Date of Birth: 08/31/1998

Hanfeng Lin

+86-15061832637 · hanfeng.lin.2016@uni.strath.ac.uk 39-401 Tianjing Huayuan, Wuxi City, China **EDUCATION**

China Pharmaceutical University (CPU), Nanjing, China

09/2016-06/2020

B.S. in Pharmacy (Biochemistry and Pharmacology) GPA: 3.88/4.0

University of Strathclyde, Glasgow, UK (anticipated)

09/2019-06/2020

BSc in Biochemistry and Pharmacology

RESEARCH EXPERIENCE

Investigator & Coach, IGEM: Blue Light Detecting Strain Based on Cas1-Cas2 07/2019-present Instructed by Dr. Yibei Xiao

Construct of the blue-light sensitizing protein (YF1, FixJ) on the plasmid and gene expression Construct the promoter that can bind to the blue-light sensitizing protein on the upstream of plasmid Cas3. (Cas3 could inhibit the continuous expression of Cas1-Cas2 on another plasmid, thus inhibiting the space acquisition process of CRISPR array.)

Deduce the blue light exposure time and intensity of the strain through PCR amplifying CRISPR array.

Investigator, Identification of Benzyl Isoquinoline Alkaloids (BIA) Genes in 03/2019-present Corydalis by Full-length Transcriptome Data Analysis

Instructed by Dr. Yucheng Zhao

Obtain the first full-length transcription group of Corydalis, analyze the related transcripts of enzymes and verified that all BIA-synthetic proteins in Corydalis root had their corresponding mRNA

Classify O-methyltransferase (OMT) protein family by constructing phylogenetic tree and prepare paper

Investigator, **Biophysical Study on Proteins Related to CRISPR System and Their** 03/2019-present **Activities**

Instructed by Dr. Yibei Xiao

Construct the expression strains and purify key proteins Cas9, Cas1, Csn2 and Cas13a in CRISPR system Obtain RNA by in-vitro transcription of spacer cDNA sequences using purified T7 transcriptase, and research their binding and activity

Analyze the structure of the complex with biophysical methods (X-ray crystallography)

Project leader, Effect of Tripeptidase Gene Knockout by Red Recombinant 05/2018-04/2019 **System on Glutathione Biosynthesis**

Instructed by Dr. Jiyang Xu

- Constructed engineering bacteria pET28a-gsh I and pBAD24-gsh II, screened positive recombinant ions and knock out the tripeptidase gene by using Red recombination system
- Inhibited the expression of tripeptidase and GSH degradation, determined the content of GSH by alloxan method
- Compared data of the glutathione production from the knockout strain and constructed strain, verified knocking out the tripeptidase gene could increase the GSH production

Co-investigator, Effects of Sodium Valerate On Endothelial Stem Progenitor 09/2018-12/2018 Cells in Rats with Uremic Heart Failure

- Worked with seniors to induced rat chronic renal failure (CRF) model by conducting nephrectomy
- Determined hemodynamics, in vitro vascular ring diastolic, renal index and cardiac index
- Provided some data and basis for the clinical application of sodium valproate

PUBLICATION

Zhenglong Wang, Jiyang Xu, Yihan Liu, Jiyu Chen, Hanfeng Lin, Yanli Huang,

Date of Birth: 08/31/1998

Xiaohong Bian, Yucheng Zhao, Selection and validation of appropriate reference genes for real-time quantitative PCR analysis in *Momordica charantia*, Phytochemistry 164 (2019) 1-11, Apr 2019

HONOR & AWARD

The First-class Scholarship of Exploring World Plan	06/2019
2 nd China Undergraduate Life Science Competition (CULSC) Third-prize	11/2018
The Honorary Title of Triple-A student	09/2018
National Scholarship	09/2018
The Honorary Title of Outstanding Volunteer	05/2018
First-class Scholarship from CPU	03/2018
Model of Triple-A student the highest individual honor for students at CPU	12/2017

EXTRACURRICULAR ACTIVITIES

Volunteer, Pharmacy of Nanjing First Hospital

09/2017-01/2018

Helped to put drugs on shelves, operated Novartis drugs dispensing machine, and received incoming clients and guided them to queue up for medication

Volunteer, Clinical Pharmacy China 3.0--sponsored by Merck & Co., Inc.

09/2017

Visited local pharmacies and conducted questionnaires with pharmacy staff and consumers, investigated on the present situation of pharmaceutical services provided by licensed pharmacists in social pharmacy

Volunteer, Jiangsu Development Summit

03/2017-05/2017

Participated in volunteer training, gave introductions of the conference agenda and travel itinerary to the attendees

OTHERS

Lab Skills: Western blot, PCR, qPCR, touch down PCR, Plasmid transformation (chemical & electric), Gene knockout (Red recombination), Protein purification - from DNA sequence to EP tube, AKTA (Gel filtration & Ion exchanger), PAGE (SDS, Urea) and Gel Imaging Scanner

Software: Snapgene, Premiere Primer 5, BioEdit, NCBI BLAST suite, MegaX, PyMOL, PS, AI, Visio, ChemDraw

Language: Chinese (Native); English (Fluent); Japanese (Moderate)