

Kylie K. Harrall, PhD, MS

Epidemiologist and Biostatistician

Department of Health Outcomes and Biomedical Informatics

University of Florida

Phone: (918) 991-8351, Email: kylieharrall@ufl.edu

EDUCATION

- B.A., University of Missouri – Kansas City** 2006
Kansas City, MO
Major: Biology and Chemistry
- M.S., University of Colorado – Denver, Anschutz Medical Campus** 2016
Aurora, CO
Major: Biostatistics
Title of Thesis: “Uncovering the liver’s role in immunity through RNA co-expression networks.”
- Ph.D., University of Colorado – Denver, Anschutz Medical Campus** 2023
Aurora, CO
Major: Epidemiology
Title of Dissertation: “Glucagon-like-peptide-1 receptor polymorphisms and childhood metabolic health.”

ACADEMIC APPOINTMENTS

- University of Colorado – Denver, Anschutz Medical Campus, Aurora, CO** 2013
Department of Biostatistics
Student Assistant
 - Statistical consulting, data analysis, and power analysis
- University of Colorado – Colorado Springs, Colorado Springs, CO** 2015
Department of Health Sciences
Lecturer
 - Taught Health Science Statistics. Four classes in total across two semesters.
- University of Colorado – Denver, Anschutz Medical Campus, Aurora, CO** 2016
School of Pharmacy
Professional Research Assistant
 - Statistical genomics: RNA-Seq, microarray, network analyses
- University of Colorado – Denver, Anschutz Medical Campus, Aurora, CO** 2016
Center for Women’s Health
Professional Research Assistant
 - Statistical consulting: grants and manuscripts

<p>University of Colorado – Denver, Anschutz Medical Campus, Aurora, CO Lifecourse Epidemiology of Adiposity and Diabetes (LEAD) Center Senior Professional Research Assistant</p> <ul style="list-style-type: none"> • Statistical consulting: grants and manuscripts • Data analysis and method development • Clinical trial consulting: Randomization, evaluation of recruitment, data collection and quality control, grant and manuscript assistance 	2018
<p>University of Colorado – Denver, Anschutz Medical Campus, Aurora, CO Lifecourse Epidemiology of Adiposity and Diabetes (LEAD) Center Research Instructor</p> <ul style="list-style-type: none"> • Statistical consulting: grants and manuscripts • Data analysis and method development • Clinical trial consulting: Randomization, evaluation of recruitment, data collection and quality control, grant and manuscript assistance 	2022
<p>University of Florida, Gainesville, FL Department of Health Outcomes and Biomedical Informatics Research Assistant Professor</p>	2024

PROFESSIONAL POSITIONS

<p>Boehringer Ingelheim Vetmedica, St. Joseph, MO Research and Development Scientist I</p> <ul style="list-style-type: none"> • Bovine vaccine research and development • Assay development • Clinical sample processing and testing 	2006
<p>Virginia Tech University, Blacksburg, VA Department of Biomedical Sciences & Pathobiology Laboratory Specialist</p> <ul style="list-style-type: none"> • Porcine vaccine research • Protein work: cloning, expression, and purification • Assay development 	2009
<p>Stower’s Institute for Medical Research, Kansas City, MO Research Technician</p> <ul style="list-style-type: none"> • Acute myeloid leukemia research • Protein work: cloning, expression, and purification • Epigenetics: RNA interference, ChIP-seq 	2010

BIBLIOGRAPHY

Peer-reviewed vaccine development publications that resulted from my work in the laboratory.

1. Huang YW, Dryman BA, **Harrall KK**, Vaughn EM, Roof MB, Meng XJ. Development of SYBR green-based real-time PCR and duplex nested PCR assays for quantitation and differential detection of species- or type-specific porcine Torque teno viruses. *J Virol Methods*. 2010 Dec;170(1–2):140–6.
2. Córdoba L, Huang YW, Opriessnig T, **Harral KK**, Beach NM, Finkelstein CV, et al. Three Amino Acid Mutations (F51L, T59A, and S390L) in the Capsid Protein of the Hepatitis E Virus Collectively Contribute to Virus Attenuation ∇ . *J Virol*. 2011 Jun;85(11):5338–49.
3. Huang YW, **Harrall KK**, Dryman BA, Beach NM, Kenney SP, Opriessnig T, et al. Expression of the putative ORF1 capsid protein of Torque teno sus virus 2 (TTSuV2) and development of Western blot and ELISA serodiagnostic assays: correlation between TTSuV2 viral load and IgG antibody level in pigs. *Virus Res*. 2011 Jun;158(1–2):79–88.
4. Huang YW, Patterson AR, Opriessnig T, Dryman BA, Gallei A, **Harrall KK**, et al. Rescue of a porcine anellovirus (torque teno sus virus 2) from cloned genomic DNA in pigs. *J Virol*. 2012 Jun;86(11):6042–54.
5. Huang YW, **Harrall KK**, Dryman BA, Opriessnig T, Vaughn EM, Roof MB, et al. Serological profile of torque teno sus virus species 1 (TTSuV1) in pigs and antigenic relationships between two TTSuV1 genotypes (1a and 1b), between two species (TTSuV1 and -2), and between porcine and human anelloviruses. *J Virol*. 2012 Oct;86(19):10628–39.

