

Amy (Yang) YANG

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EDUCATION

University of Pennsylvania, Department of Biostatistics and Epidemiology

Master of Science, GPA 3.95

Sep. 2012 – Aug. 2014

- Thesis: Differential Isoform Expression Analysis in RNA-Seq using Random-Effects Meta-Regression
- Advisor: Mingyao Li, PhD

University of Science and Technology of China, Department of Biological Science

Bachelor of Science, GPA 3.42

Sep. 2004 – Jul. 2008

PROFESSIONAL EXPERIENCE

Northwestern University Feinberg School of Medicine, Biostatistics Collaboration Center,

Sr. Statistical Analyst

Aug. 2014 – Present

- Providing statistical consultation, REDCap database design and conducting data analysis to serve the medical community
- Assisting research grant application by providing sample size and power justification
- Responsible for statistical analysis, results interpretation, abstract and manuscript development
- Giving guest lectures on biostatistics and data analysis topics to audiences with medical background

University of Pennsylvania, Department of Biostatistics and Epidemiology,

Research Assistant

Sep. 2012 – May. 2014

- Advisor: Mingyao Li, PhD
 - Developed and applied novel statistical methods to identify differentially expressed transcripts on the isoform level for RNA-seq data
- Advisor: Justine Shults, PhD
 - Identified risk factors for electrographic seizures in pediatric ICU patients and developed a prediction model for seizure occurrence
 - Assessed the performance of seizure occurrence prediction model by evaluating its calibration and discrimination abilities
 - Conducted survival analysis to determine the association of acute kidney injury after transplant and one year mortality rate

University of Pennsylvania, School of Nursing

Statistician

Jan. 2012 – Sep. 2012

- Principal Investigator: Jianghong Liu, PhD, RN, FAAN
 - Conducted studies on how early health risk factors, early nutrition and environmental toxicity influence emotional and behavioral development in children
 - Applied statistical methods e.g., GLM, GEE and mixed models to address the clinical research questions
 - Evaluated validity and reliability of multiple instruments
 - Administrated and maintained multiwave longitudinal data sets

University of Pennsylvania, Department of Ophthalmology and Human Genetics

Intern

Oct. 2011 – Dec. 2011

- Principal Investigator: Dwight Stambolian, M.D., Ph.D.
 - Provided statistical and computational support for a study on the racial differences in retinal nerve fiber layer thickness and optic nerve head parameters
 - Conducted SNP analysis and genome-wide association study (GWAS)

The Chinese University of Hong Kong, School of Public Health, Biostatistics Division

Research and Teaching Assistant

Aug. 2009 – Jun. 2011

- Advisor: Benny Chung Ying ZEE, Ph.D

- Collaborated with ophthalmologists on large cohort study and clinical trial data analysis aimed at improving near-vision and quality of life in the Chinese population

- Assisted with trial and study design, sample size and power estimation, hypothesis testing and model comparison

- Taught R based computer labs in graduate level courses

TEACHING
EXPERIENCE

Northwestern University Feinberg School of Medicine

Department of Neurology

Guest Lecturer, Biostatistics Series for Evidence-Based Medicine

Aug. 2016 and Aug. 2015

Department of Psychiatry and Behavioral Sciences

Guest Lecturer, Power and Sample Size

Jul. 2015

Guest Lecturer, Confounding, Mediator and Effect Modifier

Apr. 2015

Program in Public Health

Teaching Assistant, Statistical Inference and Applied Techniques (EPIBIO403)

Winter 2016

Teaching Assistant, Statistical Inference and Applied Techniques (EPIBIO403)

Winter 2015

Teaching Assistant, Statistical Consulting (EPIBIO560)

Winter 2015

Teaching Assistant, Intermediate Biostatistics (EPIBIO402)

Fall 2015

Teaching Assistant, Intermediate Biostatistics (EPIBIO402)

Fall 2014

Teaching Assistant, Basic Probability (EPIBIO303)

Fall 2014

PROGRAMMING
SKILLS

Statistical Software : R, SAS, STATA and SPSS

Programming Language : C, Python, \LaTeX and Shell Scripting

Platform : Windows, Linux

Data Management: REDCap

PUBLICATIONS

Published

L Kia , M J. Cuttica, **A Yang**, E N Donnan, M Whitsett, A Singhvi, A Lemmer, J Levitsky. The Utility of Pulmonary Function Testing in Predicting Outcomes Following Liver Transplantation. *Liver Transplantation* 2016; 22: 805-811

J D. Cramer, U A. Patel, S Samant, **A Yang**, S S Smith. Liver disease in patients undergoing head and neck surgery: Incidence and risk for complications. *The Laryngoscope* 2016

A Rowley, K Wylie, KY Kim, A Pink, **A Yang**, R Reindel, S Baker, S Shulman, J Orenstein, M Lingen, G Weinstock, T Wylie. The Transcriptional Profile of Coronary Arteritis in Kawasaki Disease. *BMC Genomics* 2015; 16:1076

