COLLEGE OF PUBLIC HEALTH CURRICULUM VITAE

Kai Wang
February 17, 2018

I. EDUCATION AND PROFESSIONAL HISTORY

A. Education

Institution	Field of Study	Degree Obtained	Degree Date
Lanzhou University	Mathematics	BA	1986
Nankai University	Econometrics	MA	1989
University of Iowa, Iowa City, Iowa	Economics	MA	1996
University of Iowa, Iowa City, Iowa	Statistics	PhD	1999

B. Professional and Academic Positions

Position Title	Dates of Service	Location/Institution
Instructor	1989-1992	Department of Mathematics, Nankai University, Tianjin, China
Teaching Assistant	1992-1997	Department of Economics, University of Iowa, Iowa City
Instructor	1996	Department of Economics, University of Iowa, Iowa City
Research Assistant	1997-1998	Department of Statistics and Actuarial Science, University of Iowa, Iowa City
Research Assistant Professor	1999	Comprehensive Cancer Center, University of Alabama at Birmingham, Birmingham
Assistant Professor	1999-2003	Department of Biostatistics Devision of Statistical Genetics, University of Iowa, Iowa City
Director of Graduate Studies	2003-2006	Program in Public Health Genetics, College of Public Health, University of Iowa, Iowa City

Position Title	Dates of Service	Location/Institution
Assistant Professor	2003-2005	Program in Public Health Genetics, College of Public Health, University of Iowa, Iowa City
Associate Professor	2005-2007	Program in Public Health Genetics, College of Public Health, University of Iowa, Iowa City
Acting Director of Graduate Studies	2006-2007	Program in Public Health Genetics, College of Public Health, University of Iowa, Iowa City
Associate Professor	2007-2013	Department of Biostatistics, College of Public Health, University of Iowa, Iowa City
Associate Professor	2010-2013	Interdisciplinary Graduate Degree Program in Informatics, Bioinformatics Subtrack, University of Iowa, Iowa City
Professor	2013-Present	Department of Biostatistics, College of Public Health, University of Iowa, Iowa City

C. Honors, Awards, Recognitions, and Outstanding Achievements

Year	Title
1984	Outstanding Student Award, Lanzhou University
1999	NSF travel grant for the CBMS Summer Course on Inferences from Genetic Data on Pedigrees, Michigan Technical University
2001	New Investigator Research Award, College of Public Health and College of Medicine, University of Iowa
2002	NSF travel grant for the Workshop on Developments and Challenges in Mixture Models, Bump Hunting and Measurement Error Models, Case Western Reserve University
2002	NSF travel grant for the Frontiers of Statistical Research: A Celebration of the 40th Anniversary of the Department of Statistics at Texas A&M University, Texas A&M University
2003	Finalist in Post-doctoral Neal Young Investigator Award, International Genetic Epidemiology Society Conference, Los Angeles, CA
2005	Mathematical & Physical Sciences Funding Program Award, University of Iowa

Year	Title
2005	University of Iowa international travel grant for the joint meeting of the Chinese Society of Probability and Statistics (CSPS) and the Institute of Mathematical Statistics (IMS), CSPS and IMS
2016	Best Paper Awards, 5th Annual Global Healthcare Conference: GHC 2016

II. TEACHING

A. Teaching Assignments on a semester-by-semester basis (*classroom, seminar, teaching lab*)

1. University of Iowa

Semester/Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible
Spring 1996	6K:71 Quantitative Analysis 6K:71	3		Primary Instructor	100%
Fall 1999	55:195 Computational Biology: one lecture (Nov. 5th)			Guest Lecturer	100%
Fall 1999	63:176 Biostatistical Methods I: one lecture (Nov. 30th)			Guest Lecturer	100%
Fall 2000	171:201 Biostatistical Methods I	4		Primary Instructor	100%
Spring 2001	171:202 Biostatistical Methods II	4		Primary Instructor	100%
Spring 2002	171:274 Computational Methods in Statistical Genetics	3		Primary Instructor	100%
Fall 2002	171:274 Computational Methods in Statistical Genetics	3		Primary Instructor	100%
Spring 2003	171:161 Introduction to Biostatistics	3		Primary Instructor	100%
Fall 2003	171:272 Statistical Genetics II: Continuous Traits	3		Primary Instructor	100%

Semester/Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible
Fall 2004	185:278 Computing Algorithms in Statistical Genetics	3		Primary Instructor	100%
Fall 2005	185:272 Population and Quantitative Genetics	3		Primary Instructor	100%
Fall 2006	185:278 Computing Algorithms in Statistical Genetics	3		Primary Instructor	100%
Fall 2006	185:280 Preceptorship in Statistical Genetics: Diana Abbott	2		Primary Instructor	100%
Spring 2007	171:162 Design & Analysis of Biomedical Studies	3		Primary Instructor	100%
Spring 2007	185:295 Research in Statistical Genetics: Diana Abbott	2		Primary Instructor	100%
Spring 2007	185:300 Dissertation in Statistical Genetics: Diana Abbott	8		Primary Instructor	100%
Fall 2007	171:280 Preceptorship in Biostatistics: Xiangjun Xiao	3		Primary Instructor	100%
Fall 2007	185:272 Population and Quantitative Genetics	3		Primary Instructor	100%
Fall 2007	185:290 Dissertation in Statistical Genetics: Diana Abbott	3		Primary Instructor	100%
Spring 2008	185:278 Computing Algorithms in Statistical Genetics	3		Primary Instructor	100%
Spring 2008	185:280 Preceptorship in Statistical Genetics: Yufang Zhang	3		Primary Instructor	100%

Semester/Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible
Spring 2008	185:290 Dissertation in Statistical Genetics: Diana Abbott	3		Primary Instructor	100%
Fall 2008	171:241 Applied Categorical Data Analysis	3		Primary Instructor	100%
Fall 2008	171:280 Preceptorship in Biostatistics: Yang Xu, Yufang Zhang	3		Primary Instructor	100%
Fall 2008	185:290 Dissertation in Statistical Genetics: Xiangjun Xiao, Yufang Zhang	3		Primary Instructor	100%
Spring 2009	171:203 Biostatistical Methods in Categorical Data	3		Primary Instructor	100%
Spring 2009	171:280 Preceptorship in Biostatistics: Shihao Shen	3		Primary Instructor	100%
Spring 2009	185:290 Dissertation in Statistical Genetics: Xiangjun Xiao, Yufang Zhang	3		Primary Instructor	100%
Fall 2009	171:241 Applied Categorical Data Analysis	3		Primary Instructor	100%
Fall 2009	185:290 Dissertation in Statistical Genetics: Xiangjun Xiao, Yufang Zhang	3		Primary Instructor	100%
Spring 2010	127:191 Human Molecular Genetics: Two lectures (March 23rd and 25th)			Guest Lecturer	100%
Spring 2010	171:280 Preceptorship in Biostatistics: Angela Meisterling, Lizette Ortega	3		Primary Instructor	100%

Semester/Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible
Spring 2010	171:290 Advanced Biostatistics Seminar: Statistical Genetics	3		Primary Instructor	100%
Spring 2010	185:290 Dissertation in Statistical Genetics: Xiangjun Xiao, Yufang Zhang	3		Primary Instructor	100%
Fall 2010	171:241 Applied Categorical Data Analysis	3		Primary Instructor	100%
Fall 2010	171:281 Independent Study in Biostatistics: Carmen Smith	3		Primary Instructor	100%
Fall 2010	185:300 Dissertation in Statistical Genetics: Xiangjun Xiao	3		Primary Instructor	100%
Spring 2011	171:203 Biostatistical Methods in Categorical Data	3		Primary Instructor	100%
Spring 2011	171:281 Independent Study in Biostatistics: Carmen Smith	3		Primary Instructor	100%
Spring 2011	185:300 Dissertation in Statistical Genetics: Xiangjun Xiao	3		Primary Instructor	100%
Summer 2011	Iowa Summer Institute in Biostatistics: one lecture	3		Primary Instructor	100%
Summer 2011	171:281 Independent Study in Biostatistics: Marytere Melendez, Carmen Smith	3		Primary Instructor	100%
Fall 2011	171:164 Research Data Management	3		Primary Instructor	100%
Fall 2011	171:281 Independent Study in Biostatistics: Vera Rayevskaya	3		Primary Instructor	100%

Semester/Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible
Fall 2011	171:300 Thesis/Dissertation: Carmen Smith	3		Primary Instructor	100%
Fall 2011	185:300 Dissertation in Statistical Genetics: Xiangjun Xiao	3		Primary Instructor	100%
Spring 2012	171:161 Introduction to Biostatistics	3		Primary Instructor	100%
Spring 2012	171:281 Independent Study in Biostatistics: Lizette Ortega	3		Primary Instructor	100%
Spring 2012	171:300 Thesis/Dissertation: Carmen Smith	3		Primary Instructor	100%
Spring 2012	185:300 Dissertation in Statistical Genetics: Xiangjun Xiao	3		Primary Instructor	100%
Summer 2012	Iowa Summer Institute in Biostatistics			Primary Instructor	100%
Summer 2012	171:300 Thesis/Dissertation: Carmen Smith	2		Primary Instructor	100%
Fall 2012	171:290:001 Advanced Biostatistics Seminar		15	Primary Instructor	
Fall 2012	171:290 Advanced Biostatistics Seminar: Statistiacal Genetics	3		Primary Instructor	60%
Fall 2012	171:300 Thesis/Dissertation: Carmen Smith, Lizette Ortega	3		Primary Instructor	100%
Fall 2012	185:300 Dissertation in Statistical Genetics: Xiangjun Xiao			Primary Instructor	100%

Semester/Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible
Spring 2013	171:203 Biostat Methods in Categorical Data	3		Primary Instructor	100%
Spring 2013	171:295:050 Research in Biostatistics: Lizette Ortega	3		Primary Instructor	100%
Spring 2013	171:300:050 Thesis/Dissertation: Carmen Smith	3		Primary Instructor	100%
Fall 2013	171:241 Applied Categorical Data Analysis	3		Primary Instructor	100%
Fall 2013	200:299:050 Research for Dissertation: Yang Xu	3		Primary Instructor	100%
Spring 2014	BIOS:5730:0001 Biostat Methods in Categorical Data	3		Primary Instructor	100%
Fall 2014	171:300 Thesis/Dissertation: Lizette Ortega, Carmen Smith	3		Primary Instructor	100%
Fall 2014	BIOS:6110 Applied Categorical Data Analysis	3		Primary Instructor	100%
Spring 2015	BIOS:5730:0001 Biostatistical Methods Categorical Data	3	6	Primary Instructor	100%
Spring 2015	BIOS:7900:0050 Thesis/Dissertation		1	Primary Instructor	100%
Fall 2015	BIOS:6110:0001 Applied Categorical Data Analysis	3		Primary Instructor	
Spring 2016	BIOS:5730:0001 Biostatistical Methods Categorical Data	3	11	Primary Instructor	100%

Semester/Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible
Spring 2016	BIOS:7500:0050 Preceptorship in Biostatistics		1	Primary Instructor	100%
Spring 2016	BIOS:7850:0050 Research in Biostatistics		1	Primary Instructor	100%
Fall 2016	BIOS:6110:1 Applied Categorical Data Analysis		16	Primary Instructor	100%
Spring 2017	BIOS:6210:0001 Applied Survival Analysis		14	Primary Instructor	100%
Spring 2018	BIOS:6210:0001 Applied Survival Analysis		12	Primary Instructor	100%
Spring 2018	BIOS:7600:0002 Advanced Biostatistics Seminar		6	Primary Instructor	100%

2. Other Institutions

Semester / Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible	Institution
Spring 1996	6K:71 Quantitative Analysis 6K:71	3	25	Primary Instructor	100%	
Fall 1999	55:195 Computational Biology: one lecture (Nov. 5th)		15	Guest Lecturer	100%	
Fall 1999	63:176 Biostatistical Methods I: one lecture (Nov. 30th)		8	Guest Lecturer	100%	

Semester / Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible	Institution
Fall 2000	171:201 Biostatistical Methods I	4	13	Primary Instructor	100%	
Spring 2001	171:202 Biostatistical Methods II	4	8	Primary Instructor	100%	
Spring 2002	171:274 Computational Methods in Statistical Genetics	3	4	Primary Instructor	100%	
Fall 2002	171:274 Computational Methods in Statistical Genetics	3	2	Primary Instructor	100%	
Spring 2003	171:161 Introduction to Biostatistics	3	32	Primary Instructor	100%	
Fall 2003	171:272 Statistical Genetics II: Continuous Traits	3	5	Primary Instructor	100%	
Fall 2004	185:278 Computing Algorithms in Statistical Genetics	3	2	Primary Instructor	100%	
Fall 2005	185:272 Population and Quantitative Genetics	3	4	Primary Instructor	100%	

Semester / Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible	Institution
Fall 2006	185:278 Computing Algorithms in Statistical Genetics	3	3	Primary Instructor	100%	
Fall 2006	185:280 Preceptorship in Statistical Genetics: Diana Abbott	2	1	Primary Instructor	100%	
Spring 2007	171:162 Design & Analysis of Biomedical Studies	3	40	Primary Instructor	100%	
Spring 2007	185:295 Research in Statistical Genetics: Diana Abbott	2	1	Primary Instructor	100%	
Spring 2007	185:300 Dissertation in Statistical Genetics: Diana Abbott	8	1	Primary Instructor	100%	
Fall 2007	171:280 Preceptorship in Biostatistics: Xiangjun Xiao	3	1	Primary Instructor	100%	
Fall 2007	185:272 Population and Quantitative Genetics	3	2	Primary Instructor	100%	

