


HSUEH-PING CATHERINE CHU (朱雪萍)

POSITION/AFFILIATIONS ASSOCIATE PROFESSOR, INSTITUTE OF MOLECULAR AND CELLULAR BIOLOGY, NATIONAL TAIWAN UNIVERSITY	CONTACT INFORMATION No. 1 Sec. 4 Roosevelt Road, Taipei, Taiwan TEL: +886-233662487 FAX: +886-233662478 E-mail: cchu2017@ntu.edu.tw		
EDUCATION			
INSTITUTION AND LOCATION	DEGREE	YEAR(S)	FIELD OF STUDY
National Yang Ming University, Taiwan	B.S.	2000	Life Science
National Yang Ming University, Taiwan	M.S.	2002	Biochemistry
Rutgers University, USA	Ph.D.	2009	Biomedical Science

Positions and Employment (含現職，由最近者往前追溯)

- 2023~Present Associate Professor, Institute of Molecular and Cellular Biology, National Taiwan University, Taiwan
- 2017~2023 Assistant Professor, Institute of Molecular and Cellular Biology, National Taiwan University, Taiwan
- 2010~2017 Postdoctoral Fellow, Department of Genetics, Harvard University, USA
- 2002~2003 Research assistant, Institute of Molecular Biology, Academia Sinica, Taiwan

Selected publications (*corresponding author) (請擇代表著作，時間先後順序由最近者往前追溯)

1. Tsai RX, Fang KC, Yang PC, Hsieh YH, Chiang IT, Chen Y, Lee HG, Lee JT, **Chu HC***. TERRA regulates DNA G-quadruplex formation and ATRX recruitment to chromatin. *Nucleic Acids Res.* 2022 Nov 28;50(21):12217-12234.
2. Guh CY, Shen HJ, Chen LW, Chiu PC, Liao IH, Lo CC, Chen Y, Hsieh YH, Chang TC, Yen CP, Chen YY, Chen TW, Chen LY, Wu CS, Egly JM, **Chu HC***. XPF activates break-induced telomere synthesis. *Nat Commun.* 2022 Oct 2;13(1):5781.
3. **Chu HP***, Minajigi A, Chen Y, Morris R, Guh CY, Hsieh YH, Boukhali M, Haas W, Lee JT*. iDRiP for the systematic discovery of proteins bound directly to noncoding RNA. *Nat Protoc.* 2021 Jul;16(7):3672-3694.
4. Chang KV, Chen YC, Wu WT, Shen HJ, Huang KC, **Chu HP***, Han DS*. Expression of Telomeric Repeat-Containing RNA Decreases in Sarcopenia and Increases after Exercise and Nutrition Intervention. *Nutrients.* 2020 Dec 8;12(12):3766.
5. Guh CY, Hsieh YH, **Chu HP***. Functions and properties of nuclear lncRNAs-from systematically mapping the interactomes of lncRNAs. *J Biomed Sci.* 2020 Mar 17;27(1):44.
6. Pan X, Chen Y, Biju B, Ahmed N, Kong J, Goldenberg M, Huang J, Mohan N, Klosek S, Parsa K, Guh CY, Lu R, Pickett HA, **Chu HP***, Zhang D*. FANCM suppresses DNA replication stress at ALT telomeres by disrupting TERRA R-loops. *Sci Rep.* 2019 Dec 13;9(1):19110.
7. **Chu HP**, Froberg JE, Kesner B, Oh HJ, Ji F, Sadreyev R, Pinter SF, Lee JT. PAR-TERRA directs homologous sex chromosome pairing. *Nat Struct Mol Biol.* 2017 Aug;24(8):620-631.
8. **Chu HP**, Cifuentes-Rojas C, Kesner B, Aeby E, Lee HG, Wei C, Oh HJ, Boukhali M, Haas W, Lee JT. TERRA RNA Antagonizes ATRX and Protects Telomeres. *Cell.* 2017 Jun 29;170(1):86-101.e16.