


Jason Hilton

Senior Research Engineer, Biomedical Data Science

 NIH Biosketch available Online

Bio

CURRENT ROLE AT STANFORD

PI & Director, Lattice

Publications

PUBLICATIONS

- **Data navigation on the ENCODE portal.** *Nature communications*
Kagda, M. S., Lam, B., Litton, C., Small, C., Sloan, C. A., Spragins, E., Tanaka, F., Whaling, I., Gabdank, I., Youngworth, I., Strattan, J. S., Hilton, J., Jou, et al
2025; 16 (1): 9592
- **Mondo: Integrating Disease Terminology Across Communities.** *Genetics*
Vasilevsky, N. A., Toro, S., Matentzoglou, N., Flack, J. E., Mullen, K. R., Hegde, H., Gehrke, S., Whetzel, P. L., Shwetar, Y., Harris, N. L., Ngu, M. S., Alyea, G. L., Kane, et al
2025
- **Defining breast epithelial cell types in the single-cell era.** *Developmental cell*
Gray, G. K., Carlson, E. G., Lev, T., Marshall, B., Reed, A. D., Sánchez-Covarrubias, A. P., Twigger, A. J., Puig-Barbe, A., Thennavan, A., Omotoso, A., Murrow, L. M., Chatterjee, D., He, et al
2025; 60 (17): 2218-2236
- **Gene Spatial Integration: enhancing spatial transcriptomics analysis via deep learning and batch effect mitigation.** *Bioinformatics (Oxford, England)*
Pratama, R., Hilton, J., Cherry, J. M., Song, G.
2025
- **CZ CELLxGENE Discover: a single-cell data platform for scalable exploration, analysis and modeling of aggregated data.** *Nucleic acids research*
Abdulla, S., Aevermann, B., Assis, P., Badajoz, S., Bell, S. M., Bezzi, E., Cakir, B., Chaffer, J., Chambers, S., Cherry, J. M., Chi, T., Chien, J., Dorman, et al
2024
- **MAMS: matrix and analysis metadata standards to facilitate harmonization and reproducibility of single-cell data.** *Genome biology*
Sarraz, I., Wang, Y., Shastry, A., Teh, W. K., Sokolov, A., Herb, B. R., Creasy, H. H., Virshup, I., Dries, R., Degatano, K., Mahurkar, A., Schnell, D. J., Madrigal, et al
2024; 25 (1): 205
- **Perspectives on ENCODE.** *Nature*
ENCODE Project Consortium, Snyder, M. P., Gingeras, T. R., Moore, J. E., Weng, Z., Gerstein, M. B., Ren, B., Hardison, R. C., Stamatoyannopoulos, J. A., Graveley, B. R., Feingold, E. A., Pazin, M. J., Pagan, M., et al
2020; 583 (7818): 693–98

- **Expanded encyclopaedias of DNA elements in the human and mouse genomes.** *Nature*
Moore, J. E., Purcaro, M. J., Pratt, H. E., Epstein, C. B., Shores, N. n., Adrian, J. n., Kawli, T. n., Davis, C. A., Dobin, A. n., Kaul, R. n., Halow, J. n., Van Nostrand, E. L., Freese, et al
2020; 583 (7818): 699–710
- **The ENCODE Portal as an Epigenomics Resource.** *Current protocols in bioinformatics*
Jou, J., Gabdank, I., Luo, Y., Lin, K., Sud, P., Myers, Z., Hilton, J. A., Kagda, M. S., Lam, B., O'Neill, E., Adenekan, P., Graham, K., Baymuradov, et al
2019; 68 (1): e89
- **New developments on the Encyclopedia of DNA Elements (ENCODE) data portal.** *Nucleic acids research*
Luo, Y. n., Hitz, B. C., Gabdank, I. n., Hilton, J. A., Kagda, M. S., Lam, B. n., Myers, Z. n., Sud, P. n., Jou, J. n., Lin, K. n., Baymuradov, U. K., Graham, K. n., Litton, et al
2019
- **Prevention of data duplication for high throughput sequencing repositories** *DATABASE-THE JOURNAL OF BIOLOGICAL DATABASES AND CURATION*
Gabdank, I., Chan, E. T., Davidson, J. M., Hilton, J. A., Davis, C. A., Baymuradov, U. K., Narayanan, A., Onate, K. C., Graham, K., Miyasato, S. R., Dreszer, T. R., Strattan, J., Jolanki, et al
2018
- **SnoVault and encodeD: A novel object-based storage system and applications to ENCODE metadata** *PLOS ONE*
Hitz, B. C., Rowe, L. D., Podduturi, N. R., Glick, D. I., Baymuradov, U. K., Malladi, V. S., Chan, E. T., Davidson, J. M., Gabdank, I., Narayana, A. K., Onate, K. C., Hilton, J., Ho, et al
2017; 12 (4)
- **The Encyclopedia of DNA elements (ENCODE): data portal update.** *Nucleic acids research*
Davis, C. A., Hitz, B. C., Sloan, C. A., Chan, E. T., Davidson, J. M., Gabdank, I. n., Hilton, J. A., Jain, K. n., Baymuradov, U. K., Narayanan, A. K., Onate, K. C., Graham, K. n., Miyasato, et al
2017
- **Surveying DNA Elements within Functional Genes of Heterocyst-Forming Cyanobacteria** *PLOS ONE*
Hilton, J. A., Meeks, J. C., Zehr, J. P.
2016; 11 (5): e0156034
- **Principles of metadata organization at the ENCODE data coordination center.** *Database : the journal of biological databases and curation*
Hong, E. L., Sloan, C. A., Chan, E. T., Davidson, J. M., Malladi, V. S., Strattan, J. S., Hitz, B. C., Gabdank, I., Narayanan, A. K., Ho, M., Lee, B. T., Rowe, L. D., Dreszer, et al
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