Semester / Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible	Institution
Fall 2007	185:290 Dissertation in Statistical Genetics: Diana Abbott	3	1	Primary Instructor	100%	
Spring 2008	185:278 Computing Algorithms in Statistical Genetics	3	2	Primary Instructor	100%	
Spring 2008	185:280 Preceptorship in Statistical Genetics: Yufang Zhang	3	1	Primary Instructor	100%	
Spring 2008	185:290 Dissertation in Statistical Genetics: Diana Abbott	3	1	Primary Instructor	100%	
Fall 2008	171:241 Applied Categorical Data Analysis	3	23	Primary Instructor	100%	
Fall 2008	171:280 Preceptorship in Biostatistics: Yang Xu, Yufang Zhang	3	2	Primary Instructor	100%	
Fall 2008	185:290 Dissertation in Statistical Genetics: Xiangjun Xiao, Yufang Zhang	3	2	Primary Instructor	100%	

Semester / Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible	Institution
Spring 2009	171:203 Biostatistical Methods in Categorical Data	3	10	Primary Instructor	100%	
Spring 2009	171:280 Preceptorship in Biostatistics: Shihao Shen	3	1	Primary Instructor	100%	
Spring 2009	185:290 Dissertation in Statistical Genetics: Xiangjun Xiao, Yufang Zhang	3	2	Primary Instructor	100%	
Fall 2009	171:241 Applied Categorical Data Analysis	3	36	Primary Instructor	100%	
Fall 2009	185:290 Dissertation in Statistical Genetics: Xiangjun Xiao, Yufang Zhang	3	2	Primary Instructor	100%	
Spring 2010	127:191 Human Molecular Genetics: Two lectures (March 23rd and 25th)		25	Guest Lecturer	100%	

Semester / Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible	Institution
Spring 2010	171:280 Preceptorship in Biostatistics: Angela Meisterling, Lizette Ortega	3	2	Primary Instructor	100%	
Spring 2010	171:290 Advanced Biostatistics Seminar: Statistical Genetics	3	11	Primary Instructor	100%	
Spring 2010	185:290 Dissertation in Statistical Genetics: Xiangjun Xiao, Yufang Zhang	3	2	Primary Instructor	100%	
Fall 2010	171:241 Applied Categorical Data Analysis	3	14	Primary Instructor	100%	
Fall 2010	171:281 Independent Study in Biostatistics: Carmen Smith	3	1	Primary Instructor	100%	
Fall 2010	185:300 Dissertation in Statistical Genetics: Xiangjun Xiao	3	1	Primary Instructor	100%	

Semester / Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible	Institution
Spring 2011	171:203 Biostatistical Methods in Categorical Data	3	13	Primary Instructor	100%	
Spring 2011	171:281 Independent Study in Biostatistics: Carmen Smith	3	1	Primary Instructor	100%	
Spring 2011	185:300 Dissertation in Statistical Genetics: Xiangjun Xiao	3	1	Primary Instructor	100%	
Summer 2011	Iowa Summer Institute in Biostatistics: one lecture	3	11	Primary Instructor	100%	
Summer 2011	171:281 Independent Study in Biostatistics: Marytere Melendez, Carmen Smith	3	2	Primary Instructor	100%	
Fall 2011	171:164 Research Data Management	3	20	Primary Instructor	100%	
Fall 2011	171:281 Independent Study in Biostatistics: Vera Rayevskaya	3	1	Primary Instructor	100%	

Semester / Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible	Institution
Fall 2011	171:300 Thesis/Dissertation: Carmen Smith	3	1	Primary Instructor	100%	
Fall 2011	185:300 Dissertation in Statistical Genetics: Xiangjun Xiao	3	1	Primary Instructor	100%	
Spring 2012	171:161 Introduction to Biostatistics	3	78	Primary Instructor	100%	
Spring 2012	171:281 Independent Study in Biostatistics: Lizette Ortega	3	1	Primary Instructor	100%	
Spring 2012	171:300 Thesis/Dissertation: Carmen Smith	3	1	Primary Instructor	100%	
Spring 2012	185:300 Dissertation in Statistical Genetics: Xiangjun Xiao	3	1	Primary Instructor	100%	
Summer 2012	Iowa Summer Institute in Biostatistics		15	Primary Instructor	100%	

Semester / Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible	Institution
Summer 2012	171:300 Thesis/Dissertation: Carmen Smith	2	1	Primary Instructor	100%	
Fall 2012	171:290 Advanced Biostatistics Seminar: Statistiacal Genetics	3	15	Primary Instructor	60%	
Fall 2012	171:300 Thesis/Dissertation: Carmen Smith, Lizette Ortega	3	2	Primary Instructor	100%	
Fall 2012	185:300 Dissertation in Statistical Genetics: Xiangjun Xiao		1	Primary Instructor	100%	
Spring 2013	171:203 Biostat Methods in Categorical Data	3	21	Primary Instructor	100%	
Spring 2013	171:295:050 Research in Biostatistics: Lizette Ortega	3	1	Primary Instructor	100%	
Spring 2013	171:300:050 Thesis/Dissertation: Carmen Smith	3	1	Primary Instructor	100%	

Semester / Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible	Institution
Fall 2013	171:241 Applied Categorical Data Analysis	3	18	Primary Instructor	100%	
Fall 2013	200:299:050 Research for Dissertation: Yang Xu	3	1	Primary Instructor	100%	
Spring 2014	BIOS:5730:0001 Biostat Methods in Categorical Data	3	14	Primary Instructor	100%	
Fall 2014	171:300 Thesis/Dissertation: Lizette Ortega, Carmen Smith	3	1	Primary Instructor	100%	
Fall 2014	BIOS:6110 Applied Categorical Data Analysis	3	23	Primary Instructor	100%	
Spring 2015	BIOS:5730:0001 Biostatistical Methods Categorical Data	3	6	Primary Instructor	100%	
Fall 2015	BIOS:6110:0001 Applied Categorical Data Analysis	3	14	Primary Instructor		

Semester / Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible	Institution
Spring 2016	BIOS:5730:0001 Biostatistical Methods Categorical Data	3	11	Primary Instructor	100%	

B. Students Advised

Graduate Students

Name	Field or Major	Degree Objective	Role
Huang, Xiao Dong		2004	Advisor
Li, Dapeng		MS Withdrawn	Advisor
Yang, Xinqun		MS 2002	Advisor
Govil, Manika		MS 2003	Advisor
Tan, Huaming		MS 2003	Advisor
Zhao, Lirong		MS 2003	Advisor
Kang, Jian		MS 2004	Advisor
Li, Mingjin		MS Withdrawn	Advisor
Li, Yafang		MS 2007	Advisor
Xu, Jing		MS	Advisor
Wineinger, Nathan		PhD Withdrawn	Advisor
Ortega, LIzette	Statistical Genetics	PhD Withdrawn	Advisor Advisor

Dissertations/Thesis

Name	Field or Major	Degree Objective	Role
Mendy, Angelico		In Process	Member Thesis/Dissertation Committee
Walls, William		In Process	Member Thesis/Dissertation Committee
Dogan, Meeshanthini	Bioinformatics	PhD Examining committee 2017	Member Thesis/Dissertation Committee
Xu, Yang	Bioinformatics	MS 2014	Advisor Thesis/Dissertation Committee
Xu, Yang	Bioinformatics	MS Withdrawn	Advisor Thesis/Dissertation Committee
Okeke, Barbara	Human Toxicology	PhD In Process	Thesis/Dissertation Committee
Giacalone, Joseph	Interdisciplinary Graduate Program in	PhD In Process	Member Thesis/Dissertation

Genetics		
Missikpode, Celestin	PhD In Process	Committee Member
Ludington, Elizabeth	PhD 2000	Thesis/Dissertation Committee Member
Jiang, Yanming	PhD 2001	Thesis/Dissertation Committee Member
Wang, Deli	PhD 2004	Thesis/Dissertation Committee Member
Yang, Xinqun	PhD 2005	Thesis/Dissertation Committee Committee Member
Xie, Xianjin	PhD 2005	Thesis/Dissertation Committee Member
Mendoza, Maria	PhD 2006	Thesis/Dissertation Committee Member
Tan, Huaming	PhD 2007	Thesis/Dissertation Committee Member
Istook, Diana	PhD 2009	Thesis/Dissertation Committee
Breheny, Patrick	PhD 2009	Committee Member Thesis/Dissertation Committee
Abbott, Diana	PhD 2009	Co-Chair Thesis/Dissertation Committee
Schindler, Emily	PhD 2010	Committee Member Thesis/Dissertation Committee
Martinez, Andres	PhD 2010	Member Thesis/Dissertation Committee
Zhang, Yufang	PhD Withdrawn	Dissertation Advisor Thesis/Dissertation Committee
Zhang, Yufang	PhD Withdrawn	Chair Thesis/Dissertation Committee
Liu, Jin	PhD 2011	Co-Chair Thesis/Dissertation Committee
Mikulski, Marek	PhD 2011	Committee Member Thesis/Dissertation Committee

Huang, Yungui		PhD 2011	Member Thesis/Dissertation Committee
Foster, Eric		PhD 2012	Member Thesis/Dissertation Committee
Xiao, Xiangjun		PhD Withdrawn	Chair Thesis/Dissertation Committee
Methaneethorn, Janthima		PhD 2013	Committee Member Thesis/Dissertation Committee
Brett, Benjamin		PhD 2014	Committee Member Thesis/Dissertation Committee
Badtke, Laura		PhD 2014	Member Thesis/Dissertation Committee
Smith, Carmen	Biostatistics	PhD Withdrawn	Chair Thesis/Dissertation Committee
Cao, Yanyan		PhD 2015	Member Thesis/Dissertation Committee
Lu, Wenjing		PhD 2015	Member Thesis/Dissertation Committee
Zhang, Tianyi	Applied Mathematical and Computational Sciences	PhD 2015	Member Thesis/Dissertation Committee
Mawanda, Francis		PhD 2015	Member Thesis/Dissertation Committee
Butler-Dawson, Jaime		PhD 2015	Member Thesis/Dissertation Committee
He, Bing	Interdisciplinary Graduate Program in Genetics	PhD 2015	Member Thesis/Dissertation Committee
Hu, Nan	Applied Mathematical and Computational Sciences	PhD 2016	Member Thesis/Dissertation Committee
Enayah, Sabah Hassain Enayah		PhD 2016	Committee Member Thesis/Dissertation Committee
Yu, Lixi	Biostatistics	PhD 2016	Member Thesis/Dissertation Committee
Roh, Taehyun	Interdisciplinary Graduate Program in Human Toxicology	PhD 2016	Member Thesis/Dissertation Committee

Wu, Hongqian		PhD 2016	Member Thesis/Dissertation Committee
Gao, Long		PhD 2017	Member Thesis/Dissertation Committee
Rudolphi, Josie		PhD 2017	Member Thesis/Dissertation Committee
Bao, Minli	Applied Mathematical and Computational Sciences	PhD 2017	Chair Thesis/Dissertation Committee

Other Advising/Mentoring

Name	Field or Major	Degree Objective	Role
Wickrama, Bhagya		MS 2001	Member Comprehensive Exam
Madiloggovit, Jirakate		PhD 2016	Member Comprehensive Exam

C. Course Materials (syllabi, instructional web pages, computer lab materials) (Description only - *full materials to be included in promotion dossier*)

III. SCHOLARSHIP

A. Publications or Creative Works

1. Peer-Reviewed Papers

1. Wang K, Vieland V, Huang J (1999). A Bayesian approach to replication of linkage findings. *Genetic Epidemiology* 17(Supplement 1):S749-S754. PMID: 10597525

2. Collaborative Linkage Study of Autism: , Barret S, Beck J, Berniew R, Bisson E, Braun T, Cassavant T, Childress D, Folstein SE, Garcia M, Gardiner MB, Gilman S, Haines JL, Hopkins K, Landa R, Meyer NH, Mullane JA, Nishimura DY, Palmer P, Piven J, Prudy J, Santangelo SL, Searby C, Sheffield VC, Singleton J, Slager S, Struchen T, Svenson S, Vieland VJ, Wang K, Winklosky B (1999). An autosomal genomic screen for autism. *American Journal of Medical Genetics (Neurosychiatric Genetics)* 88(6):609-615. PMID: 11811142

3. Wang K, Huang J, Vieland VJ (2000). The consistency of the posterior probability of linkage. *Annals of Human Genetics* 64(Part 6):533-553. PMID: 11281217

4. Wang K, Huang J, Logue M, Vieland VJ (2001). Combined multipoint analysis of multiple asthma data sets based on the posterior probability of linkage. *Genetic Epidemiology* 21(Supplement 1):S73-S78. PMID: 11793769

5. Bradford Y, Haines J, Hutcheson H, Gardiner M, Braun T, Sheffield V, Cassavant T, Huang W, Wang K, Vieland V, Folstein S, Santangelo S, Piven J (2001). Incorporating language

phenotypes strengthens evidence of linkage to autism. *American Journal of Medical Genetics (Neuropsychiatric Genetics)* 105(6):539-547. PMID: 11496372

6. Huang J, Vieland VJ, Wang K (2001). Nonparametric estimation of marginal distributions under bivariate truncation with application to testing for age-of-onset anticipation. *Statistica Sinica*, 11:1047-1068.

