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**Research Interests: Utilizing multi-omics and multi-modality datasets to develop AI models of:**

- A. Cell fate transition (cellDancer, Nature Biotechnology, 2023)**
- B. Large language models for nature language and omics in biomedical domain**
- C. Multi-modality learning for biomedical image and omics**

**Strengths or Unique Resources:** We have developed AI powered systems for basic biological research and translational studies including cell fate transition inference, tissue microenvironment analysis, clinical decision support, diagnosis and prognosis summarization, text retrieval from scientific publications. To pre-training the AI models like large language models, multi-modality foundation models and diffusion models, we created atlas of scRNA-seq and spatial transcriptomics data.

**Type of collaborator you seek: 1. Cell fate or cell state transition associated studies. 2. Disease specific or population specific omic or image-associated studies by training domain specific foundation models.**

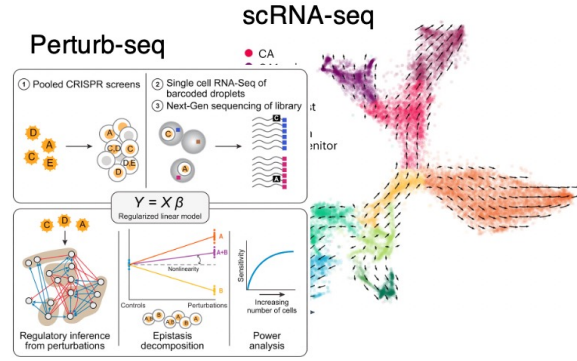
**Publication List (link & qr code):** <https://scholar.google.com/citations?user=9ZT29A4AAAAJ&hl=en>

**Lab or Faculty website (link & qr code):** <https://guangyuwanglab.github.io/web/>

**LinkedIn (link & qr code):** <https://www.linkedin.com/in/guangyu-wang-27696819b/>

# Wang lab's scope

## Single Cell sequencing



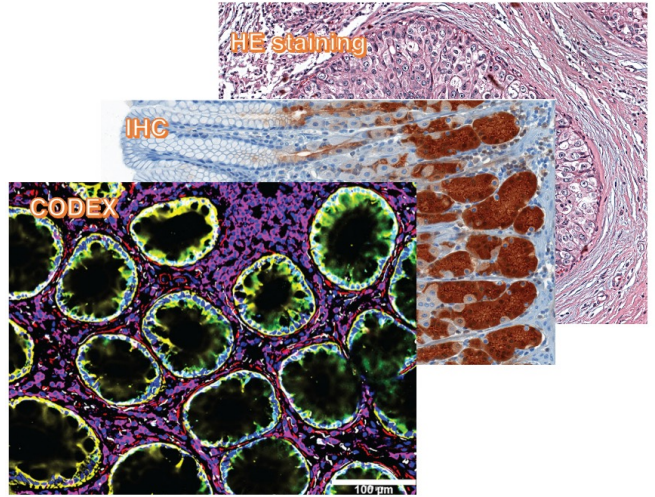
**Cellular dynamic and GRN (Intrinsic)**

**Microenvironment and Signaling (Extrinsic)**

**Diagnosis and prognosis**

**Personalized therapeutics**

## Image technology



## Spatial Sequencing technology

