

## CURRICULUM VITAE

Kathleen F. Kerr  
[www.biostat.washington.edu/people/kathleen-kerr](http://www.biostat.washington.edu/people/kathleen-kerr)  
[faculty.washington.edu/katiek/](mailto:faculty.washington.edu/katiek/)  
March 2019

### 1. Biographical Information

University of Washington  
Department of Biostatistics, Box 357232  
Seattle, Washington 98195-7232  
206-543-2507 (phone)  
206-543-3286 (fax)  
[katiek@uw.edu](mailto:katiek@uw.edu)

### 2. Education

Bryn Mawr College, Bryn Mawr, Pennsylvania, B.A., Mathematics, 1993  
Budapest Semesters in Mathematics, Budapest, Hungary, 1991-1992  
University of California, Los Angeles, M.A., Mathematics, 1995  
University of California, Los Angeles, M.S., Statistics, 1998  
University of California, Los Angeles, Ph.D., Statistics, 1999  
Dissertation: *Stationary Gaussian Processes on  $2^k$  for Bayesian Experimental Design*; Advisor: Don Ylvisaker

### 3. Licensure: Not applicable

### 4. Professional Positions

Post-doctoral Associate, The Jackson Laboratory, 1999-2001  
Fellow, Institute for Pure and Applied Mathematics, Program in Functional Genomics,  
Los Angeles, California, 2000  
Assistant Professor, Department of Biostatistics, University of Washington, 2001-2007  
Associate Professor, Department of Biostatistics, University of Washington, 2007-  
present

### 5. Honors, Awards and Fellowships

Scott Prize in Mathematics, Bryn Mawr College, 1993  
B.A. conferred Magna Cum Laude and with Honors in Mathematics, Bryn Mawr College,  
1993  
National Science Foundation Graduate Fellowship Honorable Mention, 1993  
Harris Fellowship, UCLA Graduate Division, 1993-1996  
Hoel Scholar, UCLA Division of Statistics, 1996  
AIDS Training Fellowship, UCLA Biostatistics Department, 1997-1999  
National Institutes of Health, National Human Genome Research Institute, Post-Doctoral  
Fellowship award, 2000 (awarded and declined)  
Program in Mathematics and Molecular Biology, Burroughs Wellcome Post-Doctoral  
Fellow, 2000-2001

## 6. Professional Activities

Organizer and Chair, WNAR Invited session "Statistics for Microarrays," Joint Statistical Meetings, San Francisco, California, August 3-7, 2003.

Byar Young Investigator Award Selection Committee, 2007, 2008, 2009.

Chair, WNAR student paper competition, 2013.

Organizer, WNAR Invited Session "Biomarkers and Clinical Trials," Joint Statistical Meetings, Vancouver, British Columbia, August 2018

WNAR Representative-at-Large, Elected 2018

**Professional Societies:** Member, International Biometric Society

**Associate Editor for:**

*Statistical Applications in Genetics and Molecular Biology* 2005-present

*Biometrics* 2006-2008

*PLoS Genetics* 2006-2012

**Editorial Board for:**

*Clinical Chemistry* 2018-present

**Reviewer for funding agencies:**

*National Science Foundation Reviewer Panel: Environmental Genomics* (2002)

*U.C. Davis M.I.N.D. Institute* (2003)

*National Institutes of Health, SSS-Y-92S Study Section* (2003)

*National Institute of Environmental Health Sciences Review Committee* (2011)

*European Commission, Directorate-General for Research and Innovation* (2012)

*University of Washington Royalty Research fund* (2012, 2013, 2014, 2018)

*National Institutes of Health NHLBI* (2013)

*Cancer Research UK* (2014)

*Patient-Centered Outcomes Research Institute* (2017)

**Referee for:** *Aging Cell* (2008)

*American Journal of Epidemiology* (2011, 2015)

*Anesthesia & Analgesia* (2015)

*Annals of Applied Statistics* (2007)

*Bioinformatics* (2001, 2002 (2), 2003 (3), 2004(2), 2007(2), 2009(2), 2012)

*Biometrics* (2002 (3), 2005, 2009, 2015)

*Biometrical Journal* (2017)

*Biostatistics* (2001, 2002, 2003, 2004 (2), 2005, 2006)

*BioTechniques* (2001, 2002 (2), 2003 (3))

*BMC Bioinformatics* (2005 (2), 2006, 2007, 2008(2), 2009, 2010, 2011)

*BMC Biotechnology* (2016)

*BMC Cancer* (2004)

*BMC Genomics* (2005, 2007, 2008(2), 2009(2))

*BMC Microbiology* (2008)

*BMJ* (2016, 2018)

*BMJ Open* (2015)  
*Cancer Epidemiology, Biomarkers, and Prevention* (2009)  
*Circulation* (2005, 2017)  
*Clinical Chemistry* (2018(2))  
*Computational Statistics and Data Analysis* (2007)  
*Diagnostic and Prognostic Research* (2016, 2017 (2))  
*Genetic Epidemiology* (2002)  
*Genetical Research* (2006)  
*Genetics* (2002, 2006, 2008)  
*Genome Biology* (2002)  
*Gerontology* (2003)  
*Journal of the American Statistical Association* (2001, 2007)  
*Journal of Bioinformatics and Computational Biology* (2005)  
*Journal of Biopharmaceutical Statistics* (2002)  
*Journal of Biotechnology* (2004)  
*Journal of Computational Biology* (2002)  
*Journal of Computational and Graphical Statistics* (2002)  
*Journal of Mathematical Biology* (2002)  
*Journal of the Royal Statistical Society* (2001, 2009)  
*Journal of Statistical Planning and Inference* (2003 (2), 2009)  
*Lifetime Data Analysis* (2012)  
*Medical Decision Making* (2015, 2016, 2017, 2018(3))  
*Molecular Systems Biology* (2005, 2006, 2007(2))  
*Nature* (2001)  
*Nature Methods* (2005)  
*Nucleic Acids Research* (2001, 2003, 2004, 2005 (2), 2010)  
*Omics* (2007, 2009)  
*Pharmacogenomics* (2002)  
*PLoS Genetics* (2006, 2007, 2008)  
*PLoS One* (2018)  
*Proceedings of the National Academy of Sciences, USA* (2002, 2003 (2))  
*Statistical Applications in Genetics and Molecular Biology* (2003(2), 2005, 2007)  
*Statistical Papers* (2007)  
*Statistics and Probability Letters* (2009)  
*Statistics in Medicine* (2001, 2003, 2009, 2011, 2014(2), 2015)  
*Technometrics* (2008, 2016)

**Reviewer for publishers:**

*Kluwer Academic Publishers* (2002)  
*Springer Academic Publishers* (2004)  
*Oxford University Press* (2005)  
*Wiley Academic Press* (2013, 2014)  
*Chapman & Hall/CRC* (2018)

