

Curriculum Vitae

Qi Yan

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IMMIGRATION STATUS

U.S. Permanent Resident

EDUCATION

- 2018-** **Research Assistant Professor in Pediatrics**
University of Pittsburgh, Pittsburgh, PA
Children's Hospital, Pittsburgh, PA
- 2017-2018** **Research Instructor in Pediatrics**
University of Pittsburgh, Pittsburgh, PA
Children's Hospital, Pittsburgh, PA
- 2014-2016** **Post-Doctoral Fellow in Pediatrics** (Mentors: Daniel E. Weeks and Wei Chen)
University of Pittsburgh, Pittsburgh, PA
Children's Hospital, Pittsburgh, PA
- 2011-2014** **Ph.D. of Science in Biostatistics** (Mentor: Nianjun Liu)
University of Alabama at Birmingham, Birmingham, AL
Dissertation: Statistical Methods for Set-based Association Tests in Genetic Studies
- 2009-2011** **Master of Science in Biostatistics**
University of Alabama at Birmingham, Birmingham, AL
Thesis: The Effect of Racial Difference on Warfarin Dose Response and Hemorrhagic Complications
- 2007-2009** **Master of Science in Biomedical Engineering (Bioinformatics)**
University of Alabama at Birmingham, Birmingham, AL
Thesis: Molecular Dynamics Simulation of Thrombospondin (TSP1) and Calreticulin (CRT) Binding
- 2003-2007** **Bachelor of Science in Biomedical Engineering**
Beijing Institute of Technology, Beijing, China

PROFESSIONAL EXPERIENCE

- 2017-** **Department of Pediatrics, University of Pittsburgh, PA**
Research Assistant Professor/Research Instructor
My active research projects include: 1. Development of statistical and computational methods for high throughput genetic and genomic data; 2. Genetic studies of Age-related Macular Degeneration (AMD), Asthma, Chronic Obstructive Pulmonary Disease (COPD) and Alzheimer Disease; 3. Transcriptome (RNAseq) studies in Asthma and Localized Scleroderma (LS).
- Develop statistical algorithms and related software packages.
 - Write independent research grants.

- Collaborate with medical doctors, perform clinical data analysis and write professional manuscripts.

2014-2016 Department of Pediatrics, University of Pittsburgh, PA

Postdoctoral Research

My active research projects include: 1. Development of statistical and computational methods for high throughput genetic and genomic data; 2. Genetic studies of AMD; 3. Genetic studies of Asthma and COPD in Hispanics; 4. Investigation of the impact of sequencing errors on family-based gene mapping; 5. DNA-seq, RNA-seq and Methylation analysis

- Develop statistical algorithms and related software packages.
- Collaborate with medical doctors, perform clinical data analysis and write professional manuscripts.

2011-2014 Department of Biostatistics, University of Alabama at Birmingham, Birmingham, AL

Doctoral Dissertation Research

This dissertation research focuses on developing statistical methods for set-based association tests at both pathway and gene levels in genetic studies. In the first study, we proposed a novel way for pathway analysis that assesses the effects of genes using the sequence kernel association test (SKAT) and the effects of pathways via an extended adaptive-rank-truncated product statistic. In the second study, we proposed an analytical method based on kernel machine regression to be applicable for longitudinal data. In the third study, we proposed an analytical method to be applicable for familial data with various types of phenotypes based on generalized linear mixed model.

- Collaborate with mentor to develop statistical algorithms and associated software packages.
- Perform data analysis and write professional manuscripts.

2013-2014 Department of Biostatistics, University of Alabama at Birmingham, Birmingham, AL

NSF Graduate Research

We try to determine whether genetic markers of autoimmunity validated in European and Asian populations influence the occurrence of Rheumatoid Arthritis (RA) in African Americans, determine whether genetic markers of RA susceptibility play a role in radiographic severity in African Americans and develop and test predictive models for RA risk and outcome using clinical and genomic data in African Americans.