A Yang, D Arndt, J Carpenter, K Chapman, K Cornett, D Dlugos, W Gallentine, C Giza, J Goldstein, C Hahn, J Lerner, T Loddenkemper, J Matsumoto, K McBain, K Nash, E Payne, I Fernandez, J Shults, A A. Topjian, K Williams, CJ Wusthoff, N S. Abend. Development and validation of a seizure prediction model in critically ill children. *Seizure* 2015; 25:104-111

C Jia, W Guan, **A Yang**, R Xiao, W Tang, C Moravec, K Margulies, T Cappola, C Li and M Li. MetaDiff: Differential Isoform Expression Analysis using Random-Effects Meta-Regression. *BMC Bioinformatics* 2015; 16:208

J Liu, P Leung and **A Yang**. Breastfeeding and Active Bonding Protects Against Childrens Internalizing Behavior Problems. *Nutrients* 2014; 61: 76-89

S Sanchez, D Arndt, J Carpenter, K Chapman, K Cornett, D Dlugos, W Gallentine, C Giza, J Goldstein, C Hahn, J Lerner, T Loddenkemper, J Matsumoto, K McBain, K Nash, E Payne, I Fernandez, J Shults, K Williams, **A Yang**, and N Abend. Encephalographic Monitoring in Critically Ill Children: Current Practice and Study Design Considerations. *Epilepsia*. 2013; 54:1419-1427

N Abend, D Arndt, J Carpenter, K Chapman, K Cornett, W Gallentine, C Giza, J Goldstein, C Hahn, J Lerner, T Loddenkemper, J Matsumoto, K McBain, K Nash, E Payne, S Snchez, I Fernandez, J Shults, K Williams, **A Yang**, D J. Dlugos. Electrographic Seizures in Pediatric ICU Patients: A Cohort Study of Risk Factors and Mortality. *Neurology*. 2013; 81:383-391

Q Lu, N Congdon, X He, G Murthy, **A Yang**, W He. Quality of life and near vision impairment due to functional presbyopia among rural Chinese adults. *Investigative Ophthalmology and Visual Science*. 2011; 52:4118-4123

N Congdon, L Li, M Zhang, **A Yang**, Y Gao, S Griffiths, J Wu, A Sharma, D S Lam. Randomized, controlled trial of an educational intervention to promote spectacle use in rural China: the See Well to Learn Well Study. *Ophthalmology*. 2011; 118:2343-2350

M Zhang, L Li, L Chen, J Lee, J Wu, **A Yang**, C Chen, D Xu, D S. C. Lam, A Sharma, S Griffiths, Y Gao, and N Congdon. Population density and refractive error among Chinese children. *Investigative Ophthalmology and Visual Science*. 2010; 51:4969-4976

Submitted

E Ferneze, JY Min, R Chandra, J Schroeder, J Ciolino, **A Yang**, J Holl, S S Smith. Antibiotic Prescribing by Physicians Versus Nurse Practitioners for Pediatric Upper Respiratory Infections. *Annals of Otolaryngology, Rhinology & Laryngology*

S schuette, K Brown, D Cuthbert, C Coyle, K Wisner, M Hoffman, **A Yang**, J Ciolino, T Clark. Perspectives from Patients and Health Care Providers on the Practice of Maternal Placentophagy Postpartum. *Womens Health Issues*

I Zeigler, M Satyshu, S Hong, **A Yang**, J Moskowitz, K Wisner. Mindfulness Based Stress Reduction Adapted for Depressed Disadvantaged Women in an Urban Federally Qualified Health Center. *Mindfulness*

A Yang, J Ciolino, E Pinheiro, L Rasmussen-Torvik, D Sit, K Wisner. Neonatal Discontinuation Syndrome in Serotonergic Antidepressant Exposed Neonates. *Journal of Clinical Psychiatry*

M Sherenian, A Singh, KY Kim, K Ericksen, **A Yang**, L Minturn, Z Abid, K Mestan, L Ernst. Immunophenotyping the fetal response to chorioamnionitis *Journal of Allergy and Clinical Immunology*

J Fryer, E Teitelbaum, B George, M Schuller, S Meyerson, C Theodorou, J Kang, **A Yang**, L Zhao, D DaRosa. The impact of ongoing assessment of resident operative autonomy on the OR environment. *Journal of Surgical Education*

CERTIFICATES & AWARD	SAS Certified Base Programmer for SAS9	2011
	Certificate of Completion, Program in Advanced Statistical Studies	2010
	Teaching Assistant Award–Statistical Inference	2015

COURSEWORK

Probability Theory and Math Statistics	Longitudinal Data Analysis
Applied Bayesian Statistical Analysis	Multivariate Statistics
Data Structure and Database	Linear Model
Statistical Method I and II	Statistical Inference I
Survey Design and Sampling Procedures	Survival Analysis
Categorical Data Analysis	Statistical Computing
Design of Biomedical Studies I and II	Bioinformatics

MEMBERSHIPS & SERVICE

Member of American Statistical Association (ASA)
Member of International Biometric Society Eastern North American Region (ENAR)
Volunteer at World Vision U.S.