



Prof. Dr. Han-Ching Wang

Department of Biotechnology and Bioindustry Sciences, University Library Curator,
National Cheng Kung University, Taiwan
and
International Center for the Scientific Development for Shrimp Aquaculture,
National Cheng Kung University, Taiwan

Dr. Wang started her career as a shrimp researcher in 2000 as a graduate student in an MS program, and subsequently earned her PhD in 2007, both from National Taiwan University (NTU), Taiwan. She extensively used proteomics and structural biology to study the pathogenesis of the white spot syndrome virus (WSSV), the cause of white spot disease (WSD) in shrimp. After graduating from NTU, Dr. Wang focused on shrimp immunity and transcriptomics as a post-doctoral fellow at the Tokyo University of Marine Science and Technology, Japan. In 2008, she joined National Cheng Kung University (NCKU) as a young faculty member and independent investigator, and established the Laboratory of Translational Aquabiology (TLAB). Her perseverance, hard work, and accomplishments have enabled her to grow her career. In that regard, Dr. Wang and her team have published >70 SCI research papers since 2008 and she became a Distinguished Professor in 2020. In addition to research, she currently holds the University Library Curator position at NCKU.

Although shrimp aquaculture is one of the most important economic activities in East Asia, it is severely threatened by pathogenic diseases, including those caused by viruses (e.g., WSD) and bacteria, in particular, acute hepatopancreatic necrosis disease (AHPND). To protect and promote this vital industry, Dr. Wang uses an integrated systems-biology and omics approach, including metabolomics and lipidomics, to study the complex biological phenomena of WSD and AHPND pathogenesis and to develop disease control strategies that are effective and eco-friendly. She always looks for novel ways to apply scientific findings to address the problems of shrimp diseases; consequently, the shrimp aquaculture industry has greatly benefitted from using the new knowledge that she has generated to develop evidence-based biosecurity management plans.

Dr. Wang is recognized as an outstanding young researcher and has received several awards from her university, the Ministry of Science and Technology (MOST) in Taiwan, as well as The World Academy of Sciences for the advancement of science in developing countries (TWAS). Presently, Dr. Wang is a member of the editorial board of two well-regarded scientific journals, *Developmental and Comparative Immunology* (DCI) and *Fish and Shellfish Immunology* (FSI). She also serves as one of five board members of the International Society of FSI, where she is the only board member from an Asian country. Since 2012, she has been Chair of the *Nimaviridae* study group of the International Committee for the Taxonomy of Viruses (ICTV). She also serves as a member of the Executive Committee of the Fish Health Section (FHS) and Vice President of the Thirteenth Council of the Asian Fisheries Society (AFS) Executive Committee.