

Jospeh Cesare

Predoctoral Researcher

Education

August 2013 to May 2017: Department of Biology, Undergraduate School, University of Pennsylvania, Philadelphia, Pennsylvania, USA. Awarded the degree of B.A. in Biology, concentration in Molecular Biology, minor in Chemistry.

Publications

1. Coradin M, Porter EG, Vitorino FN, Searfoss RM, Cesare J, Lan Y, Zhu Z, Lund PJ, Sidoli S, Perez Y, Lu C. Cleavage of histone H2A during embryonic stem cell differentiation destabilizes nucleosomes to counteract gene activation. *Journal of Biological Chemistry*. 2026 Apr 9:111437.
2. Nde J, Kempf CG, Zimmermann RC, Cesare J, Zhang Y, Workman JL, Florens L, Washburn MP. Integrative Structural Modeling of Intrinsically Disordered Regions in a Human HDAC2 Chromatin Remodeling Complex. *bioRxiv*. 2026 Mar 25:2025-08.
3. Nde J, Majila K, Zimmermann RC, Kempf C, Zhang Y, Cesare J, Thornton JL, Workman JL, Florens L, Viswanath S, Washburn MP. Multicomplex Integrative Structural Modeling of a Human Histone Deacetylase Interactome. *bioRxiv*. 2026 Mar 17:2026-03.
4. Olivet J*, Shewakramani NR*, Cesare J*, Laval F*, Nde J, Van de Veire J, Brammerloo Y, Brebel B, Debnath O, Richardson AD, Yue H. Dynamic engagement of dual-role regulators by the Sin3 complex. *bioRxiv*. 2026 Feb 26:2026-02.*indicates co-first authors.
5. Goswami P, Cesare J, Rekowski MJ, Clark Z, Thornton J, Washburn MP. Analysis of FAIMS for the study of affinity-purified protein complexes using the orbitrap ascend tribrid mass spectrometer. *Molecular Omics*. 2025 Jul 1;21(4):303-14.
6. Vrooman LA, Gieske MC, Lawson C, Cesare J, Zhang S, Bartolomei MS, Garcia BA, Hassold TJ, Hunt PA. Effect of brief maternal exposure to bisphenol A on the fetal female germline in a mouse model. *Environmental health perspectives*. 2025 Apr 8;133(3-4):047002.
7. Liu X, Zhang Y, Wen Z, Hao Y, Banks CA, Cesare J, Bhattacharya S, Arvindekar S, Lange JJ, Xie Y, Garcia BA. An integrated structural model of the DNA damage-responsive H3K4me3 binding WDR76: SPIN1 complex with the nucleosome. *Proceedings of the National Academy of Sciences*. 2024 Aug 13;121(33):e2318601121.
8. Kee, J., Thudium, S., Renner, D.M., Glastad, K., Palozola, K., Zhang, Z., Li, Y., Lan, Y., Cesare, J., Poleshko, A., et al. (2022). SARS-CoV-2 disrupts host epigenetic regulation via histone mimicry. *Nature* 610, 381–388.

9. Lu, C., Glisovic-Aplenc, T., Bernt, K.M., Nestler, K., Cesare, J., Cao, L., Lee, H., Fazelinia, H., Chinwalla, A., Xu, Y., et al. (2021). Longitudinal Large-Scale Semiquantitative Proteomic Data Stability across Multiple Instrument Platforms. *J Proteome Res* 20, 5203–5211.
10. Bear, A.S., Blanchard, T., Cesare, J., Ford, M.J., Richman, L.P., Xu, C., Baroja, M.L., McCuaig, S., Costeas, C., Gabunia, K., et al. (2021). Biochemical and functional characterization of mutant KRAS epitopes validates this oncoprotein for immunological targeting. *Nat Commun* 12.
11. Mcafee, Q., Chen, C.Y., Yang, Y., Caporizzo, M.A., Morley, M., Babu, A., Jeong, S., Brandimarto, J., Bedi, K.C., Flam, E., et al. (2021). Truncated titin proteins in dilated cardiomyopathy. *Sci. Transl. Med* 13, 7287.
12. Sinclair, D., Cesare, J., McMullen, M., Carlson, G.C., Hahn, C.G., and Borgmann-Winter, K.E. (2016). Effects of sex and DTNBP1 (dysbindin) null gene mutation on the developmental GluN2B-GluN2A switch in the mouse cortex and hippocampus. *J Neurodev Disord* 8, 1–19.