

BIOCHEMISTRY SEMINAR SERIES



“Biophysical Studies of an RNA Virus particle and its Maturation: Insights into an Elegantly Programmed Nano-machin”

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Nudaurelia Capensis w Virus (NwV) is a eukaryotic, quasi-equivalent, RNA virus, with a T=4 surface lattice, where maturation is dramatic (a change in particle size of 100Å) and is novel in that it can be investigated in vitro. Here we use X-ray crystallography, biochemistry, Small Angle X-ray Scattering, and electron cryo-microscopy and image reconstruction (CryoEM), to characterize maturation intermediates, an associated auto-catalytic cleavage, the kinetics of morphological change and to demonstrate that regions of NwV subunit folding are maturation-dependent and occur at rates determined by their quasi-equivalent position in the capsid.

Friday, March 11, 2022

Mol Sci 3440 and Zoom

3:30 pm

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