# Qinan (Alec) Hu

Research Assistant

A self-motivated science graduate with solid research background and good communication skills, seeking to leverage experience and expand expertise in medical research.

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3.67/4.0

Savoy, IL 61874, United States of America ♀

## **EDUCATION**

# M.Sc in Immunology Trinity College Dublin, Ireland

09/2018 - 11/2019

Courses

- Basic Immunology/ Tumor Immunology/ Clinical Immunology/ Immunogenetics/ Parasite Immunology

# **B.Sc in Pharmaceutical Engineering** Jilin University, China

09/2014 - 06/2018 3.07/4.0

Courses

- Biochemistry/ Microbiology/ Molecular Biology/ Physiology/ Organic Chemistry/ Analytical Chemistry/ Pharmacology

# **WORK & RESEARCH EXPERIENCE**

#### **Research Assistant**

University of Illinois at Urbana-Champaign (UIUC)

08/2021 - Present

Tasks

- Assist the development of a novel method using next generation sequencing and bioinformatics approaches to map 3D chromosome architecture, and to explore how the spatiotemporal folding impacts transcription regulation.
- Prepare and design the *in vitro* and *ex vivo* testing for our research project, perform experiments and deliver results.
- Generate SOPs for cell culture, maintain Good Cell Culture Practice, and provide training for undergrads in our lab.
- Keep a trackable record of lab purchase, coordinate with department administration, and respond to audit findings.

### **Visiting Scientist**

Royal College of Surgeons in Ireland (RCSI)

03/2019 - 11/2019

Achievements/Tasks

- Write a literature review and a thesis titled 'CDKN1A Activation in Drug-Resistant Neuroblastoma' based on my research.
- Generate SOPs for RT-qPCR, perform gene selection based on RNA-seq data, design primers and deliver test results.

### **Assistant Lab Manager**

MOE Key Laboratory of Environment and Genes Related to Diseases, Xi'an Jiaotong University

07/2017 - 06/2018

Achievements/Tasks

- Manage an up-to-date inventory of chemicals and consumables, maintain hazard profiles and ensure the safe handling.
- Coordinate international cooperations, schedule meetings, and arrange training sessions for teaching laboratory.
- Establish operation procedures for laboratory equipment, schedule maintenance, and troubleshoot issues.
- Carry out the quality control for newly arrived primers, antibodies, etc. and establish quality standards.

#### WORK & RESEARCH EXPERIENCE

#### Lab assistant

# National Engineering Laboratory for AIDS Vaccine, Jilin University

11/2014 - 07/2016

Achievements/Tasks

- Assist two research projects titled 'DNA Vaccine of Rabies Virus Glycoprotein' and 'Short Nascent cDNA Fragments in the Presence of Nucleocapsid Protein during Reverse Transcription'.
- Testifies antigen specific Th1 immune responses induced by the DNA vaccine we developed.
- Participates in the clone and sequencing of cDNA fragments.

### CONFERENCES

Society for the Study of Reproduction (2021)

54th Annual Meeting, St. Louis, Missouri

Illinois Symposium on Reproductive Sciences (2021) Champaign, Illinois

Matrix Biology Ireland (2019)

6th Annual Meeting, Dublin, Ireland

Australia-China Biomedical Research Conference (2017)

6th Annual Meeting, Xi'an, China

# **TECHNICAL SKILLS**

**Animal Testing** Fully trained for animal care and use under the guide of IACUC. Implement mouse husbandry routine.

Perform intravenous/subcutaneous injection, blood collection, and dissection.

Cell and Tissue

Culture

3+ years of experience in cell culture, take care 10+ mammalian cell lines with good stability, skill in preservation, subculture, and development. Perform hanging drop culture for ovary and testis samples.

Experience in plasmid design and in transfection optimization using lipid based methods across COS7,

HEK293T, and Vero cell lines. Former experience in transformation of plasmic DNA into JM109 and DH5α

**Transfection** 

and

**Transformation** 

competent cells using heat shock method.

IHC and IF

Skill in fixation, staining and microscopy, fully trained for using confocal microscope.

**Other Biology Techniques** 

Flow cytometry, RT-qPCR, ELISA, Western Blotting, DNA/RNA Extraction, Affinity Chromatography

#### VOLUNTEERING

#### Curekids.cn

Committed to making society aware of childhood cancer in China. Carry out the translation of medical reports and literatures into Chinese.

## **INTERESTS**

Hiking

Travelling

Cooking

Skiing

Basketball

Cycling

**Tennis** 

Swimming

Tea ceremony

#### REFERENCES

Dr. Olga Piskareva

Contact: olgapiskareva@rcsi.ie -

Royal College of Surgeons in Ireland (RCSI)

Dr. Xiaojun Li

Contact: xiaojun.li@duke.edu - Duke Human Vaccine Institute

Dr. Feng Gao

Contact: feng.gao@duke.edu - Duke Department of Medicine