Peer-reviewed collaborative publications for which I was the lead statistician.

6. Wolkow TD, Durrenberger LT, Maynard MA, **Harrall KK**, Hines LM. A comprehensive faculty, staff, and student training program enhances student perceptions of a course-based research experience at a two-year institution. *CBE Life Sci Educ*. 2014;13(4):724–37.
7. **Harrall KK**, Kechris KJ, Tabakoff B, Hoffman PL, Hines LM, Tsukamoto H, et al. Uncovering the liver's role in immunity through RNA co-expression networks. *Mamm Genome*. 2016;27(9):469–84.
8. Hines LM, Sedjo RL, Byers T, John EM, Fejerman L, **Harrall KK**, Stern MC, et al. The Interaction between Genetic Ancestry and Breast Cancer Risk Factors among Hispanic Women: The Breast Cancer Health Disparities Study. *Cancer Epidemiol Biomark Prev Publ Am Assoc Cancer Res Cosponsored Am Soc Prev Oncol*. 2017;26(5):692–701.
9. Shah VN, **Harrall KK**, Shah CS, Gallo TL, Joshee P, Snell-Bergeon JK, et al. Bone mineral density at femoral neck and lumbar spine in adults with type 1 diabetes: a meta-analysis and review of the literature. *Osteoporos Int J Establ Result Coop Eur Found Osteoporos Natl Osteoporos Found USA*. 2017;28(9):2601–10.

10. Demoruelle MK, **Harrall KK**, Ho L, Purmalek MM, Seto NL, Rothfuss HM, et al. Anti-Citrullinated Protein Antibodies Are Associated With Neutrophil Extracellular Traps in the Sputum in Relatives of Rheumatoid Arthritis Patients. *Arthritis Rheumatol* Hoboken NJ. 2017;69(6):1165–75.
11. Scalzo RL, Bauer TA, **Harrall K**, Moreau K, Ozemek C, Herlache L, et al. Acute vitamin C improves cardiac function, not exercise capacity, in adults with type 2 diabetes. *Diabetol Metab Syndr*. 2018;10:7.
12. Cree-Green M, Scalzo RL, **Harrall K**, Newcomer BR, Schauer IE, Huebschmann AG, et al. Supplemental Oxygen Improves In Vivo Mitochondrial Oxidative Phosphorylation Flux in Sedentary Obese Adults With Type 2 Diabetes. *Diabetes*. 2018;67(7):1369–79.
13. Sauder KA, Bekelman TA, **Harrall KK**, Glueck DH, Dabelea D. Gestational diabetes exposure and adiposity outcomes in childhood and adolescence: An analysis of effect modification by breastfeeding, diet quality, and physical activity in the EPOCH study. *Pediatr Obes*. 2019;14(12):e12562.
14. Kim C, **Harrall KK**, Glueck DH, Shumer D, Dabelea D. Childhood adiposity and adolescent sex steroids in the Exploring Perinatal Outcomes among Children study. *Clin Endocrinol (Oxf)*. 2019;91(4):525–33.
15. Hockett CW, **Harrall KK**, Moore BF, Starling AP, Bellatorre A, Sauder KA, et al. Persistent effects of in utero overnutrition on offspring adiposity: the Exploring Perinatal Outcomes among Children (EPOCH) study. *Diabetologia*. 2019;62(11):2017–24.
16. Villalobos A, Alaimo K, Erickson C, **Harrall KK**, Glueck DH, Buchenau H, et al. CAPS on the move: Crafting an approach to recruitment for a randomized controlled trial of community gardening. *Contemp Clin Trials Commun*. 2019 Dec;16:100482.
17. Gascon M, **Harrall KK**, Beavers AW, Glueck DH, Stanislawski MA, Alaimo K, et al. Feasibility of collection and analysis of microbiome data in a longitudinal randomized trial of community gardening. *Future Microbiol*. 2020 May;15:633–48.
18. Moore BF, **Harrall KK**, Sauder KA, Glueck DH, Dabelea D. Neonatal Adiposity and Childhood Obesity. *Pediatrics*. 2020;146(3).
19. Bekelman TA, Martin CK, Johnson SL, Glueck DH, Sauder KA, **Harrall KK**, et al. A comparison of the remote food photography method and the automated self-administered 24-h dietary assessment tool for measuring full-day dietary intake among school-age children. *Br J Nutr*. 2022 Apr 28;127(8):1269–78.
20. Stanislawski MA, Litkowski E, Raghavan S, **Harrall KK**, Shaw J, Glueck DH, et al. Genetic Risk Score for Type 2 Diabetes and Traits Related to Glucose-Insulin Homeostasis in Youth: The Exploring Perinatal Outcomes Among Children (EPOCH) Study. *Diabetes Care*. 2021 Sep;44(9):2018–24.
21. Bekelman TA, Ringham BM, Sauder KA, Johnson SL, **Harrall KK**, Glueck DH, et al. Adherence to index-based dietary patterns in childhood and BMI trajectory during the transition to adolescence: the EPOCH study. *Int J Obes* 2005. 2021 Nov;45(11):2439–46.

22. Courtney JB, Nuss K, Lyden K, **Harrall KK**, Glueck DH, Villalobos A, et al. Comparing the activPAL software's Primary Time in Bed Algorithm against Self-Report and van der Berg's Algorithm. *Meas Phys Educ Exerc Sci*. 2021;25(3):212–26.
23. Kim C, **Harrall KK**, Glueck DH, Dabelea D. Sex steroids and adiposity in a prospective observational cohort of youth. *Obes Sci Pract*. 2021 Aug;7(4):432–40.
24. Cohen CC, **Harrall KK**, Gilley SP, Perng W, Sauder KA, Scherzinger A, et al. Body composition trajectories from birth to 5 years and hepatic fat in early childhood. *Am J Clin Nutr*. 2022 Oct 6;116(4):1010–8.
25. Kim C, **Harrall KK**, Glueck DH, Needham BL, Dabelea D. Gestational diabetes mellitus, epigenetic age and offspring metabolism. *Diabet Med J Br Diabet Assoc*. 2022 Nov;39(11):e14925.
26. Nevarez-Brewster M, Aran Ö, Narayan AJ, **Harrall KK**, Brown SM, Hankin BL, Davis EP. Adverse and Benevolent Childhood Experiences Predict Prenatal Sleep Quality. *Advers Resil Sci*. 2022 Dec;3(4):391-402. doi: 10.1007/s42844-022-00070-0. Epub 2022 Jul 30. PMID: 36968335; PMCID: PMC10035559.
27. Litt JS, Alaimo K, **Harrall KK**, Hamman RF, Hébert JR, Hurley TG, et al. Effects of a community gardening intervention on diet, physical activity, and anthropometry outcomes in the USA (CAPS): an observer-blind, randomised controlled trial. *Lancet Planet Health*. 2023 Jan;7(1):e23–32.
28. **Harrall KK**, Muller KE, Starling AP, Dabelea D, Barton KE, Adgate JL, et al. Power and sample size analysis for longitudinal mixed models of health in populations exposed to environmental contaminants: a tutorial. *BMC Med Res Methodol*. 2023 Jan 12;23(1):12.
29. Sauder KA, Glueck DH, **Harrall KK**, D'Agostino Jr, RB, Dolan LM, Lane-Cordova A, Liese A, Lustigova E, Malik FS, Marcovina S, Mayer-Davis E, Mottl A, Pihoker C, Reynolds K, Shah AS, Urbina EM, Wagenknecht L, Daniels SR, Dabelea D. Exploring racial and ethnic differences in arterial stiffness among youth and young adults with type 1 diabetes. *J Am Heart Assoc*. 2023 Mar 30:e028529.
30. Gilley SP, **Harrall KK**, Friedman C, Glueck DH, Cohen CC, Perng W, Sauder KA, Krebs NF, Shankar K, Dabelea D. Association of Maternal BMI and Rapid Infant Weight Gain with Childhood Body Size and Composition. *Pediatrics*. 2023. PMID: 37016999
31. Hockett CW, **Harrall KK**, Glueck DH, Dabelea DM. Exposure to gestational diabetes and BMI trajectories through adolescence: Exploring Perinatal Outcomes in Children study. *J Clin Endocrinol Metab*. 2023 May 18:dgad278. PMID: 37200149.
32. Redondo MJ, **Harrall KK**, Glueck DH, Tosur M, Uysal S, Muir A, Atkinson EG, Shapiro MR, Yu L, Winter WE, Weedon M, Brusko TM, Oram R, Vehik K, Hagopian W, Atkinson MA, Dabelea D. Diabetes Study of Children of Diverse Ethnicity and Race: Study design. *Diabetes Metab Res Rev*. 2023 Oct 27:e3744.

33. Cohen CC, **Harrall KK**, Hu H, Glueck DH, Perng W, Shankar K, Dabelea D. Associations of infant feeding practices with abdominal and hepatic fat measures in childhood in the longitudinal Healthy Start Study. *Am J Clin Nutr.* 2023 Nov 23;S0002-9165(23)66283-5.
34. Zell-Baran LM, Dabelea D, Norris JM, Glueck DH, Adgate JL, Brown JM, **Harrall KK**, Calafat AM, Starling AP. Prenatal Exposure to Poly- and Perfluoroalkyl Substances (2009-2014) and Vaccine Antibody Titers of Measles, Mumps, Rubella, and Varicella in Children Four to Eight Years Old from the Healthy Start Cohort. *Environ Health Perspect.* 2023 Dec;131(12):127018.

Contributed peer-reviewed national presentations

1. **Harrall KK**, Kechris KJ, Hines LM, Hoffman PL, Tabakoff B, Saba LM. Contributed poster. A systems genetics approach to identify determinants associated with differential drug metabolism in liver and representative inbred rat panel models. Annual Rat Genomics & Models Meeting, Cold Spring Harbor Laboratory, NY, Dec 2015
2. Sauder KA, Bekelman TA, **Harrall KK**, Glueck DH, Dabelea D. Contributed poster. Offspring diet quality modifies the effect of gestational diabetes exposure on adiposity outcomes: The EPOCH study. Poster presentation at the American Diabetes Association 79th Scientific Sessions, San Francisco, CA, June 2019.
3. Hamlington KL, **Harrall KK**, Glueck DH, Aalborg J, Palumbo MP, Abdallah MB, Venter C, Liu AH, Dabelea D. Contributed poster. Asthma and allergic rhinitis modify the association between adiposity and airway resistance in children: The Healthy Start Cohort. Pediatric Academic Societies (PAS) Virtual Meeting, May 2021.
4. Kim C, **Harrall KK**, Glueck DH, Needham B, Dabelea D. Oral presentation. Diabetes, Epigenetic age acceleration, and insulin sensitivity and secretion in the Exploring Perinatal Outcomes among Children Study. American Diabetes Association 81st Scientific Sessions, June 2021.
5. Gilley SP, Friedman CF, **Harrall KK**, Glueck DH, Perng W, Sauder KA, Krebs NF, Dabelea D, Shankar K. Oral presentation. Rapid Weight Gain Magnifies Impact of Maternal BMI on Offspring BMI and Adiposity in Childhood. Pediatric Academic Societies Meeting, Denver, CO, April 2022.
6. Sauder KA, Glueck DH, **Harrall KK**, D'Agostino R., Dolan LM, Lane-Cordova A, Liese A, Lustigova E, Malik FS, Marcovina S, Mayer-Davis E, Mottl A, Pihoker C, Reynolds K, Shah AS, Urbina EM, Wagenknecht L, Daniels SR, Dabelea D. Contributed poster. Exploring racial and ethnic disparities in arterial stiffness in type 1 diabetes. American Diabetes Association 82nd Scientific Sessions, New Orleans, LA, June 2022.
7. **Harrall KK**, Litkowski E, Glueck DH, Sauder KA, Lange LA, Cree-Green M., and Dabelea D. Contributed poster. Independent and joint effects of GLP-1R polymorphisms and exposure to gestational diabetes on glucose clearance and glucose-dependent insulin response in adolescents: The EPOCH study. Colorado Diabetes Research Center Diabetes Day, Aurora, CO, March 2023.