

30 March 2023

Professor Dr Daniel Huson  
Room C310a  
Sand 14  
D-72076 Tübingen

## **RE: Petition for Extension**

Dear Professor Huson

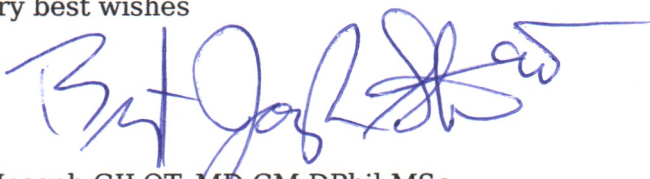
Thank you for considering my petition for an extension for my thesis. Briefly, at the end of December 2022, I expected my employment contract to lapse on 31 December 2022. It was my plan not to seek further employment until after submitting my thesis on, or before 31 March 2023. Through an unexpected, however fortunate, turn of events, I was made aware by the Rectorate of an urgent need for a coordinator within the Neuroscience Excellence Cluster Initiative working with Professor Dr Birgit Derntl. Professor Derntl, the neuroscience campus and the university committed to submitting a letter of intent (1 Feb) & a draft proposal (31 May) to the DFG as well as to organize an international symposium (21/22 April) to be held in Tübingen prior to the submission of the draft proposal. With respect to the urgency of starting the preparation of the proposal and organizing the symposium; I needed to come aboard as quickly as possible. I signed my contract in the first days of the new year upon my return from the United States followed by a challenging role with unexpected demands on my time.

The work for the thesis has progressed. Between 1 October and mid December, we collected the data from the sequencing runs performed in the Medizinische Genetik und Angewandte Genomik & the Medizinische Mikrobiologie und Hygiene. These samples were catalogued, a pipeline to perform the computationally intensive & repetitive processing was developed on the servers in Medical Genetics within the hospital network. This pipeline prepared deeply sequenced samples for our intended investigations into the detectability of low frequency variants in synthetic mixtures of controls as well as samples collected from actively infected COVID patients. The aim was to validate the variant caller umiVar/Twist and to compare it to three established variant callers, iVar, loFreq and VarScan. The processing for variant calling was mostly completed in late December and continued upon my return in the New Year. The full data set with variant calls for each human and synthetic sample across the diverse variant callers is now complete where the data are uniformly organized, fully labeled with the relevant metadata, aggregated in tabular form and ready to perform the true investigations into the validity of the umiVar/Twist platform and its comparison to existing approaches based on iVar, loFreq & VarScan.

My progress since returning in January was slowed by 1) the time demands of my new position, 2) a temporary loss of server access in the hospital network related to my contract & credential changes, & 3) from January to February; changes to the servers in Medical Genetics affecting the file system & device controllers as well as an upgrade to the operating system occurred forcing changes to the tools I wrote between October and December. Resolution of these problems occurred only in mid February.

Due to the demands and deadlines related to the Excellence Cluster Initiative and in consideration of the continued progress I made since January, I would kindly ask for consideration of an extension of the thesis deadline until 30 June 2023. I have the support of the Cluster Initiative to make this possible.

With very best wishes



Bryant Joseph GILOT, MD CM DPhil MSc