

Keren Jia

MD, PhD

10 Shanggu Street, Xiamen, Fujian, China 361003

✉ jia.keren@outlook.com

🌐 keren-jia.com

in [keren-jia](#)

🐦 [Keren_Jia](#)

Research Interests

- Gastrointestinal cancer biology and precision medicine: investigating the molecular mechanisms and evolving clinical landscape of gastric and gastroesophageal junction cancers, aiming to translate biological and cohort-level insights into improved precision diagnosis and treatment strategies.
- Tumor immune microenvironment and immunotherapy: characterizing multidimensional and spatially resolved immune landscapes in gastric cancer using multiplex immunohistochemistry, and dissecting the determinants of response and resistance to PD-1/PD-L1 blockade, including tertiary lymphoid structures and immune–metabolic crosstalk.
- Tumor microbiome and host–microbe interactions: exploring how *Helicobacter pylori* and the gut and intratumoral microbiota shape an immunotherapy-sensitive tumor microenvironment through short-chain fatty acid–mediated metabolic–immune signaling axes.
- Pathomics, machine learning, and multi-omics integration: developing machine learning models that integrate pathological, multi-omics, and clinical data to predict cancer prognosis and immunotherapeutic outcomes.

Education

2020.09 – **PhD in Oncology**, *Peking University*, Beijing, CN
2025.07

2014.09 – **Bachelor of Medicine (U.S. MD Equivalent)**, *Nantong University*, Jiangsu, China
2020.06

Professional Experience

2025.07 – **Deputy Chief Physician, Department of Endoscopy**, *The First Affiliated Hospital of Xiamen University*, Xiamen, Fujian, China
present

Research Experience

2024.05 – **Research Trainee**, *Mayo Clinic*, Rochester, MN, US
2024.08

2019.07 – **Visiting Student (Disease Biology)**, *Corpus Christi College, University of Cambridge*,
2019.08 Cambridge, UK

Selected Publications

2026

Journal **Jia K#**, Chen Y#, Dai D#, Xie Y, Peng H, Cao Y, Zou H, Qiu C, Tan Y, Zhang X, Lu Z, Yin X*, Peng Z*, Li J*, Shen L*. Impact of *Helicobacter pylori* infection on gut and intratumoral microbiome and its association with immunotherapy response in gastrointestinal cancer. *BMC Med.* 2026 Jan 12;24(1):79.

2025

Journal Chen Y#, **Jia K#**, Xie Y#, Yuan J, Liu D, Jiang L, Peng H, Zhong J, Li J, Zhang X, Shen L*. The current landscape of gastric cancer and gastroesophageal junction cancer diagnosis and treatment in China: a comprehensive nationwide cohort analysis. *J Hematol Oncol.* 2025 Apr 15;18(1):42.

