

Group Prof. Sinning

Project #3: GET pathway (GET):

Date: 01/03/21-03/03/21 (*Melanie McDowell)

Tail-anchored (TA) membrane proteins are involved in a variety of important cellular functions. We recently determined the structure of human Get3 in complex with the membrane bound human Get1/2 receptor by single-particle cryo-EM (McDowell et al., 2020). In order to further our understanding of TA protein insertion in lower eukaryotes by the Get123 complex, we reconstituted the *Chaetomium thermophilum* complex (ctGet123) into nanodiscs.

Unfortunately, due to some problems during data collection these shifts could not be used efficiently. Briefly, significant data collection time was lost due to misalignments and microscope downtime overnight. In addition, only suboptimal holes could be used for data collection due to more restrictive atlas boundaries from pre-screening on our Glacios. Ultimately, the number of particles was limiting for data processing and a reconstruction of only around 9 Å could be obtained from this dataset.