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Academic Appointments

Year(s)	Field of study	Position	Institution and Location
2023 - present	Functional genomics	Assistant Professor	Chinese Academy of Medical Sciences & Peking Union Medical College., Tianjin, China
2021 - 2022	Functional genomics	co-PI	Chinese Academy of Medical Sciences & Peking Union Medical College., Tianjin, China

Education and Training

Graduate Training

Year(s)	Field of study	Position	Institution and Location
2017 - 2020	3D genomics	Postdoc researcher	Department of Pathology, UT Southwestern medical center, Dallas, USA

Education

Year(s)	Field of study	Degree	Institution and Location
2012 - 2017	Bioinformatics	Ph.D.	Tsinghua University, Beijing, China
2008 - 2012	Biology	B.S.	Shandong University, Jinan, China

Awards

1. National scholarship (2016, Tsinghua University)
2. Bayer first-class scholarship (2014, Bayer-Tsinghua Joint Research Center, the only one first-class scholarship)
3. Doctoral freshman scholarship (2012, Tsinghua University, one of the 9 selected students in life science college)
4. Principle's scholarship (2011, Shandong University, one of the 30 selected students out of over 40,000 students)
5. National scholarship (2010, 2011, Shandong University)
6. First-class scholarship (2009, 2010, 2011, Shandong University)
7. Top volunteer of Shandong Province (2011, Shandong Province, one of the ten selected volunteers)

8. Outstanding undergraduates of Shandong Province (2011, Shandong Province, one of the ten selected students)

Publications

(co-)first-author; *(co-)corresponding author.

1. **Jiapei Yuan**^{#,*}, Yang Tong[#], Le Wang, Xiaoxiao Yang, Xiaochuan Liu, Meng Shu, Zekun Li, Wen Jin, Chenchen Guan, Yuting Wang, Qiang Zhang^{*}, Yang Yang^{*}. A compendium of genetic variations associated with promoter usage across 49 human tissues. *Nature Communications*. 2024 Oct 9;15(1):8758. PMID: 39384785.
2. **Jiapei Yuan**^{#,*}, Jingliao Zhang[#], Beibei Zhao, Fang Liu, Tianfeng Liu, Yongjuan Duan, Yumei Chen, Xiaojuan Chen, Yao Zou, Li Zhang, Ye Guo, Wenyu Yang, Yang Yang, Jun Wei^{*}, Xiaofan Zhu^{*}, Yingchi Zhang^{*}. Single-cell transcriptomic analysis of the immune microenvironment in pediatric acute leukemia. *Cancer Letters*. 2024 Jun 4;217018. PMID: 38844062.
3. Xiaochuan Liu[#], Hao Chen[#], Zekun Li, Xiaoxiao Yang, Wen Jin, Yuting Wang, Jian Zheng, Long Li, Chenghao Xuan, **Jiapei Yuan**^{*}, Yang Yang^{*}. InPACT: a computational method for accurate characterization of intronic polyadenylation from RNA sequencing data. *Nature Communications*. 2024 Mar 22;15(1):2583. PMID: 38519498.
4. Zekun Li[#], Gerui Liu[#], XiaoXiao Yang[#], Meng Shu, Wen Jin, Yang Tong, Xiaochuan Liu, Yuting Wang, **Jiapei Yuan**^{*}, Yang Yang^{*}. An atlas of cell-type-specific interactome networks across 44 human tumor types. *Genome Medicine*. 2024 Feb 12;16(1):30. PMID: 38347596.
5. **Jiapei Yuan**[#], Yang Tong[#], Xiaochuan Liu, Mulin Jun Li, Qiang Zhang^{*}, Yang Yang^{*}. eaQTLdb: An atlas of enhancer activity quantitative trait loci across cancer types. *International Journal of Cancer*. 2023 Jul 1;153(1):111-119, PMID: 36840614.
6. **Jiapei Yuan**, Kathleen E Houlahan, Susmita G Ramanand, Sora Lee, GuemHee Baek, Yang Yang, Yong Chen, Douglas W Strand, Michael Q Zhang, Paul C Boutros, Ram S Mani^{*}. Prostate cancer transcriptomic regulation by the interplay of germline risk alleles, somatic mutations and 3D-genomic architecture. *Cancer Discovery*, 2022, Dec 2;12(12):2838-2855, PMID: 36108240.
7. Susmita G Ramanand[#], Yong Chen[#], **Jiapei Yuan**[#], Kelly Daescu, Maryou Bk Lambros, Kathleen E Houlahan, Suzanne Carreira, Wei Yuan, GuemHee Baek, Adam Sharp, Alec Paschalis, Mohammed Kanchwala, Yunpeng Gao, Adam Aslam, Nida Safdar, Xiaowei Zhan, Ganesh V Raj, Chao Xing, Paul C Boutros, Johann de Bono, Michael Q Zhang^{*}, Ram S Mani^{*}. The Landscape of RNA Polymerase II Associated Chromatin Interactions in Prostate Cancer. *Journal of Clinical investigation*, 2020 Aug 3;130(8):3987-4005, PMID: 32343676.
 - Spotlight: Demystifying Cancer Etiology via 3D Genome Mapping. *Trends Genet*. 2020 Sep;36(9):634-637, PMID: 32561118.
8. **Jiapei Yuan**[#], Jingrui Li[#], Yang Yang, Chang Tan, Yumin Zhu, Long Hu, Yijun Qi^{*}, Zhi John Lu^{*}. Stress-responsive regulation of long non-coding RNA polyadenylation in *Oryza sativa*. *The Plant Journal*, 2018 Mar;93(5):814-827, PMID: 29265542.