- Journal Xie Y#, Peng H#, Hu Y#, **Jia K#**, Yuan J, Liu D, Li Y, Feng X, Li J, Zhang X, Sun Y, Shen L*, Chen Y*. Immune microenvironment spatial landscapes of tertiary lymphoid structures in gastric cancer. BMC Med. 2025 Feb 4;23(1):59.
2024
- Journal Chen Y#, **Jia K#**, Chong X, Xie Y, Jiang L, Peng H, Liu D, Yuan J, Li Y, Feng X, Sun Y, Li J, Zhang X*, Shen L*. Implications of PD-L1 expression on the immune microenvironment in HER2-positive gastric cancer. Mol Cancer. 2024 Aug 20;23(1):169.
- Journal **Jia K#**, Chen Y#, Xie Y#, Wang X, Hu Y, Sun Y, Cao Y, Zhang L, Wang Y, Wang Z, Lu Z, Li J, Zhang X, Shen L*. Helicobacter pylori and immunotherapy for gastrointestinal cancer. Innovation (Camb). 2024 Jan 8;5(2):100561.
2023
- Journal **Jia K#**, Chen Y#, Xie Y, Chong X, Li Y, Wu Y, Yuan J, Li Y, Feng X, Hu Y, Sun Y, Gong J, Zhang X, Li J, Shen L*. Multidimensional immune profiling in Gastric Cancer Multiplex Immunohistochemistry Atlas from Peking University Cancer Hospital project informs PD-1/PD-L1 blockade efficacy. Eur J Cancer. 2023 Aug;189:112931.
- Journal Jiang F#, **Jia K#**, Chen Y, Ji C, Chong X, Li Z, Zhao F, Bai Y, Ge S, Gao J, Zhang X, Li J, Shen L*, Zhang C*. ANO1-Mediated Inhibition of Cancer Ferroptosis Confers Immunotherapeutic Resistance through Recruiting Cancer-Associated Fibroblasts. Adv Sci (Weinh). 2023 Aug;10(24):e2300881.
2022
- Journal **Jia K#**, Chen Y#, Sun Y, Hu Y, Jiao L, Ma J, Yuan J, Qi C, Li Y, Gong J, Gao J, Zhang X, Li J, Zhang C*, Shen L*. Multiplex immunohistochemistry defines the tumor immune microenvironment and immunotherapeutic outcome in CLDN18.2-positive gastric cancer. BMC Med. 2022 Jul 11;20(1):223.
- Journal Chen Y#, **Jia K#**, Sun Y#, Zhang C#, Li Y, Zhang L, Chen Z, Zhang J, Hu Y, Yuan J, Zhao X, Li Y, Gong J, Dong B, Zhang X, Li J, Shen L*. Predicting response to immunotherapy in gastric cancer via multi-dimensional analyses of the tumour immune microenvironment. Nat Commun. 2022 Aug 18;13(1):4851.
2020
- Journal **Jia K**, Wu Y, Huang J, Chen J, Wei H, Wu H. Wide-ranging analysis of survival-related alternative splicing events in invasive breast carcinoma. Oncol Lett. 2020 Aug;20(2):1866–1878.
2019
- Journal **Jia K**, Wu Y, Huang J, Wu H. Survival-Associated Alternative Splicing Events in Pan-
Renal Cell Carcinoma. Front Oncol. 2019 Nov 27;9:1317.
- Journal **Jia K**, Wu Y, Ju J, Wang L, Shi L, Wu H, Jiang K, Dong J. The identification of gene signature and critical pathway associated with childhood-onset type 2 diabetes. PeerJ. 2019 Feb 6;7:e6343.

Fundings

- Principal Investigator Substrate–Microbiota–Metabolism Coordinated Regulation of Sustained Butyrate Production and Its Role in Gastric Cancer, Young Scientists Fund (Category-C, No. 82600019), National Natural Science Foundation of China, 2027/01–2029/12, RMB 300,000, Approved
- Co-Principal Investigator Health and Medical Research Fund (HMRF), Health Bureau of the Government of the Hong Kong Special Administrative Region, the People's Republic of China, Evaluating HAS as a Therapeutic Approach for Obesity: A Human Trial, 2026/09–2028/08, HKD 1,226,200, Ongoing

- Principal Investigator Mechanistic Study on the Shaping of an Immunotherapy-Sensitive Gastric Cancer Microenvironment by *Helicobacter pylori* through the Short-Chain Fatty Acids-GPR41-MAPK Axis, Student Basic Research Program (PhD Candidate, No. 823B2069), National Natural Science Foundation of China, 2024/01–2025/12, RMB 300,000, Completed
- Principal Investigator Machine learning–based characterization of the gastric cancer immune microenvironment and prediction of therapeutic response, Innovation Fund for Outstanding Doctoral Candidates of Peking University Health Science Center (BMU2021BSS001), 2021/06–2022/05, RMB 20,000, Completed

