

Kevin Stachelek

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Education

- 2018 — PhD Candidate, Cancer Biology and Genomics
University of Southern California, Los Angeles, CA
- 2015 M.S. Translational Biotechnology
University of Southern California, Los Angeles, CA
- 2013 B.A. Biology
University of Southern California, Los Angeles, CA

Professional Experience

- 2018 — Graduate Student Researcher
University of Southern California
PI: David Cobrinik
- 2013 — 2018 Technician
Children's Hospital Los Angeles
PI: David Cobrinik
- 2012 — 2013 Undergraduate Research Assistant
University of Southern California
PI: John Tower

Grant Support

NIH-NIDCD F31 DC019853-01: Ruth L. Kirschstein National Research Service Award
hideme

St. Baldrick's
hideme

Scholarships and Awards

- 2013 Undergraduate SOAR

Peer-reviewed Publications

Li, H.-T., Xu, L., Weisenberger, D. J., Li, M., Zhou, W., Peng, C.-C., Stachelek, K., Cobrinik, D., Liang, G. & Berry, J. L. Characterizing DNA methylation signatures of retinoblastoma using aqueous humor liquid biopsy. *Nat Commun* 13, 5523 (2022).

Cambier, L., Stachelek, K., Triska, M., Jubran, R., Huang, M., Li, W., Zhang, J., Li, J. & Cobrinik, D. Extracellular vesicle-associated repetitive element DNAs as candidate osteosarcoma biomarkers. *Sci Rep* 11, 94 (2021).

Kaneva, K., Merkurjev, D., Ostrow, D., Ryutov, A., Triska, P., Stachelek, K., Cobrinik, D., Biegel, J. A. & Gai, X. Detection of mitochondrial DNA variants at low level heteroplasmy in pediatric CNS and extra-CNS solid tumors with three different enrichment methods. *Mitochondrion* 51, 97–103 (2020).

Berry, J. L., Xu, L., Kooi, I., Murphree, A. L., Prabakar, R. K., Reid, M., Stachelek, K., Le, B. H. A., Welter, L., Reiser, B. J., Chévez-Barrios, P., Jubran, R., Lee, T. C., Kim, J. W., Kuhn, P., Cobrinik, D. & Hicks, J. Genomic cfDNA analysis of aqueous humor in retinoblastoma predicts eye salvage: the surrogate tumor biopsy for retinoblastoma. *Molecular Cancer Research* 16, 1701–1712 (2018).

Singh, H. P., Wang, S., Stachelek, K., Lee, S., Reid, M. W., Thornton, M. E., Craft, C. M., Grubbs, B. H. & Cobrinik, D. Developmental stage-specific proliferation and retinoblastoma genesis in RB-deficient human but not mouse cone precursors. *PNAS* 115, E9391–E9400 (2018).

Kim, J. W., Jacobsen, B., Zolfaghari, E., Ferrario, A., Chevez-Barrios, P., Berry, J. L., Lee, D. K., Rico, G., Madi, I., Rao, N., Stachelek, K., Wang, L.-C. & Gomer, C. Rabbit model of ocular indirect photodynamic therapy using a retinoblastoma xenograft. *Graefes Archive for Clinical and Experimental Ophthalmology* 255, (2017).

Berry, J. L., Xu, L., Murphree, A. L., Krishnan, S., Stachelek, K., Zolfaghari, E., McGovern, K., Lee, T. C., Carlsson, A., Kuhn, P., Kim, J. W., Cobrinik, D. & Hicks, J. Potential of aqueous humor as a surrogate tumor biopsy for retinoblastoma. *JAMA Ophthalmology* 135, 1221–1230 (2017).

Stachelek, K., Harutyunyan, N., Lee, S., Harutyunyan, A., Kim, J., Xu, L., Berry, J. L., Nagiel, A., Reynolds, C. P., Murphree, A. L., Lee, T. C., Aparicio, J. G. & Cobrinik, D. Non-Synonymous, synonymous, and non-coding nucleotide variants contribute to recurrently altered biological processes during retinoblastoma progression. Submitted.

Shayler, D., Stachelek, K., Lee, S., Bai, J., Aparicio, J. G., Kim, Y., Singh, M., Bay, M., Thornton, M., Craft, C., Grubbs, B., Bonaguidi, M., Singh, H., & Cobrinik, David. Single cell transcriptomics reveals novel photoreceptor trajectories and a cancer-predisposed cone precursor state.

Refereed Presentations

2022 CBDI
 BMM

TSRI

Keystone

Software & Technology

2022 SeuratTools

Teaching

2022 Introduction to R: Workshop for incoming PhD students - University of Southern California

- Led, organized, and co-designed 3-day workshop

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