

BIOGRAPHICAL SKETCH

NAME in English Wei-Chao Liao	POSITION TITLE Assistant Professor, Center for General Education		
NAME in Chinese 廖威超			
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
Institute of Medical and Molecular Toxicology, Chung Shan Medical University	M.S.	06/2003	Virology, Molecular Biology
Institute of Biotechnology in Medicine, National Yang-Ming University	Ph.D.	06/2011	Biotechnology, Bioinformatics
Molecular Medicine Research Center, Chang Gung University	Postdoctoral	08/2014	Biotechnology, Bioinformatics

A. Positions and Honors

Positions and Employment

- 2017/02- Present Assistant Professor, Center for General Education, Chang Gung University, Taiwan.
- 2014/08- 2017/01 Assistant Research Fellow, Molecular Medicine Research Center, Chang Gung University, Taiwan.
- 2013/05- Present Project Manager for Biosignature Project, Chang Gung Biosignature Center and Molecular Medicine Research Center, Chang Gung University, Taiwan.

Honors

1. The International Genetically Engineered Machine (iGEM) Competition, 2007 (Massachusetts Institute of Technology, MIT). Gold Medal Team of NYMU, Taipei. Project Title: A Synthetic Biology Approach for Designing and Engineering BioRobot Systems with Embedded Insulin Auto Feedback and Control Mechanisms.
2. The International Genetically Engineered Machine (iGEM) Competition, 2008 (MIT). The team from NYMU-Taipei. Project Title: BacToKidney Project.
3. The International Genetically Engineered Machine (iGEM) Competition, 2009 (MIT). The team from NYMU-Taipei, one of six finalists. Project Title: ViroCatcher Project.

B. Selected Peer-reviewed Publications (2011-2017)

1. **WC Liao**, WV Ng, IH Lin, WJ Syu, TT Liu, CH Chang. T4-Like Genome Organization of the *Escherichia coli* O157:H7 Lytic Phage AR1. *Journal of Virology*. 2011; 6567–6578.

2. TW Chen, RC Gan, YF Chang, **WC Liao**, Timothy H. Wu, CC Lee, PJ Huang, CY Lee, YY M. Chen, CH Chiu, P Tang. Is the whole greater than the sum of its parts? De novo assembly strategies for bacterial genomes based on paired-end sequencing. *BMC Genomics*. 2015; 16:648.
3. JS Yu, YT Chen, WF Chiang, YC Hsiao, LJ Chu, LC See, CS Wu, HT Tu, HW Chen, CC Chen, **WC Liao**, YT Chang, CC Wu, SJ Chen, HC Chen, CY Lin, SY Liu, WT Chiu, ST Chiou, SL Cha, KP Chang, CY Chien, CJ Chang, JD Young, CC Pao, YS Chang, LH Hartwell. Saliva Protein Biomarkers to Detect Oral Squamous Cell Carcinoma in a High-Risk Population in Taiwan. *Proc Natl Acad Sci USA*. 2016;113(41):11549-11554.
4. CC Yang, YT Chen, YP Kuo, H Liu, CT Shih, **WC Liao**, YF Chang, Bertrand CM Tan. ADAR1-mediated 3' UTR editing and expression control of anti-apoptosis genes fine-tunes cellular apoptosis response. *Cell Death Dis*. 2017;8(5): e2833.
5. TW Chen, RC Gan, YK Fang, KY Chien, **WC Liao**, CC Chen, TH Wu, YF Chang, C Yang, PJ Huang, YM Yeh, CH Chiu, TW Huang and P Tang. FunctionAnnotator, a versatile and efficient web tool for non-model organism annotation. *Scientific Reports*. 2017;7(1):10430.
6. TW Chen, CC Lee, Hsuan Liu, CS Wu, CR Pickering, PJ Huang, J Wang, Ian YF Chan, YM Yeh, CD Chen, HP Li, JD Luo, Bertrand CM Tan, Timothy EH Chan, C Hsueh, L Julie Chu, YT Chen, B Zhang, CY Yang, CC Wu, CW Hsu, LC See, P Tang, JS Yu, **WC Liao**, Kenny WF Chiang, H Rodriguez, Jeffrey N. Myers, KP Chang, YS Chang. Integrated omics analyses identify APOBEC3A as an oral cancer prognostic biomarker in carriers of an APOBEC deletion polymorphism. *Nature Communications*. 2017; 8: 465.

C. Research Support

Ongoing Research Support

1. CIRPD3B0013, Chang-Gung Memorial Hospital. 2016/12/01-2018/11/30.
Biosignatures-Technology and Bioinformatics Platform.
Role: Co-PI

Completed Research Support (2006-2010)

1. CIRPD3B0012, Chang-Gung Memorial Hospital. 2014/10/01-2016/11/30.
Biosignatures-Technology and Bioinformatics Platform.
Role: Co-PI