Awards

- 2026 **Fujian Provincial High-Level Talent (Category C)**, *Talent Work Office of the CPC Fujian Provincial Committee*
- 2025 **Outstanding Graduate of Beijing Municipality**, *Beijing Municipal Commission of Education*
- 2025 **Outstanding Graduate of Peking University**, *Peking University*
- 2025 **May Fourth Medal for Students**, *Peking University*
- 2024 **Young Talent Support Project**, *China Association for Science and Technology (CAST)*
- 2024 **Student of the Year**, *Peking University*
- 2024 **EFFORT Scholarship**, *US Chinese Anti-Cancer Association*
- 2023 – 2024 **Award for Academic Innovation**, *Peking University*
- 2022 – 2024 **National Scholarship for Doctoral Students**, *Ministry of Education of the People's Republic of China*
- 2018 **Jiangsu Provincial Government Scholarship Program for Undergraduate Overseas Studies**, *Jiangsu Education Services for International Exchange*
- 2016 **National Scholarship for Undergraduate Students**, *Ministry of Education of the People's Republic of China*

Theses

- PhD thesis *Omics Analysis of the Immune Microenvironment and Immunotherapy in Gastric Cancer*, (2025). Supervisors: Lin Shen

Conferences

- 2023
- Oral Presentation Predicting response to immunotherapy in gastric cancer via multi-dimensional analyses. Next Gen Science: Emerging Technologies / Cancer, Lindau Nobel Laureate Meeting, 2023.
- Poster Presentation Abstract 5902: The immune features of *Helicobacter pylori*-positive gastric cancer provides insights into immunotherapy. Tumor Biology, The American Association for Cancer Research (AACR) Annual Meeting, 2023.
- 2022
- Poster Presentation Abstract 6107: Multiplex immunohistochemistry defined the tumor immune microenvironment and immunotherapeutic outcome in CLDN18.2-positive gastric cancer. Tumor Biology, The American Association for Cancer Research (AACR) Annual Meeting, 2023.

Editorial Board Memberships

- 2026.08 – **Editorial Board Member**, *Functional & Integrative Genomics*
present JCR Q2, GENETICS & HEREDITY, IF 4.0, Rank 53/192.

- 2026.06 – **Young Editorial Board Member**, *The Innovation Oncology* (*The Innovation series*)
2029.06 Appointed at the journal's inception; parent journal The Innovation, IF 39.5.
- 2025.08 – **Young Editorial Board Member**, *Medicine Advances*
2028.12 Appointed for two consecutive terms (2025.08–2025.12; 2026.01–2028.12). JCR Q1, MEDICINE, GENERAL & INTERNAL, IF 5.3, Rank 38/336.

Peer Review Service

Total: 51 manuscript reviews, spanning 2019–2026.

- Biochemical Genetics (1)
- BMC Cancer (1)
- BMC Endocrine Disorders (1)
- Cancer Immunology, Immunotherapy (2)
- Discover Oncology (3)
- European Journal of Medical Research (1)
- Frontiers in Immunology (5)
- Frontiers in Medicine (1)
- Frontiers in Oncology (10)
- Frontiers in Radiology (1)
- Functional & Integrative Genomics (1)
- Medicine Advances (6)
- PeerJ (3)
- Scientific Reports (3)
- The Innovation Medicine (1)
- The Innovation Oncology (11)
- World Journal of Surgical Oncology (1)

News Coverage

- https://mp.weixin.qq.com/s/gva3e0_Z3wpxXQA2hLrXRA
- <https://bynews.bjmu.edu.cn/zhxw/2025/142de65eacd04b519ccbd7764cd1340c.htm>
- <https://news.pku.edu.cn/xwzh/bd467a5850f6480dac84c0c7f890e7d8.htm>
- https://mp.weixin.qq.com/s/_aQhyErfeoRWxSEyuqZn3A
- <https://mp.weixin.qq.com/s/Mgjih7SinZRehWhWAeSvrw>
- <https://mp.weixin.qq.com/s/UCX7m1QOnmRYbTJRrpWvyg>
- <https://mp.weixin.qq.com/s/kYFb6HAnOMseY1vv6kIn8g>
- <https://www.pkuef.org/info/1020/5802.htm>
- <https://mediatheque.lindau-nobel.org/recordings/41239/next-gen-science>

Software

- GMAP: <https://www.pku-shenlab.cn/GMAP/>

About me

- Nationality: CHINA
- Languages spoken: Chinese (native), English (fluent)
- Programming languages: Python, R