Enteroviruses include a family of RNA viruses known to cause hand, foot and mouth disease in children. Enterovirus 71 (EV 71) was first isolated from a child with encephalitis in California in 1969. In recent years EV 71 and related viruses have re-emerged across the Asia-Pacific region, including across Taiwan and local epidemics within the USA. Of high concern is that new, recombinant, EV-71 strains are presently emerging and causing severe childhood disease in Asia. The spectrum of EV71 infection is wide. In recent years, EV71 has been known to cause several large-scale outbreaks of severe complications of neurological manifestations and death of children. EV 71 continues to emerge and change. Because of the emerging actions of the virus to cause severe neurologic disease, we need to understand the characteristics of EV71 infection.

Dr. Shin-Ru Shih and Dr. Rei-Lin Kuo are at the forefront of investigating EV 71 infection to determine the virus-host interactions that regulate innate immunity for the control infection or to facilitate viral replication and disease.