## 7. Bibliography

### a) Refereed Research Articles

1. Johnson CR, **Kerr MK**, Stanford DP: Semi-positivity of matrices. *Journal of Linear and Multilinear Algebra* 37:265-271, 1994.
2. **Kerr MK**, Martin M, Churchill GA: Analysis of variance for gene expression microarray data. *Journal of Computational Biology* 7:819-837, 2000.
3. **Kerr MK**: Patents and statistical inventions. *Chance* 13:22-25, 2000.
4. **Kerr MK**, Churchill GA: Statistical design and the analysis of gene expression microarrays. *Genetical Research* 77:123-128, 2001.
5. **Kerr MK**, Churchill GA: Experimental design for gene expression microarrays. *Biostatistics* 2:183-201, 2001.
6. **Kerr MK**: Bayesian optimal fractional factorials. *Statistica Sinica* 11:605-630, 2001.
7. **Kerr MK**, Churchill GA: Bootstrapping cluster analysis: Assessing the reliability of conclusions from microarray experiments. *Proceedings of the National Academy of Sciences of the USA* 98:8961-8965, 2001.
8. **Kerr MK**, Afshari CA, Bennett L, Bushel P, Martinez J, Walker NJ, Churchill GA: Statistical analysis of a gene expression microarray experiment with replication. *Statistica Sinica* 12:203-218, 2002.
9. Cui X, **Kerr MK**, Churchill GA: Data Transformations for cDNA Microarray Data. *Statistical Applications in Genetics and Molecular Biology*. 2:Article 4, 2003.
10. **Kerr MK**: Design considerations for efficient and effective microarray studies, *Biometrics* 59:822-828, 2003.
11. **Kerr MK**: Linear models for microarray data analysis: Hidden similarities and differences, *Journal of Computational Biology* 10:891-901, 2003.
12. **Kerr MK**: Stationary Gaussian processes on the vertices of the  $k$ -cube, *Journal of Statistical Planning and Inference* 118:1-8, 2004.
13. Mikheeva S, Barrier M, Little SA, Beyer R, Mikheev AM, **Kerr MK**, Mirkes PE: Alterations in gene expression induced in day-9 mouse embryos exposed to hyperthermia (HS) or 4-hydroperoxycyclophosphamide (4CP): analysis using cDNA microarrays. *Toxicological Sciences* 79:345-359, 2004.
14. Qin, L-X, **Kerr KF**, Contributing Members of the Toxicogenomics Research Consortium: Empirical evaluation of data transformations and ranking statistics for microarray analysis. *Nucleic Acids Research* 32:5471-5479, 2004.
15. Contributing Members of The Toxicogenomics Research Consortium: Standardizing Gene Expression between Laboratories and across Platforms. *Nature Methods*, 2:351-356, 2005.

16. External RNA Controls Consortium: The External RNA Controls Consortium: a progress report. *Nature Methods*, 2:731-734, 2005. PMID 16179916
17. External RNA Controls Consortium: Proposed methods for testing and selecting the ERCC external RNA controls. *BMC Genomics* 6:150, 2005. PMID 16266432/PMC1325234
18. Qin, L-X, Beyer, RP, Hudson, FN, Linford, NJ, Morris, DE, **Kerr KF**: Evaluation of Methods for Affymetrix Array Data via Quantitative Real-Time PCR. *BMC Bioinformatics* 7:23, 2006.
19. Ditt, RF, **Kerr, KF**, de Figueiredo P, Delrow J, Comai L, Nester, EU: The Arabidopsis thaliana transcriptome in response to *Agrobacterium tumefaciens*. *Molecular Plant-Microbe Interactions* 19:665-681, 2006.
20. **Kerr KF**: 2<sup>k</sup> Factorials in Blocks of Size 2, with Application to Two-Color Microarray Experiments. *Journal of Quality Technology* 38:349-364, 2006.
21. Beyer RP, Fry RC, Lasarev MR, McConnachie LA, Meira LB, Palmer VS, Powell CL, Ross PK, Bammler TK, Bradford BU, Cranson AB, Cunningham ML, Fannin RD, Higgins GM, Hurban P, Kayton RJ, **Kerr KF**, Kosyk O, Lobenhofer EK, Sieber SO, Vliet PA, Weis BK, Wolfinger R, Woods CG, Freedman JH, Linney E, Kaufmann WK, Kavanagh TJ, Paules RS, Rusyn I, Samson LD, Spencer PS, Suk W, Tennant RJ, Zarbl H; Members of the Toxicogenomics Research Consortium: Multi-Center Study of Acetaminophen Hepatotoxicity Reveals the Importance of Biological Endpoints in Genomic Analyses. *Toxicological Sciences* 99:326-337, 2007. PMID 1756273.
22. Yuan Z-C, Edlind MP, Liu P, Saenkham P, Banta LM, Wise AA, Ronzone E, Binns AN, **Kerr K**, Nester EW: The plant signal salicylic acid shuts down expression of the *vir* regulon and activates quorum-quenching gene in *Agrobacterium*. *Proceedings of the National Academy of Sciences of the USA* 104:11790-11795, 2007. PMID 17606909/PMC1905925.
23. **Kerr KF**, Serikawa K, Wei C, Peters MA, Bumgarner RE: What makes the best reference RNA? And other questions regarding the design and low-level analysis of two-color microarray experiments. *Omics: A Journal of Integrative Biology* 11: 152-165, 2007. PMID 17594235.
24. **Kerr KF**: Extended analysis of benchmark datasets for Agilent two-color microarrays. *BMC Bioinformatics* 8:371, 2007. PMID 17915030/PMC2174956
25. Yuan Z-C, Liu P, Saenkham P, **Kerr K**, Nester EW: Transcriptome profiling and functional analysis of *Agrobacterium tumefaciens* reveals a general conserved response to acidic conditions (pH5.5) and a complex acid-mediated signaling involved in *Agrobacterium*-plant interactions. *Journal of Bacteriology* 190: 494-507, 2007. PMID 17993523/PMC2223696.
26. Yuan Z-C, Haudecoeur E, Faure D, **Kerr KF**, Nester EW: Comparative transcriptome analysis of *Agrobacterium tumefaciens* in response to plant signals salicylic acid, indole-3-acetic acid, and  $\gamma$ -amino butyric acid reveals signaling crosstalk and *Agrobacterium*-plant co-evolution. *Cellular Microbiology* 10: 2339–2354, 2008. PMID 18671824

27. **Kerr KF**, Comments on the Analysis of Unbalanced Microarray Data. *Bioinformatics*, 25: 2035-2041, 2009. PMID 19528084/PMC2732368.
28. Marcus GM, Alonso A, Peralta CA, Lettre G, Vittinghoff E, Lubitz SA, Fox ER, Levitzky YS, Mehra R, **Kerr KF**, Deo R, Sotoodehnia N, Akyzbekova M, Ellinor PT, Paltoo DN, Soliman EZ, Benjamin EJ, Heckbert SR, for the CARE Study. European Ancestry as a Risk Factor for Atrial Fibrillation in African Americans. *Circulation* 122:2009-2015, 2010. PMID 21098467/PMC3058884.
29. Smith JG, Magnani, JW, Palmer C, Meng YA, Soliman EZ, Musani SK, **Kerr KF**, Schnabel RB, Lubitz SA, Sotoodehnia N, Redline S, Pfeufer A, Müller M, Evans DS, Nalls MA, Liu Y Newman AB, Zonderman AB, Evans MK Deo R, Ellinor PT, Paaltoo DN, Newton-Cheh C, Benjamin EJ, Mehra R, Alonso A, Heckbert SR, Fox ER for the Candidate-gene Association Resource (CARE) Consortium. Genome-wide association studies of the PR interval in African Americans. *PLoS Genetics* 7: e1001304, 2011. PMID 21347284/PMC3037415
30. Engrav LH, Tuggle CK, **Kerr KF**, Zhu KQ, Numhom S Couture OP, Beyer RP, Hocking AM, Carrougner GJ, Ramos MLC, Klein MB, Gibran NS. Functional Genomics Unique to Week 20 Post Wounding in the Deep Cone/Fat Dome of the Duroc/Yorkshire Porcine Model of Fibroproliferative Scarring. *PLoS One* 6:e19024, 2011. PMID 21533106/PMC3080398.
31. **Kerr KF**, McClelland RL, Brown ER, Lumley T. Evaluating the Incremental Value of New Biomarkers with Integrated Discrimination Improvement. *American Journal of Epidemiology*, doi:10.1093/aje/kwr086, 2011. PMID 21673124/PMC3202159.
32. Schnabel RB, **Kerr KF**<sup>1</sup>, Lubitz SA, Akyzbekova EL, Marcus GM, Sinner MF, Magnani, JW, Wolf PA, Deo R, Lloyd-Jones DM, Lunetta KL, Mehra R, Levy D, Fox ER, Arking DE, Mosley TH, Mueller M, Young T, Wichmann E, Seshadri S, Farlow DN, Rotter JI, Soliman EZ, Glazer NL, Wilson JG, Breteler MMB, Sotoodehnia N, Newton-Cheh C, Kääb S, Ellinor PT, Alonso A, Benjamin EJ, Heckbert SR. Large-Scale Candidate Gene Analysis in Whites and African-Americans Identifies IL6R Polymorphism in Relation to Atrial Fibrillation: the NHLBI CARE Project. *Circulation Cardiovascular Genetics*, 4:557-564, 2011. PMID 21846873/ PMC3224824.
33. **Kerr KF**, Pepe MS. Joint Modeling, Covariate Adjustment, and Interaction: Contrasting Notions in Risk Prediction Models and Risk Prediction Performance. *Epidemiology* 22(6):805-812, 2011. (Published with Invited Commentary) PMID 21968770/PMC3660038.
34. **Kerr KF**. Optimality Criteria for the Design of 2-Color Microarray Studies. *Statistical Applications in Genetics and Molecular Biology*, 2012. 11(1):1-9, 2012. PMID 22499679/PMC3979428.
35. Manichaikul A, Palmas W, Rodriguez CJ, Peralta CA, Divers J, Guo X, Chen W-M, Wong Q, Williams K, **Kerr KF**, Taylor KD, Tsai MY, Post W, Goodarzi MO, Sale MM, Diez-Roux AV, Rich SS, Rotter JI, Mychaleckyj JC. Population structure of Hispanics in the United States: the Multi-Ethnic Study of Atherosclerosis *PLoS Genetics* 8(4): e1002640, 2012. PMID:22511882./ PMC3325201

