# Lin (Amanda) Li, MS

9500 Gilman Dr, Akinson Hall La Jolla, CA 92093 Email: amandali14124377@gmail.com

Mobile: +1 (919)-593-9581



#### HIGHLIGHTS

• Programming Languages: R/RMD/Rshiny, Python, MATLAB

• Statistical Analysis: SPSS, STATA, SAS, SQL, nQuery, PASS

• Web Development: HTML/CSS

• Clinical Data Standard: CDISC, ADaM, SDTM, REDCap

• Research Database: PubMed, MeSH, MedLine

• Clinical Trials: Experience with several clinical trials sponsored by Genetech, Pfizer and Merck, etc.

• R-Package Development: Co-author of R-package: "colocalization"

• Documents Processing: Latex, MS Office including VBA

• Publications: Two (joint) first co-authorships, and several co-authorships as main statistician

#### EDUCATION

### University of North Carolina at Chapel Hill

Master of Science in Biostatistics

Department of Biostatistics

August 2018-August 2020

- Relevant Coursework: Intermediate Probability and Statistics Inference (I)(II), Statistical Computing and Data Management, Generalized Linear Models, Working with Data in a Public Health Research Setting, Analysis of Categorical Data, Applied Longitudinal Data Analysis, Principles of Epidemiology for Public Health, Survival Analysis, Statistical Consulting
- Master Thesis: Missing Values Imputation with Machine Learning Methods on Drug Metabolomics Studies
- o MS Thesis Committee: Matthew Loop. PhD, Matthew Psioda, PhD, Xianming Tan, PhD
- Key Projects::

Analysis of opioid prescriptions after cesarean deliveries under new prescribing guidelines
Assessing the Efficacy of three Different Interventions to Prevent Vertical Transmission of HIV from Mothers to
Infants via Breastfeeding in Lilongwe, Malawi

Exploring the Relationship between Monthly Painkiller Consumption and Stress among UNC Undergraduate Students and Student Athletes

## Northwestern University

School of Professional Studies

Continuing Education

September 2020-Present

- Real Analysis: Analysis on the real line: axiomatic development of the real number system, sequences and series
  of real numbers, continuity, and differentiability, Riemann integral and sequences and series of functions.
   Grade: A
- o Data Science Bootcamp: Data science for statistician in R and Python

#### Shanghai University

Department of Economics

August 2014-June 2018

- o Overall GPA is the top 5% in Department, graduated with "Outstanding Honor Thesis":
- Relevant Coursework: Advanced Calculus, Linear Algebra, Probability and Mathematical Statistics, Business
  Statistics, Econometrics, Time Series, Quantitative Financial Risk Management, Quantitative Investment Analysis,
  Financial Valuation

### Duke Kunshan University

Global Learning Semester Certificate

Global Learning Semester August 2017-December 2017

- Health Research Methods: Introduction of Cohort study, Case-control study, Clinical trials. Healthcare and health insurance systems comparison, Non-Communicable Diseases (NCDs) Grade: A-
- Numerical Methods and Machine Learning: Numerical Method for PDE, Linear and Convex Optimization, Compressed Sensing and Support-vector Machine. Grade: A

#### RESEARCH AND WORKING EXPERIENCE

## Data Scientist and Data Management (Full time)

Center for Human Development
September 2021 - Present

- UC, San Diego
  - As a member of the data management and statistics group of the Adolescent Brain Cognitive Development (ABCD) Study, I contribute to various data quality control and reporting tasks. I use and develop skills in the cleaning, transformation, integration and modelling of high-dimensional behavioral (e.g., survey responses), experimental (e.g cognitive test batteries), and biomarkers data (e.g., genotyping data).
  - Developing Web Apps with Rshiny, HTML/CSS. Contributing to imaging processing with complex machine learning algorithms occasionally.

### Associate Biostatistician (Full-Time)

Quidel Corporation

Department of Biostatistics and Data Science

March 2021 - September 2021

- Performing statistical analyses in accordance with protocol, drafting research and development reports from statistical perspective.
- Performing data quality control (QC) and data assurance (QA), providing biostatistical support to product research, development and evaluation (e.g., sofia 2 fluorescent immunoassay analyzer, Sofia Q rapid antigen test device).

#### Statistical Analyst (Full-Time)

Robert H. Lurie Comprehensive Cancer Center

Quantitative Data Science Core

June 2020 - Feb 2021

January 2020 -May 2020

- Contributing to Statistical analysis plan (SAP) designing, data management and analyses (e.g., sample size and power analysis, generating reproducible statistical analysis reports (SARs) using SAS and R/RMarkdown) for early-phase clinical trials, basic science of medicine (in vivo and in vitro) studies, etc.
- Statistical supports on grants applications, proposal and manuscript writing for investigators in the Robert H.
   Lurie Comprehensive Cancer center.
- R shiny App, R-package and SAS Macros development

# Clinical Trial Consulting (Co-op)

UNC School of Medicine, Department of Anesthesiology

Student Statistical Consultant

o Drafting Statistical Analysis Plan(SAP) for a Randomized controlled trial in UNC school of Medicine.

