

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, Shell
- **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 the main statistician

EDUCATION

- **University of North Carolina at Chapel Hill** Department of Biostatistics
Master of Science in Biostatistics August 2018-August 2020
 - **Master Thesis:** Missing Values Imputation with Machine Learning Methods on Drug Metabolomics Studies
 - **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 in Mathematics 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.
 - **Data Science Bootcamp:** Data science for statistician in R and Python
- **Shanghai University** Department of Economics
Bachelor of Economic Sciences, with minor in Financial Mathematics August 2014-June 2018
 - **Overall GPA is the top 5% in Department, graduated with "Outstanding Honor Thesis":**
- **Duke Kunshan University** Global Learning Semester
Global Learning Semester Certificate 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)
 - **Numerical Methods and Machine Learning:** Numerical Method for PDE, Linear and Convex Optimization, Compressed Sensing and Support-vector Machine.

RESEARCH AND WORKING EXPERIENCE

- **Data Scientist and Data Management (Full time)** Center for Human Development
September 2021 - Present
UC, San Diego
 - Working as a key member of the research **data science and management** group of the Adolescent Brain Cognitive Development (ABCD) Study. Contributing to database build and management, quality control, and reproducible reports generation.
 - Cleaning, transforming, integrating 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
March 2021 - September 2021
Department of Biostatistics and Data Science
 - 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
June 2020 - Feb 2021
Quantitative Data Science Core
 - 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
January 2020 -May 2020
Student Statistical Consultant
 - 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
September 2018 - May 2020
Clinical Data Analyst
 - 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
November 2017-March 2018
Global Health Research Assistant
 - Assisting senior research analyst to perform panel data analysis on "Chinese Longitudinal Healthy Longevity Survey (CLHLS)" led by PIs from Duke University.
 - Searching and reviewing papers of "prevalence, awareness, treatment, and control rates of hypertension in China" from the PubMed and MedLine following rigorous search strategies.
- **Consulting Internship** Shanghai Da-Rui, Supply-Chain Management Consulting Co., LTD
June 2017-August 2017
Business Analyst
 - 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

- **Travel Award** March 2020
 - Department of Biostatistics, UNC-CH:
- **Good Clinical Practice Certificate** August 2020
 - ICH-GCP: Association of Clinical Research Professionals:
- **CITI Program course Certificate** August 2020, September 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:

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), reference: TSYB-2021-OP-0392.R1
- 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 Ostigui, Yuzhi Jia, **Lin Li (First statistician coauthor)**, ..., Deyu Fang, Huiping Liu., Circulating ACE2-expressing extracellular vesicles block broad strains of SARS-CoV-2, *Nature Communication*. Jan 2022, doi: <https://doi.org/10.1038/s41467-021-27893-2>
- El-Shennawy, L., Hoffmann, A., Dashzeveg, N., Mehl, P., Yu, Z., Tokars, V., Nicolaescu, V., Ostigui, C., Jia, Y., Li, L. and Furlong, K., 2021. Circulating ace2-expressing exosomes block SARS-CoV-2 infection as an innate antiviral mechanism, *bioRxiv*. Dec 2020, doi: <https://doi.org/10.1101/2020.12.03.407031>
- 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