Hijacking the retrograde trafficking by the L. pneumophila effector RidL

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Our group is involved in the study of protein effectors from *Legionella pneumophila* that allow the formation of the intracellular replicative niche. More precisely, the protein of interest in this project is RidL, one of the few effectors from *L. pneumophila* required for infectivity. Previous studies have demonstrated that Ridl interacts with retromer, an heteropentameric complex involved in recycling transmembrane proteins from endosomes. Yet, the hijacking mechanism of RidL remains unknown. The goal of this project is to elucidate such mechanism and propose new therapeutic targets to fight legionella infection. In this regard, I present an integrated set of biophysical and biochemical results, ongoing models and future directions.