

Curriculum Vitae
Shenglin Mei

Fralin Biomedical Research Institute at VTC
Department of Biomedical Sciences and Pathobiology, Virginia Tech
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Education

Tongji University, Shanghai, China	09/2012- 06/2017
Ph.D., Bioinformatics Advisor: Prof. Xiaole Shirley Liu Thesis: Modeling transcription regulation in cancers through multi-omics integration	
Harvard T.H. Chan School of Public Health, Boston, USA Visiting Scholar	12/2013- 12/2014
Nanjing Agricultural University, Nanjing China Bachelor, Statistics	08/2008- 06/2012

Professional Experience

Fralin Biomedical Research Institute at VTC, Virginia Tech Assistant Professor of Department of Biomedical Sciences and Pathobiology	Washington, DC 12/2024- present
Children's National Hospital Affiliate Member, Center for Cancer and Immunology Research	Washington, DC 12/2024- present
Harvard Medical School and Massachusetts General Hospital Instructor	Boston, MA 08/2023-11/2024
Harvard Medical School and Massachusetts General Hospital Postdoctoral Fellow with Dr. David Sykes and Peter Kharchenko	Boston, MA 09/2018-08/2023
GV20 Oncotherapy Director of Bioinformatics	Shanghai, China 07/2017-08/2018
Dana-Farber Cancer Institute & Harvard Medical School Research assistant	Boston, MA 12/2013-12/2014

Publications (#: co-first author; \$ Corresponding)

- 1 **Mei S#,\$** et al. (2024). Single cell and spatial transcriptomics reveal tumor associated macrophages mediate prostate cancer progression and metastasis. (**Under Revision**)
- 2 **Mei S#,\$** Alchahin A# et al. Single-cell analyses of metastatic bone marrow in human neuroblastoma reveals microenvironmental remodeling and metastatic signature. *JCI insight*. 2024 (**co-corresponding**)
- 3 **Mei S#,\$**, Alchahin A# et al. Single-cell analysis of immune and stroma cell remodeling in renal cell carcinoma primary tumors and bone metastatic lesions. *Genome Medicine*. 2024. (**co-corresponding**)
- 4 Olsen TK#, Otte J#, **Mei S#**, Embaie BT, Kameneva P, Cheng H, et al. Joint single-cell genetic and transcriptomic analysis reveal pre-malignant SCP-like subclones in human neuroblastoma. *Mol Cancer*.

