

# Yiyang LIU

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## EDUCATION

**Mailman School of Public Health, Columbia University, New York** Sep 2019 – Present

- **Degree:** Master of science – **Major:** Biostatistics

**School of Pharmacy, Fudan University (FDU), Shanghai** Jul 2015 - Sep 2019

- **Degree:** Bachelor of science – **Major:** Pharmaceutical Science.
- Awards: Outstanding Student of School of Pharmacy (top 5%)

**Roche Pharmaceutical Ltd., Shanghai** Sep 2017 - Nov 2017

- Participated in the R U Next Project, led a team to design a medical insurance negotiation scheme for a certain drug by mining and analyzing historical data and won *the Best Scheme Reward* in the final case competition.

## RESEARCH EXPERIENCE

**RNA-seq data analysis in Quartet program | RA** May 2018 – March 2019

Advisor: **Leming Shi**, Professor, School of Life Sciences, FDU

- Utilized R to analyze RNA-seq data, including studying the consistency of two technical replicates, PCA, HCA, DEG analysis, etc. Employed ggplot2, Heatmap2 and other packages to visualize the results.
- Wrote the PCA and HCA part of the RNA-seq Standard Operating Procedure for the group.
- Studied the effects of different aligners (including TopHat and HISAT2) on the quality of RNA-seq data.
- Identified the pipeline with high accuracy for RNA benchmarking by consulting papers, including short-read and long-read isoform detection.

**Biomimetic nanorods targeting tumors | RA** Jun 2017 – May 2018

Advisor: **Zhiqing Pang**, Associate Professor, Department of Pharmaceutics, FDU

- Wrote a research proposal and obtained funding from the Wang Dao Program of Fudan's Undergraduate Research Opportunities Program which is customarily given to less than 5 percent of all undergraduate students as the highest honor during undergraduate research.
- Wrote Chapter 13 of *Polysaccharide Carriers for Drug Delivery* (in press at Elsevier), focusing on starch-based and dextran-based nanoparticle delivery systems for cancer therapy.
- Synthesized platelets-membrane-coated gold nanorods for targeting orthotopic breast tumor.
- Organized experimental data and performed data analysis.

## PROFESSIONAL EXPERIENCE

**Abbott Laboratories** Shanghai, China

PV/MI Intern May 2019 – Jul 2019

- Coordinate collection and edition of the articles for the digital platform of Medical department.

**Xinhua Hospital Affiliated to Shanghai JiaoTong University** Shanghai, China

Summer Intern, Department of Pharmacy Jul 2018 – Aug 2018

- Assisted in gene tests, combined daily experimental data and categorized massive collected data.

**Shanghai Biopharmaceutics Industry Association** Shanghai, China

Winter Intern Dec 2016 – Feb 2017

- Assisted in organizing the Annual Council of Zhangjiang Pharmaceutical Enterprises at Novartis. 50 managers of pharmaceutical enterprises attended the meeting.

## LEADERSHIP

**Student Union, School of Pharmacy | Minister of Information Department** Nov 2016 – Nov 2017

- Managed the Wechat platform of FDUpharmacy and attracted over 9500 subscribers.
- Directed the News Broadcast of School of Pharmacy, with more than 1000 viewers.
- Collected daily data of the platform and analyzed the correlation curves between the content of the articles and the hit number.

## SKILLS AND OTHERS

- Computer skills: Advanced in R, Origin, Python, Linux, VB, PS, Access, Excel, etc.
- Language: Chinese (native), English (fluent)