

Guanglan Lin, Ph.D.

Data-driven Precision Medicine · Computational & Clinical Data Integration

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Summary

Data-driven biomedical researcher with 8+ years of research experience in biomedical and translational research, specializing in multi-omics integration and computational analysis of clinical datasets. I am seeking structured doctoral training in data-driven precision medicine to develop rigorous computational expertise for disease progression modeling, patient stratification, and biomarker discovery in complex diseases.

Education

The Chinese University of Hong Kong (Hong Kong SAR) 2021–2024

Ph.D., Medical Sciences

- Research focus: multi-omics integration, drug response profiling, and precision medicine

Tsinghua University (Beijing & Shenzhen, China) 2018–2021

M.Phil., Precision Medicine and Healthcare

Fujian Agriculture and Forestry University (Fuzhou, China) 2014–2018

B.Sc., Biological Sciences

Research Experience

St. Jude Children's Research Hospital ☐ Postdoctoral Research Associate Jan–Sep 2025

- Performed high-throughput drug sensitivity profiling on patient samples, PDX models, and leukemia cell lines, with initial exposure to Linux-based HPC workflows for large-scale data processing.

Hong Kong Children's Hospital ☐ Ph.D. Researcher Aug 2021–Oct 2024

- Established and led pediatric ALL drug screening platforms, generating large-scale drug response datasets from >60 patient samples and associated PDX models for downstream integrative analysis.
- Curated longitudinal clinical data for >60 pediatric T-ALL patients (1999–2024) across multiple treatment protocols, integrating these records with drug response and multi-omics data (RNA-seq, WGS) to support data analysis and reporting.
- Integrated multi-omics data with clinical metadata to identify drug response-associated genes and actionable biomarkers.

Tsinghua-UC Berkeley Shenzhen Institute ☐ M.Phil. Researcher Aug 2018–Jun 2021

- Combined experimental research with analysis of public genomics datasets (TCGA, GEO) in a translational research context

Fujian Agriculture and Forestry University ☐ Undergraduate Researcher Aug 2014–Jun 2018

- Participated in academic research training, gaining experience in experimental design, data collection, and scientific documentation

Selected Publications & Awards

- Tong PYG, **Lin G**, et al. *Pediatric Blood & Cancer*, 2025. Homoharringtonine in Relapsed/Refractory Paediatric T-Cell Acute Lymphoblastic Leukemia - A Case Series and a Report on the Use of In Vitro Drug Profiling.
- Jiang YP, Liao WJ, Xin QL, Wang R, **Lin G**, et al. *Genes & Diseases*, 2025. Nuclear and cytoplasmic USP30-AS1 coordinately regulate breast cancer progression through HnRNPF/p21 and EZH2/c-Myc/p21 axes.
- Zhang C, Chan KYY, Ng WH, Cheung JTK, Sun Q, Wang H, Chung PY, Cheng FWT, Leung AWK, Zhang X-B, Lee PY, Fok SP, **Lin G**, Leung KTL, et al. *Haematologica*, 2024. CD9 shapes glucocorticoid sensitivity in pediatric B-cell precursor acute lymphoblastic leukemia.
- **Lin G**, et al. *Journal of Cancer*, 2021. RNA-binding protein MBNL2 regulates cancer cell metastasis through miR-182-MBNL2-AKT.
- Zhang M, **Lin G** (*equal contribution*), et al. *IMA Fungus*, 2021. The PHD transcription factor Cti6 is involved in the fungal colonization and aflatoxin B1 biological synthesis of *Aspergillus flavus*.
- **Lin G**, et al. Drug response profiling in childhood T-cell acute lymphoblastic leukemia. ASH Annual Meeting 2023 — Poster Presentation; **ASH Abstract Achievement Award**.
- *Note: Co-author of 6 additional peer-reviewed articles involving transcriptomic analysis, regulatory mechanisms, and pathway-level studies (e.g. Int J Mol Sci, Cell Death & Disease).*

Skills, Languages & Certifications

Data Analysis & Computing:

- R (data manipulation, statistical analysis, visualization), Python (data processing), Linux
- Basic exposure to Linux-based HPC environments for large-scale data processing

Biomedical Data:

- Multi-omics data: RNA-seq and whole-genome sequencing (WGS)
- Drug response and pharmacological profiling data from patient-derived samples and PDX models
- Longitudinal clinical and patient-level datasets across multiple treatment protocols

Methods & Analysis:

- Data preprocessing, quality control, and integration of multi-modal datasets
- Exploratory and statistical analysis of molecular, pharmacological, and clinical data
- Biomarker discovery based on integrative analysis of molecular and clinical features
- Data visualization and result summarization for reporting and presentation

Research Practices:

- Clinical data curation, harmonization, and documentation
- Interdisciplinary collaboration with clinicians and experimental researchers

Languages & Certifications

- Mandarin Chinese (native); English (professional proficiency); Cantonese (conversational).
- National Tour Guide Certificate (China); National Public Nutritionist (Level III, China).