

## BIOGRAPHICAL SKETCH

NAME in English <b>Hsuan Liu</b>	POSITION TITLE <b>Assistant Professor</b>		
NAME in Chinese <b>劉軒</b>			
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
Department of Biology , Kaohsiung Medical university, Taiwan, R.O.C	B.S	07/1996	Biology
Institute of Basic Medical Sciences , Chang Gung University, Taiwan, R.O.C	M.S.	07/1998	Molecular Biology
Institute of Molecular Medicine, National Taiwan University, Taiwan, R.O.C	Ph.D.	01/2005	Cell Biology/ Biochemistry
Institute of Molecular Biology, Academia Sinica, Taiwan, R.O.C	Postdoctoral	01/2005- 09/2005	Signal Transduction
Department of Pharmacology, Chang Gung University, Taiwan, R.O.C	Postdoctoral	10/2005- 12/2008	Cancer Biology
Department of Biomedical Sciences, Chang Gung University, Taiwan, R.O.C	Postdoctoral	01/2009- 12/2011	Epigenetics/ Transcriptomics/Cancer Genomics/System Biology

## A. Positions and Honors

### Positions and Employment

2012/1~2014/1 Assistant Research Fellow, Molecular Medicine Research Center, Chang Gung University, Tao-Yuan, Taiwan, R.O.C.

2014-/2~present Assistant Professor, Department of Biochemistry and Molecular Biology, Chang Gung University, Tao-Yuan, Taiwan, R.O.C.

### Honors

*Recipient*, National Science Council Distinguished Postdoctoral Fellowship (行政院國家科學委員會補助延攬研究學者-特約博士後研究學者研究計劃) (2009-2011)

*Recipient*, NHRI Postdoctoral Fellowship Award for outstanding young postdoctoral scientists conducting research work in Taiwan (held by National Health Research Institutes). (國家衛生研究院博士後研究學者獎) (1/4 persons, 2006-2008)

## B. Selected Peer-reviewed Publications (2012-2017) (in chronological order)

### Referred papers (\*first/equal contribution or corresponding author)

1. Epigenetic silencing of myogenic gene program by Myb-binding protein 1a suppresses myogenesis. Yang CC\*, Liu H\*, Chen SL, Wang TH, Hsieh CL, Huang Y, Chen SJ, Chen HC, Yung BYM, Tan BC. (\*first author) **EMBO J.** 2012 Apr; 31(7): 1739-1751.
2. Epigenetic silencing of ribosomal RNA genes by Mybbp1a. Tan BC, Yang CC, Hsieh CL, Chou YH, Zhong CZ, Yung BYM\*, Liu H\*. (corresponding author) **J Biomed Sci.** 2012 Jun; 19:57.
3. A novel interaction of nucleophosmin with BCL2-associated X protein regulating death evasion and drug sensitivity in human hepatoma cells. Lo SJ, Fan LC, Tsai YF, Lin KY, Huang HL, Wang TH, Liu H, Chen TC, Huang SF, Chang CJ, Lin YJ, Yung BY, Hsieh SY. **Hepatology.** 2013 May; 57(5):1893-905.
4. CPAP: Cancer Panel Analysis Pipeline. Huang PJ, Yeh YM, Gan RC, Lee CC, Chen TW, Lee CY, Liu H, Chen SJ, Tang P. **Hum Mutat.** 2013 Oct; 34(10):1340-6.
5. A functional genomic approach reveals the transcriptional role of EDD in the expression and function of angiogenesis regulator ACVRL1. Chen HW, Yang CC, Hsieh CL, Liu H, Lee SC, Tan BC. **Biochim Biophys Acta.** 2013 Dec;1829(12):1309-19.
6. ADAR1 deaminase contributes to scheduled skeletal myogenesis progression via stage-specific functions. Hsieh CL, Liu H, Huang Y, Kang L, Chen HW, Chen YT, Wee YR, Chen SJ, and Tan BC. **Cell Death Differ.** 2014 May; 21(5):707-719.
7. Cytoplasmic viral RNA-dependent RNA polymerase disrupts the intracellular splicing machinery by entering the nucleus and interfering with Prp8. Liu YC, Kuo RL, Lin JY, Huang PN, Huang Y, Liu H, Arnold JJ, Chen SJ, Wang RY, Cameron CE, Shih SR. **PLoS Pathog.** 2014 Jun; 10(6):e1004199.
8. Functional impact of RNA editing and ADARs on regulation of gene expression: perspectives from deep sequencing studies. Liu H\*, Ma CP, Chen YT, Schuyler SC, Chang KP, Tan BC. (\*first author) **Cell & Bioscience.** 2014 Aug 19; 4:44.
9. Vanno: A Visualization-aided Variant Annotation Tool. Huang PJ, Lee CC, Tan BC, Yeh YM, Huang KY, Gan RC, Chen TW, Lee CY, Yang ST, Liao CS, Liu H\*, Tang P\*. (\*corresponding author) **Hum Mutat.** 2015 Feb;36(2):167-74.
10. CMPD: cancer mutant proteome database. Huang PJ, Lee CC, Tan BC, Yeh YM, Chu LJ, Chen TW, Chang KP, Lee CY, Gan RC, Liu H\*, Tang P\*. (\*corresponding author) **Nucleic Acids Res.** 2015 Jan;43(Database issue):D849-55.
10. Intellectual disability-associated dBRWD3 regulates gene expression through inhibition of HIRA/YEM-mediated chromatin deposition of histone H3.3. Chen WY, Shih HT, Liu KY, Shih ZS, Chen LK, Tsai TH, Chen MJ, Liu H, Tan BC, Chen CY, Lee HH, Loppin B, Ait-Ahmed O, Wu JT. **EMBO Rep.** 2015 Apr;16(4):528-38.
11. Ultra-deep targeted sequencing of advanced oral squamous cell carcinoma identifies a mutation-based prognostic gene signature. Chen SJ\*, Liu H\*, Liao CT\*, Huang PJ, Huang Y, Hsu A, Tang P, Chang YS, Chen HC, Yen TC. (\*first author) **Oncotarget.** 2015 Jul 20;6(20):18066-80
12. Selectively Constrained RNA Editing Regulation Crosstalks with piRNA Biogenesis in Primates. Yang XZ, Chen JY, Liu CJ, Peng J, Wee YR, Han X, Wang C, Zhong X, Shen QS, Liu H, Cao H, Chen X, Tan BC, Li CY. **Mol Biol Evol.** 2015 Dec;32(12):3143-57

