

Date 10th June 2015

To MSc. Guillermo G. Torres Institute of Clinical Molecular Biology Christian-Albrechts-University Kiel University Hospital Schleswig Holstein · Campus Kiel Schittenhelmstr. 12 · 24105 Kiel, Germany

Dear Guillermo G. Torres,

Thank you very much for your interest in our work and research group.

In support of your interest to visit our institute for an academy stay, I would be happy to host you the last week of August and describe you our ongoing research activities. At our institute we will be happy to train you in new analysis methods for the investigation of 16S RNA microbiome data in a complex network approaches.

After your academic stay, you will understand the most basic and relevant principles of complex systems since the perspective of complex networks, whose are useful models to interpret the interactions (links) among biological entities (nodes) in order to better understand the emergent demeanour of complex biological systems. You will also acquire basic knowledge about how to build up bipartite and non bipartite networks and, how to deal with the reality of the reality-extracted graphs from their mathematical fundamentals. In this context, features like average shortest path, clustering, global and local efficiency, strength distributions and community detection will be the target measures you will be able to calculate.

Looking forward to seeing you in Madrid.

Sincerely

Dr. Javier M. Buldú

Center for Biomedical Engineering (UPM) &

Universidad Rey Juan Carlos