

Speaker Bio

Kevin Tsai

Assistant Research Fellow

Institute of Biomedical Sciences, Academia Sinica

<https://www.ibms.sinica.edu.tw/tsai-kevin/>

E-mail: kevtsai@ibms.sinica.edu.tw

Experience:

2008–2014 Ph.D., Cell and Molecular Biology Graduate Group, University of Pennsylvania

2014–2021 Postdoctoral Scholar, Duke University Medical Center

2021–current Assistant Research Fellow, Institute of Biomedical Sciences, Academia Sinica

Research Interests:

Epitranscriptomic RNA modifications, RNA metabolism, virus host interactions, Influenza A virus, Hepatitis B virus, HIV-1, Retrovirology

Selected Publications:

1. Mapping of pseudouridine residues on cellular and viral transcripts using a novel antibody-based technique. Martinez Campos C, Tsai K, Courtney DG, Bogerd HP, Holley CL, Cullen BR. RNA. 2021
2. Epitranscriptomic addition of m6A regulates HIV-1 RNA stability and alternative splicing. Tsai K, Bogerd HP, Kennedy EM, Emery A, Swanstrom R, Cullen BR. Genes Dev. 2021
3. Epigenetic and epitranscriptomic regulation of viral replication. Tsai K, Cullen BR. Nat Rev Microbiol. 2020
4. Acetylation of cytidine residues boosts HIV-1 gene expression by increasing viral RNA stability. Tsai K, Vasudevan AJ, Martinez Campos C, Emery A, Swanstrom R, Cullen BR. Cell Host Microbe. 2020
5. Epitranscriptomic addition of m5C to HIV-1 transcripts regulates viral gene expression. Courtney DG, Tsai K, Bogerd HP, Kennedy EM, Law BA, Emery A, Swanstrom R, Holley CL, Cullen BR. Cell Host Microbe. 2019
6. Influenza A virus-derived siRNAs increase in the absence of NS1 yet fail to inhibit virus replication. Tsai K, Courtney DG, Kennedy EM, Cullen BR. RNA. 2018
7. Addition of m6A to SV40 late mRNAs enhances viral structural gene expression and replication. Tsai K, Courtney DG, Cullen BR. PLoS Pathog. 2018
8. Posttranscriptional m6A editing of HIV-1 mRNAs enhances viral gene expression. Kennedy EM, Bogerd HP, Kornepati AV, Kang D, Ghoshal D, Marshall JB, Poling BC, Tsai K, Gokhale NS, Horner SM, Cullen BR. Cell Host Microbe. 2016
9. Viral reprogramming of the Daxx-Histone H3.3 chaperone during EBV pre-latent infection. Tsai K, Chan L, Gibeault R, Conn K, Dheekollu J, Domsic J, Marmorstein R, Schang LM, Lieberman PM. J Virol., 2014
10. EBV tegument protein BNRF1 disrupts DAXX-ATRAX to activate viral early gene transcription. Tsai K, Thikmyanova N, Wojcechowskyj JA, Delecluse HJ, Lieberman PM. PLoS Pathog. 2011