



Department of Medical Laboratory Science and Biotechnology,
College of Medicine, National Cheng Kung University,
N0.1, University Road, Tainan 701, Taiwan
TEL:+886-6-2353535 #5775 FAX:886-6 2363956



Name: Jhen-Wei Ruan

Designation: Assistant Professor

E-mail: jhenweiruan@mail.ncku.edu.tw

Research Interest:

My research interests focus on the impact of gut microbiota on the metabolic diseases and inflammatory diseases. In particular, we will investigate how host genetics shape microbiome in gut and lung. To this end, we employ the multi-omics approach (genetics, transcriptomics, proteomics, metabolomics and metagenomics) to dissect the host-microbe interaction. Our ultimate goal is to identify specific prebiotics, probiotics or

drugs that can help treat metabolic and inflammatory diseases through modulating microbiome homeostasis.

Publications:

1. Gut microbiome and transcriptome analyses reveal that *dusp6* deficiency regulates commensal response against diet-induced obesity in mice. **Ruan JW**, Statt S, Huang CT, Tsai YT, Kuo CC, Chan HL, Liao YC, Tan TH and Kao CY **Nature Microbiology**, 2016 Nov (**First Author**)
2. HLH-30/TFEB-mediated autophagy functions cell-autonomously for epithelium intrinsic cellular defense against bacterial pore-forming toxin in *C. elegans*. Chen HD, Kao CY, Liu BY, Huang SW, Kuo CJ, **Ruan JW**, Lin YH, Huang CR, Chen YH, Wang HD, Aroian R, Chen CS **Autophagy**, 2016 Nov
3. Lipidome and transcriptome profiling of pneumolysin intoxication identifies networks involved in statin-conferred protection of airway epithelial cells. Statt S, **Ruan JW**, Huang CT, Wu R, Kao CY. **Scientific Reports**, 2015 May
4. Statins Enhance Cellular Resistance Against Bacterial Pore-forming Toxins in Airway Epithelial Cells. **Statt S**, Ruan JW, Hung LY, Chang CY, Huang CT, Lim JH, Li JD, Wu R, Kao CY. **American Journal of Respiratory Cell and Molecular Biology**, 2015 Apr (**Co-First Author**)
5. Human pituitary tumour-transforming gene 1 overexpression reinforces oncogene-induced senescence through CXCR2/p21 signalling in breast cancer cells. **Ruan JW**, Liao YC, Lua I, Li MH, Hsu CY, and Chen JH **Breast Cancer Research**, 2012 Jul (**First Author**)
6. Overexpressed hPTTG1 promotes breast cancer cell invasion and metastasis by regulating GEF-H1/RhoA signalling. Liao YC, **Ruan JW**, Lua I, Li MH, Chen WL, Wang JR, Kao RH, and Chen JH. **Oncogene**. 2012 Jun
7. Genetic and functional analyses of the gene encoding synaptophysin in schizophrenia. Shen YC, Tsai HM, **Ruan JW**, Liao YC, Chen SF, and Chen CH. **Schizophrenia Research**, 2012 May