Tianyou (Alice) Wang

Email：tw2838@cumc.columbia.edu Cell：(530)-564-9409

EDUCATION

Columbia University Mailman School of Public Health Expected May 2023

Master of Public Health (GPA: 3.9/4.0)

Coursework: Statistical Computing with SAS, Data Science, Categorical Data Analysis, Applied Regression, Survival Data Analysis, Chronic Disease Epidemiology, Cancer Epidemiology

University of California, Davis September 2017-June 2021

Bachelor of Science in Chemical Engineering (GPA: 3.6/4.0)

Coursework: Physical Chemistry, Organic Chemistry, Chemical Kinetics, Thermodynamics, Mass & Heat Transfer, Fluid Mechanics, Process Dynamics & Design, Nanomaterials

PROFESSIONAL EXPERIENCE

Columbia University Irving Medical Center May-December 2022

Teaching Assistant, Categorical Data Analysis and Applied Regression Courses, Supervisor: Dr. Naitee Ting

- Partnered with professor to prepare class materials, sample SAS codes, and grading rubrics
- Led discussion sessions (18 students) and hold office hours to answer questions, fostering an included learning environment with open communications

Akzo Nobel Performance Coatings (Shanghai) Co., Ltd September-October 2020

Analyst

- Generated standard lines for formaldehyde and volatile organic compounds in Excel and estimated test samples' concentrations, which increased the working efficiency
- Prepared over 80 testing samples daily and operated Agilent's gas and high-performance liquid chromatography systems to measure polymer concentrations in samples

Mouse Gene Knockout with Cas 9 January-March 2020

Lab student volunteer, UC-Davis Biology Mouse Program, Supervisor: Brandon Willis (Genetic Analysis Lab Manager)

- Accurately follow research protocols to prepare testing samples
- Determined the location of Mir483 with lab database, designed Cas9 Primer for targeted gene knockout
- Performed standard PCR, qPCR plates and gel electrophoresis to analyze the deletion
- Used gel extraction kit to wash the cut gel for genotyping, successfully built mouse models

ACADEMIC PROJECT

SAS Project: Estimating BMIs After Surgical or Non-surgical Therapies May 2022

- Conducted a thorough statistical research to assess the impact of 3 treatments on weight loss, created a professional poster to deliver the modeling process and the final result
- Cleaned and processed a dataset consist of 450 patient records from a RCT study for model construction.
- Compared the effect of cross-sectional and longitudinal approach on analyzing the relationship between treatments and weight loss, performed correlation tests and t-tests for statistical associations and chose the generalized estimating equation model to predict the population average effect, which achieved a p-value < 0.0001

COMMUNITY INVOLVEMENT

Orientation Leader, UC-Davis June-September 2019

- Advised all incoming new students (15-20 students per group, 2 groups per week), led campus tour and ice-breaking events, smoothed communications with students with different personalities
- Worked cooperatively with school staff and students to ensure events go on smoothly, hosted 45-minute Q&A sessions for about 200 parents, delivered a 15-minite speech, provided interpreting service for parents
- Communicated with departments and admission advisors to help student register courses proactively, predicted and solved possible similar problems in advance

SKILLS

- SAS, R, MATLAB, Excel
- Aspen Plus V10, Agilent GC and HPLC systems, IR spectroscopy, general Chemistry and Biology lab skills
- Bilingual (Fluent English and Chinese)