

SHAOBO (SEBASTIAN) LI, *Ph.D.*

Los Angeles, CA

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EDUCATION

University of Southern California

2018.08 – 2022.05

Doctor of Philosophy in Cancer Biology and Genomics (Bioinformatics)

- Thesis: Perinatal epigenetic and genetic analyses in childhood cancers
- Advisors: Dr Joseph L. Wiemels, Dr Adam de Smith

Fudan University, Shanghai, China

2009.09 – 2014.06

Bachelor of Medicine (Forensic medicine)

- Coursework: Anatomy, Psychiatry, Radiology, Surgery, Internal Medicine, Obstetrics and Gynecology

WORK EXPERIENCE

University of Southern California, Center for Genetic Epidemiology

Los Angeles, CA

Postdoctoral fellow

2022.05 – Present

- Led a meta-analysis project of US National Institutes of Health (NIH) Pregnancy and Childhood Epigenetics (PACE) study about the effects of birth order on perinatal DNA methylation
- Participated in a meta-analysis project of NIH PACE study on the association of C-section and perinatal DNA methylation led by Harvard T.H. Chan School of Public Health
- Led collaborations with European (Danish and Sweden) cohorts on meta-analysis of childhood glioma GWAS studies
- Trained new PhD students and pediatrician research fellows

University of Southern California, Center for Genetic Epidemiology

Los Angeles, CA

Predoctoral fellow, Research Assistant

2019.06 – 2022.05

- Genetic and epigenetic analysis of leukemia, pediatric glioma, and other childhood cancers

University of California, Berkeley, School of Public Health

Berkeley, CA

Research Affiliate

2019.07 – Present

- Genetic association and ancestry analyses for CCLS (California Childhood Leukemia Study)

Zhongshan Hospital

Shanghai, China

Assistant Clinical Researcher

2014.09 – 2018.06

- Glucose metabolic dysfunction in OSAHS patients and its interference with CPAP (Department of Respiration)
- FENO as a novel respiratory indicator for patients with OSAHS (Department of Respiration)
- Application of CT-based radiomics in predicting portal pressure and patient outcome in portal hypertension (Department of Gastroenterology)

LOFT Education

Online, China

Founder and English Lecturer

2014.06 – 2018.06

- Online English learning platform with originally designed courses in written and oral English

Roche Pharmaceuticals (Mabthera)

Shanghai, China

Marketing Intern

2013.11

- Processed invoicing data, assisted in constructing hematology ward in Ruijin Hospital

CERTIFICATES

Statistics and R (PH525.1x)	HarvardX, edX
Introduction to Linear Models and Matrix Algebra (PH525.2x)	HarvardX, edX
Statistical Inference and Modeling for High-throughput Experiments (PH525.3x)	HarvardX, edX
High-Dimensional Data Analysis (PH525.4x)	HarvardX, edX
Machine Learning	Stanford Online, Coursera

RELEVANT SKILLS

Data Analysis: Data Cleaning, Visualization, Modelling, Prediction, Machine Learning, Deep Learning, Ancestry Analyses, Survival Analyses