---

<sup>1</sup>Joint First Author

36. **Kerr KF**, Bansal A, Pepe MS. Further Insight into the Incremental Value of New Markers: The Interpretation of Performance Measures and the Importance of Clinical Context. *American Journal of Epidemiology* doi: 10.1093/aje/kws210, 2012. PMID 22875756/ PMC3530353.
37. Engrav LH, Heimbach DM, Rivara FP, **Kerr KF**, Osler T, Pham TN, Sharar SR, Esselman PC, Bulger EM, Carrougher GJ, Honari S, Gibran N. Harborview Burns – 1974 to 2009. *PLoS One*, 7(7): e40086, 2012. PMID 22792216.
38. Hansen E, **Kerr KF**. A Comparison of Two Classes of Methods for Estimating False Discovery Rates in Microarray Studies. *Scientifica*, vol 2012, Article ID 519394, doi: 10.6064/2012/519394, 2012. PMID 24278709/ PMC3820438.
39. Smith JG, Avery CL, Evans DS, Nalls MA, Meng YA, Smith EN, Palmer C, Tanaka T, Mehra R, Butler AM, Young T, Buxbaum SG, **Kerr KF**, Berenson GS, Schnabel RB, Li G, Ellinor PT, Magnani JW, Chen W, Bis JC, Curb JD, Hsueh W-C, Rotter JI, Liu Y, Newman AB, Limacher MC, North KE, Reiner AP, Quibrera M, Schork NJ, Singleton AB, Psaty BM, Soliman EZ, Solomon AJ, Srinivasan SR, Alonso A, Wallace R, Redline S, Zhang Z-M, Post WS, Zonderman AB, Taylor HA, Murray SS, Ferrucci L, Arking D, Evans MK, Fox ER, Sotoodehnia N, Heckbert SR, Whitsel EA, Newton-Cheh C for the CARE and COGENT consortia. The impact of ancestry and common genetic variants on QT interval in African Americans. *Circulation Cardiovascular Genetics*, 5:647-655, 2012. PMID 23166209/PMC3568265.
40. Butler AM, Yin X, Evans DS, Nalls MA, Smith EN, Tanaka T, Li G, Buxbaum SG, Whitsel, EA, Alonso A, Arking DE, Benjamin EJ, Berenson GS, Bis JC, Chen W, Deo R, Ellinor PT, Heckbert SR, Heiss G, Hsueh W-C, Keating BJ, **Kerr KF**, Li Y, Limacher MC, Liu Y, Lubitz SA, Marciante KD, Mehra R, Meng YA, Newman AB, Newton-Cheh C, North KE, Palmer CD, Psaty BM, Quibrera PM, Redline S, Reiner AP, Rotter JI, Schnabel RB, Schork, NJ, Singleton AB, Smith JG, Soliman EZ, Srinivasan SR, Zhang Z, Zonderman AB, Ferrucci L, Murray SS, Evans MK, Sotoodehnia N, Magnani JW, Avery CL. Novel Loci Associated with PR Interval In a Genome-wide Association Study of Ten African American Populations. *Circulation: Cardiovascular Genetics*, 5:639-646, 2013. PMID 23139255/ PMC3560365.
41. Thanassoulis G, Campbell CY, Owens DS, Smith JG, Smith AV, Peloso GM, **Kerr KF**, Pechlivanis S, Budoff MJ, Harris TB, Malhotra R, O'Brien KD, Allison MA, Aspelund T, Carr J, Criqui MH, Heckbert SR, Hwang S-J, Kathiresan S, Liu Y, Sjogren M, Van Der Pals J, Kälsch S, Cupples LA, Caslake M, Di Angelantonio E, Danesh J, Rotter JI, Sigurdsson S, Wong Q, Erbel R, Melander O, Gudnason V, O'Donnell CJ, Post WS for the CHARGE Extracoronary Calcium Working Group. Genetic Associations with Valvular Calcification and Aortic Stenosis. *New England Journal of Medicine* 368:503-512, 2013. PMID 23388002/PMC3766627.
42. Divers J, Palmer ND, Lui L, Register TC, Carr JJ, Hicks PJ, Hightower RC, Smith SC, Xu J, Cox AJ, Hruska KA, Bowden DW, Smith SC, Lewis CE, Heiss G, Province MA, Borecki IB, **Kerr KF**, Chen Y-D I, Palmas W, Rotter J, Wassel CL, Bertoni A, Herrington D, Wagenknecht LE, Langeveld CD, Freedman BI. Admixture mapping of coronary artery calcified plaque in African-Americans with type 2 diabetes. *Circulation: Cardiovascular Genetics*, 6:97–105, 2013. PMID 23233742/PMC3578054.