- Conducted statistical analysis of GWAS at marker and gene levels.
- Reported research results at internal meetings.

2010-2011 Department of Biostatistics, University of Alabama at Birmingham, Birmingham, AL

Master's Thesis Research

We evaluated the influence of race and gender on therapeutic warfarin dose, anticoagulation control and most importantly risk of major hemorrhage from prospective inception cohort of chronic warfarin users.

- Conducted research in interdisciplinary groups
- Reported research results at internal meetings.
- Provided statistical support to medical doctors with their projects and grant preparation.

2010-2011 Department of Epidemiology, University of Alabama at Birmingham, Birmingham, AL

Research Assistant

I participated in two projects. 1. A genome-wide association study (GWAS) of carotid atherosclerosis in HIV-infected men. 2. A Comparison of Principal Component Analysis Using Autosomal Variants with Phylogeny Based on Y-chromosome and Mitochondrial Markers.

- Provided insight, regular and ad-hoc reporting backed by solid analysis and documentation.
- Manipulated and maintained large-scale genetic data.
- Worked on multiple large projects to perform in a cross-functional team.

2007-2009 Department of Biomedical Engineering, University of Alabama at Birmingham, Birmingham, AL

Research Assistant

We investigated the structural insights for Thrombospondin-1 binding to Calreticulin by using Molecular Dynamics technique.

- Worked with supervisor to investigate the properties of Molecular Dynamics of proteins.
- Reported research results in the manuscripts professionally.

TEACHING EXPERIENCE

- 2019 spring Invited Lecturer**
Foundations of Translational Bioinformatics (BIOINF 2016)
Department of Biomedical Informatics, University of Pittsburgh, Pittsburgh, PA
- 2017 winter Invited Lecturer**
Introductory high-throughput genomic data analysis I: data mining and applications (BIOST 2055)
Department of Biostatistics, University of Pittsburgh, Pittsburgh, PA
- 2016 spring Invited Lecturer**
Introductory high-throughput genomic data analysis I: data mining and applications (BIOST 2055)
Department of Biostatistics, University of Pittsburgh, Pittsburgh, PA
- 2016 spring Invited Lecturer**
Applied mixed models analysis (BIOST 2086)
Department of Biostatistics, University of Pittsburgh, Pittsburgh, PA
- 2015 spring Invited Lecturer**
Introductory high-throughput genomic data analysis I: data mining and applications (BIOST 2055)
Department of Biostatistics, University of Pittsburgh, Pittsburgh, PA
- 2012 spring Graduate Teaching Assistant**
Inter Statistical Analysis I (BST611)
Department of Biostatistics, University of Alabama at Birmingham, Birmingham, AL
- 2013 fall Graduate Teaching Assistant**
Inter Statistical Analysis II (BST612)

AWARDS

- 2015** 2014 Best Paper Award - UAB from the Science Unbound Foundation
2011 Research Fellowship Award from Department of Biostatistics
2009 Research Fellowship Award from Department of Biomedical Engineering
2007 Research Fellowship Award from Department of Biomedical Engineering

