

BAI HEI

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EDUCATION

Peking University(Beijing University)

Senior Undergraduate

College of Chemistry and Molecular Engineering(CCME)

Sept. 2015 - July 2019(expected)

Overall GPA: 3.45/4.00

RESEARCH EXPERIENCE

Influenza

Supervisor: Prof. Michael W. Deem

June 2018 - September 2018

Rice University, Houston, TX

- We developed a method to predict H3N2 vaccine efficacy with high accuracy just from sequence information and statistical mechanics model.
- I presented a poster about this project in the 4th Annual Smalley-Curl Institute(SCI) Summer Research Colloquium and a paper for it is in progress to illustrate the findings.

DNA sequence information

Supervisor: Prof. Yiqin Gao

October 2017-Present

Peking University, Beijing, China

- Calculation of the long-range correlation of DNA sequences of different creatures, and data analysis for the relationship between DNA sequences, chromosome structure and biological properties.
- This project is supported by Beijing Training Program of Innovation and Entrepreneurship for Undergraduates.

Molecular Simulation for DNA

Supervisor: Prof. Yiqin Gao

April 2017-June 2017

Peking University, Beijing, China

- The project objective is to find the mechanism of DNA recognition and catalysis for HhaI, a DNA methylase. I am one of the team members to simulate DNA base-flipping using Amber 14.

TECHNICAL STRENGTHS

Computer Languages

MATLAB, Python, C/C++, FORTRAN, R, Bash

Software & Tools

Vim, L^AT_EX, Excel, Mathematica

ENGLISH PROFICIENCY

TOEFL 108/120 (Reading 28, Listening 29, Speaking 24, Writing 27)

GRE Verbal 151, Quant 169, AW 3.5

TEACHING EXPERIENCE

Teaching Assistant

Chemistry Today

CCME, Peking University

Fall 2018

Chemistry Today

CCME, Peking University

Fall 2017

Volunteer Teacher

Fine Art

Xiaojiahe Fenghua Primary School, Beijing

Fall 2015-2016

HONORS & AWARDS

Award for Academic Excellents

Peking University

2017

The third prize in National College Students Physics Competition

Beijing Physics Society

2016

Youth Award for Athletics

Peking University

2016

LEADERSHIP & ACTIVITIES

Director	Weiming Hongxue Society, PKU	2017-2018
The third winner in Womens 5000-meter race	Peking University	2016
Volunteer for Environmental Protection	Maldives	2016