43. Deo R, Nalls MA, Avery CL, Smith JG, Evans DS, Keller MF, Butler AM, Buxbaum SG, Li PG, Quibrera PM, Smith EN, Tanaka T, Akyzbekova EL, Alonso A, Arking DE, Benjamin EJ, Berenson GS, Bis JC, Chen LY, Chen W, Cummings SR, Ellinor PT, Evans MK, Ferrucci L, Fox ER, Heckbert SR, Heiss G, Hsueh W, **Kerr KF**, Limacher M, Liu Y, Lubitz SA, Magnani JW, Mehra R, Marcus GM, Murray SS, Newman AB, Njajou O, North KE, Paltoo DN, Psaty BM, Redline SS, Reiner AP, Robinson JG, Rotter JI, Samdarshi TE, Schnabel RB, Schork NJ, Singleton AB, Siscovick D, Soliman EZ, Sotoodehnia N, Srinivasan SR, Taylor HA, Trevisan M, Zhang Z, Zonderman AB, Newton-Cheh C, Whitsel EA. Common genetic variation near the Connexin-43 gene is Associated with Heart Rate in African Americans: A Genome-wide Association Study of 13,372 Participants. *Heart Rhythm* 10:401-408, 2013. PMID 23183192/PMC3718037.
44. Seymour CW, Cooke CR, Wang Z, **Kerr KF**, Yealy DM, Angus DC, Rea TD, Kahn JM, Pepe MS. Improving risk classification of critical illness with biomarkers: A simulation study. *Journal of Critical Care*, 28:541–548, 2013. PMID 23566734/PMC3707977.
45. Pepe MS, **Kerr KF**, Longton G, Wang Z. Testing for improvement in prediction model performance. *Statistics in Medicine* 32: 1467–1482, 2013. PMID 23296397/PMC3625503.
46. Hall TA, Wan JY, Mata IF, **Kerr KF**, Snapinn KW, Samii A, Roberts JW, Agarwal P, Zabetian CP, Edwards KL: Risk Prediction for Complex Diseases: Application to Parkinson's disease. *Genetics in Medicine* 15:361–367, 2013. PMID 23222663/PMC3687522.
47. den Hoed M, Eijgelsheim M, Esko T, Brundel B, Peal DS, Evans DM, Nolte IM, Segrè AV, Holm H, Handsaker RE, Westra H-J, Johnson T, Isaacs A, Yang J, Lundby A, Kim YJ, Go MJ, Almgren P, Bochud M, Boucher G, Cornelis MC, Gudbjartsson D, Hadley D, van der Harst P, Hayward C, den Heijer M, Igl W, Jackson AU, Kutalik Z, Luan J, Kemp JP, Kristiansson K, Ladenvall C, Lorentzon M, Montasser ME, Njajou OT, O'Reilly PF, Padmanabhan S, St Pourcain B, Rankinen T, Salo P, Tanaka T, Timpson NJ, Vitart V, Waite L, Wheeler W, Zhao JH, Zhang W, Draisma HHM, Feitosa MF, **Kerr KF**, et al, Identification of heart rate-associated loci and their effects on cardiac conduction and rhythm disorders. *Nature Genetics* 45:621–631, 2013. PMID 23583979/PMC3696959.
48. Wojczynski MK, Li M, Bielak LF, **Kerr KF**, Reiner AP, Wong ND, Yanek LR, Qu L, White CC, Lange LA, Ferguson JF, He J, Young T, Mosley TH, Smith JA, Kral BG, Guo X, Wong Q, Ganesh SK, Heckbert SR, Griswold ME, O'Leary DH, Budoff M, Carr JJ, Taylor Jr HA, Bluemke DA, Demissie S, Hwang S-J, Paltoo DN, Polak JF, Psaty BM, Becker DM, Province MA, Post WS, O'Donnell CJ, Wilson JG, Harris TB, Kavousi M, Cupples LA, Rotter JI, Fornage M, Becker LC, Peyser PA, Borecki IB, Reilly MP. Genetics of Coronary Artery Calcification among African Americans, a Meta-Analysis. *BMC Genomics* 14:75, 2013. PMID 23870195/PMC3733595.
49. Demerath EW, Liu C-T, Franceschini N, Chen G, Palmer JR, Smith EN, Chen CTL, Ambrosone CB, Arnold AM, Bandera EV, Berenson GS, Bernstein L, Britton A, Cappola AR, Carlson CS, Chanock SJ, Chen W, Chen Z, Deming DL, Elks CE, Evans MK, Gajdos Z, Henderson BE, Hu JJ, Ingles S, John EM, **Kerr KF**, Kolonel LN, Marchand LL, Lu X, Millikan RC, Musani SK, Nock NL, North K, Nyante S, Press MF, Rodriguez-Gil JL, Ruiz-Narvaez EA, Schork NJ, Srinivasan SR, Woods NF, Zheng W, Ziegler RG, Zonderman A, Heiss G, Windham BG, Wellons M, Murray SS, Nalls M, Rajkovic A, Hirschhorn J, Cupples LA, Kooperberg C, Murabito JM, Haiman CA. Genome-wide



- association study of age at menarche in African-American women. *Human Molecular Genetics* 22:3329–3346, 2013. PMID 23599027/PMC3723312
50. **Kerr KF**, Wang Z, Janes H, McClelland R, Psaty B, Pepe M. Net Reclassification Indices for Evaluating Risk Prediction Instruments: A Critical Review. *Epidemiology*, 25:114–21, 2014. (Published with Invited Commentary.) PMID 24240655/PMC3918180
51. Chen CTL, Liu C-T, Chen GK, Andrews JS, Arnold AM, Dreyfus J, Franceschini N, Garcia ME, **Kerr KF**, Li Gu, Lohman KK, Musani SK, Nalls MA, Raffel LJ, Smith J, Ambrosone CB, Bandera EV, Bernstein L, Britton A, Brzyski RG, Cappola A, Carlson CS, Couper D, Deming SL, Goodarzi MO, Heiss G, John EM, Lu X, Le Marchand L, Marciante K, McKnight B, Millikan R, Nock NL, Olshan AF, Press MF, Vaidya D, Woods NF, Taylor HA, Zhao W, Zheng W, Evans MK, Harris TB, Henderson BE, Kardia SLR, Kooperberg C, Liu Y, Mosley TH, Psaty B, Wellons M, Windham BG, Zonderman AB, Cupples LA, Demerath EW, Haiman C, Murabito JM, Rajkovic A. Meta-Analysis of Loci Associated with Age at Natural Menopause in African-American Women. *Human Molecular Genetics*, 23:3327–42. 2014. PMID 2443794/PMC4030781
52. **Kerr KF**, Meisner A, Thiessen-Philbrook H, Coca SG, Parikh CR. Developing Risk Prediction Models for Kidney Injury and Assessing Incremental Value for Novel Biomarkers. *Clinical Journal of the American Society of Nephrology* 9:1488-1496, 2014. PMID 24855282/ PMC4123400
53. Smith JG, Luk K, Schulz CA, Engert JC, Do R, Hindy G, Rukh G, Dufresne L, Almgren P, Owens DS, Harris TB, Peloso GM, **Kerr KF**, Wong Q, Smith AV, Rotter JI, Cupples A, Rich S, Kathiresan S, Orho-Melander M, Gudnason V, O'Donnell CJ, Post WS, Thanassoulis G. Association of Low-Density Lipoprotein Cholesterol-Related Genetic Variants with Aortic Valve Calcium and Incident Aortic Stenosis. *Journal of the American Medical Association* 312:1764-1771, 2014. PMID 25065297/ PMC4280258.
54. Ilkhanoff L, Arking DE, Lemaitre, RN, Alonso A. Chen LY, Durda P, Hesselson SE, **Kerr KF**, Magnani JW, Marcus GM, Schnabel RB, Smith JG, Soliman EZ, Reiner AP, Sotoodehnia N. A Common SCN5A Variant is Associated with PR interval and Atrial Fibrillation among African Americans. *Journal of Cardiovascular Electrophysiology* 25:1150-1157, 2014. PMID 25065297/ PMC4454499
55. **Kerr KF**, Meisner A, Thiessen-Philbrook H, Coca SG, Parikh CR. RiGoR: Reporting Guidelines to Address Common Sources of Bias in Risk Model Development. *Biomarker Research* 3:UNSP 2, 2015. PMID 25642328/ PMC4312434
56. Meisner A, **Kerr KF**, Thiessen-Philbrook H, Coca SG, Parikh CR. Methodological Issues in Current Practice May Lead to Bias in the Development of Biomarker Combinations for Predicting Acute Kidney Injury. *Kidney International* 89:429-438, 2016. PMID 26398494/ PMC4805513
57. van der Harst P, van Setten J, Verweij N, Vogler G, Franke L, Maurano M, Wang X, Leach IM, Eijgelsheim M, Sotoodehnia N, Hayward C, Sorice R, Meirelles O, Lytikäinen L-P, Polašek O, Tanaka T, Arkin D, Ulivi S, Trompet S, Müller-Nurasyid M, Smith AV, Dörr M, **Kerr KF**, Magnani JW, Del Greco F, Zhang W, Nolte M, Silva CT, Padmanabhan S, Tragante V, Esko T, Abecasis GR, Adriaens ME, Andersen K, Barnett P, Bis JC, Bodmer R, Buckley BM, Campbell H, Cannon MV, Chakravarti A, Chen LY, Delitala A, Devereux RB, Doevendans PA, Dominiczak AF, Ferrucci L, Ford I, Gieger C,

