

JIYUE QIN

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Education

Columbia University, Mailman School of Public Health
Master of Science in Biostatistics

New York, NY
May 2020

- GPA: 4.19/4.33, Track: Theory and Methods
- Relevant coursework: Data Science, Survival Analysis, Longitudinal Data Analysis, Deep Learning

Huazhong University of Science and Technology (HUST)
Bachelor of Science in Bioscience

Wuhan, China
June 2018

- GPA: 3.87/4.0, Rank: 1/53, Recipient of National Scholarship, Thesis track: Bioinformatics

University of California, Berkeley

Studying Abroad Program Sponsored by China Scholarship Council

Berkeley, CA
Jan - May 2017

- GPA: 4.0/4.0, Coursework: Cell and Systems Biology, Neurobiology of Disease, Developmental Biology

Experience

Albert Einstein College of Medicine, Division of Biostatistics
Associate

Bronx, NY
June 2020 - Present

- Provided statistical support for Einstein Aging Study, Einstein Cancer Center and Department of Neurosurgery
- Led the analyses including statistical modeling of intensive longitudinal data, survival analysis and mediation analysis using national databases like SEER and NCDB, predictive modeling for stroke
- Created analysis reports, communicated findings to collaborators and contributed to manuscripts
- Provided statistical consultations on study design and analysis plan development

Columbia University, Department of Biostatistics
Graduate Teaching Assistant

New York, NY
Sep - Dec 2019

- Assisted in course Relational Database and held office hours for materials about SQL, Access, VBA and SAS
- Graded 80+ SQL scripts and 5 Access database projects and provided feedback to 30 graduate students

Regeneron Pharmaceuticals
Data Science Intern

Tarrytown, NY
June - Aug 2019

- Analyzed data from 4 clinical trials for compliance pattern and presented results with actionable insights
- Built predictive models of patients' compliance using supervised machine learning methods such as random forest
- Built two R Shiny apps to streamline data visualization, analysis and model building
- Developed statistical analysis plans for three studies involving wearable devices

Huazhong University of Science and Technology, Department of Bioinformatics
Research Assistant

Wuhan, China
Aug 2017 - June 2018

- Simulated human gut microbiome genomic data with 10786 SNP and evaluated three variant calling software
- Analyzed 12GB of metagenomic NGS data by performing quality control, variant calling workflow involving BWA, SAMtools, BCFtools, KEGG annotation, phylogenetic tree construction
- Discovered strain-level SNP pattern by unsupervised machine learning methods such as clustering

Peer-reviewed Publications

indicates co-first authors

1. Zhu X[#], **Qin J[#]**, Tan C, Ning K. The seasonal changes of the gut microbiome of the population living in traditional lifestyles are represented by characteristic species-level and functional-level SNP enrichment patterns. BMC Genomics. 2021 Jan 28;22(1):83.
2. Hyun J, **Qin J**, Wang C, Katz MJ, Pavlovic JM, Derby CA, Lipton RB. Reliabilities of intra-individual mean and intra-individual variability of self-reported pain derived from ecological momentary assessments: Results from the Einstein Aging Study. J Pain. 2021 Nov 12:S1526-5900(21)00357-6. Epub ahead of print.
3. Wang C, Katz MJ, Chang KH, **Qin J**, Lipton RB, Zwerling JL, Sliwinski MJ, Derby CA, Rabin LA. UDSNB 3.0 Neuropsychological Test Norms in Older Adults from a Diverse Community: Results from the Einstein Aging Study (EAS). J Alzheimers Dis. 2021;83(4):1665-1678.
4. Makower D, **Qin J**, Lin J, Xue X, Sparano JA (2021). The 21-gene recurrence score in early non-ductal breast cancer: A National Cancer Database analysis. NPJ Breast Cancer. Accepted.

