

Tuesday, 20<sup>th</sup> September, 11.30am, SEMINAR ROOM

*Host: Dr. Silvia Collavini*

## **Repeating repeats: novel protein structural assemblies through repeat protein crystal contact modifications**

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Protein crystallography has been primarily a tool for protein structural determination, but it also reveals preferred modes of protein interactions. Strategic modification of the crystal contacts responsible for maintaining the integrity of crystal lattice precludes crystal growth in selected directions, in effect allowing to “extract” sub-crystalline assemblies from 3D crystals. Re-engineering of consensus tetratricopeptide repeat protein has allowed the generation of novel 1D and 2D protein assemblies. Therefore, crystal contact modification allows top-down construction of functional protein assemblies.