Gaotong (Gloria) Liu

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EDUCATION

Columbia University, Mailman School of Public Health, Expected May 2021 Master of Science (**MS**) in Biostatistics (Theory and Methods track),

New York, NY

• Related courses: Data Science, Biostatistical Methods

The University of Hong Kong, Visiting Program, Fall 2018

Hong Kong

• Enrolled in Multivariable calculus, Statistical inference and Computer programming

The Hong Kong Polytechnic University, Fall 2014 – Spring 2018

Hong Kong

Bachelor of Science (BS) in Applied Biology with Biotechnology with first class honors

• GPA: 3.94/4.0 (Award)

The University of Queensland, Exchange Program, Spring 2017

Brisbane, Australia

• Enrolled in courses on Genomics & Bioinformatics and Biostatistics

RESEARCH EXPERIENCE

Shenzhen Institutes of Advanced Technology, CAS, August 2018

Shenzhen, China

Dr. Yin Peng's group, Research Center for Biomedical Information Technology

- Effectively analyzed gene expression data by <u>differential expression analysis</u> and <u>GO, KEGG enrichment</u> analysis using R packages
- Studied R, Python programming and various algorithms applied to GWAS, TWAS

The Hong Kong Polytechnic University, February 2016 – May 2018

Hong Kong

Prof. Wong Mansau's group, Department of Applied Biology and Chemical Technology

- Efficiently used bioinformatical tool based on R to analyze <u>RNA-sequencing data</u>, mainly using <u>differential and enrichment analysis</u> and narrowed down to 20 targets for research of Icarriin's effect on osteoporosis
- Investigated molecular mechanisms of the Icariin's effect on apoptosis and cell proliferation of osteoblast using bioinformatics and techniques such as flow cytometry, Real-time PCR, cell culture (MC3T3-E1), MTS assay, Western Blot

Shanghai Institute for Biological Sciences, CAS, Jun-Augt 2016/Jul-Aug 2017.

Shanghai, China

Prof. Hu Ronggui's group, Institute of Biochemistry and Cell Biology

- Obtained the chemicals (E3 ubiquitin-protein ligase) with a <u>statistical significance</u> which can influence retinoic acid signal transduction using immunoblotting, immunoprecipitation and DNA cloning
- Accurately followed research protocols and conducted high-throughput screening of chemicals on retinoic acid signal transduction by the dual-luciferase reporter assay

EXTRACURRICULAR ACTIVITIES

Orientation Program, The Hong Kong Polytechnic University, August 2015 *Group Leader*

Hong Kong

• Introduced university features to full-time, non-local undergraduate freshmen up to 50 students, answered enrollment questions

Education Voluntary Service, University Community, May 2015 *Activity Coordinator*

Hong Kong

- Instructed 30 junior high students from Fujian province to study and played games with them
- Presented global and domestic news to them, encouraged them to study further and achieve their dreams

SKILLS

Languages: Native in Mandarin, Elementary in Japanese, Basic in Cantonese

Computer Skills: Proficient in Microsoft Office (Word, Excel and Power Point), Proficient in R, some

knowledge of Python, currently studying machine learning with Python

Hobbies: Badminton, playing Pipa, swimming, animation