Vibrio parahaemolyticus is currently one of the most important seafood-borne pathogens and is a leading cause of human acute gastroenteritis. A novel O3:K6 strain emerged in 1996, causing the first known pandemic involving this species. This pandemic O3:K6 strain has differentiated into a unique “pandemic clone”, possesses the ability to cause a rapidly spreading form of food poisoning, and is therefore an ongoing public health concern. Scientists have done a lot of work to reveal its origin and evolutionary process and to prevent outbreaks and transmission over the past 22 years. However, the disease burden from this clone remains heavy in many areas. We have to face many challenges from them, for examples:

- More attention should be paid to search for truly accurate and stable pandemic markers. This is contributing to the early identification, prevention, and control of V. parahaemolyticus pandemics.
- Environmental pandemic strains bring new threats to seafood safety and human health.
- Traditional typing methods can't fully meet the needs of further studies of pandemic strains.
- WGS is a challenging opportunity to fully understand the microevolution of pandemic strains.
- The emergence and dissemination of multidrug-resistant pandemic strains will be a stumbling block to seafood safety and human health if we sit idly by, while this threat grows around us.
- Thus we appeal for measures from scientists to address the problems caused by infection from pandemic V. parahaemolyticus, aiming to make this pathogenic bacterium disappear as soon as possible.