



Molecular Physiology and Biological Physics Department | University of Virginia

Why is this your favorite spectrum?

This is an overlay of two ^{15}N - ^1H TROSY spectra of the Outer Membrane Protein H (OprH) from the opportunistic pathogen *Pseudomonas aeruginosa*. The black spectrum was collected on OprH sample in detergent micelles, and the red spectrum is the same sample but with the addition of lipopolysaccharide (LPS). The LPS-induced changes in backbone chemical shifts of OprH allowed us to identify multiple residues important for OprH-LPS interaction. It took us about five years of testing different purification protocols, detergents and mutants to obtain these beautiful and well resolved ^{15}N - ^1H TROSY spectra of OprH.