- 2024.
- 5 Hirz T#, **Mei S#**, Sarkar H, Kfoury Y, Wu S, Verhoeven BM, et al. Dissecting the immune suppressive human prostate tumor microenvironment via integrated single-cell and spatial transcriptomic analyses. *Nature Communications*. 2023. (co-corresponding)
 - 6 Alchahin AM#, **Mei S#**, Tsea I, Hirz T, Kfoury Y, Dahl D, et al. A transcriptional metastatic signature predicts survival in clear cell renal cell carcinoma. *Nature Communications*. 2022. (co-corresponding)
 - 7 Verhoeven BM#, **Mei S#**, Olsen TK, Gustafsson K, Valind A, Lindström A, et al. The immune cell atlas of human neuroblastoma. *Cell Reports Medicine*. 2022.
 - 8 Haase C#, Gustafsson K#, **Mei S#**, Yeh S-C, Richter D, Milosevic J, et al. Image-seq: spatially resolved single-cell sequencing guided by in situ and in vivo imaging. *Nat Methods*. 2022.
 - 9 Buonomo E#, **Mei S#**, Guinn S, Leo I, Peluso M, Nolan M-A, et al. Liver Stromal Cells Restrict Macrophage Maturation and Stromal IL-6 Limits the Differentiation of Cirrhosis-linked Macrophages. *Journal of Hepatology*. 2022.
 - 10 **Mei S**, Meyer CA, Zheng R, Qin Q, Wu Q, Jiang P, et al. Cistrome Cancer: A Web Resource for Integrative Gene Regulation Modeling in Cancer. *Cancer Res*. American Association for Cancer Research; 2018.
 - 11 **Mei S#**, Qin Q#, Wu Q#, Sun H, Zheng R, Zang C, et al. Cistrome Data Browser: a data portal for ChIP-Seq and chromatin accessibility data in human and mouse. *Nucleic Acids Res*. 2017.
 - 12 Xu Y#, Wei Z#, Feng M#, Zhu D, # **Mei S#**, Wu Z, et al. Tumor-infiltrated activated B cells suppress liver metastasis of colorectal cancers. *Cell Reports*. 2022.
 - 13 Kfoury Y#, Baryawno N#, Severe N#, **Mei S#**, Gustafsson K, Hirz T, et al, Human prostate cancer bone metastases have an actionable immunosuppressive microenvironment, *Cancer Cell*, 2021.
 - 14 Zhao L#, Huang S#, **Mei S#**, Yang Z, Xu L, Zhou N, et al. Pharmacological activation of estrogen receptor beta augments innate immunity to suppress cancer metastasis. *PNAS*. 2018.
 - 15 Qin Q#, **Mei S#**, Wu Q#, Sun H#, Li L#, Taing L, et al. ChiLin: a comprehensive ChIP-seq and DNase-seq quality control and analysis pipeline. *BMC Bioinformatics*. 2016.
 - 16 Bai, Y, Min, R, Chen, P, **Mei, S**, Deng, F., Zheng, Z., Jiang, C., Miao, R, Wu, Z, Zhang, P, Pan, Y, Lieberman, J, & Liu, X. Disulfiram blocks inflammatory TLR4 signaling by targeting MD-2. *PNAS*. 2023.
 - 17 Batiuk MY, Tyler T, Dragicevic K, **Mei S**, Rydbirk R, Petukhov V, et al. Upper cortical layer-driven network impairment in schizophrenia. *Sci Adv*. 2022.
 - 18 Deng, W, Bai, Y, Deng, F, Pan, Y, **Mei, S**, Zheng, Z, Min, R, Wu, Z, Li, W, Miao, R, Zhang, Z, Kupper, T. S, Lieberman, J, & Liu, X. Streptococcal pyrogenic exotoxin B cleaves GSDMA and triggers pyroptosis. *Nature*, 2022.
 - 19 Zheng Z#, Deng W#, Bai Y#, Miao R#, **Mei S**, Zhang Z, et al. The lysosomal Rag-Ragulator complex licenses RIPK1– and caspase-8–mediated pyroptosis by Yersinia. *Science*. 2021.
 - 20 Kameneva P, Artemov AV, Kastriti ME, Faure L, Olsen TK, Otte J, **Mei S**, et al, Single-cell transcriptomics of human embryos identifies multiple sympathoblast lineages with potential implications for neuroblastoma origin, *Nat Genet*. 2021.
 - 21 Qin Q, Fan J, Zheng R, Wan C, **Mei S**, Wu Q, et al. Lisa: inferring transcriptional regulators through integrative modeling of public chromatin accessibility and ChIP-seq data. *Genome Biology*. 2020.
 - 22 Feng M, Jin JQ, Xia L, Xiao T, **Mei S**, Wang X, et al. Pharmacological inhibition of β -catenin/BCL9 interaction overcomes resistance to immune checkpoint blockades by modulating Treg cells. *Sci Adv*. 2019.
 - 23 Zheng R, Wan C, **Mei S**, Qin Q, Wu Q, Sun H, et al. Cistrome Data Browser: expanded datasets and new