7. Vieland VJ, Wang K, Huang J (2001). Power to detect linkage based on multiple sets of data in the presence of locus heterogeneity: Comparative evaluation of model-based linkage methods for affected sib pair data. *Human Heredity* 51(4):199-208. PMID: 11287741

8. Wang K, Huang J (2002). A score-statistic approach for the mapping of quantitative-trait loci with sibships of arbitrary size. *American Journal of Human Genetics* 70(2):412-424. PMC: PMC384916, PMID: 11791211

9. Wang K (2002). Efficient score statistics for mapping quantitative trait loci with extended pedigrees. *Human Heredity* 54(2):57-68. PMID: 12566738

10. Wang K, Huang J (2002). Score test for mapping quantitative-trait loci with sibships of arbitrary size when the dominance effect is not negligible. *Genetic Epidemiology* 23(4):398-412. PMID: 12432506

11. Morcuende JA, Minhas R, Dolan L, Stevens J, Beck J, Wang K, Weinstein SL, Sheffield V (2003). Allelic variants of human melatonin 1-A receptor (hMel-1A) in patients with familial adolescent idiopathic scoliosis. *Spine* 28(17):2025-2029. PMID: 12973153

12. Zhang X, Wang K (2003). Bivariate linkage analysis of cholesterol and triglyceride levels in Framingham heart study. *BMC Genetics* 4(Supplement 1):S62. PMC: PMC1866500, PMID: 14975130

13. Yang X, Wang K, Huang J, Vieland VJ (2003). Genome-wide linkage analysis of blood pressure under locus heterogeneity. *BMC Genetics* 4(Supplement 1):S78. PMC: PMC1866517, PMID: 14975146

14. Wang K, Peng Y (2003). Linkage analysis of systolic blood pressure: A score statistic and computer implementation. *BMC Genetics* 4(Supplement 1):S77. PMC: PMC1866516, PMID: 14975145

15. Wang K (2003). Mapping quantitative trait loci using multiple phenotypes in general pedigrees. *Human Heredity* 55(1):1-15. PMID: 12890921

16. Wang K (2003). Score tests for epistasis models on quantitative traits using general pedigree data. *Genetic Epidemiology* 25(4):314-326. PMID: 14639701

17. Wang K (2004). A note on asymptotic properties of affected-sib-pair linkage tests. *Annals of Human Genetics* 68(Part 4):367-375. PMID: 15225162

18. Wang K, Sheffield VC (2005). A constrained-likelihood approach to marker-trait association studies. *American Journal of Human Genetics* 77(5):768-780. PMC: PMC1271386, PMID: 16252237

19. Wang K (2005). A likelihood approach for quantitative-trait-loci mapping with selected pedigrees. *Biometrics* 61(2):465-473. PMID: 16011693

20. Sander MD, Abbasi D, Ferguson AL, Steyers CM, Wang K, Morcuende JA (2005). The prevalence of hereditary neuropathy with liability to pressure palsies in patients with multiple surgically treated entrapment neuropathies. *Journal of Hand Surgery-American* 30A(6):1236-1241. PMID: 16344182

21. Wang K, Peng Y (2006). Quantitative-trait-locus mapping in the presence of locus heterogeneity. *Annals of Human Genetics* 70(Part 6):882-892. PMID: 17044863

22. Bishop JR, Wang K, Moline J, Ellingrod VL (2007). Association analysis of the metabotropic glutamate receptor type 3 gene (GRM3) with schizophrenia. *Psychiatric Genetics* 17(6):358. PMID: 18075480

23. Fingert JH, Alward WM, Kwon yH, Wang K, Streb LM, Sheffield VC, Stone EM (2007). LOXL1 mutations are associated with exfoliation syndrome in patients from the Midwestern United States. *American Journal of Ophthalmology*, 144(6):974-975. PMID: 18036875

24. Wang K, Abbott D (2008). A principal components regression approach to multilocus genetic association studies. *Genetic Epidemiology* 32(2):108-118. PMID: 17849491

25. Wang K (2008). An analytic study of the power of popular quantitative-trait-locus mapping methods. *Behavior Genetics* 38(5):554-559. PMID: 18766435

26. Ho BC, Epping E, Wang K, Andreasen NC, Librant A, Wassink TH (2008). Basic helix-loop-helix transcription factor NEUEOG1 and schizophrenia: Effects on illness susceptibility, MRI brain morphometry and cognitive abilities. *Schizophrenia Research* 106(2-3):192-199. PMC: PMC2597152, PMID: 18799289

27. Wang K (2008). Genetic association tests in the presence of epistasis or gene-environment interaction. *Genetic Epidemiology* 32(7):606-614. PMID: 18435472

28. Maddox C, Wang BX, Kirby PA, Wang K, Ludewig (2008). Mutagenicity of 3-methylcholanthrene, PCB3, and 4-OH-PCB3 in the lung of transgenic BigBlue® rats. *Environmental Toxicology and Pharmacology* 25(2):260-266. PMC: PMC2346436, PMID: 18438460

29. Zhang Y, Xiao X, Wang K (2009). Accommodating population stratification in case-control association analysis: a new test and its application to genome-wide study on rheumatoid arthritis. *BMC Proceedings* 3(Suppl 7):S111. PMC: PMC2795883, PMID: 20017976

30. Xiao X, Zhang Y, Wang K (2009). Association of KCNB1 to rheumatoid arthritis via interaction with HLA-DRB1. *BMC Proceedings* 3(Suppl 7):S134. PMC: PMC2795908, PMID: 20018001

31. Wang K (2009). Testing for genetic association in the presence of population stratification in genome-wide association studies. *Genetic Epidemiology* 33(7):637-645. PMID: 19235185

32. Jacobus JA, Wang B, Maddox C, Esch H, Lehmann L, Robertson LW, Wang K, Kirby P, Ludewig G (2010). 3-Methylcholanthrene (3-MC) and 4-Chlorobiphenyl (PCB3) genotoxicity is gender-related in Fischer 344 transgenic rats. *Environment International* 36(8):970-979. PMC: PMC2949545, PMID: 20739065

33. Fingert JH, Alward WL, Wang K, Yorio T, Clark AF (2010). Assessment of SNPs associated with the human glucocorticoid receptor in primary open-angle glaucoma and steroid responders. *Molecular Vision*, 16:596-601. PMC: PMC2848919, PMID: 20376328

34. Hu D, Lehmler H, Martinez A, Wang K, Hornbuckle KC (2010). Atmospheric PCB congeners across Chicago. *Atmospheric Environment* 44(12):1550-1557. PMC: PMC3171135, PMID: 21918637

35. Schindler EI, Nylen EL, Ko AC, Affatigato LM, Heggen AC, Wang K, Sheffield VC, Stone EM (2010). Deducing the pathogenic contribution of recessive ABCA4 alleles in an outbred population. *Human Molecular Genetics* 19(19):3693-3701. PMC: PMC2935854, PMID: 20647261

36. Sun X, Sui H, Fisher JT, Yan Z, Lui X, Cho HJ, Joo NS, Zhang Y, Zhou W, Lei-Butters DC, Yi Y, Griffin MA, Naumann P, Luo M, Ascher J, Wang K, Wine JJ, Meyerholz DK, Engelhardt JF (2010). Disease phenotype of a ferret CFTR-knockout model of cystic fibrosis. *The Journal of Clinical Investigation* 120(9):3149-3160. PMC: PMC2929732, PMID: 20739752

37. Shyy W, Wang K, Sheffield VC, Morcuende JA (2010). Evaluation of embryonic and perinatal myosin gene mutations and the etiology of congenital idiopathic clubfoot. *Journal of Pediatric Orthopaedics* 30(3):231-234. PMC: PMC2913130, PMID: 20357587

38. Shyy W, Wang K, Gurnett CA, Dobbs MB, Smith NH, Wise C, Sheffield VC, Morcuende JA (2010). Evaluation of GPR50, hMel-1B, and ROR-alpha melatonin-related receptors and the etiology of adolescent idiopathic scoliosis. *Journal of Pediatric Orthopaedics* 30(6):539-543. PMC: PMC2928583, PMID: 20733416

39. Martinez A, Wang K, Hornbuckle KC (2010). Fate of PCB congeners in an industrial harbor of Lake Michigan. *Environmental Science & Technology* 44(8):2803-2808. PMC: PMC3257175, PMID: 20131898

40. Lively GD, Jiang B, Hedberg-Buenz A, Chang B, Peterson GE, Wang K, Kuehn MH, Anderson MG (2010). Genetic dependence of central corneal thickness among inbred strains of mice. *Investigative Ophthalmology & Visual Science* 51(1):160-171. PMC: PMC2869057, PMID: 19710407

41. Xie W, Wang K, Robertson LW, Ludewig G (2010). Investigation of mechanism(s) of DNA damage induced by 4-monochlorobyphenyl (PCB3) metabolites. *Environment International* 36(8):950-961. PMC: PMC2888624, PMID: 20129669

42. Xie W, Ludewig G, Wang K, Lehmler H (2010). Model and cell membrane partitioning of perfluorooctanesulfonate is independent of the lipid chain length. *Colloids and Surfaces, B, Biointerfaces* 76(1):128-136. PMC: PMC2818369, PMID: 19932010

43. Martinez A, Norstrom K, Wang K, Hornbuckle KC (2010). Polychlorinated biphenyls in the surficial sediment of Indiana Harbor and Ship Canal, Lake Michigan. *Environment International* 36(8):849-854. PMC: PMC2888873, PMID: 19268364

44. Lively GD, Koehn D, Hedberg-Buenz A, Wang K, Anderson M (2010). Quantitative trait loci associated with murine central corneal thickness. *Physiological Genomics* 42(2):281-286. PMC: PMC3032283, PMID: 20423963

45. Kuehn MH, Wang K, Roos B, Stone EM, Kwon YH, Alward WL, Mullins RF, Fingert JH (2011). Chromosome 7q31 POAG locus: ocular expression of caveolins and lack of association with POAG in a US cohort. *Molecular Vision*, 17:430-435. PMC: PMC3038208, PMID: 21321670

46. Lai IK, Chai Y, Simmons D, Watson WH, Tan R, Haschek WM, Wang K, Wang B, Ludewig G, Robertson LW (2011). Dietary selenium as a modulator of PCB 126-induced hepatotoxicity in male Sprague Dawley rats. *Toxicological Sciences* 124(1):202-214. PMC: PMC3196656, PMID: 21865291

47. Mullins RF, Dewald AD, Streb LM, Wang K, Kuehn MH, Stone EM (2011). Elevated membrane attack complex in human choroid with high risk complement factor H genotypes. *Experimental Eye Research* 93(4):565-567. PMC: PMC3206185, PMID: 21729696

48. Mullins RF, Skeie JM, Folk JC, Solivan-Timpe FM, Oetting TA, Huang J, Wang K, Stone EM, Fingert jH (2011). Evaluation of variants in the selectin genes in age-related macular degeneration. *BMC Medical Genetics*, 12:58. PMC: PMC3096910, PMID: 21521525

49. Fabbro S, Kahr WH, Hinckley J, Wang K, Moseley J, Ryu GY, Nixon B, White JG, Bair T, Schutte B, Paola JD (2011). Homozygosity mapping with SNP arrays confirms 3p21 as a recessive locus for gray platelet syndrome and narrows the interval significantly. *Blood* 117(12):3430-3434. PMC: PMC3069679, PMID: 21263149

50. Kahr WH, Hinckley J, Li L, Schwertz H, Christensen H, Rowley JW, Pluthero FG, Urban D, Fabbro S, Nixon B, Gadzinski R, Storck M, Wang K, Ryu G-, Jobe SM, Schutte BC, Moseley J, Loughran NB, Parkinson J, Weyrich AS, Di Paola J (2011). Mutations in NBEAL2, encoding a BEACH protein, cause gray platelet syndrome. *Nature Genetics*, 43:738-740. PMID: 21765413

51. Liu J, Wang K, Ma S, Huang J (2011). Regularized regression method for genome-wide association studies. *BMC Proceedings* 5(Supplement 9):S67. PMC: PMC3287906, PMID: 22373491

52. Mikulski M, Hartley P, Sprince N, Sanderson W, Lourens S, Worden N, Wang K, Fuortes L (2011). Risk and significance of chest radiograph and pulmonary function abnormalities in an elderly cohort of former nuclear weapons workers. *Occupational and Environmental Medicine* 53(9):1046-1053. PMID: 21866051

53. Wang B, Robertson LW, Wang K, Ludewig G (2011). Species difference in the regulation of cytochrome P450 2S1: Lack of induction in rats by the aryl hydrocarbon receptor agonist PCB126. *Xenobiotica* 41(12):1031-1043. PMC: PMC3564674, PMID: 21970748

54. Wang K, Huang J (2011). Treating phenotype as given: A simple resampling method for genome-wide association studies. *BMC Proceedings* 5(Supplement 9):S60. PMC: PMC3287899, PMID: 22373312

55. Olivier AK, Yi Y, Sun X, Sui H, Liang B, Hu S, Xie W, Fisher JT, Keiser NW, Lei D, Zhou W, Yan Z, Li G, Evans TI, Meyerholz DK, Wang K, Stewart ZA, Norris AW, Engelhardt JF (2012). Abnormal endocrine pancreas function at birth in cystic fibrosis ferrets. *The Journal of Clinical Investigation*, 122(10):3755–3768. PMC: PMC3534166, PMID: 22996690

56. Fingert JH, Roos BR, Solivan-Timpe F, Miller K, Oetting TA, Wang K, Kwan YH, Scheetz TE, Stone EM, Alward WL (2012). Analysis of ASB10 variants in open angle glaucoma. *Human Molecular Genetics*, 21(20):4543-4548. PMC: PMC3459468, PMID: 22798626

57. Zhang Y, Meyer N, Wang K, Nishimura C, Frees K, Jones M, Katz L, Sethi S, Smith R (2012). Causes of alternative pathway dysregulation in dense deposit disease. *Clinical Journal of the American Society of Nephrology*, 7(2):265-274. PMC: PMC3280037, PMID: 22223606

58. Fingert JH, Burden JH, Wang K, Kwon YH, Alward WL, Anderson MG (2012). Circumferential iris transillumination defects in exfoliation syndrome. *Journal of Glaucoma*, 22(7):555-558. PMC: PMC3502723, PMID: 22525123

59. Wang K, Fingert J (2012). Statistical tests for detecting rare variants using variance-stabilizing transformations. *Annals of Human Genetics* 76(5):402-409. PMC: PMC3418475, PMID: 22724536

60. Wang K (2012). Statistical tests of genetic association for case-control study designs. *Biostatistics* 13(4):724-733. PMID: 22389176

61. Scheetz T, Fingert J, Wang K, Kuehn M, Knudtson K, AlWard W, Boldt H, Russell S, Folk J, Casavant T, Braun T, Clark A, Stone E, Sheffield V (2013). A genome-wide association study for primary open angle glaucoma and macular degeneration reveals novel loci. *PLoS ONE*, 8(3):e58657. PMC: PMC3594156, PMID: 23536807

62. Liu J, Wang K, Ma S, Huang J (2013). Accounting for linkage disequilibrium in genome-wide association studies: A penalized regression method. *Statistics and Its Interface*, 6:99-115.