PEER REVIEWED PUBLICATIONS

1. **Qi Yan**, Nianjun Liu, Erick Forno, Glorisa Canino, Juan C. Celedon, Wei Chen. “An integrative association method for omics data based on a modified Fisher’s method with application to childhood asthma”. PLOS Genetics, 2019, <https://doi.org/10.1371/journal.pgen.1008142>.
2. Jordan Mandel, Huabo Wang, Daniel P. Normolle, Wei Chen, **Qi Yan**, Peter C. Lucas, Panayiotis V. Benos, and Edward V. Prochownik. “Expression patterns of small numbers of transcripts from functionally-related pathways predict survival in multiple cancers”. BMC Cancer, 2019, doi: 10.1186/s12885-019-5851-6.
3. Kumaravel Rajakumar, **Qi Yan**, Arshad T. Khalid, Eleanor Feingold, Abbe N. Vallejo, F. Yesim Demirci and M. Ilyas Kamboh. “Gene Expression and Cardiometabolic Phenotypes of Vitamin D-Deficient Overweight and Obese Black Children”. Nutrients, 2019, doi: 10.3390/nu11092016.
4. M. Ilyas Kamboh*, Kang-Hsien Fan*, **Qi Yan***, Joanne C. Beer*, Beth E. Snitz, Xingbin Wang, Chung-Chou H. Chang, F. Yesim Demirci, Eleanor Feingold, Mary Ganguli. “Population-based genome-wide association study of cognitive decline in older adults free of dementia: Identification of a novel locus for the attention domain”. Neurobiology of Aging, 2019, doi: 10.1016/j.neurobiolaging.2019.02.024.
5. Yingda Jiang, Chi-yang Chiu, **Qi Yan**, Wei Chen, Michael B. Gorin, Yvette P. Conley, M’Hamed Lajmi Lakhali-Chaieb, Richard J. Cook, Christopher I. Amos, Alexander F. Wilson, Joan E. Bailey-Wilson, Francis J. McMahon, Ana I. Vazquez, Ao Yuan, Xiaogang Zhong, Momiao Xiong, Daniel E. Weeks, and Ruzong Fan. “Gene-based Association Testing of Dichotomous Traits with Generalized Linear Mixed Models Using Extended Pedigrees”. 2019, Accepted in JASA.
6. Erick Forno, Ting Wang, Cancan Qi, **Qi Yan**, Cheng-Jian Xu, Nadia Boutaoui, Yueh-Ying Han, Daniel Weeks, Yale Jiang, Franziska Rosser, Judith M Vonk, Sharon Brouwer, Edna Acosta-Perez, Angel Colón-Semidey, María Alvarez, Glorisa Canino, Gerard H Koppelman, Wei Chen, Juan C Celedón. “DNA methylation in nasal epithelium, atopy, and atopic asthma in children: a genome-wide study”. Lancet Respir Med, 2018, doi: 10.1016/S2213-2600(18)30466-1.
7. **Qi Yan**, Kwangsik Nho, Jorge L. Del-Aguila, Xingbin Wang, Shannon L. Risacher, Kang-Hsien Fan, Beth E. Snitz, Howard J. Aizenstein, Chester A. Mathis, Oscar L. Lopez, F. Yesim Demirci, Eleanor Feingold, William E. Klunk, Andrew J. Saykin, Carlos Cruchaga, M. Ilyas Kamboh. “Genome-wide association study of brain amyloid deposition as measured by Pittsburgh Compound-B (PiB)-PET imaging”. Molecular Psychiatry, 2018, doi: 10.1038/s41380-018-0246-7.
8. **Qi Yan***, Ying Ding*, Yi Liu, Tao Sun, Lars G. Fritsche, Traci Clemons, Rinki Ratnapriya, Michael L. Klein, Richard J. Cook, Yu Liu, Ruzong Fan, Lai Wei, Gonçalo R. Abecasis, Anand Swaroop, Emily Y. Chew, AREDS2 research group, Daniel E. Weeks*, Wei Chen*. “Genome-wide Analysis of Disease Progression in Age-related Macular Degeneration”. Human Molecular Genetics, 2018, doi: 10.1093/hmg/ddy002.
9. **Qi Yan**, Zhou Fang and Wei Chen. “KMgene: a unified R package for gene-based association analysis for complex

