Córdoba (Argentina), April 28, 2023

Dear ISFG Fellowship Review Board,

As I mentioned in the application form last year, the objective of applying for a travel fellowship to visit the Biology Service of the Madrid Department of the National Institute of Toxicology and Forensic Sciences (INTCF-MAD) was to receive a practical training on Massively Parallel Sequencing (MPS) techniques. After two weeks of a full-time MPS program, the objective was fully achieved.

The MPS program training included the following topics:

1) Amplification of ten (10) Ion Chef Libraries;
    a. Nine (9) libraries of the Precision ID mitochondrial DNA Control Region Panel.
    b. One (1) library of the Precision ID Globalfiler NGS Panel (for A-STR).
2) Template reactions and chip loading;
    a. Two (2) template reactions on Ion Chef to load four (4) chips.
3) Sequencing on Ion S5 XL;
    a. Four (4) sequencing runs (one chip of Globalfiler NGS library; three chips of pooles of mitochondrial DNA Control Region libraries)
4) Analysis of MPS results using Converge software.
5) Analysis of MPS results using alternative programs such as STRaitRazor and IGV.
6) Review of previous results obtained in the INTCF-MAD and previous results obtained in Argentina.
7) Review of recommended bibliography.
8) Oral presentations on related topics, such as MPS workflow for the integration of the technology in the forensic lab, MPS validation strategies, population studies to obtain allelic frequencies, application of MPS technology in degraded samples, etc.

I would like to express my gratitude for the opportunity that the ISFG and INTCF provided me with this fellowship; a special mention to Dr. Pedro A. Barrio.

Best regards,

Laura Catelli

Laboratorio de Genética Forense del Equipo Argentino de Antropología Forense (LGF-EAAF)