63. Wang K, Hu X, Peng P (2013). An analytical comparison of the principal component method and the mixed effects model for association studies in the presence of cryptic relatedness and population stratification. *Human Heredity*, 76(1):1-9. PMID: PMID: 23921716

64. Fisher JT, Tyler SR, Zhang Y, Lee BJ, Liu X, Sun X, Sui H, Liang B, Luo M, Xie W, Yi Y, Zhou W, Song Y, Keiser N, Wang K, de Jonge HR, Engelhardt J (2013). Bioelectric characterization of epithelia from neonatal CFTR knockout ferrets. *American Journal of Respiratory Cell and Molecular Biology*, 49(5):837-844. PMC: PMC3931095, PMID: 23782101

65. Lai I, Klaren W, Li M, Wels B, Simmons D, Olivier A, Haschek-Hock W, Wang K, Ludewig G, Robertson LW (2013). Does dietary copper supplementation enhance or diminish PCB126 toxicity in rodent liver? *Chemical Research in Toxicology* 26(5):634-644. PMC: PMC3660509, PMID: 23527585

66. Hou L, Wang K, Bartlett C (2013). Evaluation of a Bayesian model-integration-based method for censored data. *Human Heredity* 74(1):1-11. PMC: PMC3571622, PMID: 23018141

67. Gonsalez-Alegre P, Buffard V, Wang K, Henien S, Morcuende JA (2013). Exploring the link between dystonia genes and idiopathic scoliosis. *Journal of Pediatric Orthopaedics*, 33(6):e65-e66. PMID: 23812140

68. Liu J, Huang J, Ma S, Wang K (2013). Incorporating group correlations in genome-wide association studies using smoothed group lasso. *Biostatistics*, 14((2)):205-219. PMC: PMC3590928, PMID: 22988281

69. Iwabuchi S, Koh J, Wang K, Ho KW, Harata NC (2013). Minimal change in the cytoplasmic calcium dynamics in striatal GABAergic neurons of a DYT1 dystonia knock-in mouse model. *PLos ONE*, 8(11):e80793. PMC: PMC3834333, PMID: 24260480

70. Marek R, Thorne PS, Wang K, DeWall J, Hornbuckle K (2013). PCBs and OH-PCBs in Serum from Children and Mothers in Urban and Rural U.S. Communities. *Environmental Science & Technology*, 47(7):3353–3361. PMC: PMC3645264, PMID: 23452180

71. Hinckley J, Abbott D, Burns TL, Heiman M, Shapiro A, Wang K, Di Paola J (2013). Quantitative trait locus linkage analysis in a large Amish pedigree identifies novel candidate loci for erythrocyte traits. *Molecular Genetics & Genomic Medicine*, 1(2):131-141. PMC: PMC3775389, PMID: 24058921

72. Seo S, Mullins RF, Dumitrescu AV, Bhattarrai S, Gratie D, Wang K, Stone EM, Sheffield VC (2013). Subretinal gene therapy of mice with Bardet-Biedl Syndrome type 1. *Investigative Ophthalmology & Visual Science*, 54(9):6118-6132. PMC: PMC3771708, PMID: 23900607

73. Bu F, Mega T, Meyer NC, Wang K, Thomas C, Nester C, Smith R (2014). Comprehensive genetic analysis of the complement and coagulation pathways in atypical hemolytic uremic syndrome. *Journal of the American Society of Nephrology*, 25(1):55-64. PMC: PMC3871781, PMID: 24029428

74. Sohn EH, Flamme-Wiese MJ, Whitmore SS, Wang K, Tucker BA, Mullins RF (2014). Loss of CD34 expression in aging human choriocapillaris endothelial cells. *PLos ONE*, 9(1):e86538. PMC: PMC3897719, PMID: 24466138

75. Brownstein CA, Beggs AH, Homer N, Merriman B, Yu TW, Flannery KC, DeChene ET, Towne MC, Savage SK, Price EN, Holm IA, Luquette LJ, Lyon E, Majzoub J, Neupert P, McCallie, Jr D, Szolovits P, Willard HF, Mendelsohn NJ, Temme R, Finkel RS, Yum SW, Medne L, Sunyaev SR, Adzhubey I, Cassa CA, de Bakker PI, Duzkale H, Dworzyński P, Fairbrother W, Francioli L, Funke BH, Giovanni MA, Handsaker RE, Lage K, Lebo MS, Lek M, Leshchiner I, MacArthur DG, McLaughlin HM, Murray MF, Pers TH, Polak PP, Raychaudhuri S, Rehm HL, Soemedi R, Stitziel NO, Vestecka S, Supper J, Gugenmus C, Klocke B, Hahn A, Schubach M, Menzel M, Biskup S, Freisinger P, Deng M, Braun M, Perner S, Smith RJ, Andorf JL, Huang J, Ryckman K, Sheffield VC, Stone EM, Bair T, Black-Ziegelbein EA, Braun TA, Darbro B, DeLuca AP, Kolbe DL, Scheetz TE, Shearer AE, Sompallae R, Wang K, Bassuk AG, Edens E, Mathews K, Moore SA, Shchelochkov OA, Trapane P, Bossler A, Campbell CA, Heusel JW, Kwitek A, Maga T, Panzer K, Wassink T, Van Daele D, Azaiez H, Booth K, Meyer N, Segal MM, Williams MS, Tromp G, White P, Corsmeier D, Fitzgerald-Butt S, Herman G, Lamb-Thrush D, McBride KL, Newsom D, Pierson CR, Rakowsky AT, Maver A, Lovrečić L, Palandačić A, Peterlin B, Torkamani A, Wedell A, Huss M, Alexeyenko A, Lindvall JM, Magnusson M, Nilsson D, Stranneheim H, Taylan F, Gilissen C, Hoischen A, van Bon B, Yntema H, Nelen M, Zhang W, Sager J, Zhang L, Blair K, Kural D, Cariaso M, Lennon GG, Javed A, Agrawal S, Ng PC, Sandhu KS, Krishna S, Veeramachaneni V, Isakov O, Halperin E, Friedman E, Shomron N, Glusman G, Roach JC, Caballero J, Cox HC, Mauldin D, Ament SA, Rowen L, Richards DR, San Lucas FA, Gonzalez-Garay ML, Caskey CT, Bai Y, Huang Y, Fang F, Zhang Y, Wang Z, Barrera J, Garcia-Lobo JM, González-Lamuño D, Llorca J, Rodriguez MC, Varela I, Reese MG, De La Vega FM, Kiruluta E, Cargill M, Hart RK, Sorenson JM, Lyon GJ, Stevenson DA, Bray BE, Moore BM, Eilbeck K, Yandell M, Zhao H, Hou L, Chen X, Yan X, Chen M, Li C, Yang C, Gunel M, Li P, Kong Y, Alexander AC, Albertyn ZI, Boycott KM, Bulman DE, Gordon PM, Innes AM, Knoppers BM, Majewski J, Marshall CR,

Parboosingh JS, Sawyer SL, Samuels ME, Schwartzentruber J, Kohane IS, Margulies DM (2014). An international effort towards developing standards for best practices in analysis, interpretation and reporting of clinical genome sequencing results in the CLARITY Challenge. *Genome Biology*, 15(3):R53. PMC: PMC4073084, PMID: 24667040

76. Wang K (2014). Testing genetic association by regressing genotype over multiple phenotypes. *PloS ONE*, 9(9):e106918. PMC: PMC4164437, PMID: 25221983

77. Gonzalez-Alegre P, Di Paola J, Wang K, Fabbro S, Yu HC, Shaikh TH, Darbro BW, Bassuk AG (2014). Evaluating familial essential tremor with novel genetic approaches: Is it a genotyping or phenotyping issue? *Tremor and other Hyperkinetic Movements (New York, N.Y.)*, 4:258. PMC: PMC4219111, PMID: 25374765

78. Mullins RF, Schoo DP, Sohn EH, Flamme-Wiese MJ, Workamelahu G, Johnston RM, Wang K, Tucker BA, Stone EM (2014). The membrane attack complex in aging human choriocapillaris: relationship to macular degeneration and choroidal thinning. *The American Journal of Pathology*, 184(11):3142-53. PMC: PMC4215023, PMID: 25204844

79. Stunkel M, Bhattarai S, Kemerley A, Stone EM, Wang K, Mullins RF, Drack AV (2015). Vitritis in pediatric genetic retinal disorders. *Ophthalmology*, 122(1):192-9. PMC: PMC4277925, PMID: 25217415

80. Sohn EH, Wang K, Thompson S, Riker MJ, Hoffmann JM, Stone EM, Mullins RF (2015). Comparison of drusen and modifying genes in autosomal dominant radial drusen and age-related macular degeneration. *Retina (Philadelphia, Pa.)*, 35(1):48-57. PMID: 25077532

81. Philibert R, Hollenbeck N, Andersen E, Osborn T, Gerrard M, Gibbons FX, Wang K (2015). A quantitative epigenetic approach for the assessment of cigarette consumption. *Frontiers in Psychology*, 6:656. PMC: PMC4451580, PMID: 26082730

82. Rohlman DS, Ismail AA, Rasoul GA, Bonner MR, Hendy O, Mara K, Wang K, Olson JR (2016). A 10-month prospective study of organophosphorus pesticide exposure and neurobehavioral performance among adolescents in Egypt. *Cortex; a journal devoted to the study of the nervous system and behavior*, 74:383-395. PMC: PMC4786370, PMID: 26687929

83. Wang B, Klaren WD, Wels BR, Simmons DL, Olivier AK, Wang K, Robertson LW, Ludewig G (2016). Dietary manganese modulates PCB126 toxicity, metal status, and MnSOD in the rat. *Toxicological Sciences : an official journal of the Society of Toxicology*, 150(1):15-26. PMC: PMC5009614, PMID: 26660635

84. Huang J, Wang K, Wei P, Liu X, Liu X, Tan K, Boerwinkle E, Potash JB, Han S (2016). FLAGS: A Flexible and Adaptive Association Test for Gene Sets Using Summary Statistics. *Genetics*, 202(3):919-929. PMC: PMC4788129, PMID: 26773050

85. Koh WX, Hornbuckle KC, Marek RF, Wang K, Thorne PS (2016). Hydroxylated polychlorinated biphenyls in human sera from adolescents and their mothers living in two U.S. Midwestern communities. *Chemosphere*, 147:389-395. PMC: PMC4747419, PMID: 26774304

86. Ulland TK, Jain N, Clay GC, Hornick EE, Sadler JJ, Mills KA, Janowski AM, Volk AP, Wang K, Legge KL, Gakhar L, Bourdi M, Ferguson PJ, Wilson ME, Cassel SL, Sutterwala FS, (2016). Nlrp12 mutation causes C57BL/6J strain-specific defect in neutrophil recruitment. *Nature Communications*, 7:13180.

87. Philibert R, Hollenbeck N, Andersen E, McElroy S, Wilson S, Vercande K, Beach S, Osborn T, Gerrard M, Gibbons R, Wang K (2016). Reversion of AHRR demethylation is a quantitative biomarker of smoking cessation. *Frontiers in Psychiatry - Addictive Disorders*, 7:55. PMC: PMC4822186, PMID: 27092088

88. Wang K (2016). A robust statistical method for constructing 3D chromosome structure using Hi-C chromatin interaction data. *Proceedings of International Conference on Applied Statistics 2016*.

89. Yi Y, Sun X, Gibson-Corley K, Xie W, Liang B, He N, Tyler SR, Uc A, Philipson LH, Wang K, Hara M, Larson Ode K, Norris AW, Engelhardt JF (2016). A transient metabolic recovery from early life glucose intolerance in cystic fibrosis ferrets occurs during pancreatic remodeling. *Endocrinology*, 157(5):1852-1865. PMC: PMC4870869, PMID: 26862997

90. Hedberg-Buenz A, Christopher MA, Lewis CJ, Fernandes KA, Dutca LM, Wang K, Scheetz TE, Abràmoff MD, Libby RT, Garvin MK, Anderson MG (2016). Quantitative measurement of retinal ganglion cell populations via histology-based random forest classification. *Experimental Eye Research*, 146:370-385. PMC: PMC4841761, PMID: 26474494

91. Hedberg-Buenz A, Christopher MA, Lewis CJ, Meyer KJ, Rudd DS, Dutca LM, Wang K, Garvin MK, Scheetz TE, Abràmoff MD, Harper MM, Anderson MG (2016). RetFM-J, an ImageJ-based module for automated counting and quantifying features of nuclei in retinal whole-mounts. *Experimental Eye Research*, 146:386-392. PMC: PMC4753132, PMID: 26283021

92. Mondal P, Baumstein S, Prabhakaran S, Abu-Hasan M, Zeng Y, Singh S, Wang K, Ahrens RC, Hendeles L (2016). Bioassay of salmeterol in children using methacholine challenge with impulse oscillometry. *Pediatric Pulmonology*, 51(6):570-575. PMID: 26575323

93. Scheetz TE, Roos BR, Solivan-Timpe F, Miller K, DeLuca AP, Stone EM, Kwon YH, Alward WL, Wang K, Fingert JH (2016). SQSTM1 mutations and glaucoma. *PLoS ONE*, 11(6):e0156001. PMC: PMC4898711, PMID: 27275741

94. Xu Y, Dai D, Wang K (2016). A flexible penalized integrated analysis of mRNA and miRNA expression levels as biomarkers for endometrial cancer classification. *Proceedings of the 5th Annual Global Healthcare Conference (GHC 2016)*:53-58.