9. **Jiapei Yuan**[#], Ye Zhang[#], Jinsong Dong, Yuzhe Sun, Boon L Lim, Dong Liu^{*}, Zhi John Lu^{*}. Systematic characterization of novel lncRNAs responding to phosphate starvation in *Arabidopsis thaliana*. **BMC Genomics**, 2016 Aug 18;17:655, PMID: 27538394.
10. Chao Di[#], **Jiapei Yuan**[#], Yue Wu, Jingrui Li, Huixin Lin, Long Hu, Ting Zhang, Yijun Qi, Mark B Gerstein, Yan Guo, Zhi John Lu^{*}. Characterization of stress-responsive lncRNA in *Arabidopsis thaliana* by integrating expression, epigenetic and structural features. **The Plant Journal**, 2014 Dec;80(5):848-61, PMID: 25256571. (ESI highly cited paper, in the top 1% of the academic field of Plant & Animal Science).
11. **Jiapei Yuan**[#], Haowen Zhang H, Zhi John Lu^{*}. Progress on Bioinformatic Research of lncRNA. **Progress in biochemistry and biophysics**, 2013, 40(7): 634-640.
12. Xiaochuan Liu[#], Wen Jin[#], Dengyi Bao, Tongxin He, Wenhui Wang, Zekun Li, Xiaoxiao Yang, Yang Tong, Meng Shu, Yuting Wang, **Jiapei Yuan**, Yang Yang^{*}. DIPAN: Detecting personalized intronic polyadenylation derived neoantigens from RNA sequencing data. **Computational and Structural Biotechnology Journal**. 2024 Dec;23:2057-2066. PMID: 38783901.
13. Yuting Wang^{*}, Meng Shu, Tianqiang Wang, Tongxin He, **Jiapei Yuan**, Yang Yang^{*}. Comprehensive characterization of somatic mutations associated with chimeric RNAs in human cancers. **International Journal of Cancer**. 2024 Aug 15;155(4):683-696. PMID: 38613405.
14. Yan Li[#], Hongyan Liu[#], Shuting Ye, Bumei Zhang, Xiaopei Li, Jiapei Yuan, Yongrui Du, Jianmei Wang^{*}, Yang Yang^{*}. The effects of coagulation factors on the risk of endometriosis: a Mendelian randomization study. **BMC Medicine**, 2023 May 25;21(1):195, PMID: 37226166.
15. Kathleen E. Houlahan, **Jiapei Yuan**, Tommer Schwarz, Julie Livingstone, Natalie S. Fox, Weerachai Jaratlerdsiri, Job van Riet, Kodi Taraszka, Natalie Kurganovs, Jocelyn Sietsma Penington, Chol-Hee Jung, Helen Zhu, Takafumi N Yamaguchi, Jue Jiang, Lawrence E Heisler, Richard Jovelín, Susmita G Ramanand, Connor Bell, Edward O'Connor, Shingai B.A. Mutambirwa, Ji-Heui Seo, Mark M. Pomerantz, Amar U. Kishan, Niall M. Corcoran, Robert G. Bristow, Sebastian M. Waszak, Riana M.S. Bornman, Alexander Gusev, Martijn P. Lokema, Joachim Weischenfeldt, Rayjean Hung, Housheng H. He, Vanessa M. Hayes, Bogdan Pasaniuc, Matthew L. Freedman, Christopher M. Hovens, Ram S. Mani, Paul C. Boutros^{*}. Germline polymorphisms shape the somatic architecture of prostate cancer. **bioRxiv**. Under revision in high-impact journal.
16. Ahmed Abbas, Khyati Chandratre, Yunpeng Gao, **Jiapei Yuan**, Michael Q. Zhang^{*}, Ram S. Mani^{*}. ChIPr: accurate prediction of cohesin-mediated 3D genome organization from 2D chromatin features. **Genome Biology**, 2024 Jan 12;25(1):15. PMID: 38217027.
17. Xiaoxiao Yang[#], Yang Tong[#], Gerui Liu[#], **Jiapei Yuan**, Yang Yang^{*}. scAPAAtlas: an atlas of alternative polyadenylation across cell types in human and mouse. **Nucleic Acids Research**, 2022 Jan 7;50(D1):D356-D364, PMID: 34643729.

