SPEECH INFORMATION (For Conference Program Book)	
Topic	Preventing Ammonia damage – the role of Ammonia-utilizing bacteria on fish skin microbiome
Abstract	Ammonium is known to be toxic to fish in aquatic ecosystems, and fish skin mucus may serve as a barrier against environmental ammonium stress. Our lab aimed to investigate the role of fish skin mucus microbiome in interacting with ammonium stress. By removing fish mucus and being challenged with ammonia, we found that the skin mucus microbiome plays a crucial role in protecting fish. Further incubation of fish mucus in an ammonium-enriched medium effectively reduced the ammonium level and bacterial growth. *Acinetobacter sp*. was then found to be responsible for ammonium utilization. The *in vivo* inoculation of this bacterium validates its role in mitigating ammonia damage on skin by reducing skin ammonia accumulation. The data suggest that the striped catfish skin mucus microbiome may play a significant role in mitigating ammonium-associated skin damage by utilizing ammonia. This study offers insights into the functional interaction between the fish skin mucus microbiome and its host, as well as its potential application in mitigating ammonium stress in aquaculture systems.