95. Wang K (2016). Boosting the power of the sequence kernel association test by properly estimating its null distribution. *American Journal of Human Genetics*, 99(1):1041-14. PMC: PMC5005443, PMID: 27292111

96. Risma JM, Tehrani S, Wang K, Fingert JH, Alward WL, Kwon YH (2016). The utility of diaton tonometer measurements in patients with ocular hypertension, glaucoma, and glaucoma tube shunts: A preliminary study for its potential use in keratoprosthesis patients. *Journal of Glaucoma*, 25(8):643-7. PMID: 26950582

97. Koh WX, Hornbuckle KC, Wang K, Thorne P, (2016). Serum polychlorinated biphenyls and their hydroxylated metabolites are associated with demographic and behavioral factors in children and mothers. *Environment International*, 94:538-545. PMC: PMC4980156, PMID: 27352881

98. Yi Y, Norris AW, Wang K, Sun X, Uc A, Moran A, Engelhardt JF, Ode KL (2016). Abnormal glucose tolerance in infants and young children with cystic fibrosis. *American Journal of Respiratory and Critical Care Medicine*, 194(8):974-980. PMC: PMC5067820, PMID: 27447840

99. Scheetz TE, Faga B, Ortega L, Roos BR, Gordon MO, Kass MA, Wang K, Fingert JH (2016). Glaucoma risk alleles in the Ocular Hypertension Treatment Study (OHTS). *Ophthalmology*, 123(12):2527-2536. PMID: 27707548

100. Chirco KR, Whitmore SS, Wang K, Potempa LA, Halder JA, Stone EM, Tucker BA, Mullins RF (2016). Monomeric C-reactive protein and inflammation in age-related macular degeneration. *The Journal of Pathology*, 240(2):173-183. PMID: 27376713

101. Ismail AA, Bonner MR, Hendy O, Rasoul GA, Wang K, Olson JR, Rohlman DS (2017). Comparison of neurological health outcomes between two adolescent cohorts exposed to pesticides in Egypt. *PLOS One*:e0172696.

102. Chen Z, Lu Y, Lin T, Liu Q, Wang K (2017). Gene-based genetic association test with adaptive optimal weights. *Genet Epidemiol*, 42(1):95-103. PMID: 29178441

103. Ismail AA, Wang K, Olson JR, Bonner MR, Hendy O, Abdel Rasoul G, Rohlman DS (2017). The Impact of Repeated Organophosphorus Pesticide Exposure on Biomarkers and Neurobehavioral Outcomes among Adolescents. *Journal of Toxicology and Environmental Health, Part A: Current Issues*, 80(10-12):542-555. PMID: 28880741

104. Chung T, Lenci LT, Wang K, Collins TE, Griess MD, Oetting TA, Shriver E (2017). Effect of Fine-Motor-Skill Activities on Surgical Simulator Performance. *Journal of Cataract & Refractive Surgery*, 43:pp. 915-922.

105. Bao M, Wang K (2017). Genome-wide association studies using a penalized moving-window regression. *Bioinformatics*, 33(24):3887–3894.

106. Chen Z, Han S, Wang K (2017). Genetic association test based on principal component analysis. *Stat Appl Genet Mol Biol*, 16(3):189-198. PMID: 28672760

107. Guo Z, Kwon YH, Lee K, Wang K, Wahle A, Alward WL, Fingert JH, Bettis DI, Johnson CA, Garvin MK, Sonka M, Abramoff MD (2017). Optical Coherence Tomography Analysis Based Prediction of Humphrey 24-2 Visual Field Thresholds in Patients with Glaucoma. *Invest Ophthalmol Vis Sci*, 58(10):3975-3985. PMC: PMC5552000, PMID: 28796875

108. Wang K (2017). Conditional Asymptotic Inference for the Kernel Association Test. *Bioinformatics*, 33(23):3733-3739. PMID: 28961861

109. Chen Z, Wang K (2017). A gene-based test of association through an orthogonal decomposition of genotype scores. *Hum Genet*, 136(10):1385-1394. PMID: 28864915

110. Kania-Korwel I, Wu X, Wang K, Lehmler H (2017). Identification of Lipidomic Markers of Chronic 3,3',4,4',5-Pentachlorobiphenyl (PCB 126) Exposure in the Male Rat Liver. *Toxicology*, 390:124-134. PMID: 28890136

111. Roh T, Lynch CF, Weyer P, Wang K, Kelly KM, Ludewig G (2017). Low-level arsenic exposure from drinking water is associated with prostate cancer in Iowa. *Environ Res*, 159:338-343.

112. Rosen BH, Evans TI, Moll SR, Gray JS, Liang B, Sun X, Zhang Y, Jensen-Cody CW, Swatek AM, Zhou W, He N, Rotti PG, Tyler SR, Keiser NW, Anderson PJ, Brooks L, Li Y, Pope TM, Rajput M, Hoffman EA, Wang K, Harris JK, Parekh KR, Gibson-Corley KN, Engelhardt JF (2017). Infection Is Not Required for Mucoinflammatory Lung Disease in CFTR-Knockout Ferrets. *American Journal of Respiratory and Critical Care Medicine*. (*Accepted/In Press*)

113. Clark T, Evans J, Wang K, Shriver E (2017). The Effect of Iris Show on Perceived Upper Eyelid Height. *Canadian Journal of Ophthalmology / Journal canadien d'ophtalmologie*. (*Accepted/In Press*)

114. Clark TJ, Klejch WJ, Allen RC, Nerad JA, Wang K, Carter KD, Shriver EM (2017). Hering's law in congenital ptosis: evaluation of the contralateral response to unilateral congenital ptosis repair. *Ophthal Plast Reconstr Surg*. PMID: 28723733 (*Accepted/In Press*)

115. Chen Z, Lin T, Wang K (2017). A powerful variant-set association test based on chi-square distribution. *Genetics*, 207(3):903-910. PMID: 28912342 (*Accepted/In Press*)

116. Zeng Y, Singh S, Wang K, Ahrens RC (2017). Effect of Study Design on Sample Size in Studies Intended to Evaluate Bioequivalence of Inhaled Short-Acting Beta-Agonist Formulations. *Journal of Clinical Pharmacology*. (*Accepted/In Press*)

117. Liang Y, Liu X, Singletary MA, Wang K, Mattes TE (2017). Relationships between the abundance and expression of functional genes from vinyl chloride (VC)-degrading bacteria and geochemical parameters at VC-contaminated sites. *Environ Sci Technol*, 51(21):12164-12174. PMID: 28981261 (*Accepted/In Press*)

118. Wang K (2017). Understanding power anomalies in mediation analysis. *Psychometrika*. (*Accepted/In Press*)

119. Jiao C, Eliott D, Spee C, He S, Wang K, Mullins RF, Hinton DR, Sohn EH (2017). Apoptosis and Angiofibrosis in Diabetic Tractional Membranes after VEGF Inhibition: Results of a Prospective Trial. *Retina*. (*Accepted/In Press*)

120. Miraldi Utz V, Pfeifer WO, Longmuir SQ, Olson R, Wang K, Drack AV (2018). The presentation of TRPM1-associated Congenital Stationary Night Blindness in children. *JAMA Ophthalmology*. (*Accepted/In Press*)

121. Wang K (2017). Identification and maximum likelihood estimation in mediation models with interaction and unobserved confounding. *Scandinavian Journal of Statistics*. (*Submitted*)

122. Rohlman DS, Ismail A, Bonner MR, Rasoul GA, Hendy O, Ortega L, Wang K, Olson JR (2017). Occupational Pesticide Exposure and Attention Deficit Hyperactivity Disorder in Adolescent Pesticide Applicators in Egypt. *Environmental Health Perspectives*. (*Submitted*)

123. Wang K (2017). Statistical mediation analysis via likelihood. *Journal of the Royal Statistical Society, Series B*. (*Submitted*)

124. Chirco KR, Whitmore SS, Wang K, Potempa LA, Halder JA, Stone EM, Tucker BA, Mullins RF (2017). The monomeric form of C-reactive protein (mCRP) is abundant in eyes homozygous for the CFH Y402H allele and induces pro-inflammatory gene expression in human RPE and choroid. *JCI*. (*Submitted*)

125. Hedberg-Buenz A, Koehn DR, Meyer KJ, Lewis CJ, Mercer HE, Wang K, Anderson MG (2017). Mouse models and strain-dependency of Chédiak-Higashi syndrome-associated neurologic dysfunction. *BMC Neuroscience*. (*Submitted*)

126. Sohn EH, Flamme-Wiese MJ, Zhang L, Workalemahu G, Kwon YH, Wang K, Tucker BA, Abramoff MD, Stone EM, Mullins RF, (2017). Choroidal vascular loss in the atrophic form of age-related macular degeneration. *American Journal of Pathology*. (*Submitted*)

127. Wang K (2018). An Accurate Normalization Method for RNA-Seq Data. *Annals of Applied Statistics*. (*Submitted*)

2. Non-Peer-Reviewed Papers (reports, proceedings, etc.)

1. Mendell NR, Babron M, Boddeker I, Chiu Y, Grigull J, Eerdewegh PV, Wang K (2001). Introduction: Heterogeneity. *Genet Epidemiol* 21(Suppl 1):S42-S43.

2. König IR, Nsengimana J, Papachristou C, Simonson MA, Wang K, Weisburd JA (2011). Multiple Testing in High-Throughput Sequence Data: Experiences from Group 8 of the Genetic Analysis Workshop 17. *GAW 17*

3. Books/Monographs

4. Chapters

1. Huang J, Wang K (2003). Semiparametric methods for mapping quantitative trait loci. H Zhang, J Huang (Eds.), Development of Modern Statistics and Related Topics, New Jersey: *World Scientific Publishing Co*, 1:262-271.

5. Electronic Publications

6. Abstracts

1. Wang K, Huang J, Vieland VJ (1997). Combiing results in linkage study: An empirical Bayes approach. *Am J Hum Genet* 61(Suppl):A299.

2. The Collaborative Linkage Study of Autism (CLSA) (1998). Results of a genomic screen for autism include strong evidence of linkage to chromosome 13. *Am J Hum Genet* 63(Suppl):77.

3. Vieland VJ, Wang K, Huang J (1999). A new linkage analysis method for complex disorders based on multiple sets of data. *Am J Hum Genet* 65(Suppl 1):A450.

4. Goedken R, Crowe R, Deng Z, Fyer AJ, Haghighi V, Heiman G, Hodge SE, Knowles JA, Vkeland VJ, Wang K, Weissman MM (1999). Drawbacks of genehunter for larger pedigrees: Application to panic disorder. *Molecular Psychiatry* 4(Suppl 1):S10.

5. Wang K, Braun TA, Sheffield VC (2000). A novel method for estimation of short tandem repeat polymorphic marker allele frequencies from pooled DNA samples. *Am J Hum Genet* 67(Suppl):336.

6. Raas-Rothschild A, Bargal R, Frumkin A, Zeigler M, Wang K, Sheffield V, Bach G (2000). Mucolipidosis type IV: Clinical and Molecular findings. *European J Hum Genet* 8(Suppl 1):69.

7. Wang K (2000). On the maximization procedure of the heterogeneity LOD in Genehunter. *Genet Epidemiol*, 19:276.

8. Vieland VJ, Huang J, Wang K (2000). Summed vs. averaged LOD scores: Which represents the true evidence for linkage based on multiple independent data sets? *Genet Epidemiol*, 19:275.

9. Huang J, Vieland VJ, Wang K (2000). The null distribution of the heterogeneity LOD score (HLOD) does depend on the assumed genetic model for the trait. *Genet Epidemiol*, 19:253.

10. Vieland Vj, Ludington E, Wang K, Huang J (2000). The posterior probability of linkage (PPL) incorporating prior genomic information is efficient for detection of linkage and estimation of male/female recombination rates for complex disorders. *Am J Hum Genet* 67(Suppl 2):328.

11. Huang J, Wang K, Vieland VJ (2000). The use of summed maximum lods as a simple and approximate measure of evidence for linkage based on multiple independent data sets. *Am J Hum Genet* 67(Suppl 2):324.

12. Wang K, Huang J (2001). A score test for detecting quantitative trait loci using sibships of arbitrary sizes. *Am J Hum Genet*, 69:514.

13. Wang K (2002). Efficient score statistics for mapping quantitative trait loci using multiple phenotypes. *Genet Epidemiol*, 23:309.

14. Wang K (2002). Score statistics for mapping quantitative trait loci with extended pedigrees. *Am J Hum Genet*, 71:571.

15. Wang K, Peng Y (2003). Locus heterogeneity models for quantitative traits and related test statistics. *Genet Epidemiol*, 25:134.

16. Wang K (2003). On asymptotic properties of affected-sib-pair linkage tests. *Genet Epidemiol*, 25:132.

17. Carelli V, Wang K, Valentino ML (2003). Segregation analysis of a large LHON pedigree is consistent with the existence of a nuclear modifying gene. *Investigative Ophthalmology & Visual Science* 44(Suppl 1):937.

18. Wang K (2003). Using trait data and marker data simultaneously: QTL mapping adaptive to the extent of selection. *Genet Epidemiol*, 25:133.

19. Paola JD, Rickard M, Murray J, Burns T, Wang K, Shapiro A (2006). A Genome-Wide Linkage Scan of a Large Amish Pedigree with Von Willebrand Disease (VWD) Identified Several Chromosomal Regions That May Contain Potential Modifiers of Von Willebrand Factor (VWF) Levels and Disease Variability. *Blood* 108(11):56A.