- Harris TB, Haugen E, Heinig M, Hernandez DG, Hillege HL, Hirschhorn JN, Hofman A, Hubner N, Hwang S-J, Iorio A, Kähönen M, Kellis M, Holcic I, Kooner IK, Kooner JS, Kors JA, Lakatta EG, Launer LJ, Levy D, LUndry A, Macfarlane PW, May D, Meitinger T, Metspalu A, Nappo S, Naitza S, Neph S, Nord AS, Nutile T, Okin PM, Olsen JV, Oostra BA, Penninger JM, Pennacchio LA, Pers TH, Perz S, Peters A, Pinto Y, Pfeufer A, Pilia MG, Pramstaller PP, Prins BP, Raitakari OT, Raychaudhuri S, Rice KM, Rossin EJ, Rotter JI, Schafer S, Schlessinger D, Schmidt CO, Sehmi J, Silljé HHW, Sinagra G, Sinner MF, Slowikowski K, Soliman EZ, Spector TD, Spiering W, Stamatoyannopoulos JA, Stolk RP, Stolk K, Tan S-T, Tarasov KV, Trinh B, Uitterlinden AG, van den Boogaard M, van Duijn CM, van Gilst WH, Viikari JS, Visscher PM, Vitart V, Völker U, Waldenberger M, Weichenberger CX, Westra H-J, Wijmenga C, Wolffenbuttel BH, Yang J, Bezzina CR, Munroe PB, Snieder H, Wright AF, Rudan I, Boyer LA, Asselbergs FW, van Veldhuisen DJ, Stricker BH, Psaty BM, Ciullo M, Sanna S, Lehtimäki T, Wilson JF, Bandinelli S, Alonso A, Gasparini P, Jukema W, Kääb S, Gudnason V, Felix SB, Heckbert SR, de Boer RA, Newton-Cheh C, Hicks AA, Chambers JC, Jamshidi Y, Visel A, Christoffels VM, Isaacs A, Samani NJ, de Bakker PIW: 52 Genetic Loci Influencing Myocardial Mass. *Journal of the American College of Cardiology* 68:1435-1448, 2016. PMID 27659466
58. Conomos MP, Laurie CA, Stilp AM, Gogarten SM, McHugh CP, Nelson SC, Sofer T, Fernández-Rhodes L, Justice AE, Graff M, Seyerle AA, Avery CL, Taylor KD, Rotter JI, Talavera GA, Daviglus ML, Wassertheil-Smoller S, Schneiderman N, Heiss G, Kaplan RC, Franceschini N, Reiner AP, Shaffer JR, Barr1 RG, **Kerr KF**, Browning SR, Browning BL, Weir BS, Avilés-Santa ML, Papanicolaou1 JG, Lumley T, Szpiro AA, North KE, Rice K, Thornton TA, and Laurie CC. Genetic Diversity and Association Studies in U.S. Hispanic/Latino Populations: Applications in the Hispanic Community Health Study/Study of Latinos. *American Journal of Human Genetics*, 2016. PMID 26748518/ PMC4716704
59. Morrison J, Laurie CC, Marazita ML, Sanders, AE, Offenbacher S, Salazar CR, Conomos MP, Thornton T, Jain D, Laurie CA, **Kerr KF**, Papanicolaou G, Taylor K, Kaste LM, Beck JD, Shaffer JR. Genome-wide Association Study of Dental Caries in the Hispanic Communities Health Study/Study of Latinos (HCHS/SOL). *Human Molecular Genetics* 25: 807-816, 2016. PMID 26662797/ PMC4743689
60. Schick UM, Jain D, Hodonsky CJ, Morrison JV, Davis JP, Brown L, Sofer T, Conomos M, Schurmann C, Nelson S, Vadlamudi S, Stilp A, Plantinga A, Baier L, Bien SA, Gogarten S, Laurie C, Taylor KD, Liu Y, Aue PLr, Franceschini N, Szpiro A, Rice K, **Kerr KF**, Rotter JI, Hanson R, Papanicolaou G, Rich SS, Loos RJF, Browning B, Browning S, Weir B, Laurie C, Mohlke K, North KE, Thornton TA, Reiner AP. Genome-wide Association Study of Platelet Count Identifies Novel, Ancestry-Specific Loci in Hispanic/Latino Americans. *American Journal of Human Genetics* 98:429-438, 2016. PMID: 26805783/ PMC4746331.
61. **Kerr KF**, Brown M, Zhu K, Janes H. Assessing the Clinical Impact of Risk Prediction Models with Decision Curves: Guidance for Correct Interpretation and Appropriate Use. *Journal of Clinical Oncology* 34:2534-40, 2016. PMID 27247223/PMC4962736.
62. **Kerr KF**, Brown M, Janes H. Decision Curves, Calibration, and Subgroups Reply. *Journal of Clinical Oncology* 35:473, 2017. PMID 28129522

63. Dunn EC, Sofer T, Gallo LC, Gogarten SM, **Kerr KF**, Chen C-Y, Stein MB, Ursano RJ, Guo X, Jia Y, Qi Q, Rotter JI, Argos M, Cai J, Penedo FJ, Perreira K, Wassertheil-Smoller S, Smoller JW. Genome-Wide Association Study of Generalized Anxiety Symptoms in the Hispanic Community Health Study/Study of Latinos. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics* 174:132-143, 2017. PMID 27159506/ PMC5501086.
64. Shi M, Kovac A, Korf A, Cook TJ, Gingham C, Bullock KM, Yang L, Stewart T, Zheng D, Aro P, **Kerr KF**, Zabetian CP, Peskind ER, Hu S-C, Quinn JF, Galasko DR, Montine TJ, Banks WA, Zhang J. CNS tau efflux via exosomes is not increased in Alzheimer disease but in Parkinson disease. *Alzheimers and Dementia*, 25:4350-4368, 2016. PMID 27234211/PMC5107127.
65. Evans DS, Avery CL, Nalls MA, Li G, Barnard J, Smith EN, Tanaka T, Butler AM, Buxbaum SG, Alonso A, Arking DE, Berenson GS, Bis JC, Buyske S, Carty CL, Chen W, Chung MK, Cummings SR, Deo R, Eaton CB, Fox ER, Heckbert SE, Heiss G, Hindorff LA, Hsueh W-C, Isaacs A, Jamshidi Y, **Kerr KF**, Liu F, Liu Y, Lohman KK, Magnani JW, Maher JF, Mehra R, Meng YA, Musani SK, Newton-Cheh C, North KE, Psaty BM, Redline S, Rotter JI, Schnabel TB, Schork NJ, Shohet RV, Singleton AB, Smith JD, Soliman EZ, Srinivasan SR, Taylor HA, Jr., Van Wagener DR, Wilson JG, Young T, Zhang Z-M, Zonderman AB, Evans MK, Ferrucci L, Murray SS, Tranah GJ, Whitsel EA, Reiner AP, Sotoodehnia N: Fine-mapping, Novel Loci Identification, and SNP Association Transferability in a Genome-Wide Association Study of QRS Duration in African Americans. *Human Molecular Genetics* 25:4350-4368, 2016. PMID 27577874/PMC5291202
66. Bitto A, Ito TK, Pineda VV, LeTexier NJ, Huang HZ, Sutlief E, Tung H, Vizzini N, Yajima M, Beyer RP, **Kerr KF**, Davis DJ, Hagan CE, Snyder JM, Treuting PM, Kaeberlein M. Transient Rapamycin Treatment Robustly Increases Lifespan and Healthspan in Middle-aged Mice. *eLife*, 2016. PMID 27549339/PMC4996648
67. Sanders AE, Jain D, Sofer T, **Kerr KF**, Laurie CC, Shaffer JR, Marazita, ML, Kaste LM, Slade GD, Fillingim, R, Ohrbach R, Maixner W, Kocher T, Bernhardt O, Teumer A, Schwahn C, Sipilä K, Lähdesmäki R, Männikkö M, Pesonen P, Järvelin MR, Rizzatti-Barbosa CM, Meloto CB, Ribeiro-Dasilva M, Diatchenko L, Serrano P, Smith SB. GWAS Identifies New Loci for Painful Temporomandibular Disorder: Hispanic Community Health Study/Study of Latinos. *Journal of Dental Research* 96:277-284, 2017. PMID 28081371/ PMC5298397
68. Kramer HJ, Stilp AM, Laurie CC, Reiner AA, Lash J, Daviglius ML, Rosas SE, Ricardo AC, Tayo B, Flessner MF, **Kerr KF**, Peralta C, Durazo-Arvizu R, Conomos M, Thornton T, Rotter J, Taylor KD, Cai J, Eckfeldt J, Chen H, Papanicolau G, Franceschini N. African Ancestry-Specific Alleles and Kidney Disease Risk in Hispanics/Latinos. *Journal of the American Society of Nephrology* 28:915-922, 2017. PMID 27650483/ PMC5328161
69. Sofer T, Heller R, Bogomolov M, Avery C, Graff M, North K, Reiner A, Thornton T, Rice K, Banjamini Y, Laurie CC, **Kerr KF**. A powerful statistical framework for generalization testing in GWAS, with application to the HCHS/SOL. *Genetic Epidemiology* 41:251-250, 2017. PMID: 28090672/PMC5340573

