Dr. Linda Saif, PhD

Dr. Saif is a pioneer in research on the pathogenesis and immunity of enteric disease viruses, especially coronaviruses and rotaviruses. She was one of the first individuals to determine the role of IgA in preventing transmissible gastroenteritis in swine and one of the first to describe how the gut-mammary gland axis provides protective IgA in milk to the neonate. Her research includes several hundred works, including peer-reviewed papers, book chapters, and books chronicling her scientific productivity throughout her career. She has received numerous awards, including being elected to the National Academy of Science. Dr. Saif has served on the CRWAD Council and as President of the Council.



Dr. Saif was involved in the first discovery of enteric calicivirus (PEC, sapovirus) in pigs in 1980 and adaptation of this fastidious virus to cell culture in 1988 by adding intestinal contents collected from piglets in the medium. Since then, Dr. Siaf has continued here work studying the gnotobiotic piglets for studies of enteric viruses, including rotaviruses. Her studies established basic parameters related to immune protection in the piglet model of human rotavirus-induced disease, contributed significantly to the success of attenuated rotavirus vaccines in children.

In addition to rotavirus research, Dr. Saif has established herself as a renowned expert in viral pathogenicity and vaccine development for animal coronaviruses, including transmissible gastroenteritis (TGEV), porcine respiratory coronavirus (PRCV), porcine epidemic diarrheal virus (PEDV), and bovine coronavirus. Her many breakthrough discoveries include the gut-mammary secretory IgA axis in swine, which is a significant finding for the development of maternal coronavirus vaccines to passively protect neonatal animals.

2021 CRWAD Fellows Inductee