20. Marek R, Wang K, DeWall J, Thorne PS, Hornbuckle KC (2012). PCBs and OH-PCBs in Serum from Children and Mothers in Urban and Rural Communities. *SETAC North America 33rd Annual Meeting*

21. Thorne PS, Honbuckle KC, DeWall J, Marek RF, Hu D, Schulz T, Butler-Dawson J, Xie W, Wang K (2012). The AESOP Study: Assessing exposure to PCBs in children and their mothers in at-risk and baseline communities. *The 7th International PCB Workshop in Arachon, France*

7. Other

1. Wang K (2012). R package iGasso. *cran.r-project.org/web/packages/iGasso/index.html*

2. Wang K (2013). R package ExactPath. *cran.r-project.org/web/packages/ExactPath/index.html*

3. Wang K (2017). R package iMediate https://cran.r-project.org/web/packages/iMediate/

B. Areas of Research Interest/Current Projects

1. Bioinformatics (Areas of Research Interest)

2. Collaborative research on all the funded projects (Area of Research Interest)

3. Large data analysis (Area of Research Interest)

4. Mediation analysis (Methodology development)

5. Omics data analysis (Areas of Research Interest)

6. Statistical genetics (Area of Research Interest)

C. Sponsored Research (*ALL grants*)

(if you are not the PI, state your role or contributions - in a few sentences)

1. Grants Received

Source	Number of Months	Direct Funds
Title	% Effort	Period of Funding
P.I.		

Source Title P.I.	Number of Months % Effort	Direct Funds Period of Funding
P30 ES005605 National Institutes of Health Environmental Health Sciences Research Center Peter Thorne *Principal Investigator* Kai Wang *Co-Investigator* *Building on a 26-year history, the Environmental Health Sciences Research Center (EHSRC) will advance and translate cutting edge research that addresses environmental health problems across the urban-rural continuum. The EHSRC vision is to be the primary environmental health sciences (EHS) resource for improving the health of rural residents by stimulating and translating innovative EHS research. Center goals are to: 1) Develop, support and expand innovative interdisciplinary EHS research in key Thematic Areas; 2) Recruit, mentor and nurture talented new and mid-level investigators in EHS; and 3) Engage with communities and policy makers to translate research findings toward improving the health and environment of rural people in the Midwest and the nation.*	8%	$995,971 09/29/1990-03/31/2022
R01 DC002842 NIH Non-Syndromic Hearing Loss - A Collaborative Study Richard Smith *Investigator* Kai Wang *Co-Investigator* *The identification of ARNSD genes lead to the development of novel therapies to treat deafness; the ability to recognize specific types of genetic deafness has made comparative studies of genotype, phenotype and habilitative outcome feasible; and the use of genetic testing to diagnose many types of ARNSD has changed the medical evaluation of the deaf person. This grant will continue to focus on these three areas by completing specific aims: 1) to identify novel ARNSD genes; 2) to define genotype-phenotype associations in persons with DFNB1 deafness; 3) to study Pendred syndrome as a complex disease, focusing on the role of FOXI1 and its interacting partners in the Pendred syndrome phenotype.*	8%	$346,468 09/30/1996-08/31/2019

Source Title P.I.	Number of Months % Effort	Direct Funds Period of Funding
College of Public Health-College of Medicine New Investigator Award Linkage analysis under linkage disequilibrium and disease locus heterogeneity Kai Wang *Principal*	0%	01/01/2001-12/31/2001
R01 NIMH Sampling models and methods for complex genetic diseases Veronica Vieland *Principal* Kai Wang *Co-Investigator*	25%	03/01/2001-07/31/2003
R01 NIH A collaborative linkage study of autism Val Sheffield *Principal* Kai Wang *Co-Investigator*	21%	03/01/2001-05/31/2001
R01 NIH Molecular Biology of Syndromic Retinal Degeneration Val Sheffield *Principal* Kai Wang *Co-Investigator*	10.1%	08/01/2002-07/30/2007
R01 NIH Infrastructure to Facilitate Discovery of Autism Genes Veronica Vieland *Principal* Kai Wang *Co-Investigator*	17%	08/01/2002-07/31/2003
COM HHMI Pilot Collaborative project Genetic Mapping of Familial Adolescent Idiopathic Scoliosis Jose Morcuende *Principal* Kai Wang *Co-Investigator*	0%	01/01/2003-12/31/2005

Source Title P.I.	Number of Months % Effort	Direct Funds Period of Funding
R01 NIMH A novel approach for finding genes in autism Tom Wassink *Principal* Kai Wang *Co-Investigator*	25%	07/01/2003-08/31/2003
University of Iowa, Mathematical & Physical Sciences Funding Program Locating genes responsible for continuous traits: A software tool Kai Wang *Principal*	0%	01/01/2005-12/31/2005
R01 EY010564-12 NIH Molecular Genetics of Hereditary Glaucoma Val Sheffield *Principal* Kai Wang *Co-Investigator*	10%	01/01/2006-12/31/2011
P42 ES013661 NIH/NIEHS Semi-Volatile PCBs: Sources, Exposures, Toxicities (Superfund Research Program for the Administrative Core) Larry Robertson *Principal* Kai Wang *Co-Investigator* *The Administrative Core is the focal point for the Research Projects and Cores of the Iowa Superfund Research Program and provides administrative oversight, statistical consulting, research results reporting, and serves as a liaison between the stakeholders, University officials, and the SRP.*	1.68 months 14%	05/12/2006-03/31/2020
NIH-NHLBI 7 R01 HL084086 NIH Genetic Modifiers of von Willebrand Disease Jorge D. Paola *Principal* Kai Wang *Collaborator*	12%	$225,000 02/01/2007-01/31/2012

Source Title P.I.	Number of Months % Effort	Direct Funds Period of Funding
R01 CA122934-01A2 NIH Elderly Cancer Survivors: Cognitive Outcomes and Markers of Neurodegeneration Susan Schultz *Principal* Kai Wang *Co-Investigator*	5%	07/01/2007-06/30/2008
R01 EY017673 NIH Genetic Dissection of Pigmentary Glaucoma Michael Anderson *Principal* Kai Wang *Co-Investigator* *Glaucoma is a leading cause of irreversible blindness and visual disability that has a major impact on the quality of life and productivity of millions of Americans. With no new pharmaceutical classes for treating glaucoma introduced into clinical practice since the 1990s, there remains a continuing need for improved regimes that treat glaucoma more effectively. Our long-term goal is to contribute to the development of these improved therapies by utilizing synergistic genetic approaches with mice and humans. Our objective in this proposal is to utilize and build on these resources to study molecular events contributing to pigment dispersion and its conversion to pigmentary glaucoma. To accomplish this, we propose: (SA1) to identify suppressors of pigmentary glaucoma using hereditary mouse models, (SA2) to define predictors of ocular responses to pigment dispersion using inducible mouse models, and (SA3) to identify genes linked with pigmentary glaucoma using human patient cohorts.*	0.12 months 1%	$200,000 04/01/2008-01/31/2018
3 U01 MH070010-03S1A2 NIH Prediction of Relapse in Schizophrenia Del D. Miller *Principal* Kai Wang *Co-Investigator*		07/01/2008-12/31/2010

Source Title P.I.	Number of Months % Effort	Direct Funds Period of Funding
Environmental Health Sciences Research Center (EHSRC) Pilot Grant Robust Statistical Methods for Studies of Susceptibility to Environmentally Induced Diseases Kai Wang *Principal*	0%	$23,200 04/01/2009-03/31/2010
5 T15 HL097622 NIH Iowa Summer Institute in Biostatistics (ISIB) Kathryn M. Chaloner *Principal* Kai Wang *Co-Investigator* *There is a nationwide shortage of biostatisticians and the shortage is having a negative impact on medical and public health research. The goal of this proposed program is to increase the number of minority undergraduates who enter graduate programs in Biostatistics or related areas. Instruction will be through case-based instruction of real biomedical research; computer laboratory training; projects; and clinical and translational research enrichment activities.*	0.48 months 4%	$217,159 08/20/2009-02/28/2016
High Q Foundation Neurobiological Predictors of Huntington's Disease – Biostatistics Core Jane Paulsen *Principal* Kai Wang *Co-Investigator*	15%	$8,378,958 12/14/2009-04/30/2011
5 P42 ES013661 NIH/NIEHS Semi-Volatile PCBs: Sources, Exposures, Toxicities (Superfund Research Program for the Administrative Core) Larry Robertson *Principal* Kai Wang *Co-Investigator* *The Administrative Core is the focal point for the Research Projects and Cores of the Iowa Superfund Research Program and provides administrative oversight, statistical consulting, research results reporting, and serves as a liaison between the stakeholders, University officials, and the SRP.*	1.68 months 14%	$2,022,661 04/01/2010-03/31/2015

Source Title P.I.	Number of Months % Effort	Direct Funds Period of Funding
R01 EY017451 NIH Choriocapillaris Activation in Macular Degeneration Robert Mullins *Principal* Kai Wang *Co-Investigator*	10%	$1,326,088 06/01/2010-07/31/2012
5 R01 EY018825 NIH Genetics of Quantitative Traits Associated with Glaucoma John Fingert *Principal* Kai Wang *Co-Investigator*	1.2 months 10%	$401,499 07/01/2010-06/30/2014
5 R01 EY016822 NIH Molecular Genetics of Age Related Macular Degeneration Edwin Stone *Principal* Kai Wang *Co-Investigator* *This project aims to identify new AMD genes with next-generation sequencing and identify phenotypic-expression-based subtypes of disease.*	0.6 months 5%	$350,712 09/01/2010-05/31/2015
5 R01 CA122934-05 NIH Elderly Cancer Survivors: Cognitive Outcomes and Markers of Neurodegeneration Susan Schultz *Principal* Kai Wang *Co-Investigator*	5%	$136,800 04/01/2011-03/31/2012

Source Title P.I.	Number of Months % Effort	Direct Funds Period of Funding
R24 DK096518 NIH Early Pathogenesis of Cystic Fibrosis Related Diabetes John Engelhardt *Investigator* Kai Wang *Statistician* *Cystic Fibrosis (CF) is the most common life-threatening autosomal recessive condition among Caucasians, with over $450 million dollars spent annually on clinical care of CF patients in the U.S. alone. Cystic fibrosis related diabetes (CFRD) is the most common severe complication of CF and is well known to be associated with increased mortality and a decline in lung function. This study will characterize early disease mechanisms that lead to the development of CFRD in animal models and humans, with the long-term goal of developing improved therapies and biomarkers for early diagnosis and treatment of this disease.*	5%	$1,071,925 08/15/2012-06/30/2019
R01 EY023187 NIH Genetic Determinants of Optic Nerve Head Structure Todd Scheetz *Principal* Kai Wang *Co-Investigator* *The ultimate goal of this research proposal is identify biomarkers and/or genetic risk factors that accurately predict: (1) primary optic nerve head (ONH) structure (i.e. before age- or disease-related changes), (2) changes in ONH structure, and (3) the development of irreversible glaucomatous optic nerve damage before it occurs. These outcomes will improve the specificity and sensitivity of initial diagnosis of glaucoma, allowing clinicians to determine the proportion of ONH structure change that is damage from this disease, as opposed to normal variations in primary ONH structure. This in turn will allow the application of currently available and effective therapies to be instituted before vision is lost.*	1.2 months 10%	$271,185 03/01/2013-02/28/2016

Source Title P.I.	Number of Months % Effort	Direct Funds Period of Funding
R01 ES022163 NIH Vulnerability of the Adolescent Brain to Organophosphorus Pesticides Diane Rohlman *Principal* Kai Wang *Co-Investigator* *Despite evidence from human and animal studies that clearly identifies neurotoxicity as the primary adverse endpoint, the long-term effects of repeated occupational and environmental exposures to organophosphorus pesticides (OPs) remain poorly understood. There is also a critical need to investigate the susceptibility of children and adolescents to pesticides, since the developing brain may be uniquely sensitive to the neurotoxic effects of these agents. We propose a longitudinal study to investigate the relationship between sensitive and specific biomarkers of pesticide exposure, effect and susceptibility and multiple measures of neurobehavioral function in this unique cohort over a 5-year period to assess cumulative and potentially reversible effects.*	6%	$485,074 03/04/2013-10/31/2017
R01 HG008348 National Institutes of Health Interactive Multimedia Consent for Biobanking Christian Simon *Principal Investigator* Kai Wang *Co-Investigator* *To support next-generation genomic research and science, many biobanks in the U.S. consent thousands of contributors of biospecimens and health information. There is growing interest in the efficiency of electronic consenting (e-consent) given the scale of these efforts. The long-term objective of this three-year (R01) study is to improve the efficiency and effectiveness of informed consent through use of systematically developed e-consent tools. Overall, the study is expected to contribute to ethical, cost-effective genomic research recruitment efforts through in-depth empirical knowledge of IM consenting technology.*	5%	$464,592 08/10/2015-05/31/2018

Source Title P.I.	Number of Months % Effort	Direct Funds Period of Funding
R01 EY026087 National Institutes of Health Unraveling the 10q AMD Risk Locus Edwin Stone *Principal Investigator* Kai Wang *Co-Investigator* *In this study, we will take advantage of molecular genetics, state of the art computer-assisted image analysis, large patient populations, donor eye tissue, induced pluripotent stem cells and CRISPR based genome editing to determine the molecular mechanism through which variations at the 10q AMD locus increase the risk of AMD.*	8.3%	$325,084 09/01/2016-08/31/2020
R21 ES027169 National Institutes of Health PCB Enantiomers Implicated in Neurodevelopmental Disorders: Identification of Individual Metabolic Factors that Determine Risk and Vulnerability Hans-Joachim Lehmler *Principal Investigator* Kai Wang *Co-Investigator* *The long-term goal of this project is to determine how inter-individual differences in enantioselective PCB metabolism affect the susceptibility to PCB-mediated neurodevelopmental disorders following environmental exposures and, ultimately, reduce the burden of these diseases.*	10%	$150,000 09/01/2017-08/31/2019
EHSRC Pilot Grant Environmental Health Sciences Research Center Prospective Investigation of Environment Exposure to BPA and BPA Substitutes in Early Pregnancy in Relation to Pregnancy Complications Buyun Liu *Principal Investigator* Kai Wang *Investigator*		$40,000 09/01/2017-08/31/2018