- traits". *Bioinformatics*, 2018, <https://doi.org/10.1093/bioinformatics/bty066>.
10. Xiaofeng Wen*, Yu Liu*, **Qi Yan***, Minling Liang, Miao Tang, Ran Liu, Jianying Pan, Qihui Liu, Tingting Chen, Shixin Guo, Juanran Liang, Lin Lv, Xiaoyan Ding, Chen Zhao, Wei Chen and Lai Wei. "*IGFNI* Is Associated with Polypoidal Choroidal Vasculopathy". ***co-first-author**. *The Journal of Gene Medicine*, 2018, doi: 10.1002/jgm.3007.
 11. Zhou Fang, Tianzhou Ma, Gong Tang, Li Zhu, **Qi Yan**, Ting Wang, Juan C. Celedón, Wei Chen, and George C. Tseng. "Bayesian integrative model for multi-omics data with missingness". *Bioinformatics*, 2018, doi: 10.1093/bioinformatics/bty775.
 12. Kristin M Burkart, Tamar Sofer, Stephanie J. London, Ani Manichaikul, Fernando P Hartwig, **Qi Yan**, María Soler Artigas, Lydiana Avila, Wei Chen, Sonia Davis Thomas, Alejandro A. Diaz, Ian P Hall, Bernardo L Horta, Robert C Kaplan, Cathy C. Laurie, Ana M Menezes, Jean V. Morrison, Elizabeth C Oelsner, Deepa Rastogi, Stephen S Rich, Manuel Soto-Quiros, Adrienne M. Stilp, Martin D Tobin, Louise V Wain, Juan C. Celedón, R. Graham Barr. "A Genome-Wide Association Study in Hispanics/Latinos Identifies Novel Signals for Lung Function". *Am J Respir Cell Mol Biol (AJRCMB)*, 2018, doi: 10.1164/rccm.201707-1493OC.
 13. Erick Forno, Ting Wang, **Qi Yan**, John Brehm, Edna Acosta-Perez, Angel Colon-Semidey, Maria Alvarez, Nadia Boutaoui, Michelle M. Cloutier, John F. Alcorn, Glorisa Canino, Wei Chen, Juan C Celedón. "A multi-omics approach to identify genes associated with childhood asthma risk and morbidity". *Am J Respir Cell Mol Biol (AJRCMB)*, 2017, doi: 10.1165/rcmb.2017-0002OC.
 14. Ying Ding, Yi Liu, **Qi Yan**, Lars G. Fritsche, Richard J. Cook, Traci Clemons, Rinki Ratnapriya, Gonçalo R. Abecasis, Anand Swaroop, Emily Y. Chew, Daniel E. Weeks, Wei Chen. "Bivariate Analysis of Age-Related Macular Degeneration Progression Using Genetic Risk Scores". *Genetics*, 2017, <https://doi.org/10.1534/genetics.116.196998>.
 15. **Qi Yan**, John Brehm, Donglei Hu, Erick Forno, Edna Acosta-Perez, Glorisa Canino, Cathy C. Laurie, Michelle M. Cloutier, Benjamin A. Raby, Wei Chen, Adrienne M. Stilp, Tamar Sofer, Matthew P. Conomos, Kenneth Rice, R. Graham Barr, Esteban G. Burchard, Juan C Celedón. "A meta-analysis of genome-wide association studies of asthma in Puerto Ricans". *European Respiratory Journal*, 2017, 49:1601505. **With an accompanying Editorial**.
 16. Erick Forno, Joanne Sordillo, John Brehm, Wei Chen, Takis Benos, **Qi Yan**, Lydiana Avila, Manuel Soto-Quirós, Michelle M Cloutier, Angel Colón-Semidey, Maria Alvarez, Edna Acosta-Pérez, Scott T Weiss, Augusto A Litonjua, Glorisa Canino, Juan C Celedón. "Genome-wide interaction study of dust mite allergen 1 on lung function in children with asthma". *Journal of Allergy and Clinical Immunology*, 2017, doi: 10.1016/j.jaci.2016.12.967.
 17. Maria I Danila, Vincent A Laufer, Richard J Reynolds, **Qi Yan**, Nianjun Liu, Peter K Gregersen, Annette Lee, Marlena Kern, Carl D Langefeld, Donna K Arnett, and S Louis Bridges, Jr. "Dense Genotyping of Immune-Related Regions Identifies Loci for Rheumatoid Arthritis Risk and Damage in African Americans". *Molecular Medicine*, 2017, 23: 177–187.
 18. Lingyun Wang, Di Pan, **Qi Yan**, Yuhua Song. "Activation mechanisms of $\alpha V\beta 3$ integrin by binding to fibronectin: A computational study". *Protein Science*, 2017, doi: 10.1002/pro.3163.
 19. Wei Chen, Ting Wang, Maria Pino-Yanes, Erick Forno, Liming Liang, **Qi Yan**, Donglei Hu, Daniel E. Weeks, Andrea Baccarelli, Edna Acosta-Perez, Celeste Eng, Yueh-Ying Han, Nadia Boutaoui, Catherine Laprise, Gwyneth A. Davies, Julian M. Hopkin, Miriam F. Moffatt, William O.C.M. Cookson, Glorisa Canino, Esteban G. Burchard, Juan C. Celedón. "An epigenome-wide association study of total serum IgE in Hispanic children". *Journal of*

