

# 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**

*Volunteer 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

## **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. Xu, K., **Li, S.**, Muskens, I. S., ..., Wiemels, J. L., & de Smith, A. J. (2022). Accelerated epigenetic aging in newborns with Down syndrome. *Aging Cell*, 00, e13652. <https://doi.org/10.1111/accel.13652>
2. Shaobo Li, Pagna Sok, ..., Joseph L. Wiemels, Adam J. de Smith; Epigenome-Wide Association Study of Acute Lymphoblastic Leukemia in Children with Down Syndrome. *Blood* 2021; 138 (Supplement 1): 214. doi: <https://doi.org/10.1182/blood-2021-151454>
3. Qianxi Feng, Mi Zhou, **Shaobo Li**, ..., Joseph L. Wiemels; Interaction between maternal killer immunoglobulin-like receptors and offspring HLAs and susceptibility of childhood ALL. *Blood Adv* 2022; bloodadvances.2021006821. <https://doi.org/10.1182/bloodadvances.2021006821>
4. **Shaobo Li**, Xiaowu Gai, Swe Swe Myint, ..., 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>
5. Gallant RE, Arroyo K, Bracci PM, **Li S**, Metayer C, ..., 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.
6. 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>
7. 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.
8. Xu K, **Li S**, Whitehead TP, ..., 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.
9. Muskens, I. S., **Li, S.**, Jackson, T., ... , 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>.

10. Shen Q, Zhou Z, Liu Z, Hu S, Lin Z, **Li S**, Li S, ... , 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.
11. 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.
12. 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>
13. 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>
14. 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.
15. 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.
16. 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](https://doi.org/10.4103/jcrt.JCRT_237_17)
17. 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)