Source Title P.I.	Number of Months % Effort	Direct Funds Period of Funding
R21 HD91458 National Institutes of Health Pregnancy-Associated microRNAs in Plasma as Predictors of Gestational Diabetes Wei Bao *Principal Investigator* Kai Wang *Co-Investigator*	5%	$150,000 09/10/2017-06/30/2019

2. Grants Pending

Source Title P.I.	Number of Months % Effort	Direct Funds Period of Funding

D. Presentations

1. Invited Presentations

Year	Title	Organization	Presentation Type

2. Conference Presentations/Posters

Year	Title	Organization	Presentation Type
1997	Combining Results in Linkage Study: An Empirical Bayes Approach (Wang K, Huang J, Vieland V)	American Society of Human Genetics, Baltimore, Maryland	Poster
1998	Comprehensive Cancer Center (Wang K)	University of Alabama at Birmingham	Oral
1998	Department of Health Sciences Research (Wang K)	Mayo Clinic and Foundation	Oral
1998	Department of Statistics (Wang K)	Carnegie Mellon University	Oral
1998	Division of Human Cancer Genetics (Wang K)	Ohio State University	Oral
1998	A Bayesian Approach to Replication of Linkage Studies (Wang K, Huang J, Vieland V)	Genetic Analysis Workshop 11, Arachon, France	Poster

Year	Title	Organization	Presentation Type
1998	Combining Results in Linkage Study: An Empirical Bayes Approach (Wang K, Huang J, Vieland V)	Inter-Iowa Genetics Symposia, Grinnell, Iowa	Poster
1998	Utilizing Genomap (a distributed laboratory information management system) in a Genomic Screen for Genes Underlying Autism (Wang K, Braun T, Scheetz T, Munn K, Casavant T, Stone E, Vieland V, Sheffield V)	Inter-Iowa Genetics Symposia, Grinnell, Iowa	Poster
1999	Division of Biostatistics (Wang K)	University of Iowa	Oral
1999	A New Linkage Analysis Method for Complex Disorders Based on Multiple Sets of Data (Wang K, Vieland V, Huang J)	American Society of Human Genetics, San Francisco, California	Poster
1999	Body Surface Area (BSA) Dosing Using Actual Body Weight (ABW) Yields Less Variation in Area Under the Concentration X on Time Curve (AUC) for High Dose IV Busulfan (BU) than BSA Dosing Using Ideal Body Weight (IBW), Adjusted Ideal Body Weight (AIBW) or Dosing Using ABW, IBW or AIBW Directly (Wang K, Vaughan W, Cagnoni P, Fernandez H, Hu W, Kashyap A, Gian V, Wingard J, Tarantolo S, Andersson B)	American Society of Clinical Oncology, Atlanta, Georgia	Poster
1999	Drawbacks of Genehunter for Larger Pedigrees: Application to Panic Disorder (Wang K, Goedken R, Crowe R, Deng Z, Fyer A, Haghighi V, Heiman G, Hodge S, Knowles J, Vieland V, Weissman M)	World Congress on Psychiatric Genetics, Monterey, California	Poster

Year	Title	Organization	Presentation Type
2000	On the Maximization Procedure of the Heterogeneity LOD in Genehunter (Wang K)	International Genetic Epidemiology Society, San Antonio, Texas	Oral
2000	A Novel Method for Estimation of Short Tandem Repeat Polymorphic Marker Allele Frequencies from Pooled DNA Samples (Wang K, Braun T, Sheffield V)	American Society of Human Genetics, Philadelphia, Pennsylvania	Poster
2000	Summed vs. Averaged LOD Scores: Which Represents the True Evidence for Linkage Based on Multiple Independent Data Sets? (Wang K, Vieland V, Huang J)	International Genetic Epidemiology Society, San Antonio, Texas	Poster
2000	The Null Distribution of the Heterogeneity LOD Score (HLOD) Does Depend on the Assumed Genetic Model for the Trait (Wang K, Huang J, Vieland V)	International Genetic Epidemiology Society, San Antonio, Texas	Poster
2000	The Posterior Probability of Linkage (PPL) Incorporating Prior Genomic Information is Efficient for Detection of Linkage and Estimation of Male/Female Recombination Rates for Complex Disorders (Wang K, Vieland V, Ludington E, Huang J)	American Society of Human Genetics, Philadelphia, Pennsylvania	Poster
2000	The Use of Summed LOD Score as a Simple and Approximate Measure of Evidence for Linkage Based on Multiple Independent Data Sets (Wang K, Huang J, Vieland V)	American Society of Human Genetics, Philadelphia, Pennsylvania	Poster
2002	Efficient Score Statistics for Mapping Quantitative Trait Loci (Wang K)	Department of Mathematics & Statistics, Memorial University of Newfoundland, Canada	Oral

Year	Title	Organization	Presentation Type
2002	Efficient Score Statistics for Mapping Quantitative Trait Loci Using Multiple Phenotypes (Wang K)	International Genetic Epidemiology Society, New Orleans, Louisiana	Oral
2002	Mapping Quantitative Trait Loci with General Pedigrees (Wang K)	Department of Statistics, University of Iowa	Oral
2002	Score Statistics for Mapping Quantitative Trait Loci with Extended Pedigrees (Wang K)	American Society of Human Genetics, Baltimore, Massachusetts	Oral
2002	Score Tests for Mapping Quantitative Trait Loci with General Pedigrees: Two-locus Models (Wang K)	Department of Biostatistics, University of Iowa	Oral
2003	Locus Heterogeneity Models for Quantitative Traits and Related Test Statistics (Wang K)	International Genetic Epidemiology Society, Redondo Beach, California	Oral
2003	On Asymptotic Properties of Affected-sib-pair Linkage Tests (Wang K)	International Genetic Epidemiology Society, Redondo Beach, California	Oral
2003	Using Trait Data and Marker Data in Selected Samples Simultaneously: QTL Mapping Adaptive to the Extent of Selection (Wang K)	International Genetic Epidemiology Society, Redondo Beach, California	Oral
2003	Using Trait Data and Marker Data in Selected Samples Simultaneously: QTL Mapping Adaptive to the Extent of Selection (Wang K)	Program in Public Health Genetics, University of Iowa	Oral
2003	Using Trait Data and Marker Data in Selected Samples Simultaneously: QTL Mapping Adaptive to the Extent of Selection (Wang K)	Annual meeting of the International Genetic Epidemiology Society	Oral

Year	Title	Organization	Presentation Type
2004	A Statistical Method for Detection and Estimation of Deletion Length From a Very Dense Set of Markers (Wang K)	Program in Public Health Genetics, University of Iowa	Oral
2004	Quantitative-trait-loci Mapping with Selected Samples (Wang K)	Department of Statistics, Nankai University, Tianjin, China	Oral
2004	Some Issues Related to the Use of SNP Data (Wang K)	Dr. Val Sheffield Lab Meeting	Oral
2005	A Constrained Likelihood Approach to Marker-Trait Association Studies (Wang K)	The Joint Meeting of the Chinese Society of Probability and Statistics and the Institute of Mathematical Statistics, Beijing, China	Oral
2005	A Constrained-likelihood Approach to Genotype-trait Association Studies (Wang K)	American Society of Human Genetics, Salt Lake City, Utah	Oral
2005	A Multiallelic Test for Marker-trait Association Studies (Wang K)	International Genetic Epidemiology Society, Park City, Utah	Oral
2005	Statistical Genetics: Overview, Theory and Application (in Chinese) (Wang K)	College of Mathematics and System Science, Xinjiang University, China	Oral
2006	A Likelihood Ratio Test of Incomplete Dominance Versus Overdominance and/or Under Dominance (Wang K)	Department of Statistics and Actuarial Sciences, University of Iowa, Iowa City, Iowa	Oral
2006	A Score-based Approach to Quantitative Trait Loci Mapping in Inbred Lines Using Flanking Markers (Wang K)	Department of Biostatistics, University of Iowa, Iowa City, Iowa	Oral
2006	A Score-based Approach to Quantitative Trait Loci Mapping in Inbred Lines Using Flanking Markers (Wang K)	Department of Population Health Sciences, University of Wisconsin, Madison, Wisconsin	Oral

Year	Title	Organization	Presentation Type
2006	Statistical Methods for Testing for 1) Overdominance, 2) Linkage Jointly to Two Loci, and 3) Association using DNA Pooling with SNP Chips (Wang K)	Dr. Val Sheffield Lab Meeting	Oral
2007	Statistical Analyses of an Autism Follow-Up Study (Wang K)	Dr. Val Sheffield Lab Meeting	Oral
2007	An Association Study of Candidate Modifier Genes in a Large Pedigree with Von Willebrand Disease	American Society of Human Genetics, Atlanta, Georgia	Poster
2007	Genome Wide Scan of Complete Blood Count (CBC) Measures Suggests Strong Linkage of Red Blood Cell (RBC) Count to Chromosome 4q25	American Society of Human Genetics, Atlanta, Georgia	Poster
September 2007	Mutagenicity of 3-methylcholanthrene, 4-monochlorobiphenyl (PCV3), and Its Metabolite 4-OH-PCB3 in the Lung of Male Transgenic BigBlue® Rats	Annual Meeting, Central States Chapter of the Society of Toxicology, Iowa City, Iowa	Poster
2008	Detection of and Correcting for the Effect of Population Stratification in the Association Analysis of Big Human Project Data (Wang K)	Dr. Val Sheffield's Lab Meeting	Oral
2008	Statistical Analysis of Data from the Big Human Project (Wang K)	Dr. Val Sheffield Lab Meeting	Oral
2008	Visualization and Evaluation of Complex Microarray Datasets (Wang K)	Dr. Larry Robertson's Lab Meeting	Oral
2008	Spatial Distribution and Sources of Atmospheric PCBs in the Chicago Urban Industrial Region	PCB Workshop, Iowa City, Iowa	Poster

Year	Title	Organization	Presentation Type
September 2008	Testing Genetic Association in the Presence of Population Stratification (Wang K)	17th Annual Meeting, International Genetic Epidemiology Society, St. Louis, Missouri	Oral
2009	Detection of and Correcting for the Effect of Population Stratification in Genetic Association Analysis with Application to an Eye Disease Study (Wang K)	International Workshop on Probability Theory, Statistics and Their Application to Biology, Beijing, China	Oral
October 2009	A Novel Efficient Genome-wide Association Study Design: Application to Glaucoma and Age-related Macular Degeneration (Wang K)	59th Annual Meeting, American Society of Human Genetics, Honolulu, Hawaii	Poster
October 2009	Linkage Analysis in a Large Amish Pedigree with Von Willebrand Disease Identifies Regions Suggestive of Linkage and Candidate Modifier Genes	59th Annual Meeting, American Society of Human Genetics, Honolulu, Hawaii	Poster
2010	Population Structure and Studies of Susceptibility to Environmentally Induced Diseases (Wang K)	EHSRC Retreat	Oral
2010	Statistical Methods for Genetic Association Studies (Wang K)	Department of Biostatistics	Oral
March 2010	Evaluation of Embryonic and Perinatal Myosins as Candidate Genes for Idiopathic Clubfoot	Annual Meeting, American Association of Orthopaedic Surgeons, New Orleans, Louisiana	Poster
June 2010	Evaluation of Embryonic and Perinatal Myosin Gene Mutations and the Etiology of Congenital Idiopathic Clubfoot	11th EFORT Congress, European Federation of National Associations of Orthopaedics and Traumatology, Madrid, Spain	Poster

Year	Title	Organization	Presentation Type
June 2010	Evaluation of GPR50, hMel-1B, and ROR-alpha Melatonin-receptors and the Etiology of Adolescent Idiopathic Scoliosis	11th EFFORT Congress, European Federation of National Associations of Orthopaedics and Traumatology, Madrid, Spain	Poster
October 2010	Treating Phenotype as Given: A Novel Resampling Method for Genome-Wide Association Studies (Wang K, Huang J)	Genetic Analysis Workshop 17, Boston, Massachusetts	Poster
October 8, 2012	Statistical Methods in Genetic Association Studies: Cryptic Relatedness, Population Stratification, and Rare Variants (Wang K)	Biostatistics Seminar, University of Iowa College of Public Health/Department of Biostatistics, Iowa City, Iowa	Oral
July 30, 2013	Association test in the presence of population stratification (Wang K)	Wellcome Trust Statistical Genetics Workshop, Wellcome Trust, Hinxton, England	Oral
August 4, 2013	Exact LASSO linear regression (Wang K)	2013 Joint Statistical Meetings, Montreal, Canada	Oral
April 25, 2014	An Efficient Variance Components Model for Genome-Wide Association Study with Structured Populations (Wang K)	Department seminar, Department of Epidemiology and Biostatistics Indiana University Bloomington, Bloomington, Indiana	Oral
July 14, 2014	An efficient variance components model for genome-wide association studies with structured population (Wang K)	International Workshop on Statistics Frontier and Related Topics, Xinjiang University, Xinjiang University of Finance & Economics, and Xinjiang Society of Mathematics, Urumqi, Xinjiang, China	Oral
2015	Robust estimation of 3-D chromosome structure from Hi-C chromatin interaction data (Wang K)	ENAR	Oral
April 2016	Boosting the power of the sequence kernel association test (SKAT) by properly estimating its null distribution (Wang K)	Iowa Informatics Showcase Symposium	Poster

