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Applicant:

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Dear ISFG Fellowship Review Board:

First of all, I would like to thank this award to the ISFG review board for giving me this unique opportunity. Thanks to Supreme Court of San Juan and Complejo Científico Forense y de Criminalística (CCFyC), Poder Judicial de San Juan, for support and licence, to the Unit of Forensic Genetics at INCIFOR (Prof. Dr María Victoria Lareu Huidobro) for receiving me during this amazing days and share with me all of their knowledge and experience. And a special thanks to my family for the constant support that pushes me to achieve my professional goals and to be a better person.

According to my application form, the main scope of my short term trip to INCIFOR in Universidad de Santiago de Compostela was to learn about the technical process, to receive practical training and analysis understanding of microhaplotypes that could be used in kinship and criminal investigation due all of the advantages it provides to forensic field. During the visit on this international recognized investigation center I was under the supervision of Dr María de la Puente. The objective was greatly exceeded since under the precise explanation of Lucía Casanova-Adán, I worked on library prepatation for nanopore sequencing of several distinct samples. Followed intensive instruction of Dr De la Puente, I made the complete analysis of the obtained sequencies using bioinformatical workflows as BWA, SAMTOOLS and R software, and we calculate the America's microhaplotypes allele frequencies. I had also the chance to observe the work of Javier Gonzalez-Bao about qualitive and quantitative software analysis comparison that he is carrying on.

In addition, I must mention the participation of Dr Chris Phillips, Dr María de la Puente and Dr Ana Freire, that helped me to learn about ancestry investigation, practical workflow, data analysis and interpretation using software as SNIPPER, STRUCTURE and STRUCTURE SELECTOR. Then, I had the chance to go through the whole process of 34-plex ancestry panel.

This great opportunity allowed me to incorporate new knowledge about the complete research process on microhaplotypes and ancestry, the details of the methodology and the management of resources and associated equipment in a ISO/IEC17025 accredited laboratory. The next step will be to try to implement the acquired knowledge in the Laboratorio de Genética Forense del CCFyC, Poder Judicial de San Juan.

I want to thank the entire group (not mentioned before) of the Xenetica Laboratory, Dr Ana Mosquera, Adrian, Jorge, Amaia, Amelia, Miguel (permanent workers/investigators) and to Francesca, Borja and Lukas for making me feel comfortable and like one of them, for receiving my suggestions in a good way and make me notice that they are usefull.

Finally, I cannot describe how beneficial this visit was for me and to forge good and lasting bonds for both institutions.

Sincerely.