- tools for gene regulatory analysis. *Nucleic Acids Res.* 2019.
- 24 Liang T, **Mei S**, Shi C, Yang Y, Peng Y, Ma L, et al. UVR8 Interacts with BES1 and BIM1 to Regulate Transcription and Photomorphogenesis in Arabidopsis. *Dev Cell.* 2018.
- 25 Pan Y, Tian T, Park CO, Lofftus SY, **Mei S**, Liu X, et al. Survival of tissue-resident memory T cells requires exogenous lipid uptake and metabolism. *Nature.* 2017.
- 26 Chen D, Fang L, **Mei S**, Li H, Xu X, Des Marais TL, et al. Regulation of Chromatin Assembly and Cell Transformation by Formaldehyde Exposure in Human Cells. *Environ Health Perspect.* 2017.
- 27 Wang S, Zang C, Xiao T, Fan J, **Mei S**, Qin Q, et al. Modeling cis-regulation with a compendium of genome-wide histone H3K27ac profiles. *Genome Res.* 2016.

Awards and funding

Prostate Cancer Foundation 2023 Young Investigator Awards (Principal Investigator)	2023-2026
<ul style="list-style-type: none"> Investigating tumor and immune cell dysregulation for the treatment of prostate cancer bone metastases 	
Prostate Cancer Foundation Challenge Award (Young Investigators)	2022-2025
<ul style="list-style-type: none"> Activating the NLRP3 Inflammasome to Treat Advanced Prostate Cancer 	
Outstanding Graduates of Nanjing Agricultural University	2012
Ying Cai Scholarship of Nanjing Agricultural University	2011
Second Prize of China Mathematical Modeling Network Challenge Contest	2010

Journal Reviewer

Nature Communications, Cell Reports Medicine, Clinical and Translational Medicine, Frontiers in genetics, Frontiers in Oncology, BMC Genomics

Professional Affiliation

Associate Membership in American Association for Cancer Research (AACR)	2022-present
Society of Chinese Bioscientists in America (SCBA)	2022-present

Professional Activities

9th International Conference on Cancer Research & Drug Development (Invited talk)	11/2024
The 31st PCF Annual Scientific Retreat (Poster)	10/2024
18th PQG Conference in AI for Genomics and Health	10/2024
Center for cutaneous biology and immunology, Henry Ford Health (Invited talk)	07/2024
GU & Prostate Cancer Seminar Series, Emory University (Invited talk)	06/2024
DF/HCC Prostate Cancer Program/SPORE Retreat (Poster)	06/2024
2023 AACR Annual Meeting (Poster)	04/2024
Single Cell Multiomics Live Webinar (Invited virtual talk)	02/2024
The 30st PCF Annual Scientific Retreat (Poster)	10/2023
4th Annual Emerging Scholars in Genome Sciences Symposium at UVA (Invited talk)	09/2023
2023 AACR Annual Meeting (Poster)	04/2023
NextGen Omics US -Single cell and Spatial transcriptomics	04/2023
2022 PQG Conference: Emerging challenges and opportunities in gene editing.	11/2022
5th Annual Single-Cell Proteomics conference	06/2022
PQG annual conference in Quantitative Challenges in Cancer Immunology and Immunotherapy (Poster)	11/2019

Live Broadcast Lecture: Molding Transcription Regulation in Cancer Through Muti-Omics Integration (Poster)	06/2017
Cold Spring Harbor Asia meeting. Precision Cancer Biology: From Targeted to Immune Therapies (Poster)	10/2017
Cold Spring Harbor Asia meeting. Systems Biology of Gene Regulation and Genome Editing	10/2016
The Seventh Bioinformatics and Systems Biology Conference (Poster)	08/2016
Genomic Workshop, Fudan University, Shanghai	07/2015

Teaching Experience

Teaching assistant of Tongji Bioinformatics Summer School	2016
Teaching Assistant of 2013 Dragon Star Bioinformatics Courses	2013

Mentoring

Yana Ruchiy, PhD students, Karolinska Institute	09/2022-11/2022
Adele Alchahin, PhD students, Karolinska Institute	04/2022-08/2022
Ziyi Hou, Master students, Harvard Medical School	05/2019-10/2019
Rongbin Zheng, Graduate students, Tongji University	09/2014-05/2016