70. Afshar M, Luk K, Do R, Dufresne L, Owens D, Harris T, Peloso G, **Kerr KF**, Wong Q, Smith A, Budoff M, Rotter J, Cupples LA, Rich S, Engert JC, Gudnason V, O'Donnell CJ, Post W, Thanassoulis G: Triglyceride-Related Genetic Variants are Associated with Mitral Annular Calcification. *Journal of the American College of Cardiology*, 69:2941-2948, 2017. PMID 28619195/PMC5538134
71. Nolte IM, Munox ML, Tragante V, Amare AT, Jansen R, Vaez A, von der Heyde B, Avery CL, Bis JC, Dierckx B, van Dongen J, Gogarten SM, Goyette P, Hernesniemi J, Huikari V, Hwang S-J, Jaju D, **Kerr KF**, et al. Genetic loci associated with heart rate variability and their effects on cardiac disease risk. *Nature Communications* 8:15805, 2017. PMID 28613276/PMC5474732
72. de Fontnouvelle CA, Greenberg JH, Thiessen-Philbrook HR, Zappitelli M, Roth J, **Kerr KF**, Devarajan P, Shlipak M, Coca S, Parikh CR. Interleukin-8 and Tumor Necrosis Factor Predict Acute Kidney Injury after Pediatric Cardiac Surgery. *Annals of Thoracic Surgery* 104:2072-2079, 2017. PMID 28821332/PMC5696070
73. **Kerr KF** and Janes H. First things first: risk model performance metrics should reflect the clinical application. *Statistics in Medicine* 36:4503-4508, 2017. PMID: 29156498/PMC5726302
74. Christophersen IE, Magnani JW, Yin X, Barnard J, Weng L-C, Arking DE, Niemeijer MN, Lubitz SA, Avery CL, Duan Q, Felix SB, Bis JC, **Kerr KF**, Isaacs A, Müller-Nurasyid M, Müller C, North KE, Reiner AP, Tinker LF, Kors JA, Teumer A, Petersmann A, Sinner MF, Buzkova P, Smith J, Van Wagoner DR, Völker U, Waldenberger M, Peters A, Meitinger T, Limacher MC, Wilhelmsen KC, Psaty BM, Hofman A, Uitterlinden A, Krijthe BP, Zhang Z-M, Schnabel RB, Kääh S, van Duijn C, Rotter JI, Sotoodehnia N, Dörr M, Li Y, Chung MK, Soliman EZ, Alonso A, Whitsel EA, Stricker BH, Benjamin JE, Heckbert SR, Ellinor PT. Fifteen Genetic Loci Associated with the Electrocardiographic P-wave. *Circulation: Cardiovascular Genetics*,10(4), 2017. PMID 28794112/PMC5567993
75. **Kerr KF**, LeBlanc M, Janes H. Comparisons of cancer staging systems should be based on overall performance in the population. *Clinical Trials* 14:659-660, 2017. PMID 28819997/ PMC5714691
76. **Kerr KF**, Avery CL, Lin HJ, Raffield LM, Zhang QS, Browning BL, Browning SR, Conomos MP, Gogarten SM, Laurie CC, Sofer T, Thornton TA, Hohensee C, Jackson RD, Kooperberg C, Li Y, Méndez-Giráldez R, Perez MV, Peters U, Reiner AP, Zhang Z-M, Yao J, Sotoodehnia N, Taylor KD, Guo X, Lange L, Soliman EZ, Wilson JG, Rotter JI, Heckbert SR, Jain D, Whitsel EA. Genome-wide Association Study of Heart Rate and Its Variability in Hispanic/Latino Cohorts. *Heart Rhythm* 14:1675-1684, 2017. PMID 28610988/ PMC5671896
77. **Kerr KF**, Roth J, Zhu K, Thiessen-Philbrook H, Meisner A, Wilson FP, Coca S, Parikh C. Evaluating biomarkers for prognostic enrichment of clinical trials. *Clinical Trials* 14:629-638, 2017. PMID 28795578/PMC5714681
78. Nadkarni, G, Coca SG, Meisner A, Patel S, **Kerr KF**, Patel UD, Koyner JL, Garg AX, Thiessen-Philbrook H, Edelstein CL, Shlipak M, El-Khoury J, Parikh CR. Urinalysis Findings and Urinary Kidney Biomarker Concentrations. *BMC Nephrology* 18:218, 2017. PMID 28683730/PMC5499057

79. Sofer T, Wong Q, Hartwig FP, Taylor K, Warren HR, Evangelou E, Cabrera CP, Levy D, Kramer HJ, Lange LA, Horta BL, **Kerr KF**, Reiner AP, Franceschini N. Genome-Wide Association Study of Blood Pressure Traits in Hispanic/Latino Americans: the Hispanic Community Health Study/Study of Latinos. *Scientific Reports*, 7:10348, 2017. PMID 28871152/PMC5583292
80. Meisner A, Parikh C, **Kerr KF**. Biomarker Combinations for Diagnosis and Prognosis in Multicenter Studies: Principles and Methods. *Statistical Methods in Medical Research*, 2017. PMID 29157119
81. Lakehal K, Levine D, **Kerr KF**, Vir P, Bruiners N, Lardizabal A, Gennaro ML, Pine R. Tuberculosis State is Associated with Expression of Toll-like receptor 2 in Sputum Macrophages. *mSphere* 2:e00475-17, 2017. PMID 29104936/PMC5663984
82. Seyerle AA, Lin HJ, Gogarten SM, Stilp A, Méndez-Giráldez R, Soliman EZ, Baldassari A, Graff M, Heckbert SR, **Kerr KF**, Kooperberg C, Rodriguez CJ, Guo X, Yao J, Sotoodehnia N, Taylor KD, Whitsel EA, Rotter JI, Laurie CC, Avery CL. Genome-Wide Association Study of PR Interval in Hispanics/Latinos Identifies Novel Locus at *ID2*. *Heart*, 2017. PMID 29127183
83. Méndez-Giráldez R, Gogarten SM, Below JE, Yao J, Seyerle AA, Highland HM, Kooperberg C, Soliman EZ, Rotter JI, **Kerr KF**, Ryckman KK, Taylor KD, Petty LE, Shah SJ, Conomos MP, Sotoodehnia N, Cheng S, Heckbert SR, Sofer T, Guo X, Whitsel EA, Lin HJ, Hanis CL, Laurie CC, Avery CL. GWAS of the electrocardiographic QT interval in Hispanics/Latinos generalizes previously identified loci and identifies population-specific signals. *Scientific Reports* 7:17075, 2017. PMID 29213071/PMC5719082
84. Parikh CR, Puthumana J, Shlipak MG, Koyner JL, Thiessen-Philbrook H, McArthur E, **Kerr KF**, Kavsak P, Whitlock RP, Garg AX, Coca SG. Relationship of Kidney Injury Biomarkers with Long-Term Cardiovascular Outcomes after Cardiac Surgery. *Journal of the American Society of Nephrology* 28:3699-3707, 2017. PMID 28808078/PMC5698070
85. Sanders AE, Sofer T, Wong Q, **Kerr KF**, Agler C, Shaffer JR, Beck JD, Offenbacher S, Salazar CR, North KE, Marazita ML, Laurie CC, Singer RH, Cai J, Finlyason TL, Divaris K. Chronic Periodontitis Genome-wide Association Study in the Hispanic Community Health Study / Study of Latinos. *Journal of Dental Research* 96:64-72, 2017.
86. Dunn E, Sofer T, Wang M-J, Soare TW, Gallo LC, Gogarten SM, **Kerr KF**, Chen C, Stein MB, Ursano RJ, Guo X, Jia Y, Yao J, Rotter JI, Argos M, Cai J, Ferreira K, Wassertheil-Smoller S, Smoller JW. Genome-Wide Association Study of Depressive Symptoms in the Hispanic Community Health Study/Study of Latinos. *Journal of Psychiatric Research* 99:167-176, 2018. PMID: 29505938
87. Floyd JS, Sitlani CM, Avery CL, Noordam R, Li X, Smith AV, Gogarten S, Lin J, Broer L, Evans DS, Trompet S, Brody JA, Stewart JD, Seyerle AA, Roach J, Lange LA, Lin HJ, Kors JA, Harris TB, Li-Gao R, Sattar N, Cummings SR, Aviles-Santa L, Wiggins KL, Napier MD, Stürmer T, Bis JC, **Kerr KF**, Uitterlinden AG, Taylor KD, Stott DJ, de Mutsert R, Launer LJ, Busch EL, Giráldez RM, Sotoodehnia N, Soliman EZ, Li Y, Duan Q, Hofman A, Mook-Kanamori DO, Slagboom PE, Wilhelmsen KC, Reiner AP, Chen Y-DI, Heckbert SR, Kaplan RC, Rice KM, Jukema JW, Liu Y, Rosendaal FR, Gudnason V, Wilson JG, Rotter JI, Laurie CC, Psaty BM, Whitsel EA, Cupples LA, Stricker BH. Large-

