

WEI-SHAU HU, PH.D.

COMPETE BIBLIOGRAPHY, September 2023 (120 Total)

Peer-Reviewed Research Publications:

1. Delviks-Frankenberry K.A., C.R. Ojha, K.J. Hermann, **W.-S. Hu**, B.E. Torbett, V.K. Pathak 2023. Potent dual block to HIV-1 infection using lentiviral vectors expressing fusion inhibitor peptide mC46- and Vif-resistant APOBEC3G. *Mol Ther Nucleic Acids* 33:794-809. [PMID: 37662965](#)
2. Nikolaitchik O.A., S. Islam, J. P. Kitzrow, A. Duchon, Z. Cheng, Y. Liu, J.M.O. Rawson, W. Shao, M. Nikolaitchik, M.F. Kearney, F. Maldarelli, K. Musier-Forsyth, V. K. Pathak, **W.-S. Hu** 2023. HIV-1 usurps transcription start site heterogeneity of host RNA polymerase II to maximize replication fitness. *Proc Natl Acad Sci U S A* 120:e2305103120. [PMID: 37252967](#)
3. Rawson J.M.O., O.A.Nikolaitchik, J.A. Yoo, X. Somoulay, M.A. Brown, F. S. Mbuntcha Bogni, V. K. Pathak, F. Soheilian, R. L. Slack, S. G. Sarafianos, **W.-S. Hu**. 2022. Adaptation of HIV-1/HIV-2 Chimeras with Defects in Genome Packaging and Viral Replication. *mBio* 13:e0222022. [PMID: 36036631](#)
4. Rawson J.M.O., O.A. Nikolaitchik, S. Shakya, B.F. Keele, V.K. Pathak, **W.-S. Hu**. 2022. Transcription Start Site Heterogeneity and Preferential Packaging of Specific Full-Length RNA Species Are Conserved Features of Primate Lentiviruses. *Microbiol Spectr* 10:e0105322. [PMID: 35736240](#)
5. Burdick R.C., C. Deleage, A. Duchon, J.D. Estes, **W.-S. Hu**, V.K. Pathak. 2022. Intranuclear Positions of HIV-1 Proviruses Are Dynamic and Do Not Correlate with Transcriptional Activity. *mBio* doi:10.1128/mbio.03256-21:e0325621. [PMID: 35012348](#)
6. Nikolaitchik O.A., S. Liu, J.P. Kitzrow, Y. Liu, J.M.O. Rawson, S. Shakya, Z. Cheng, V.K. Pathak, **W.-S. Hu**, Musier-Forsyth K. 2021. Selective packaging of HIV-1 RNA genome is guided by the stability of 5' untranslated region polyA stem. *Proc Natl Acad Sci U S A* 118 (50):e2114494118. [PMID: 34873042](#)
7. Duchon A., S. Santos, J. Chen, M. Brown, O.A. Nikolaitchik, S. Tai, J.A. Chao, E.O. Freed, V.K. Pathak, **W.-S. Hu**. 2021. Plasma Membrane Anchoring and Gag:Gag Multimerization on Viral RNA Are Critical Properties of HIV-1 Gag Required To Mediate Efficient Genome Packaging. *mBio* doi:10.1128/mbio.03254-21:e0325421. [PMID: 34872357](#)
8. Li C., R.C. Burdick, K. Nagashima, **W.-S. Hu**, V.K. Pathak. 2021. HIV-1 cores retain their integrity until minutes before uncoating in the nucleus. *Proc Natl Acad Sci U S A* 118 (10):e2019467118. [PMID: 33649225](#)
9. Rawson J.M.O., A. Duchon, O.A. Nikolaitchik, V.K. Pathak, **W.-S. Hu**. 2021.

Development of a Cell-Based Luciferase Complementation Assay for Identification of SARS-CoV-2 3CL(pro) Inhibitors. *Viruses* 13(2):173. [PMID: 33498923](#)

10. Umunnakwe, C.N., A. Duchon, O.A. Nikolaitchik, S.A. Rahman, Y. Liu, J. Chen, S. Tai, V.K. Pathak, and **W.-S. Hu**. 2021. Specific guanosines in the HIV-2 leader RNA are essential for efficient viral genome packaging. *J. Mol. Biol.* **433**:166718. [PMID: 33221337](#).
11. Chen, J., C. Umunnakwe, D.Q. Sun, O.A. Nikolaitchik, V.K. Pathak, B. Berkhout, A.T. Das, and **W.-S. Hu**. 2020. Impact of nuclear export pathway on cytoplasmic HIV-1 RNA transport mechanism and distribution. *mBio* **11**:e01578-20. [PMCID: PMC7667035](#).
12. Nikolaitchik, O.A., X. Somoulay, J.M.O. Rawson, J.A. Yoo, V.K. Pathak, and **W.-S. Hu**. 2020. Unpaired guanosines in the 5' untranslated region of HIV-1 RNA act synergistically to mediate genome packaging. *J. Virol.* **94**:e00439-20. [PMID: 32796062](#).
13. Chen, J., Y. Liu, B. Wu, O.A. Nikolaitchik, P.R. Mohan, J. Chen, V.K. Pathak, and **W.-S. Hu**. 2020. Visualizing the translation and packaging of HIV-1 full-length RNA. *Proc. Natl. Acad. Sci. USA* **117**:6145-6155. [PMCID: PMC7084099](#).
14. Burdick, R.C., C. Li, M. Munshi, J.M.O. Rawson, K. Nagashima, **W.-S. Hu**, and V.K. Pathak. 2020. HIV-1 uncoats in the nucleus near sites of integration. *Proc. Natl. Acad. Sci. USA* **117**:5486-5493. [PMCID: PMC7071919](#).
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23. Liu, Y., O.A. Nikolaitchik, S.A. Rahman, J. Chen, V.K. Pathak, and **W.-S. Hu**. 2017. HIV-1 sequence necessary and sufficient to package non-viral RNAs into HIV-1 particles. *J. Mol. Biol.* **429**:2542-2555. PMID: [PMC6771289](#).
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Invited Book Chapters, Reviews, and Commentaries:

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