June 20th, 2024

Dear ESHG Members,

Dear Educational Committee Members,

Hilal Pırıl Saraçoğlu, PhD candidate *in Cellular and Molecular Medicine programme of Koç University Health Sciences Institute, İstanbul, Turkey*

My main research focus has been on modelling and characterization of rare/ultrarare human genetic diseases in zebrafish and my thesis is titled as "*In vivo* modelling and phenotypic characterization of a new muscular dystrophy". New muscular dystrophy, *SNUPN*-related muscular dystrophy, has been delineated by our group and has been published recently (doi: 10.1038/s41467-024-45933-5). After the final decision on my thesis subject, I was highly motivated on extending my knowledge and practical skills on disease modelling techniques and also getting ready to ask the consequent questions to have a better insight on disease etiopathogenesis. ESHG Observership Programme provided me the opportunity to visit Kavli Institute for Neuroscience, NTNU, Trondheim, Norway for a period of one month.

The primary objective of my observership was to participate in various zebrafish experiments and to gain more insight on the novel techniques. I had the chance to get involved in several activities that significantly enriched my knowledge and practical skills in zebrafish such as two-photon experiments to understand the way neurons work upon stimuli and a new approach called hybridization chain reaction (HCR) RNA-FISH. I am happy to have the chance to transfer the knowledge I gained on husbandry and novel techniques from a well-established zebrafish laboratory in Norway to my home institute, the one that is newly established. I also had the opportunity to implement multiplex and quantitative high-resolution RNA imaging techniques to my thesis studies along with behavioural analysis studies.

During my stay, I regularly attended to the weekly meetings of different groups in the institute and had the opportunity to meet researchers from several countries with diverse research background. The observership period has served me on several aspects. The researchers I have met and have networking from different specialties, opened new perspectives for my research and led me to come up with more questions to find the answers of. The laboratory environment and the team that I have the chance to work with was very welcoming which allowed me to communicate freely and made me feel at ease to ask for advice since I return back to Turkey.

This short period of fellowship served for the progression of my academic and professional growth spurt, advancing my skills, and knowledge, and overall intensified my passion for modelling studies.

I am profoundly grateful to the ESHG educational committee for selecting me as a researcher for this invaluable opportunity. I would also like to present my special thanks to my mentors and the entire team at Kavli Institute for their guidance, and hospitality throughout my stay.

Sincerely,

Hilal Pırıl Saraçoğlu