

# 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).