- Allergy and Clinical Immunology, 2017, doi: 10.1016/j.jaci.2016.11.030.
20. **Qi Yan**, Rui Chen, James S. Sutcliffe, Edwin H. Cook, Daniel E. Weeks, Bingshan Li, Wei Chen. “The impact of genotype calling errors on family-based studies”. *Scientific Reports*, 2016, doi: 10.1038/srep28323.
 21. **Qi Yan**, Daniel E. Weeks, Hemant K. Tiwari, Nengjun Yi, Kui Zhang, Guimin Gao, Wan-Yu Lin, Xiang-Yang Lou, Wei Chen, and Nianjun Liu. “Rare-Variant Kernel Machine Test for Longitudinal Data from Population and Family Samples”. *Human Heredity*, 2016, 80(3):126-138.
 22. **Qi Yan**, Daniel E. Weeks, Juan C. Celedón, Hemant K. Tiwari, Bingshan Li, Xiaojing Wang, Wan-Yu Lin, Wei Chen, and Nianjun Liu. “Associating Multivariate Quantitative Phenotypes with Genetic Variants in Family Samples with a Novel Kernel Machine Regression Method”. *Genetics*, 2015, 201(4):1329-39. **Chosen by the GENETICS Editors as one of the December 2015 Highlights.**
 23. Ruzong Fan*, Yifan Wang*, **Qi Yan***, Ying Ding, Daniel E. Weeks, Zhaohui Lu, Haobo Ren, Richard J. Cook, Momiao Xiong, Anand Swaroop, Emily Y. Chew, and Wei Chen. “Gene-based Association Analysis for Censored Traits via Fixed Effect Functional Regressions”. **co-first-author. Genetic Epidemiology*, 2016 Feb;40(2):133-43.
 24. John M. Brehm, Sze-Man Tse, Damien C. Croteau-Chonka, Erick Forno, Augusto A. Litonjua, Benjamin A. Raby, Wei Chen, **Qi Yan**, Nadia Boutaoui, Edna Acosta-Pérez, Lydiana Avila, Scott T. Weiss, Manuel Soto-Quiros, Michelle M. Cloutier, Donglei Hu, Maria Pino-Yanes, Sally E. Wenzel, Melissa Spear, Jay K. Kolls, Esteban G. Burchard, Glorisa Canino, and Juan C. Celedón. “A Genome-wide Association Study of Post-Bronchodilator Lung Function in Children with Asthma”. *AJRCCM*, 2015, 192(5):634-7.
 25. Nita A. Limdi, Todd M. Brown, **Qi Yan**, Jonathan L. Thigpen, Aditi Shendre, Nianjun Liu, Charles E. Hill, Donna K. Arnett, T. Mark Beasley. “Race influences warfarin dose changes associated with genetic factors”. *Blood*. 2015 May 29. pii: blood-2015-02-627042. **With an accompanying Editorial.**
