This thesis aimed at the improvement of large multi-omics network visualisations by utilisation of virtual reality. Due to the increasing size of biological datasets, it is getting more challenging to properly visualise such datasets in 2D. Therefore, different approaches should be considered, like virtual reality. In this thesis, an interactive virtual reality network of multi-omics data was developed and compared to a pre-existing 2D network from the same dataset. Finally, the virtual reality visualisation was compared to the 2D visualisation through conducting a cross-over design study where participants had to test the visualisations and, subsequently, evaluate them with a Likert scale survey. Essentially, no significant differences were found between the two types of visualisations from the survey data. However, the feedback was generally positive indicating that virtual reality visualisation has the potential to serve as an appropriate way of visualising multi-omics data but should still be further developed and tested.<br><br>

To see the VR visualisation in action, where a genetic network is explored using state of the art infrared hand-tracking technology (leap motion), play the video below: