Trudy L. Burns

Professor Emeritus

Education

Institution and Location	Degree	Year	Field of Study
Oakland University, Rochester, Michigan	BA	1973	Mathematics and Biology
University of Michigan, Ann Arbor, Michigan	MPH	1976	Biostatistics
University of Michigan, Ann Arbor, Michigan	PhD	1982	Biostatistics

Positions

1975-76	Research Assistant, Department of Dermatology, School of Medicine, University of Michigan, Ann Arbor, MI
1976-77	Research Associate, Department of Dermatology, School of Medicine, University of Michigan
1976	Lecturer, Department of Biostatistics, School of Public Health, University of Michigan
1982-87	Assistant Professor, Department of Preventive Medicine and Environmental Health, Division of Biostatistics, College of Medicine, University of Iowa
1987-93	Associate Professor, Department of Preventive Medicine and Environmental Health, Division of Biostatistics, College of Medicine, University of Iowa
1993-99	Professor, Department of Preventive Medicine and Environmental Health, Divisions of Biostatistics and Epidemiology (secondary), College of Medicine, University of Iowa
1993-99	Director, Iowa Birth Defects Registry
1999-00	Professor, Department of Biostatistics, College of Public Health, University of Iowa
2000-03	Professor, Department of Biostatistics, Division of Statistical Genetics, College of Public Health, University of Iowa
2000-06	Professor, Department of Epidemiology (secondary), College of Public Health, University of Iowa
2000-18	Professor, Department of Pediatrics (secondary), Carver College of Medicine, University of Iowa
2003-06	Professor, Program in Public Health Genetics, College of Public Health, University of Iowa
2004-18	Professor, Parent Child Family Area of Study (secondary), College of Nursing, University of Iowa
2007-18	Professor, Department of Epidemiology, College of Public Health, University of Iowa
2013-14	Research Editor, Journal of the Academy of Nutrition and Dietetics
2018-	Professor Emeritus, Department of Epidemiology, College of Public Health, University of Iowa

Honors

1973	BA, cum laude, honors in mathematics
1975-76	Public Health Service Award
1977-82	National Research Service Award for Biostatistical Training in Heart and Vascular Disease
1992-96	Member, Epidemiology and Disease Control – 1 Study Section, NIH
1993-13	Fellow, American Heart Association High Blood Pressure Council
1998-14	Member, Observational Study Monitoring Board of the Jackson Heart Study, NHLBI
1998-00	Member, VA Merit Review Committee for Epidemiology
2001-02	Career Development Award, University of Iowa
2005-09	Member, Clinical and Integrative Cardiovascular Sciences Study Section, NIH
2006-	Paul Harris Fellow, Rotary International
2006-	Member, Data and Safety Monitoring Board for Adolescent Bariatrics: Assessing Health Benefits & Risks (Teen-LABS), NIDDK
2009-	Member, Delta Omega Honor Society in Public Health
2009	Nominated for the University of Iowa Outstanding Faculty Mentor Award in the Biological and Life Sciences

2010-12 Member, College of CSR Reviewers, NIH
2010 Faculty Teaching Award, College of Public Health, University of Iowa
2014- Chair, Observational Study Monitoring Board of the Jackson Heart Study, NHLBI
2013- Member, Abboud Cardiovascular Research Center, University of Iowa

Selected Publications (2010 to present, in chronological order)

