ZOOM IN ON THE HUMAN GENOME

Zoom in on the human genome: Team Science collaboration goes online

Reported by Connie Koo

Inspired by a talk on bridging clinical and basic science by Professor Ian Hall (UoN) at the 2019 COMPARE Annual Symposium, Rhiannon Moss and I, postgraduate researchers from Dr. Mike Tomlinson's lab (UoB) applied to the Team Science Collaborative Grant scheme to establish a collaboration with the Hall lab. We were subsequently awarded funds to support visits to Nottingham. The aim of the project was to identify novel links of the Tomlinson lab's favourite membrane proteins, the tetraspanins and their associated proteins, to human disease, by utilising the Hall lab's expertise in analysing genotype-phenotype data from health resource databases such as the UK Biobank.

Thanks to advances in **co**mmunications and **vid**eo conferencing technology, science can continue amidst the time away from lab benches. The project was kick-started through an online meeting joined by 14 members and friends of the Hall and Tomlinson labs. Ian led the meeting by introducing their systematic approach in analysing a gene of interest: from profiling expression, to associating variants with disease traits and phenotypes. Participants chipped in by discussing and recommending their favourite resources.

This project has enabled not just the initial applicants, but also additional postdoctoral, postgraduate and undergraduate researchers to continue studying our favourite proteins with mouse pointers. With the newfound information, new hypotheses are being generated, ready to be tested when we can pipette again. Some parents might appreciate an investigation on how polymorphisms in the *TSPAN5* gene regulate vegetable intake, or how some *TSPAN17*

variants are associated with time spent watching TV. However, perhaps it would be more sensible for me to follow up on whether shedding of endothelial protein C receptor is regulated by Tspan15 and how this might explain the link of these two proteins to venous thrombosis risk.