

**P013** Structural studies on protein complexes from  
*Saccharomyces cerevisiae*  
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Over the last forty years, investigations of key biological processes have provided insights into the ways in which proteins assemble into large complexes to carry out their functions. Despite recent developments, the purification or reconstitution of such complexes, often composed of low abundance proteins, in quantities necessary for structural studies, remains a formidable challenge. To address this we have chosen to exploit the extensive Cellzome TAP-tagging survey which has described the repertoire of supramolecular complexes present in *S.cerevisiae* in order to evaluate the potential of the TAP-tag system to yield useful structural data. Cell paste will be produced on a scale of between 50-250 grams on TAP-tag fusion strains which have been engineered to reduce proteolysis by vacuolar proteases. The complexes will be purified using affinity methods and concentrated by the use of a novel open tube capillary Phynexus separation technology. It is anticipated that yields of at least 0.5mgs will be available to provide sufficient material for screening of the complexes by negative stain EM and for crystallisation using a state-of-the-art nano-volume robot The poster will describe recent progress in the purification and analysis of the complexes.