1. Juonala M, Magnussen CG, Venn A, Dwyer T, Burns TL, Davis PH, Chen W, Srinivasan SR, Daniels SR, Kähönen M, Laitinen T, Taittonen L, Berenson GS, Viikari JSA and Raitakari OT. Influence of age on associations between childhood risk factors and carotid intima-media thickness in adulthood: the Cardiovascular Risk in Young Finns Study, the Childhood Determinants of Adult Health Study, the Bogalusa Heart Study, and the Muscatine Study for the International Childhood Cardiovascular Cohort (i3C) Consortium. Circulation 122:2514-20, 2010. PMID 21126976
2. Kwon S, Janz KF, Burns TL and Levy SM. Effects of adiposity on physical activity in childhood: Iowa Bone Development Study. Med Sci Sports Exerc 43:443-8, 2011. PMID: 20631643; PMCID: PMC3130563
3. Juonala M, Magnussen CG, Berenson GS, Venn A, Burns TL, Sabin MA, Srinivasan SR, Daniels SR, Davis PH, Chen W, Sun C, Cheung M, Viikari J, Dwyer T, Raitakari OT. Childhood adiposity, adult adiposity, and cardiovascular risk factors. New Engl J Med 365:1876-85, 2011. PMID: 22087679. Identified by the NHLBI as one of the two major scientific advances in cardiovascular epidemiology in fiscal year 2012. Commentaries: N Engl J Med, 365:1927-9, 2011; Nat Rev Endocrinol, 8:67, 2011; Evid Based Nurs 15:69-70, 2012.
4. Patel, SS, Burns, TL, Kochilas L, for the Pediatric Cardiac Care Consortium. Early outcomes and prognostic factors for left atrioventricular valve reoperation after primary atrioventricular septal defect repair. Pediatr Cardiol 33:129-40, 2012. PMID: 21910021
5. Patel SS, Mahoney LT, Burns TL. Is a shorter atrioventricular septal length an intermediate phenotype in the spectrum of nonsyndromic atrioventricular septal defects? J Am Soc Echocardiogr 25:782-9, 2012. PMID: 22542274; PMCID: PMC3383386
6. Patel SS, Burns TL, Botto LD, Riehle-Colarusso TJ, Lin AE, Shaw GM, Romitti PA; National Birth Defects Prevention Study. Analysis of selected maternal exposures and non-syndromic atrioventricular septal defects in the National Birth Defects Prevention Study, 1997-2005. Am J Med Genet A 158A:2447-56, 2012. PMID: 22903798
7. Dwyer T, Sun C, Magnussen CG, Raitakari OT, Schork NJ, Venn A, Burns TL, Juonala M, Steinberger J, Sinaiko AR, Prineas RJ, Davis PH, Woo JG, Morrison JA, Daniels SR, Chen W, Srinivasan SR, Viikari JS, Berenson GS. Cohort Profile: The International Childhood Cardiovascular Cohort (i3C) Consortium. Int J Epidemiol 42:86-96, 2013. PMID: 22434861; PMCID: PMC3600617
8. Juhola J, Magnussen CG, Berenson GS, Venn A, Burns TL, Sabin MA, Srinivasan SR, Daniels SR, Davis PH, Chen W, Kähönen M, Taittonen L, Urbina E, Viikari JSA, Dwyer T, Raitakari OT, Juonala M. Combined effects of child and adult elevated blood pressure on subclinical atherosclerosis: The International Childhood Cardiovascular Cohort Consortium. Circulation 128:217-24, 2013. PMID: 23780579; PMCID: PMC3875837
9. Hinckley JD, Abbott D, Burns TL, Heiman M, Shapiro AD, Wang K, Di Paola J. Quantitative trait locus linkage analysis in a large Amish pedigree identifies novel candidate loci for erythrocyte traits. Mol Genet Genom Med 1:131-41, 2013. PMID: 24058921; PMCID: PMC3775389
10. Patel SS, Burns TL. Nongenetic risk factors and congenital heart defects. Pediatr Cardiol 34:1535-55, 2013. PMID: 23963188
11. Calarge CA, Nicol G, Schlechte JA, Burns TL. Cardiometabolic outcomes in children and adolescents following discontinuation of long-term Risperidone treatment. J Child Adolesc Psychopharmacol 24:120-9, 2014. PMID: 24725198; PMCID: PMC3993060