5. Cerino ES, Katz MJ, Wang C, **Qin J**, Gao Q, Hyun J, Hakun JG, Roque NA, Derby CA, Lipton RB, Sliwinski MJ. Variability in Cognitive Performance on Mobile Devices Is Sensitive to Mild Cognitive Impairment: Results From the Einstein Aging Study. *Front Digit Health*. 2021 Dec 3;3:758031.
6. Cheng M, Cheng Z, Yu Y, Liu W, Li R, Guo Z, **Qin J**, Zeng Z, Di L, Mo Y, Pan C, Liang Y, Li J, Tong Y, Yan Y, Zhan Y, Ning K. An engineered genetic circuit for lactose intolerance alleviation. *BMC Biol*. 2021 Jul 5;19(1):137.

Manuscripts

indicates co-first authors

1. **Qin J**, Wang C (2021). Likelihood approximation methods and quadrature points in mixed-effect location scale models. Currently being revised for submission.
2. Javed K[#], **Qin J[#]**, Mowery W, Kadaba D, Altschul D, Haranhalli N (2021). Predicting 90-day Functional Dependency and Death after Endovascular Thrombectomy for Stroke: the BET Score. *Journal of Stroke and Cerebrovascular Diseases*. Under revision.
3. Kim G, **Qin J**, Hall CB, In H (2021). Impact of socioeconomic and insurance status on delayed diagnosis of gastrointestinal cancers. *Journal of Surgical Research*. Revision submitted.
4. Kim G[#], Pastoriza JM[#], **Qin J**, Lin J, Karagiannis GS, Condeelis JS, Yothers G, Anderson S, Julian T, Entenberg D, Rohan TE, Sparano JA, Xue X, Oktay MH (2021). Racial disparity in distant recurrence-free survival in localized breast cancer patients: A pooled analysis of NSABP trials. *JNCI Cancer Spectrum*. Revision submitted.
5. Hoogendoorn CJ, **Qin J**, Wang C, Roque NA, Laurenceau JP, Katz MJ, Derby CA, Lipton RB & Gonzalez JS (2021). Depressive Symptoms Mediate the Relationship between Diabetes and Cognitive Performance in a Community-based Sample of Older Adults. Under review.
6. Naidu I[#], Ryvlin J[#], Videlefsky D[#], **Qin J**, Mowrey W et al. (2021). The effect of a multidisciplinary spine clinic on time to care in patients with back and leg pain: A propensity score-matched analysis. Under review.
7. Lekhraj R, Lalezari S, Aguilan J, **Qin J**, Sidoli S, Mowrey W, Gollamudi S, Lalezari P (2021). Altered Abundances of Human Immunoglobulin M and Immunoglobulin G Subclasses in Alzheimer's Disease Frontal Cortex. Under review.

R Packages

- “tidyreport”: a package to conduct common statistical analyses in the field of epidemiology and biostatistics and generate publication-quality formatted tables from the statistical output. Author.
- “eas”: a package to calculate demographically adjusted z-scores and impairment indicators of UDS3 neuropsychological tests using norms developed from Einstein Aging Study and National Alzheimer's Coordinating Center. Author.

Computer Skills

R, SAS, SQL, Python, Mplus, HTML, Microsoft Office (Word, Excel, PowerPoint, Access), SPSS, Git, Linux Shell, REDCap, Tableau, Rstudio, GitHub

Honors & Awards

Outstanding Graduate of HUST	June 2018
The Outstanding Undergraduate Thesis Award	May 2018
The Honor of Merit Student of HUST	Sep 2016, Sep 2017
iGEM (International Genetically Engineered Machine Competition) Gold Medal	Oct 2016
The National Scholarship	Sep 2016
The National Encouragement Scholarship	Sep 2015
The Honor of Outstanding Student Cadre of HUST	Sep 2015
The Freshman Scholarship for Outstanding Academic Achievement of HUST	Mar 2015

Volunteer & Leadership

Columbia University Community Lunch Soup Kitchen

Volunteer, once-a-month

New York, NY
Mar 2019 - May 2020

- Assisted in preparing and serving the food to 70-100 homeless and low-income individuals

Huazhong University of Science and Technology, Student Union

Member and vice president of Liaison Department

Wuhan, China
Oct 2014 - Mar 2016

- Helped organize events such as New Year Party by proposing business plans and negotiating sponsorships
- Took charge of expense reimbursement and cost accounting