- Clinical trial experience on "Tailored Opioid Prescribing for women after Caesarean Section". The key responsibilities cover but not limit to statistical analysis plan (SAP) designing, data analysis, **statistical report writing and presentation.** (PI:Christine McKenzie, MD)
- Graduate Student Research Assistant Department of PACE, Eshelman School of Pharmacy, UNC-CH
  Clinical Data Analyst September 2018 May 2020
  - Working in Dr. Sachiko Ozawa research group on the project "The condition and social cost of antibiotics over-prescription and abuse in rural area of China"

Cleaning and analysis data collected from an innovative health economic survey on antibiotics abuses among village doctors in Yunnan Province, China by SAS and STATA. The key methods include Item Response Theory,
 Balloon Analogue Risk Task and Generalized Linear Model.

#### Research Assistant Internship

Global Health Research Center, Duke Kunshan University

Global Health Research Assistant

 $November\ 2017\text{-}March\ 2018$ 

- Assisting senior research analyst to perform panel data analysis on "Chinese Longitudinal Healthy Longevity Survey (CLHLS)" led by PIs from Duke University.
- Searching and revieweing papers of "prevalence, awareness, treatment, and control rates of hypertension in China" from the PubMed and MedLine flowing rigorous search strategies.

### Consulting Internship

Shanghai Da-Rui, Supply-Chain Management Consulting Co., LTD

Business Analyst

June 2017-August 2017

• Providing Consulting service with a senior consultant on **inventory level optimization** for Master Kong LLC

#### TEACHING EXPERIENCE

#### Teaching Assistant

Department of Mathematics, Shanghai University

Teaching Assistant of Business Statistics

September 2016-June 2017

• Helped the instructor to grade homework; tutored sophomore students with problems in business statistics lecture, such as hypothesis test, confidence interval estimates

### CERTIFICATES AND AWARDS

## Good Clinical Practice Certificate

August 2020

• ICH-GCP: Association of Clinical Research Professionals:

#### CITI Program course Certificate

August 2020, Semptember 2021

• Human Research: Social Science and Behavioral Science Research, Biomedical Research

## Certified SAS Programmer

January 2019

• Certified Base Programmer for SAS 9:

Association of Chartered Certified Accountants (ACCA)

February 2017

Advanced Diploma in Accounting and Business:

### **Undergraduate Scholarships**

September 2015, September 2017

- First Class Scholarship of Shanghai University:
- Second Class Scholarship of Shanghai University:

Other Awards May 2015, May 2016

• Active Student in Student Community:

## Publications and Conference (Chronological order)

- Li, L., Jiang, A., (Professor), Huang, Z., Tam K.L., Huang, YC., The Effects of Dynamic Learning and the Forgetting Process on Optimizing Modeling for Pricing of Full-Service Repair Contracts for Medical Devices, Journal of Operational Research Society (Major revision completed and resubmitted)
- Yin, R.(joint first author), Yin, L.(joint first author), **Li, L.**, Silvia-Nash, J., Tan, J., Pan Z., Zeng, J., Yan, L., Hypertension in China: Burdens, Guidelines, and Policy Responses: A State-of-the-Art Review, *Journal of Human Hypertension*, Nature Press. doi: https://doi.org/10.1038/s41371-021-00570-z
- Gelarden I, Nguyen J, Gao J, Chen Q, Morales-Nebreda L, Wunderink R, **Li L**, Chmiel JS, Hrisinko M, Marszalek L, Momnani S, Patel P, Sumugod R, Chao Q, Jennings LJ, Zembower TR, Ji P, Chen YH. Comprehensive evaluation of bronchoalveolar lavage from patients with severe COVID-19 and correlation with clinical outcomes. *Hum Pathol.* 2021 Jul;113:92-103. doi: 10.1016/j.humpath.2021.04.010.
- Lamiaa El-Shennawy, Andrew Hoffmann, Nurmaa Khund Dashzeveg, Paul J. Mehl2, Zihao Yu, Valerie Tokars, Vlad Nicolaescu, Carolina Ostiguin, Yuzhi Jia, Lin Li (First statistician coauthor),..., Deyu Fang, Huiping Liu., Circulating ACE2-expressing Exosomes Block SARS-CoV-2 Virus Infection as an Innate Antiviral Mechanism, *Nature Medicine* (Submitted for Revision), reference number: NMED-L110136. doi: https://doi.org/10.1101/2020.12.03.407031
- Wu, P., Li, L., Xie, J., Chen, J., Probabilistically Feasible Path Planning for an Unmanned Aerial Vehicle Using Chance Constrained RRT under Gaussian Uncertainty, *ICCA Japan 2020*
- Wu, P., Li, L., Xie J., Chen J., Probabilistic Guaranteed Path Planning for Safe Urban Air Mobility Using Chance Constrained RRT\*. 2020 AIAA AVIATION Forum (Oral presentation was given in June 2020). doi: https://doi.org/10.2514/6.2020-2914
- Li, L., Wu, M., (Professor), Wu, Z. (2017). The Impact of Public Health Expenditure on Economic Development–Evidence from Prefecture-Level Panel Data of Shandong Province. Research in World Economy, 8(2), 59. doi: https://doi.org/10.5430/rwe.v8n2p59
- International Conference on "Interdisciplinary and Frontier Research on Healthy Aging", Nov. 10-11, 2017, Peking University.
- International Conference on Transformations and Innovations in Management (ICTIM), September 9-10, 2017, Shanghai University.

#### VOLUNTEERING AND COMMUNITY SERVICE

- Volunteer of "Digital Health Conference", Duke (Kunshan) University, October 2017
- Volunteer to teach refugee children nutrition and infection-prevention knowledge at Christian Church for Refugees in Malaysia, January 2017 (Christian Ministries)
- Volunteer interpreter of delegates at Shanghai Trade Fair, April 2015