Master's thesis in the Core Facility Microbiome:

“Verification and functionality testing of novel genes”

The Core Facility Microbiome at the ZIEL Institute for Food & Health offers a Master’s thesis starting about January 2025. In the thesis, novel genes, which have been found by sequencing experiments, will be tested for their capability to produce stable and functional proteins. Overexpression-mutants will be generated and expression will be verified using Western blots. Moreover, different growth conditions will be screened to observe any possible function of these novel proteins. For proteins, which are shown to be stable and functional, knockout-mutants will be generated, to be tested under the same conditions. In the end of the thesis, the student will have verified the existence of the tested proteins and gained a better understanding about their respective functions. If time permits, ribosome profiling or similar techniques are used to verify the results.

We are looking for a master’s student in Biology, Biochemistry, Molecular Microbiology, or similar. Please mail your applications (including a short CV, but describing your research experience) or any questions to Marc Follmer (marc.follmer@tum.de).