April 8 - Ed Yu (Case Ohio) hosted by David Giedroc

**Title:** Structural and Functional Diversity of RND Transporters

**Abstract:** To mediate resistance to a broad spectrum of antimicrobial agents, bacterial pathogens acquire various mechanisms, including multidrug efflux pump expression and the strengthening of bacterial cell walls, to promote infection and threaten the lives of vulnerable patients. These pathogens use membrane proteins belonging to the resistance-nodulation-cell division (RND) superfamily to transform themselves into “superbugs” that are resistant even to last resort antibiotics. Our cumulative data indicate that these RND membrane proteins can utilize different oligomerization states to form multidrug resistance (MDR) pumps and cell wall remodeling machinery to ensure bacterial survival.