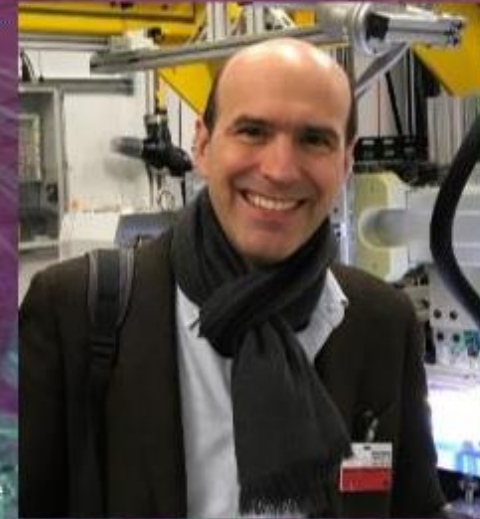


The Warwick Structural Biology Lecture: 'Structural Insights on Catalysis at the Membrane-Water Interface'

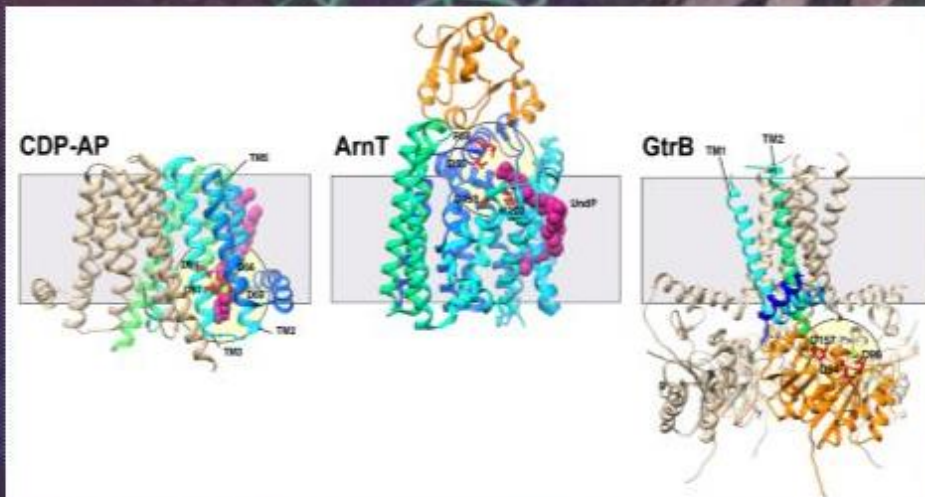
Thursday 15th November 2018 4:00pm, Physics Lecture Theatre

All welcome, coffee and tea available from 3:30pm

The main focus of my lab is to use structural biology – both X-ray crystallography and single-particle cryo-electron microscopy – to investigate at a molecular level the interactions between membrane enzymes and their lipidic substrates. Our structures produce testable functional hypotheses on how hydrophobic and hydrophilic substrates are brought into apposition for catalysis to occur, on how chemical reactions involving charged groups and an aqueous environment can adapt to process lipophilic molecules, on what are the molecular determinants of substrate specificity for hydrophobic ligands, and on the role that the membrane itself plays in these processes.



Dr Filippo Mancía
Columbia University,



Biography: Filippo Mancía is an Associate Professor in the Department of Physiology & Cellular Biophysics at Columbia University. He graduated in Chemistry in Pavia (Italy), and obtained a PhD at the MRC Laboratory of Molecular Biology in Cambridge, UK under the supervision of Dr. Phil Evans. His post-doctoral work was carried out in the labs of Drs. Wayne Hendrickson and Richard Axel at Columbia University. He is a structural biologist with experience in x-ray crystallography, single-particle cryo-electron microscope, and in production and characterization of membrane proteins for structural studies. The main research focus of his lab is on membrane protein – lipid interactions, both in terms of enzymes, which process lipid substrates, and of transporters, which mediate cellular uptake of lipidic substrates.