

## Abby R. Thurm

- MD Student, expected graduation Spring 2026
- Ph.D. Student in Biophysics, admitted Autumn 2022
- MSTP Student
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### Publications

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#### PUBLICATIONS

- **Structural probing of RNA hairpins quantifies protein occupancy on RNA and links it to function in human cells.** *bioRxiv : the preprint server for biology*  
Thurm, A. R., Nguyen, T. H., Campos, J. D., Mansfield, M., Bintu, L., Hagler, L. D.  
2026
- **High-throughput mapping of modular regulatory domains in human RNA-binding proteins.** *Cell systems*  
Thurm, A. R., Finkel, Y., Andrews, C., Cai, X. S., Benko, C., Bintu, L.  
2025: 101450
- **Human Synthetic Biology and Programmable Gene Regulation Control.** *Annual review of genomics and human genetics*  
Thurm, A. R., Janer Carattini, G. L., Bintu, L.  
2025
- **Single-molecule states link transcription factor binding to gene expression.** *Nature*  
Doughty, B. R., Hinks, M. M., Schaepe, J. M., Marinov, G. K., Thurm, A. R., Rios-Martinez, C., Parks, B. E., Tan, Y., Marklund, E., Dubocanin, D., Bintu, L., Greenleaf, W. J.  
2024
- **High-throughput development and characterization of new functional nanobodies for gene regulation and epigenetic control in human cells.** *bioRxiv : the preprint server for biology*  
Wan, J., Thurm, A. R., Allen, S. J., Ludwig, C. H., Patel, A. N., Bintu, L.  
2024
- **The H3.3K36M oncohistone disrupts the establishment of epigenetic memory through loss of DNA methylation.** *Molecular cell*  
Sinha, J., Nickels, J. F., Thurm, A. R., Ludwig, C. H., Archibald, B. N., Hinks, M. M., Wan, J., Fang, D., Bintu, L.  
2024
- **High-throughput discovery of regulatory effector domains in human RNA-binding proteins.** *bioRxiv : the preprint server for biology*  
Thurm, A. R., Finkel, Y., Andrews, C., Cai, X. S., Benko, C., Bintu, L.  
2024
- **Single-molecule chromatin configurations link transcription factor binding to expression in human cells.** *bioRxiv : the preprint server for biology*  
Doughty, B. R., Hinks, M. M., Schaepe, J. M., Marinov, G. K., Thurm, A. R., Rios-Martinez, C., Parks, B. E., Tan, Y., Marklund, E., Dubocanin, D., Bintu, L., Greenleaf, W. J.  
2024
- **The H3.3 K36M oncohistone disrupts the establishment of epigenetic memory through loss of DNA methylation.** *bioRxiv : the preprint server for biology*  
Sinha, J., Nickels, J. F., Thurm, A. R., Ludwig, C. H., Archibald, B. N., Hinks, M. M., Wan, J., Fang, D., Bintu, L.  
2023

- **Single-cell chromatin state transitions during epigenetic memory formation.** *bioRxiv : the preprint server for biology*  
Fujimori, T., Rios-Martinez, C., Thurm, A. R., Hinks, M. M., Doughty, B. R., Sinha, J., Le, D., Hafner, A., Greenleaf, W. J., Boettiger, A. N., Bintu, L.  
2023
- **High-throughput discovery and characterization of viral transcriptional effectors in human cells.** *Cell systems*  
Ludwig, C. H., Thurm, A. R., Morgens, D. W., Yang, K. J., Tycko, J., Bassik, M. C., Glaunsinger, B. A., Bintu, L.  
2023; 14 (6): 482
- **Myeloid lncRNA LOUP mediates opposing regulatory effects of RUNX1 and RUNX1-ETO in t(8;21) AML (vol 138 pg 1331, 2021)** *BLOOD*  
Trinh, B. Q., Umumarino, S., Zhang, Y., Ebralidze, A. K., Bassal, M. A., Nguyen, T. M., Heller, G., Coffey, R., Tenen, D. E., van der Kouwe, E., Fabiani, E., Gurnari, C., Wu, et al  
2023; 141 (20): 2542
- **The Nonmonotonic Dose Dependence of Protein Expression in Cells Transfected with Self-Amplifying RNA.** *Journal of virology*  
Tanimoto, C. R., Thurm, A. R., Brandt, D. S., Knobler, C. M., Gelbart, W. M.  
2022; 96 (7): e0185821
- **Myeloid lncRNA LOUP Mediates Opposing Regulatory Effects of RUNX1 and RUNX1-ETO in t(8;21) AML.** *Blood*  
Trinh, B. Q., Umumarino, S. n., Zhang, Y. n., Ebralidze, A. K., Bassal, M. A., Nguyen, T. M., Heller, G. n., Coffey, R. n., Tenen, D. E., van der Kouwe, E. n., Fabiani, E. n., Gurnari, C. n., Wu, et al  
2021
- **RNA Homopolymers Form Higher-Curvature Virus-like Particles Than Do Normal-Composition RNAs.** *Biophysical journal*  
Thurm, A. R., Beren, C., Duran-Meza, A. L., Knobler, C. M., Gelbart, W. M.  
2019; 117 (7): 1331-1341