14. ChIP-on-chip analysis of thyroid hormone-regulated genes and their physiological significance. Chung IH\*, **Liu H\***, Lin YH, Chi HC, Huang YH, Yang CC, Yeh CT, Tan BC, Lin KH. (\*first author) **Oncotarget**. 2016 Apr 19;7(16):22448-59.
15. Quantitative analysis of wild-type and V600E mutant BRAF proteins in colorectal carcinoma using immunoenrichment and targeted mass spectrometry. Chen H, Hsiao YC, Chiang SF, Wu CC, Lin YT, **Liu H**, Zhao H, Chen JS, Chang YS, Yu JS. **Anal Chim Acta**. 2016 Aug 24;933:144-55.
16. Yang CC, Chen YT, Chang YF, **Liu H**, Kuo YP, Shih CT, Liao WC, Chen HW, Tsai WS, Tan, BC. ADAR1 mediated 3' UTR editing and expression control of anti-apoptosis genes fine-tunes cellular apoptosis response. **Cell Death Dis**. 2017 May 25;8(5):e2833.
17. Chen TW, Lee CC\*, **Liu H\***, Wu CS\*, Pickering CR\*, Huang PJ, Wang J, Chang YF, Yeh YM, Chen CD, Li HP, Luo JD, Tan BC, Chan EH, Hsueh C, Chu LJ, Chen YT, Zhang B, Yang CY, Wu CC, Hsu CW, See LC, Tang P, Yu JS, Liao WC, Chiang KW, Rodriguez H, Myers JN., Chang KP\*, Chang YS\*. (\*first author) APOBEC3A is an oral cancer prognostic biomarker in Taiwanese carriers of an APOBEC deletion polymorphism. **Nat Commun**. 2017 Sep 6;8(1):465.
18. Wu SM, Huang PJ, Chang YF, Lee CC, Yang CY, Tsai WS, **Liu H\***, Tan BC\*. (\*corresponding author) circIncRNA.net: An integrated web-based resource for mapping functional networks of long or circular forms of non-coding RNAs. Under revision at GigaScience. 2017.
19. Lai YH, **Liu H**, Chiang WF, Chen TW, Chu L, Yu JS, Chen SJ, Chen HC, Tan BC\*. MiR-31-5p-ACOX1 Axis Enhances Tumorigenic Fitness in Oral Squamous Cell Carcinoma Via the Promigratory Prostaglandin E2. **Theranostics**. 2017. (Accepted).

## C. Research Support

### Ongoing Research Support

MOST 106-2320-B-182 -035 -MY3, Ministry of Science and Technology, 2017/8/1- 2020/7/31  
Functional interrogation of cancer-associated lncRNAs in gene regulation and malignant pathogenesis  
Role: PI

MOST 106-2320-B-182 -018 -, Ministry of Science and Technology, 2017/08/01-2018/07/30  
Clinicopathologic and genomic characteristics of cyclin D1-negative pleomorphic/blastoid mantle cell lymphoma  
Role: co-PI

MOST 105-2320-B-001 -014 -MY3, Ministry of Science and Technology, 2016/08/01-2019/07/30  
Function and mechanism of TCTP in activated T cells  
Role: co-PI

### Completed Research Support (2006-2010)

MOST105-2320-B-182-017-, Ministry of Science and Technology, 2017/8/1- 2020/7/31  
Comprehensive profiling of pathologically relevant exosomal miRNAs in colorectal cancer (CRC) and functional characterization: a next-generation sequencing (NGS)-based approach  
Role: PI