- scale pharmacogenomic study of sulfonyleureas and the QT, JT, and QRS intervals: CHARGE Pharmacogenomics Working Group. *The Pharmacogenomics Journal* 18:127-135, 2018. PMID 27958378/PMC5468495
88. Seyerle AA, Sitalani CM, Noordam R, Gogarten SM, Li J, Li X, Evans DS, Sun F, Isaacs A, Highland HM, Stewart JD, Harris TB, Trompet S, Bis JC, Peloso GM, Brody JA, Broer L, Busch EL, Duan Q, Stilp AM, O'Donnell C, MacFarlane P, Floyd JS, Kors JA, Lin HJ, Li-Gao R, Sofer T, Giraldez RM, Cummings SR, Heckbert SR, Hofman A, Ford I, Li Y, Launer LJ, Newton-Cheh C, Napier MD, **Kerr KF**, Reiner AP, Rice KM, Roach J, Buckley BM, Soliman EZ, de Mutsert R, Sotoodehnia N, Uitterlinden AG, North KE, Lee C, Gundnason V, Strümer T, Mook-Kanamori DO, Kent D Taylor KD, Wiggins KL, Wilson JG, Chen YI, Kaplan RC, Wilhelmsen K, Cupples LA, Salomaa V, Jukema JW, Liu Y, Rosendaal FR, Lange LA, Vasani RS, Smith A, Stricker BH, Laurie CC, Rotter JI, Whitsel EA, Psaty BM, Avery CL. Pharmacogenomics Study of Thiazide Diuretics and QT Interval in Multi-Ethnic Populations: The Cohorts for Heart and Aging Research in Genomic Epidemiology. *The Pharmacogenomics Journal* 18:215-226, 2018. PMID 28719597/PMC5773415
  89. Wang H, Atik A, Stewart T, Gingham C, Aro P, **Kerr KF**, Seibyl J, Jennings D, Jensen PH, Marek K, Shi M, Zhang J. Plasma  $\alpha$ -synuclein and cognitive impairment in the Parkinson's Associated Risk Syndrome: A Pilot Study. *Neurobiology of Disease*, 2018. PMID 29705185
  90. Meisner A, **Kerr KF**, Thiessen-Philbrook H, Wilson FP, Garg AX, Shilpak MC, Kavsak P, Whitlock W, Coca SG, Parikh CR. Development of Biomarker Combinations for Postoperative Acute Kidney Injury via Bayesian Model Selection in a Multicenter Cohort Study. *Biomarker Research*, 2018. PMID 29344362/ PMC5767010
  91. **Kerr KF**, Thiessen-Philbrook H, Parikh CR. Assessing Predictive Ability of Biomarkers for Pediatric Acute Kidney Injury: Methodological Issues. *The Annals of Thoracic Surgery* 106:641, 2018. PMID: 29626457
  92. van Setten J, Brody J, Jamshidi Y, Swenson B, Butler AM, Campbell H, Del Greco F, Evans DS, Gibson Q, Gudbjartsson DF, **Kerr KF** et al: PR interval genome-wide association meta-analysis identifies 50 loci associated with atrial and atrioventricular electrical activity. *Nature Communications* 9:2904, 2018. PMID: 30046033/ PMC6060178.
  93. Meisner A, Parikh CR, **Kerr KF**. Using Ordinal Outcomes to Construct and Select Biomarker Combinations for Single-level Prediction. *Diagnostic and Prognostic Research*, 2018.
  94. Ioannou GN, Green PK, Beste LA, Mun EJ, **Kerr KF**, Berry K. Development of Models Estimating the Risk of Hepatocellular Carcinoma after Antiviral Treatment for Hepatitis C Virus. *Journal of Hepatology*, 2018. PMID: 30138686
  95. Smith SB, Parisien M, Bair E, Belfer I, Chabot-Doré A-J, Gris P Khoury S, Tansley S, Torosyan Y, Zaykin DV, Bernhardt O, de Oliveira-Serrano P, Gracely RH, Jain D, Järvelin M-R, Kaste LM, **Kerr KF**, Kocher T, Lähdesmäki R, Laniado N, Laurie CC, Laurie CA, Männikkö M, Meloto CB, Nackley AG, Nelson SC, Pesonen P, Ribeiro-Dasilva MC, Rizzatti-Barbosa CM, Sander AE, Schwahn C, Sipilä K, Sofer T, Teumer A, Mogil JS, Fillingim RB, Greenspan JD, Orhbach R, Slade GD, Maixner W, Diatchenko L.

Genome-wide association reveals contribution of *MRAS* to painful temporomandibular disorder in males. *Pain*, accepted.

96. **Kerr KF**, Brown MD, Marsh TL, Janes H. Evaluating Risk Models for Opting Out of Treatment. *Medical Decision Making*, accepted.

#### b) Other Refereed Scholarly Publications

1. **Kerr MK**, Leiter EH, Picard L, Churchill GA: Analysis of a designed microarray experiment. Proceedings of the IEEE-EURASIP Nonlinear Signal and Image Processing Workshop, June 3-6, 2001.

#### c) Books and Book Chapters

1. **Kerr MK**, Leiter EH, Picard L, Churchill GA: Sources of variation in microarray experiments. "Computational and Statistical Approaches to Genetics," Wei Zhang and Ilya Shmulevich, eds. Kluwer Publishers, 2002.
2. **Kerr MK**: Experimental design to make the most of microarray studies. "Functional Genomics," MJ Brownstein and AB Khodursky, eds. Series in Methods in Molecular Biology, Humana Press, 2003.
3. Wu H, **Kerr MK**, Cui X, Churchill GA: MAANOVA: A software package for the analysis of spotted cDNA microarray experiments. "The Analysis of Gene Expression Data," Giovanni Parmigiani, Elizabeth S. Garrett, Rafael A. Irizarry, and Scott Zeger, eds. Springer-Verlag, 2003.
4. **Kerr KF**: Principles of Design for Microarray Experiments. "Fundamentals of Data Mining in Genomics and Proteomics," Werner Dubitsky, Martin Granzow, and Daniel Berrar, eds. Springer-Verlag, 2006.
5. van Belle G and **Kerr KF**: Design and Analysis of Experiments in the Health Sciences. Wiley, 2012.