Year	Title	Organization	Presentation Type
May 2016	Boosting the power of the sequence kernel association test (SKAT) by properly estimating its null distribution (Wang K)	The European Human Genetics Conference 2016	Poster
July 2016	A flexible penalized integrated analysis of mRNA and miRNA expression levels as biomarkers for endometrial cancer classification (Wang K)	5th Annual Global Healthcare Conference (GHC 2016), Global Science and Technology Forum (GSTF), Singapore, Singapore	Oral
July 2016	Robust Estimation of 3-D Chromosome Structure from Hi-C Chromatin Interaction Data (Wang K)	International Conference on Applied Statistics 2016, Thai Statistical Association, Phuket, Thailand	Oral
August 2016	Conditional Inference for the Kernel Association Test (Wang K)	Joint Statistical Meetings, ASA, ENAR, and WNAR etc., Chicago, Illinois, United States	Oral
March 14, 2017	Mediation Analysis in Observational Studies Via Likelihood (Wang K)	ENAR 2017 Spring Meeting, ENAR, Washington DC	Oral

3. Other Presentations

Year	Title	Organization	Presentation Type
2009	Detection of and Correcting for the Effect of Population Stratification in the Association Analysis of Big Human Project Data	BSAC Seminar, Department of Biostatistics	Seminar
2015	Robust estimation of 3-D chromosome structure from Hi-C chromatin interaction data (Wang K)	Applied Mathematical and Computational Sciences (AMCS)	Colloquium
2015	Robust estimation of 3-D chromosome structure from Hi-C chromatin interaction data (Wang K)	Seminar, Division of Biostatistics, University of Minnesota	Colloquium
April 24, 2017	Statistical Mediation Analysis via Likelihood (Wang K)	Department seminar, Department of Biostatistics, Iowa City, Iowa	Seminar

Year	Title	Organization	Presentation Type
May 10, 2017	Simple bias formulas for mediation analysis with unmeasured confounding (Wang K)	9th EMR-IBS and Italian Region Conference, IBS, EMR, Thessaloniki	Conference Presentation

IV. SERVICE

A. Offices/appointments held in professional organizations

1. Editorships

Year	Organization	Position

2. Review Panels

Year	Organization	Position

3. Professional Organizations (state and/or national)

Year	Organization	Position
1999-Present	International Genetic Epidemiology Society	Member
1999-Present	The American Society of Human Genetics	Member
2005-2006	ENAR (International Biometric Society)	Member
2009-Present	Environmental Health Sciences Research Center and the Integrative Health Sciences Facility, University of Iowa	Member
2012-Present	American Statistical Association (ASA)	Member

B. Other Professional Service

1. Referee Manuscripts/Journal Reviews

Year	Organization	Position
2000	Psychiatric Genetics	Reviewer
2000	Springer	Reviewer

Year	Organization	Position
2001	Arteriosclerosis, Thrombosis, and Vascular Biology	Reviewer
2002	A grant proposal to American Cancer Society	Reviewer
2002	American Journal of Human Genetics	Reviewer
2002	Genetic Analysis Workshop 13	Reviewer
2003	Annals of Human Genetics	Reviewer
2003	Genome Research	Reviewer
2003	Human Genetics	Reviewer
2003	Human Heredity	Reviewer
2004-2005	Genetic Epidemiology	Reviewer
2004	American Journal of Medical Genetics Part B: Neuropsychiatric Genetics	Reviewer
2004	Biometrics	Reviewer
2004	Journal of Mathematical Biology	Reviewer
2004	Journal of the American Statistical Association	Reviewer
2004	Physiological Genomics	Reviewer
2005	Annals of Human Genetics	Reviewer
2006-2009	Human Heredity	Reviewer
2006	Psychiatric Genetics	Reviewer
2007-2010	Annals of Human Genetics	Reviewer
2007-2008	American Journal of Human Genetics	Reviewer
2007	Genetic Analysis Workshop 15	Reviewer
2007	Genetic Epidemiology	Reviewer

Year	Organization	Position
2008-2010	BMC Genetics	Reviewer
2008	Genetic Analysis Workshop 16	Reviewer
2008	Genome Research	Reviewer
2008	Human Genomics and Proteomics	Reviewer
2008	Special Issue of Environment International titled “PCBs: New Knowledge Gained from Old Pollutants”	Reviewer
2009-2010	BMC Informatics	Reviewer
2009-2010	Genetic Epidemiology	Reviewer
2009	Genetic Analysis Workshop 16	Reviewer
2009	Journal of Clinical Epidemiology	Reviewer
2009	Physiological Genomics	Reviewer
2010-2011	Biometrics	Reviewer
2010	Circulation	Reviewer
2011	BMC: Bioinformatics	Reviewer
2011	Circulation: Arrhythmia and Electrophysiology	Reviewer
2011	Env. Sci. and Technology	Reviewer
2011	Genetic Analysis Workshop 17	Reviewer
2012	Biostatistics	Reviewer
2012	Circulation: Heart Failure	Reviewer
2012	Frontiers in Evolutionary and Population Genetics	Reviewer
2013	Bioinformatics	Reviewer
2013	Biostatistics	Reviewer
2013	Circulation: Heart Failure	Reviewer

Year	Organization	Position
2013	Frontiers in Evolutionary and Population Genetics	Reviewer
2013	Genetic Basis of Complex Disease, Garland Science	Reviewer
2013	Genetics	Reviewer
2013	Genome Research	Reviewer
2013	Human Heredity	Reviewer
2013	Journal of Computational and Graphical Statistics	Reviewer
2013	PloS One	Reviewer
2014	Annals of Otology, Rhinology & Laryngology	Reviewer
2014	Annals of Statistics	Reviewer
2014	Circulation: Cardiovascular Interventions	Reviewer
2014	Computational Statistics and Data Analysis	Reviewer
2014	Genetic Epidemiology	Reviewer
2014	Genetics	Reviewer
2014	Human Heredity	Reviewer
2014	Human Heredity	Reviewer
2014	Journal of Computational and Graphical Statistics	Reviewer
2014	Ophthalmologica	Reviewer
2014	Translational Research	Reviewer
2015	American Journal of Human Genetics	Reviewer
2015	Annals of Otology, Rhinology & Laryngology	Reviewer

Year	Organization	Position
2015	Circulation: Arrhythmia and Electrophysiology	Reviewer
2015	Statistics in Medicine	Reviewer
2016	American Journal of Human Genetics	Reviewer
2016	Circulation: Arrhythmia and Electrophysiology	Reviewer
2016	Genetic Epidemiology	Reviewer
2016	Genetic Epidemiology	Reviewer
2016	Statistica Sinica	Reviewer
2017	BMJ Open	Reviewer
2017	Genetic Epidemiology	Reviewer
2017	Human Heredity	Reviewer
2017	Journal of Community Medicine & Public Health Care	Reviewer
2018	American Journal of Human Genetics	Reviewer
2018	Journal of Health Science Studies	Reviewer

2. Organize Conference, Paper Session, etc.

Year	Organization	Position
2015	PLoS One	

3. State Committees

Year	Organization	Position

4. National Committees

Year	Organization	Position

5. Professionally Relevant Community Involvement

Year	Organization	Position

6. Professional Consulting

Year	Organization	Position

7. Other

Year	Organization	Position
2012	Promotion and Tenure Review Committee, School of Public Health, University of Minnesota	Member
2014		Reviewer, Grant Proposals
2014	Promotion and Tenure Review Committee, School of Public Health, Indiana University-Bloomington	Member
2014	Tenure Committee, School of Statistics and Management, Shanghai University of Finance and Economics	Member
2015		Reviewer, Grant Proposals
2015	Promotion and Tenure Review Committee, School of Public Health, University of Minnesota	Member
2015	Promotion and Tenure Review Committee, University of Notre Dame	Member
2016	Promotion and Tenure Review Committee, School of Public Health, Indiana University-Bloomington	Member
2017	Promotion and Tenure Review Committee, College of Medicine, University of Illinois at Chicago	Member
2017	Promotion and Tenure Review Committee, School of Public Health and Tropical Medicine, Tulane University	Member

C. Departmental, Collegiate or University Service

Year	Organization	Position

Year	Organization	Position
1999-2003	College of Public Health, University of Iowa, Instructional Development and Evaluation Committee	Member
2000-2001	College of Public Health, University of Iowa, Biostatistics Seminar Committee	Member
2000-2001	Department of Biostatistics, College of Public Health, University of Iowa, M.S. Core Exam Committee	Member
2001	Department of Biostatistics, College of Public Health, University of Iowa, Ph.D. Comprehensive Exam Committee	Member
2001	Department of Biostatistics, College of Public Health, University of Iowa, Statistical Genetics Faculty Search Committee	Member
2002-2003	Department of Biostatistics, College of Public Health, University of Iowa, Student Admissions Committee	Member
2003-2006	College of Public Health, University of Iowa, Curriculum Committee	Member
2003-2004	Program in Public Health Genetics, College of Public Health, University of Iowa, Student Admissions Committee	Member
2004-2007	College of Public Health, University of Iowa, Curriculum Committee	Member
2004-2005	College of Public Health, University of Iowa, Faculty Council	Member
2004-2005	College of Public Health and Carver College of Medicine, University of Iowa, New Investigator Research Award Review Committee	Member

Year	Organization	Position
2004	Program in Public Health Genetics, College of Public Health, University of Iowa, Ph.D. Comprehensive Exam Committee	Member
2005-2007	College of Public Health, University of Iowa, Alumni Relations Council	Member
2005-2007	College of Public Health, University of Iowa, Awards Committee	Member
2005-2006	College of Public Health, University of Iowa, Awards Committee	Member
2007-2009	Department of Biostatistics, College of Public Health, University of Iowa, M.S. Exam Committee	Member
2007-2008	Department of Biostatistics, College of Public Health, University of Iowa, Biostatistics Seminar Committee	Member
2007-2008	Department of Biostatistics, College of Public Health, University of Iowa, Departmental Self-Study Committee	Member
2007-2008	Program in Public Health Genetics, College of Public Health, University of Iowa, Doctoral Comprehensive Examination Committee	Chair
2007-2008	Department of Biostatistics, College of Public Health, University of Iowa, Faculty Search Committee	Member
2007-2008	Department of Biostatistics, College of Public Health, University of Iowa, Recruitment and Admissions Committee	Member
2008	Department of Biostatistics, College of Public Health, University of Iowa, Course Renumbering Committee	Member

Year	Organization	Position
2009-2012	Bioinformatics PhD Program, College of Public Health, University of Iowa, Admissions Committee	Member
2009-2011	Department of Biostatistics, College of Public Health, University of Iowa, M.S. Exam Committee, Spring Chair	Member
2009	College of Public Health, University of Iowa, Strategic Planning Initiative: Research Foci and Organization Subgroup	Member
2010-2013	College of Public Health, University of Iowa, Faculty Council	Member
2010-2011	Department of Biostatistics, College of Public Health, University of Iowa, Seminar Committee	Chair
2010	Health Sciences Research Week	Graduate Student Poster Judge
2011	Department of Biostatistics, College of Public Health, University of Iowa, Theory Course Committee	Member
2011-2015	Biostatistics Seminar Committee	Member
2012-2013	Clinical Trials Faculty Search Committee	Member
2012-2013	Genetics Cluster Hire Search Committee	Member
2012	CPH Faculty Council Best Practices Task Force	Member
2013	Biostatistics Seminar Committee	Member
2013	M.S. Exam Committee	Member
2014-2019	College of Public Health, University of Iowa, CPH Faculty Council	Member
2014-2015	CPH Curriculum Innovations Committee: Academic subgroup	Member

Year	Organization	Position
2014	CPH Promotion and Tenure Committee	Member
2014	M.S. Exam Committee: Fall	Member
2014	Department of Biostatistics, Ph.D. Comprehensive Examination Committee: Fall	Member
2015-2017	CPH Faculty Council	Co-Chair
2015	Collegiate Consulting Group	Chair
2015	Post-Tenure Review Committee of Professor Michael P. Jones	Chair
2015	Post-Tenure Review Committee of Professor Shelly Campo	Member
2015	M.S. Core Exam Committee (January 2015)	Member
2015	M.S. Core Exam Committee (Summer 2015)	Member
2016-Present	CPH Promotion and Tenure Committee	Member
2016-Present	M.S. Core Exam Committee (January)	Member
2016-2019	EHSRC Internal Advisory Committee	Member
2016-2017	DCG for Promotion to Full Professor (Dr. Brian Smith)	Member
2016	Biostatistics Third-Year Review Committee for Professor Patrick Breheny	Member
2016	CCG for Promotion to Associate Professor (Dr. Kelli Rychman)	Member
2016	CCG for Promotion to Clinical Professor (Dr. Anne Helene Skinstad)	Member

Year	Organization	Position
2016	DCG for Tenure and Promotion to Associate Professor (Dr. Patrick Breheny)	Member
2017-Present	M.S. and Ph.D. Curriculum Committee	Member
2017-2019	CPH Faculty Council	Member
2017-2018	M.S. and Ph.D. Curriculum Committee	Member
2017-2018	Peer Review Committees for Promotion to Full Professor	Member
2017	CCG for Promotion to Associate Professor (Dr. Padmaja Ayyagari)	Member
2017	CCG for Promotion to Associate Professor (Dr. Xi Zhu)	Member
2017	CCG for Promotion to Full Professor (Dr. George Wehby)	Member
2017	CCG for Promotion to Full Professor (Dr. Hans Lehmler)	Member
2017	Peer Review Committees for Promotion to Full Professor	Member
2017	Biostatistics PhD Comprehensive Exam: Question-writer	
2018	CPH Promotion and Tenure Committee	Member
2018	M.S. Core Exam Committee (January 2018)	Member
2018	Post-Tenure Review Committee of Professor Paul Romitti	Member