

## EDUCATION

### **Columbia University, School of Engineering**

- M.S Biomedical Engineering, 2023 (expected)

### **University at Buffalo, The State University of New York**

- M.S. Geographic Information Systems (GIS), 2009

### **Beijing Normal University, Beijing, China**

- B.S. GIS 2007

## EXPERIENCE

### **Whitaker Scholar Program (WSP) in Developmental Neuropsychiatry**

Sept 2021- Present

#### *Whitaker Scholar*

- Provide support for research data collection to children psychiatrists and other professionals who seek to better understand and address the mental health needs of persons with developmental disability.

### **Department of Psychiatry, Columbia University**

June 2019 -Present

#### *Director of Research Data Operations*

- Provide operational and administrative support to NYSPI REDCap System
- Offer training and consultation in REDCap to NYSPI staff requiring data capture needs
- Manage REDCap system with over 1,000 user accounts and 900 projects

### **Division of Behavioral Medicine**

### **Department of Psychiatry, Columbia University**

Dec 2013- Present

#### *Data Manager*

- Provide comprehensive data services for the division including data collection design, data quality check, data reporting and adverse event adjudication results.
- Maintain and update REDCap database supporting over 200 users across 100 research projects.
- Create database/software/ data procedure manuals, conduct training and assessment sessions for staff.
- Design, implement and maintain SQL database to streamline study operation and data collection. Built-in logics and automated functions of database maximized study personnel's time and effort
- Consult with investigators to assist with all aspects of data management; extract, transform and load data between systems as needed. Deliver custom programs utilizing SAS, Excel/VBA, and other analytical packages

## SKILLS

- Chinese (fluent verbal and written).
- Proficient in REDCap, ArcGIS, SPSS, SAS, R Programming, MATLAB, JavaScript, jQuery, Node.js

## Certificates

- Full-Stack Development Certificate: Department of Engineering Columbia University  
A 24-week intensive program focused on gaining technical programming skills in HTML5, CSS, JavaScript, JQuery, Bootstrap, Node.js, MySQL, MongoDB, Express.js, Handeldbars.js & React.
- Certificate of Achievement from Association of American Geographers (AAG) for outstanding performance and lasting contribution for Global Geography Education.

**Publications**

- Walsh K, McCormack CA, Webster R, Pinto A, Lee S, Feng T, Krakovsky HS, O'Grady SM, Tycko B, Champagne FA, Werner EA, **Liu G**, Monk C. Maternal prenatal stress phenotypes associate with fetal neurodevelopment and birth outcomes. *Proc Natl Acad Sci U S A*. 2019 Nov 26;116(48):23996-24005. doi: 10.1073/pnas.1905890116. Epub 2019 Oct 14. PMID: 31611411; PMCID: PMC6883837.
- Spicer J, Giesbrecht GF, Aboelela S, Lee S, **Liu G**, Monk C. Ambulatory Blood Pressure Trajectory and Perceived Stress in Relation to Birth Outcomes in Healthy Pregnant Adolescents. *Psychosom Med*. 2019 Jun;81(5):464-476. doi: 10.1097/PSY.0000000000000698. PMID: 31090671; PMCID: PMC6715293.
- Robakis TK, Lee S, Werner E, **Liu G**, Miller M, Wylie D, Champagne FA, Salas M, Do C, Tycko B, Monk C. DNA methylation patterns in T lymphocytes are generally stable in human pregnancies but CD3 methylation is associated with perinatal psychiatric symptoms. *Brain Behav Immun Health*. 2020 Feb 18;3:100044. doi: 10.1016/j.bbih.2020.100044. PMID: 34589835; PMCID: PMC8474679.
- McIntyre K, **Liu G**, Otto L, Schaefer S, Sloan R, Emotion regulation strategy use and resting vagal activity in adults in review

**Posters**

- **Liu G**, Sloan R. Poster titled Emotion Regulation and Resting Vagal Activity in Healthy Adults *given at "Achieving Health Equity: Opportunities for Psychosomatic Medicine" the 78th Annual Meeting of the American Psychosomatic Society, March 11-14, 2020, Long Beach, CA. Conference canceled.* *Psychosom Med*. 2020 Month, Vol 82; (issue2)
- Koorathota S, Sajda P, **Liu G**, Lachman M, Sloan R. Poster titled DEEP LEARNING METHODS TO PREDICT COGNITIVE PERFORMANCE IN MIDLIFE *given at "Achieving Health Equity: Opportunities for Psychosomatic Medicine" the 78th Annual Meeting of the American Psychosomatic Society, March 11-14, 2020, Long Beach, CA. Conference canceled.* *Psychosom Med*. 2020 Month, Vol 82; (issue2)
- **Liu G**, McIntyre K, Schaefer S, Sloan P, poster titled Vagus Nerve Activity and Emotion Recognition *given at the 16th International Congress of Behavioral Medicine being held in Glasgow, Scotland on 19th - 22nd August 2020.*
- Cross M, Trumpff C, Engelstad K, Gabriel Sturm G, McGill MA, Karan KR, Rosales XQ, Anderson Z, Clark J, Tepler S, Taleon V, Wang J, Manly J, Martinez M, Medina V, Fortune J, **Liu G**, Lauriola V, Elder DJ, Ogden T, Thiebaut de Schotten M, Shapiro P, McEwen BS, Sloan RP, Wager TD, Hirano M, Picard M. The Mitochondrial Stress, Brain Imaging, and Epigenetics Study – MiSBIE. United Mitochondrial Disease Foundation (UMDF). (June 2019)