

## Secondment Public report

THERADNET ESR6: Razan Hessenow

Seconding institution: OncoRay, Dresden, Germany

Secondment duration: 20 June - 10 July 2022

Secondment purpose: Learning 3D cell culture technique



The secondment started on Monday, 20 June 2022; ESR went through all the required training and instructions to be able to start working in the lab. In the following days, ESR learned how to culture the cells in the 3D matrix (laminin-rich extracellular matrix) and to comprehensively conduct three different experiments involving 3D cell culture, including Colony Formation Assay (CFA), cell lysate preparation for western blotting, and immunofluorescence staining for assessing irradiation-induced DNA damage. Each of these experiments has been repeated twice or three times during the secondment time, including the data analysis.

During the secondment, the seconding institution has provided the ESR with all requirements, including materials, cells, consumables, protocols, and support while performing the experiments. Besides practical lab work, ESR has participated in multiple meetings in the host institution and presented her research topic in a progress report meeting; ESR has received much helpful feedback to improve her research. At the end of the secondment, the ESR learned and reproduced the three experiments, from 3D cell plating to data analysis and quantification.

The secondment was not only about science; the ESR had time to spend an enjoyable time with the team at OncoRay; this involved a social evening in which the ESR had the opportunity to know and interact with all the team members. Overall, the secondment was super fruitful, where the ESR not only learned a new scientific approach but also built life-long friends.