

# **Core2Core Program Internship Report**

## **Applicant**

Fiallos Oliveros, Carolina

Waseda University, Graduate School of Advanced Science and Engineering,  
department of Life Science and Medical Bioscience.

Ohshima laboratory                      1<sup>st</sup> year Doctoral course

## **Visiting Institute**

Bonn University, Life & Medical Sciences Institute (LIMES). Bonn, Germany.  
Kolanus and Hoch laboratories.

## **Length of the stay**

From 4th September to 3rd October 2016

In September I participated in a one-month internship at the University of Bonn, Germany, to carry out a collaboration project between Ohshima and Kolanus and Hoch laboratories.

The first and third week of the program I worked mainly at the Hoch lab, whose research in molecular developmental biology is performed principally in *Drosophila*, but also in Zebrafish, the model organism that I am using for research. Under the supervision of Dr. Fuss I could see and compare the facilities in which the fishes are raised and kept and also their way of handling with them. Despite the basics of working with Zebrafish are the same, I think each research group has its own particularities and having the possibility to learn them is a very good opportunity to improve the way you usually work. Since the facilities have also differences due to their location and other conditions it will not be possible to treat the animals exactly the same, but there are some details that can help you work more comfortably.

In addition to the basic handling I could also learn and practice the induction and quantitative analysis by qPCR of a knock down using Antisense Morpholino Oligonucleotides. Since my project at Waseda University is quite different from what I have done before in my country, learning some of these techniques at the university of Bonn, whose environment could be more similar to the labs where I had been before, was very helpful for me. I rapidly felt familiar with the lab, which I think is very important to work proper and comfortably.

The second week of my stay I learned a lot from Kolanus lab. During these days we used the zebrafish protein samples from Hoch lab to test antibodies and improve the Western Blot results. In this case, I was more familiar with the techniques, but as I said before learning the particular methods of different research groups is very interesting and can be very useful. It was also a big incentive to me being able to

use different machines or tools than the ones I used in Spain or Japan and share thoughts about it.

In the middle of my stay, the end of the internship for most of the participants, a Symposium between the University of Bonn and Waseda University was held. There, students and professors from both universities had the opportunity to introduce their investigation projects, learn about other fields and exchange opinions about it. I also had the opportunity to talk about what I did during the previous days, which was a good chance to improve my presentation skills and also a good way to see what could be lacking in the experiments or how to get better results. It was also interesting to listen other people's projects despite sometimes my knowledge in their fields was very low. I think the environment of the symposium was very positive and active and a good chance to make both universities closer.

The last week I worked between Hock and Kolanus laboratories and therefore I had the opportunity to repeat some experiments and learn more about other people's projects. Luckily, the daily schedule for my stay was decided in detail from the beginning and I could seize the days completely.

Besides the lab work, this internship was a great opportunity to improve my English skills and learn about other countries. LIMES institute has a huge diversity of people from different countries or cities in Germany and it was very nice to know about them and share experiences. Listening to others you can enlarge your mind and see the world differently. It is also helpful to see there are a lot of pathways to reach your goals or to change your mind about what you want to do. Despite I did some research a few years ago in another city in Germany, I was surprised again about the different ways of working and living in Spain, Japan or Germany. I think it is very recommended (sometimes even necessary) to go out of your country and see what is going on in other places; I have no doubts it is an experience that changes somehow the way you see your own life.

During one month I had the opportunity to learn different techniques and ways of working that will be also very useful in my main project in Japan. The Joint Symposium between the University of Bonn and Waseda University was also good to learn more about other fields and the methods that are being used in other laboratories. In addition, using a foreign language in daily life in an international environment makes you feel more confident and able to improve it. I am very glad I participated on this project.



Picture taken after the joint symposium with all the participants and professors involved.