#### d) Other Non-refereed Published Scholarly Publications

1. **Kerr MK**: A guide to design issues for microarrays. "Statistical analysis of microarrays," Inserm Proceedings (Institut national de la santé et de la recherche médicale), May 26-27, 2003
2. **Kerr MK**: Review of "Design and Analysis of Experiments, Volume 2: Advanced Experimental Design," Klaus Hinklemann and Oscar Kempthorne. Journal of the American Statistical Association. June 2006.
3. Meisner A, **Kerr KF**: Review of 'Evaluation of screening tests for detecting Chlamydia trachomatis – Bias associated with the patient-infected-status-algorithm.' World Health Organization STI Diagnostics Publications Review (stidiagnostics.org), Issue 40

## 8. Conferences, Symposiums, and Invited Research Presentations

- \*International Biometric Society ENAR, Chicago, Illinois, March 20, 2000
- \*Agilent Technologies, Palo Alto, California, June 27, 2000
- \*Joint Statistical Meetings, Indianapolis, Indiana, August 17, 2000
- \*Purdue University, Bioinformatics and Statistical Genomics Seminar Series, West Lafayette, Indiana, October 3, 2000
- \*Institute for Pure and Applied Mathematics, Conference on Expression Arrays, Genetic Networks, and Disease, Los Angeles, California, November 11, 2000, Conference on Mathematical and Statistical Challenges from Computational Biology, Lake Arrowhead, California, December 11, 2000
- \*University of Southern Maine, Department of Mathematics and Statistics, Portland, Maine, February 8, 2001
- \*Keck Graduate Institute, Claremont, California, February 15, 2001, March 30, 2001
- \*The Genomics Institute of the Novartis Research Foundation, February 22, 2001
- \*Department of Biostatistics, University of Michigan, February 27, 2001
- \*Department of Statistics, The Ohio State University, March 1, 2001
- \*Department of Biostatistics, Harvard University, February 14, 2001
- \*Harvard School of Public Health, Boston, Massachusetts, May 12, 2001
- \*Department of Biostatistics, University of North Carolina, March 20, 2001
- The Jackson Laboratory, Short Course on Gene Microarray Development and Analysis, Bar Harbor, Maine, May 18, 2001
- \*IEEE-EURASIP Workshop on Nonlinear Signal and Image Processing, Special Invited Session on Signal Processing in Biocomputing, Baltimore, Maryland, June 5, 2001
- \*IMS/AMS/SIAM Conference on Statistics and Functional Genomics, South Hadley, Massachusetts, June 14, 2001
- \*The Institute for Genomic Research (TIGR), Rockville, Maryland, July 18, 2001
- The Jackson Laboratory, Short Course on Mathematical Approaches to the Analysis of Complex Phenotypes, Bar Harbor, Maine, October 6, 2001.
- \*Nathan Shock Bioinformatics Workshop, Rochester, New York, October 20, 2001
- \*University of Washington, Computational Biology Seminar Series, November 7, 2001
- American Society for Quality and American Statistical Association Deming Conference on Applied Statistics, Short Course, Atlantic City, New Jersey, December 13, 2001.
- \*University of Washington, Workshop in Statistical Genetics and Computational Molecular Biology, Seattle, Washington, December 18, 2001
- \*The Program in Mathematics and Molecular Biology, Mathematics and Molecular Biology VII: Modeling Across the Scales: Atoms to Organisms. Santa Fe, New Mexico, January 5-10, 2002
- \*Karolinska Institutet, Stockholm, Sweden, February 21, 2002
- \*International Biometric Society ENAR, Washington, D.C., March 20, 2002
- \*Institute for Pure and Applied Mathematics, Reunion Conference on Functional Genomics, Los Angeles, CA, June 16, 2002.
- \*Design and Analysis of Experiments 1, Vancouver, British Columbia, July 16, 2002
- Pittsburgh Supercomputing Center, Short Course on Nucleic Acid and Protein Sequence Analysis, August 13-15, 2003.
- \*Association of General Clinical Research Centers, New York, New York, August 11, 2002
- \*Joint Statistical Meetings, New York, New York, August 13, 2002
- \*Gordon Conference on Quantitative Genomics, Ventura, California, February 12, 2003



- \*International Symposium on Animal Functional Genomics, East Lansing, Michigan, May 4, 2003.
- \*French National Institute of Health and Medical Research (INSERM), Workshop on the Statistical Analysis of Microarrays, Toulon, France, May 26, 2002.
- \*Joint Statistical Meetings, San Francisco, California, August 5, 2003.
- Pittsburgh Supercomputing Center, Short Course on Nucleic Acid and Protein Sequence Analysis, August 13-15, 2003.
- \*National Academy of Sciences Committee on Emerging Issues and Data on Environmental Contaminants, Seattle, Washington, September 16, 2003.
- \*University of Washington, Workshop in Statistical Genetics and Computational Molecular Biology, Seattle, Washington, September 21, 2003
- \*Institute for Mathematics and Its Applications, Statistical Methods for Gene Expression: Microarrays and Proteomics, Minneapolis, Minnesota, September 30, 2003.
- \*University of Idaho, Bioinformatics Seminar, Moscow, Idaho, November 7, 2003.
- \*Mathematical Biosciences Institute, The Ohio State University, Analysis of Gene Expression Data: Principles and Applications, Columbus, Ohio, October 11, 2004.
- \*Albert Einstein College of Medicine, New York, New York, May 19, 2005.
- \*University of Washington Environmental Health Sciences Research Day, Seattle, Washington, May 8, 2006.
- \*Joint Statistical Meetings, Seattle, Washington, August 6, 2006.
- \*Isaac Newton Institute for Mathematical Sciences, Cambridge, UK, Programme on Designed Experiments: Recent Advances in Methods and Applications, August 12, 2008.
- \*University of California, Los Angeles, Department of Statistics Tenth Anniversary Celebration, October 18, 2008.
- \*Bryn Mawr College, July 1, 2009.
- \*University of Washington, Department of Biostatistics, October 7, 2010.
- \*Dutch Royal Academy of Arts and Sciences, Amsterdam, Netherlands, April 28, 2011.
- \*Jackson Heart Study Writers Lab, via teleconference, May 7, 2012
- \*MultiEthnic Study of Atherosclerosis, Steering Committee Meeting, Seattle, WA, April 26, 2013
- \*International Biometrics Society WNAS, Los Angeles, CA, June 18, 2013
- \*Yale University, Department of Biostatistics, New Haven, CT, February 4, 2014.
- \*University of California, San Francisco, Department of Epidemiology and Biostatistics, San Francisco, CA, March 14, 2014.
- \*National Institute of Diabetes and Digestive and Kidney Diseases, "Building Better Biomarkers Statistical Methodology" Workshop, December 2, 2014
- \*American Statistical Association Professional Development Webinar, September 23, 2015.
- \*ENAR, Austin, TX March 7, 2016
- \*Joint Statistical Meetings, Vancouver, British Columbia, August 2, 2018

## 9. Short Courses

- The Jackson Laboratory, Short Course on Gene Microarray Development and Analysis, Bar Harbor, Maine, May 18, 2001
- Workshop for the School of Public Health, "The Design and Analysis of Microarray Experiments, September 25, 2001.

American Society for Quality and American Statistical Association Deming Conference on Applied Statistics, Short Course, Atlantic City, New Jersey, December 13, 2001.

The Jackson Laboratory, Short Course on Mathematical Approaches to the Analysis of Complex Phenotypes, Bar Harbor, Maine, October 6, 2001.

The Jackson Laboratory, Short Course on Mathematical Approaches to the Analysis of Complex Phenotypes, Bar Harbor, Maine, September 23, 2002.

University of Alabama, Birmingham, Short Course on Statistical Genetics, February 8, 2003

Pittsburgh Supercomputing Center, Short Course on Nucleic Acid and Protein Sequence Analysis, August 13-15, 2003.

Third Seattle Symposium in Biostatistics, Short course in the Design and Analysis of Microarray Experiments, Seattle, Washington, November 19, 2005.

Summer Institute in Statistical Genetics, Module Instructor, Seattle, Washington 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014

Summer Institute in Statistics for Clinical Research, Seattle Washington 2014, 2015, 2016, 2017, 2018