Research

We work at the cross roads of mammalian cell biology and bacterial pathogenesis. We are interested in understanding how bacterial proteins subvert various cellular processes and manipulate them to their own advantage. Understanding the mechanisms of host-pathogen interactions serves two main purposes. First, it provides an understanding of the mechanism of disease and thus leads to the development of better therapeutic approaches. Second, because bacteria disrupt host processes in
multiple ways and often target key host proteins, studying these interactions often lead to a deeper understanding of basic mammalian cell-biological processes. Based on our recent discovery, a major focus of our lab is to understand how the host unfolded protein response pathway is manipulated in response to pathogen infection.