 26. **Qi Yan**, Hemant K. Tiwari, Nengjun Yi, Guimin Gao, Wan-Yu Lin, Xiang-Yang Lou, and Nianjun Liu. “Sequence Kernel Association Test for Dichotomous Traits in Family Sample under Generalized Linear Mixed Model”. *Human Heredity*, 2015, 79(2):60-68.
 27. Wei Chen, John M. Brehm, Ani Manichaikul, Michael H. Cho, Nadia Boutaoui, **Qi Yan**, Kristin M. Burkart, Paul L. Enright, Jerome I. Rotter, Hans Petersen, Shuguan Leng, Ma'en Obeidat, Yohan Bossé, Corry-Anke Brandsma, Ke Hao, Stephen S. Rich, Rhea Powell, Lydiana Avila, Manuel Soto-Quiros, Edwin K. Silverman, Yohannes Tesfaigzi, R Graham Barr, Juan C. Celedón. “A Genome-Wide Association Study of Chronic Obstructive Pulmonary Disease in Hispanics”. *Annals of ATS*, 2014, 12(3):340-8.
 28. **Qi Yan**, Hemant K. Tiwari, Nengjun Yi, Wan-Yu Lin, Guimin Gao, Xiang-Yang Lou, Xiangqin Cui, and Nianjun Liu. “Kernel Machine Testing Coupled with Rank Truncation Method for Genetic Pathway Analysis”. *Genetic Epidemiology*, 2014, 38:447-456. **2014 Best Paper Award - UAB from the Science Unbound Foundation.**
 29. Sadeep Shrestha, **Qi Yan**, Greg Joseph, Donna K Arnett Jeremy J Martinson, Lawrence A Kingsley. “Replication of RYR3 gene polymorphism association with cIMT among HIV-infected Caucasians”. *AIDS*, 2012, Vol 26 No 12.
 30. Robert Makowsky, **Qi Yan**, Howard W Wiener, Brahim Aissani, Richard A Kaslow, Hemant K Tiwari, Sadeep Shretha. “The Utility of Mitochondrial and Y Chromosome Phylogenetic Data to Improve Correction for Population Stratification”. *Frontiers in Genetics*, 2012, 3: 301.
 31. **Qi Yan**, Jay McDonald, Tong Zhou, Yuhua Song. “Structural Insight for the Roles of Fas Death Domain Binding to FADD and Oligomerization Degree of the Fas - FADD complex in the Death Inducing Signaling Complex Formation: A Computational Study”. *Protein*, 2012 Oct 8. doi: 10.1002/prot.24193.
 32. Di Pan, **Qi Yan**, Yabing Chen, Jay M McDonald, Yuhua Song. “Trifluoperazine regulation of calmodulin binding to