12. Bottai M, Frongillo EA, Sui X, O'Neill JR, McKeown RE, Burns TL, Liese AD, Blair SN, Pate RR. Use of quantile regression to investigate the longitudinal association between physical activity and body mass index. Obesity 22:E149-56, 2014. PMID: 24039223; PMCID: PMC3954962
13. Janz KF, Letuchy EM, Burns TL, Eichenberger-Gilmore JM, Torner JC, Levy SM. Objectively measured physical activity trajectories predict adolescent bone strength: Iowa Bone Development Study. British J Sports Med 48:1032-6, 2014. PMID: 24837241; PMCID: PMC4550443
14. Liu Y, Jin D, Li C, Janz KF, Burns TL, Torner JC, Levy SM, Saha PK. A robust algorithm for thickness computation at low resolution and its application to *in vivo* trabecular bone CT imaging. IEEE Trans Biomed Eng 61:2057-69, 2014. PMID: 24686226; PMCID: PMC4517594
15. TenNapel MJ, Lynch CF, Burns TL, Wallace R, Smith BJ, Button A, Domann FE. *SIRT6* minor allele genotype is associated with >5-year decrease in lifespan in an aged cohort. PLoS One 9:e115616, 2014. PMID: 25541994; PMCID: PMC4277407
16. Calarge CA, Burns TL, Schlechte JA, Zemel BS. Longitudinal examination of the skeletal effects of selective serotonin reuptake inhibitors and risperidone in boys. J Clin Psychiatr 76:607-13, 2015. PMID: 26035190
17. Kwon S, Janz KF, Letuchy EM, Burns TL, Levy SM. Developmental trajectories of physical activity, sports, and television viewing during childhood to young adulthood: Iowa Bone Development Study. JAMA Pediatr 169:666-72, 2015. PMID:25984811; PMCID: PMC4596396
18. Janz KF, Letuchy EM, Burns TL, Francis SL, Levy SM. Muscle power predicts adolescent bone strength: Iowa Bone Development Study. Med Sci Sports Exerc 47:2201-6, 2015. PMID:25751769; PMCID: PMC4549233
19. Kwon S, Janz KF, Letuchy EM, Burns TL, Levy SM. Active lifestyle in childhood and adolescence prevents obesity development in young adulthood. Obesity 23:2462-9, 2015. PMID: 26538514; PMCID: PMC4701632
20. Saha PK, Liu Y, Chen C, Jin D, Letuchy EM, Xu Z, Amelon RE, Burns TL, Torner JC, Levy SM, Calarge CA. Characterization of trabecular bone plate-rod microarchitecture using multirow detector CT and the tensor scale: algorithms, validation, and applications to pilot human studies. Med Physics 42:5410-25, 2015. PMID: 26328990; PMCID: PMC4545095
21. Priest JR, Osoegawa K, Mohammed N, Nanda V, Kundu R, Schultz K, Lammer EJ, Girirajan S, Scheetz T, Waggott D, Haddad F, Reddy S, Bernstein D, Burns T, Steimle JD, Yang XH, Moskowitz IP, Hurles M, Lifton RP, Nickerson D, Bamshad M, Eichler EE, Mital S, Sheffield V, Quertermous T, Gelb BD, Portman M, Ashley EA. *De Novo* and rare variants at multiple loci support the oligogenic origins of atrioventricular septal heart defects. PLoS Genetics 12:e1005963, 2016. PMID:27058611; PMCID: PMC4825975
22. Janz KF, Boros P, Letuchy EM, Kwon S, Burns TL, Levy SM. Physical activity, not sedentary time, predicts DXA-measured adiposity age 5-19 years. Med Sci Sports Exerc 49:2071-7, 2017. PMID: 28915225; PMCID: PMC5712279
23. Chen C, Zhang X, Guo J, Jin D, Letuchy EM, Burns TL, Levy SM, Hoffman EA, Saha PK. Quantitative imaging of peripheral trabecular bone microarchitecture using MDCT. Med Phys 45:236-49, 2018. PMID: 29064579; PMCID: PMC6345384
24. Sun C, Ponsonby AL, Carlin JB, Bui M, Magnussen CG, Burns TL, Lehtimaki T, Wardrop NH, Juonala M, Viikari JSA, Venn AJ, Raitakari OT, Dwyer T. Childhood adiposity, adult adiposity, and the ACE gene insertion/deletion polymorphism: evidence of gene-environment interaction effects on adult blood pressure and hypertension status in adulthood. J Hypertens, 36:2168-76, 2018. PMID: 29939946; PMCID: PMC6452450
25. Suhl J, Leonard S, Weyer P, Rhoads A, Siega-Riz AM, Renée Anthony T, Burns TL, Conway KM, Langlois PH, Romitti PA. Maternal arsenic exposure and nonsyndromic orofacial clefts. Birth Defects Res, 110:1455-67, 2018. PMID: 30367712; PMCID: PMC5914503
26. Koskinen J, Juonala M, Dwyer T, Venn A, Petkeviciene J, Čeponienė I, Bazzano L, Chen W, Sabin MA, Burns TL, Viikari JSA, Woo JG, Urbina EM, Prineas R, Hutri-Kähönen N, Sinaiko A, Jacobs DR

Jr, Steinberger J, Daniels S, Raitakari O, Magnussen CG. Utility of different blood pressure measurement components in childhood to predict adult carotid intima-media thickness. Hypertension, 73:335-41, 2019. PMID: 30580683; PMCID: PMC 6326843

27. Dwyer T, Viikari J, Sinaiko A, Burns T, Daniels S, Juonala M, Woo J, Urbina E, Steinberger J, Hu T, Raitakari O. In Memoriam for Gerald Berenson. Hypertension, 73:936-7, 2019. PMID: 30969859
28. Urbina EM, Khoury PR, Bazzano L, Burns TL, Chen W, Daniels S, Dwyer T, Hu T, Jacobs DR Jr, Juonala M, Prineas R, Raitakari O, Steinberger J, Venn A, Woo JG, Sinaiko A. Relation of blood pressure in childhood to self-reported hypertension in adulthood: the International Childhood Cardiovascular Cohort (i3C) Consortium. Hypertension, 73:1224-30, 2019. PMID: 31067199; PMCID: PMC 6510248
29. Kartiosuo N, Ramakrishnan R, Lemeshow S, Juonala M, Burns T, Woo JG, Jacobs DR, Daniels S, Venn A, Steinberger J, Urbina E, Bazzano L, Sabin MA, Hu T, Prineas R, Sinaiko AR, Pahkala K, Raitakari O, Dwyer T. Developing global standards for predicting adult overweight and obesity from childhood body mass index - a comparison of estimates obtained from follow up of a pooled international longitudinal cohort to current standards derived from cross-sectional survey data. The Lancet Child & Adolescent Health, in press June 2019.