

ESPGHAN Head Office
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Report about my Experience Working in Massachusetts General Hospital, Harvard Medical School, Boston, USA.

To all interested

I was thrilled to receive the ESPGHAN International Exchange Award. The funding enabled me to travel to Boston and continue my research work.

I am presently undertaking a doctorate degree at Queen Mary University of London under the supervision of Professor Ian Sanderson. I am studying the microbiota in children with Crohn's disease. My study involves collecting samples from the gastrointestinal tract of children with Crohn's disease and isolating microbial DNA for studies on bacterial composition. As part of my fellowship, a collaboration with the Harvard Clinical Nutrition Research Centre (HCNRC) in Boston had been set up to sequence the microbiota and to train me in such sequencing and bio-informatic analysis techniques.

I spent the month of September last year working in the HCNRC (Director: Dr Allan Walker) based in Massachusetts General Hospital, which is part of Harvard Medical School in Boston. The centre has an established Microbiota Sequencing Core (Director: Dr Alessio Fasano). This Core facility provides expertise in deep sequencing of operational taxonomic units (OTUs) in addition to the bioinformatics necessary for their analysis. Both, Dr Allan Walker and Dr Alessio Fasano provided supervision during my stay in Boston. It comes as no surprise to me, that previous exchange award winners have also felt the same about their time spent under the supervision of such great mentors. I was supported and encouraged throughout my attachment and my learning curve was steep and yet thoroughly enjoyable.

The visit was my second attachment there and I was able to analyse my patient samples from the UK. I performed laboratory techniques including DNA extractions, PCR and purification and quantification methods in state of the art laboratory facilities. I also gained an in-depth understanding of the complex microbiota analysis using computer programmes such as QIIME and mothur. I am now able to analyse bacterial data generated from my experiments.

The data has been exciting to review and is especially rewarding when I think back to a year ago when I did not have the knowhow to complete such work. I have recently written an abstract summarising this data and will present this at ESPGHAN conference in Athens.

I very much look forward to seeing you all there!

I would like to say a heartfelt thank you to ESPGHAN once again for supporting me in my research adventure.

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