Fas: A computational study". *Protein*, 2011, 79:2543-2556.

33. **Qi Yan**, Joanne E. Murphy-Ullrich, Yuhua Song. "Molecular and Structural Insight for the Role of Key Residues of Thrombospondin-1 and Calreticulin in Thrombospondin-1- Calreticulin Binding". *Biochemistry*, 2011, 50(4), pp566-573.
34. **Qi Yan**, Joanne E. Murphy-Ullrich, Yuhua Song. "Structural Insight for the Role of Thrombospondin-1 Binding to Calreticulin in Calreticulin-Induced Focal Adhesion Disassembly". *Biochemistry*, 2010, 49 (17), pp3685-3694.

BOOK CHAPTERS

1. GENETIC EPIDEMIOLOGY (Methods and Protocols). Springer, 2018.

MANUSCRIPTS UNDER REVIEW OR REVISION

1. **Qi Yan**, Yale Jiang, Heng Huang, Anand Swaroop, Emily Y. Chew, Daniel E. Weeks, Wei Chen, Ying Ding. "GWAS-based Machine Learning for Prediction of Age-Related Macular Degeneration Risk". Under review in *PLOS Medicine*.

READY FOR SUBMISSION

1. **Qi Yan**, Erick Forno, Esther Herrera-Luis, Maria Pino-Yanes, Raimon Rios, Sam Oh, Edna Acosta-Pérez, Donglei Hu, Celeste Eng, Scott Huntsman, Lydiana Avila, Nadia Boutaoui, Michelle M. Cloutier, Manuel E. Soto-Quiros, Scott T. Weiss, Jessica Lasky-Su, Camila Figueiredo, Mauricio L. Barreto, Glorisa Canino, Wei Chen, Esteban G. Burchard, Juan C. Celedón. "*PRKCH* and severe asthma exacerbations in Latino children".
2. **Qi Yan**, Daniel E. Weeks, Hongyi Xin, Anand Swaroop, Emily Y. Chew, Wei Chen, Ying Ding. "Classification of Late Age-Related Macular Degeneration Progression Using Deep Learning".

INVITED PRESENTATIONS

1. **Yan Q.** "KMgene: a unified R package for gene-based association analysis for complex traits" ASHG Conference. Poster. October 19, 2018
2. **Yan Q.** "Genome-wide analysis of age-related macular degeneration progression" ASHG Conference. Poster. October 19, 2017
3. **Yan Q.** "An Omnibus Test for Gene-Level Effects of Multi-Omics Data with Application to Childhood Asthma" ICSA Conference (Shanghai, China). Platform talk. December 22, 2016
4. **Yan Q.** "Associating Multivariate Quantitative Phenotypes with Genetic Variants in Family Samples with a Novel Kernel Machine Regression Method" ICSA Conference (Atlanta, GA). Platform talk. June 13, 2016
5. **Yan Q.** "Set-based Methods for DNA Methylation Analysis" ASHG Conference. Poster. October 8, 2015
6. **Yan Q.** "Rare-Variant Kernel Machine Test for Longitudinal Data for Population and Family Samples" JSM Conference. Platform talk. August 12, 2015
7. **Yan Q.** "Sequence kernel association test for multivariate quantitative phenotype in family samples" ASHG Conference. Platform talk. October 19, 2014
8. **Yan Q.** "Kernel Machine Testing Coupled with Rank Truncation Method for Genetic Pathway Analysis" JSM Conference. Platform talk. August 4, 2013

REVIEWS

Guest editor, the supplement of *Big Data Analytics for Health*, 2015

Editorial Board, *Frontiers in Genetics*, 2014

Reviewer, Plos One, 2015, 2018
Reviewer, Meta Gene, 2017
Reviewer, Scientific Reports, 2016, 2018
Reviewer, Human Heredity, 2016
Reviewer, Bioinformatics, 2015
Reviewer, Human Genetics, 2015,2017, 2018
Reviewer, Genetic Epidemiology, 2015, 2018
Reviewer, Statistics and Its Interface, 2015
Reviewer, International Journal of Cancer, 2015
Reviewer, Mediators of Inflammation, 2015
Reviewer, Biometrics & Biostatistics International Journal, 2015
Reviewer, Annals of Nutrition and Metabolism, 2014
Reviewer, Annals of Human Genetics, 2014
Reviewer, Colombian Journal of Statistics, 2014

GRANTS

<i>K01 HL138098 (NHLBI)</i>	<i>Principal Investigator</i>	<i>04/15/2018 – 03/31/2023</i>
<i>Novel Methods for Analysis of Genetic and Epigenetic Studies of Childhood Asthma</i>		
Total cost: \$714,630		
<i>RAC UPMC/University of Pittsburgh</i>	<i>Principal Investigator</i>	<i>01/01/2016 – 12/31/2016</i>
<i>Novel Methods for Analysis of Genetic and Epigenetic Studies of Childhood Asthma</i>		
Total cost: \$45,100		

TECHNICAL SKILLS

Proficiency with R programming
Proficiency with UNIX/LINUX environment and related programming languages: Shell, Python, Perl

PROFESSIONAL ORGANIZATIONS

Member, American Society of Human Genetics, 2014-
Member, American Statistical Association, 2013-
Member, Professional Development Committee in Department of Biostatistics at UAB, 2012-2014.
Vice President, Chinese Student and Scholar Association at UAB, 2012-2013.