Programming: R, Python, C, Linux/Unix (HPC), JAVA, SAS, STATA, SPSS

Bioinformatics: EWAS, GWAS (SNPTEST, PLINK), WDL, GATK, Singularity

Languages: English, Mandarin, Japanese

PUBLICATIONS

1. **Shaobo Li**, Xiaowu Gai, Swe Swe Myint, Katti Arroyo, Libby Morimoto, Catherine Metayer, Adam J de Smith, Kyle M Walsh, Joseph L Wiemels, Mitochondrial 1555 G>A variant as a potential risk factor for childhood glioblastoma, *Neuro-Oncology Advances*, 2022, vdac045, <https://doi.org/10.1093/noajnl/vdac045>
2. Gallant RE, Arroyo K, Bracci PM, **Li S**, Metayer C, Kogan SC, Wendt GA, Francis SS, de Smith AJ, Wiemels JL. Clinical characteristics of cytomegalovirus-positive pediatric acute lymphoblastic leukemia at diagnosis. *Am J Hematol*. 2022 Mar 14. doi: 10.1002/ajh.26528. Epub ahead of print. PMID: 35285969.
3. Jeon, S., de Smith, A.J., **Li, S.** et al. Genome-wide trans-ethnic meta-analysis identifies novel susceptibility loci for childhood acute lymphoblastic leukemia. *Leukemia* (2021). <https://doi.org/10.1038/s41375-021-01465-1>
4. Martirosian, V., Deshpande, K., Zhou, H., **Li, S.**, ... & Neman, J. (2021). Medulloblastoma uses GABA transaminase to survive in the cerebrospinal fluid microenvironment and promote leptomeningeal dissemination. *Cell Reports*, 35(13), 109302.
5. Xu K, **Li S**, Whitehead TP, Pandey P, Kang AY, Morimoto LM, Kogan SC, Metayer C, Wiemels JL, de Smith AJ. Epigenetic biomarkers of prenatal tobacco smoke exposure are associated with gene deletions in childhood acute lymphoblastic leukemia. *Cancer Epidemiol Biomarkers Prev*. 2021 May 21;cebp.0009.2021. doi: 10.1158/1055-9965.EPI-21-0009.
6. Muskens, I. S., **Li, S.**, Jackson, T., Elliot, N., Hansen, H. M., Myint, S. S., ... de Smith, A. J. (2021). The genome-wide impact of trisomy 21 on DNA methylation and its implications for hematopoiesis. *Nature Communications*. <https://doi.org/10.1038/s41467-021-21064-z>.
7. Shen Q, Zhou Z, Liu Z, Hu S, Lin Z, **Li S**, Li S, Song H, Chen Y, Meng Y, Wang Y, Fan Y, Li X, Xiao Y, He Q, Jin J, Zhang Q, Yu W. Clinical and Pathological Features of Prostatic Stromal Tumor of Uncertain Malignant Potential: A Retrospective Study of 23 Chinese Cases. *Urol Int*. 2021;105(3-4):206-214. doi: 10.1159/000508763. Epub 2020 Nov 20. PMID: 33221793.
8. Meng Y, Yu W, Liu Z, Zhang M, Chen Y, **Li S**, Fan Y, Hu S, Zhang K, Zhang Q, Jin J. The inflammation patterns of different inflammatory cells in histological structures of hyperplastic

prostatic tissues. *Transl Androl Urol*. 2020 Aug;9(4):1639-1649. doi: 10.21037/tau-20-448. PMID: 32944525; PMCID: PMC7475681.

9. Liu, Z., Meng, Y., Cao, Y., Chen, Y., Fan, Y., **Li, S.**, He, Q., Wu, S., Yu, W., & Jin, J. (2020). Expression and prognostic value of PD-L1 in non-schistosoma-associated urinary bladder squamous cell carcinoma. *Translational andrology and urology*, 9(2), 428–436. <https://doi.org/10.21037/tau.2020.02.12>
10. Tseng, Y., Ma, L., **Li, S.**, Luo, T., Luo, J., Zhang, W., ... Chen, S. (2020). Application of CT-based radiomics in predicting portal pressure and patient outcome in portal hypertension. *European Journal of Radiology*, 0(0), 108927. <https://doi.org/10.1016/j.ejrad.2020.108927>
11. Liu Z, Meng Y, **Li S**, Yu W, Jin J. Perioperative recovery in different urinary reconstruction approaches of radical cystectomy: Are the advantages of laparoscopy consistent? *J Minim Access Surg*. 2020 Oct-Dec;16(4):390-398. doi: 10.4103/jmas.JMAS_227_19. PMID: 31929226; PMCID: PMC7597872.
12. Liu, Z., Wang, H., Zhang, L., **Li, S.**, Fan, Y., Meng, Y., ... Jin, J. (2019). Metabolic syndrome is associated with improved cancer-specific survival in patients with localized clear cell renal cell carcinoma. *Translational Andrology and Urology*, 8(5), 507–518.
13. Liu, Z., Huang, H., **Li, S.**, Yu, W., Li, W., Jin, J., ... Xing, J. (2017). The prognostic value of preoperative serum albumin-globulin ratio for high-grade bladder urothelial carcinoma treated with radical cystectomy: A propensity score-matched analysis. *Journal of Cancer Research and Therapeutics*, 13(5), 837–843. https://doi.org/10.4103/jcrt.JCRT_237_17
14. Sun, H.-T., Wen, X., Han, T., Liu, Z.-H., **Li, S.-B.**, Wang, J.-G., & Liu, X.-P. (2015). Expression of CPEB4 in invasive ductal breast carcinoma and its prognostic significance. *OncoTargets and Therapy*, 8, 3499–3506. <https://doi.org/10.2147/OTT.S87587>

OTHER SKILLS

Digital multimedia production: Proficient in graphic and video productions using Adobe Suite (Photoshop, Illustrator, Lightroom, After Effect), and Apple Final Cut Pro.

- Producer of USC Keck School of Medicine Virtual Commencement Videos (2020, 2021)
- First Prize in Keck School of Medicine Research Video Competition (2020)
- First Prize of Cambridge Business English (China) video competition (2012)
- First Prize of U21 United Nations Millennium Development Goals (UNMDG) Video Competition (2012)