle and Brussels are the coolest places to live in but you need to commute to UCB daily by train and bus. I chose to live in Rhode Saint Genese in a shared flat for 400€, since the price of accommodation during my time in Brussels or other places is very expensive and flats are not available for long term.

Concerning transportation, it's possible to buy a monthly card and for young people <26, there will be a significant reduction in price. Car-pooling is also an alternate option which could be arranged with your colleagues.

3. Company and Intern responsibilities

UCB Pharma S.A. is a multinational biopharmaceutical company with revenues of €3.3 billion that focuses primarily on developing medications centered on Epilepsy, Parkinson's & Crohn's diseases. They have developed specialized medicines for treating central nervous system (CNS) disorders and inflammatory disorders.

My 7-month internship was based in the upstream process sciences department of Biotech Sciences at UCB. It was focused completely on Bioprocessing. My main task as a cell culture process science intern was to participate in ongoing process development activities for upstream manufacturing processes.

I have worked with different scale bioreactors and shake flasks. Also, I had the opportunity to work with the harvesting of cell culture and primary recovery processes. Moreover, weekly one-to-one meetings were arranged with my supervisor so that a continuous feedback and mentoring were possible. Through these meetings, my personal overall progress were easily tracked down while discussions and explanations were given for any activity planned. It was really helpful for establishing a meaningful interaction on both sides. Regarding the working hours, I worked for 8 hours per day and present 5 days per week. Sometimes, weekend work (Saturday or Sunday) is required in order to perform sampling and feeding the cells.

4. Intercultural experience and student life

Brussels is an international city that holds more research institutions and companies from various sectors particularly Biopharmaceuticals and microelectronics. Since there are a lot of

international people working and studying here, obviously many of them understand English. Belgium is a country with 3 official languages: large French and Dutch speaking part and very small German speaking region. In Brussels, most people speak French.

Belgium as a small country, there are possibilities to explore during weekends. For instance, Ghent and Leuven are student cities where you can party a lot and Bruges, Antwerp is also having beautiful touristic attractions. Belgium is very famous for its Beers, chocolate, waffles and Fries. You could easily connect with students using Erasmus group in Facebook, Internations and Meetup websites where you could check in for local events.

5. Conclusion

Work culture of UCB provided me with good exposure related to professional development. During my 7 months of stay, I gained good knowledge related to the pharmaceutical industry, particularly the primary methods and techniques used in biopharmaceutical process development. It gave me the insight of drug development processes and challenges behind it.

I also had the opportunity to work and interact in an international environment with colleagues from countries like France, Belgium, Germany and Lebanon. Since most of the people are from French and Dutch backgrounds, it gave me good exposure and understanding of their culture, way of greeting and food habits. The main language used in the company was English, though a lot of people speak French. As a result, I have learned French at a basic level. However, meetings and work conferences were conducted in English.

Overall, it was a very positive experience and I gained a lot of valuable lessons during my stay at UCB as well as in Belgium.