18. Kathleen E Houlahan, Yu-Jia Shiah, Alexander Gusev, **Jiapei Yuan**, Musaddeque Ahmed, Anamay Shetty, Susmita G Ramanand, Cindy Q Yao, Connor Bell, Edward O'Connor, Vincent Huang, Michael Fraser, Lawrence E Heisler, Julie Livingstone, Takafumi N Yamaguchi, Alexandre Rouette, Adrien Foucal, Shadrielle Melijah G Espiritu, Ankit Sinha, Michelle Sam, Lee Timms, Jeremy Johns, Ada Wong, Alex Murison, Michèle Orain, Valérie Picard, Hélène Hovington, Alain Bergeron, Louis Lacombe, Mathieu Lupien, Yves Fradet, Bernard Têtu, John D McPherson, Bogdan Pasaniuc, Thomas Kislinger, Melvin L K Chua, Mark M Pomerantz, Theodorus van der Kwast, Matthew L Freedman, Ram S Mani, Housheng H He, Robert G Bristow, Paul C Boutros*. Genome-wide germline correlates of the epigenetic landscape of prostate cancer. *Nature Medicine*, 2019 Oct;25(10):1615-1626, PMID: 31591588.

19. Qian Zheng, Peipei Liu, Ge Gao, **Jiapei Yuan**, Pengfeng Wang, Jinliang Huang, Leiming Xie, Xinping Lu, Fan Di, Tanjun Tong, Jun Chen, Zhi Lu, Jisong Guan, Geng Wang*. Mitochondrion-processed TERC regulates senescence without affecting telomerase activities. *Protein & Cell*, 2019 Sep;10(9):631-648, PMID: 30788732.

20. Ying Cheng, Peipei Liu, Qian Zheng, Ge Gao, **Jiapei Yuan**, Pengfeng Wang, Jinliang Huang, Leiming Xie, Xinping Lu, Tanjun Tong, Jun Chen, Zhi Lu, Jisong Guan, Geng Wang*. Mitochondrial trafficking and processing of telomerase RNA TERC. *Cell Reports*, 2018 Sep 4;24(10):2589-2595, PMID: 30184494.

21. Yang Yang[#], Lei Chen[#], Jin Gu[#], Hanshuo Zhang[#], **Jiapei Yuan**, Qiuyu Lian, Guishuai Lv, Siqi Wang, Yang Wu, Yu-Cheng T Yang, Dongfang Wang, Yang Liu, Jing Tang, Guijuan Luo, Yang Li, Long Hu, Xinbao Sun, Dong Wang, Mingzhou Guo, Qiaoran Xi, Jianzhong Xi, Hongyang Wang, Michael Q Zhang*, Zhi John Lu*. Recurrently deregulated lncRNAs in hepatocellular carcinoma. *Nature Communications*, 2017 Feb 13;8:14421, PMID: 28194035. (ESI highly cited paper).

22. Yang Yang[#], Yu-Cheng T Yang[#], **Jiapei Yuan**, Zhi John Lu*, Jingyi Jessica Li*. Large-scale mapping of mammalian transcriptomes identifies conserved genes associated with different cell differentiation states. *Nucleic Acids Research*, 2017 Feb 28;45(4):1657-1672, PMID: 27980097.

23. Zhonglin Tang[#], Yang Wu[#], Yalan Yang, Yu-Cheng T Yang, Zishuai Wang, **Jiapei Yuan**, Yang Yang, Chaoju Hua, Xinhao Fan, Guanglin Niu, Yubo Zhang, Zhi John Lu*, Kui Li*. Comprehensive analysis of long non-coding RNAs highlights their spatio-temporal expression patterns and evolutionary conservation in *Sus scrofa*. *Scientific Reports*, 2017 Feb 24;7:43166, PMID: 28233874.