

Doug Lorenz

Department of Bioinformatics and Biostatistics
School of Public Health and Information Science
University of Louisville
485 E. Gray St., Room 134
Louisville, KY 40202

Phone: 1-502-852-3635
Fax: 1-502-852-3294
Email: djlore01@louisville.edu
Date: January 30, 2022

[Google Scholar](#)
[My NCBI Bibliography](#)

Education

Ph.D. (2011), Applied and Industrial Mathematics, University of Louisville, Louisville, KY, USA.

Dissertation: Marginal Nonparametric Inference for Multi-Stage Models: Hypothesis Testing and Regression

M.S.P.H. (2002), Biostatistics/Decision Science, University of Louisville, Louisville, KY, USA.

Thesis: A Cost-Effectiveness Analysis of Pediatric Pharyngitis Management

M.A. (2001), Mathematics, University of Louisville, Louisville, KY, USA.

Thesis: A Model of the Dynamics of Bacteria-Antibiotic Interaction in the Intensive Care Unit

B.S. (1999) Mathematics, English Minor, University of Louisville, Louisville, KY, USA.

Experience

2016 – Associate Professor

2011 – 2016 Assistant Professor
Department of Bioinformatics and Biostatistics
University of Louisville

2003 – 2011 Biostatistician II (2003 – 2006), III (2006 – 2008), IV (2008 – 2011)
The Statistical Consulting Center
Department of Bioinformatics and Biostatistics
University of Louisville

2002 – 2003 Instructor
Division of Natural Sciences and Mathematics, Jefferson Community College, Louisville, KY.

Professional Memberships and Certifications

American Statistical Association

Treasurer, Kentucky Chapter, 2012–2016

PStat[®], Accredited Statistician of the American Statistical Association (2010 – 2012)

Delta Omega, Beta Pi Chapter

Elected member of national public health honor society

Commonwealth Institute of Kentucky

Commonwealth Scholar

Awards and Honors

	2021	Alumni Fellow, School of Public Health and Information Sciences
	2013–2014	University “Top 4” Faculty Favorite
	2014–2019, 2021	University Faculty Favorite (6-time)
	2011	Graduate Dean’s Citation
<i>University of Louisville</i>	2006	Hohman Fellowship, Department of Mathematics
	2002	Graduate Dean’s Citation
	1999	Baseball Team Captain GTE Academic All-American Conference USA Scholar Athlete of the Year Red and Black Scholar Athlete Award Ed Kallay Student Athlete of the Year

Publications

Book Chapters

1. Datta, S., **Lorenz, D.J.**, Datta, S. Approximate U-statistics for State Waiting Times Under Right Censoring. In *Modern Nonparametric, Robust and Multivariate Methods: Festschrift in Honour of Hannu Oja*, Springer International Publishing Switzerland. 2015.
2. **Lorenz, D.J.**, Gill, R.S., Mitra, R., Datta, S. Using RNA-seq Data to Detect Differentially Expressed Genes. In *Statistical Analysis of Next Generation Sequence Data*, Springer-Verlag. 2014.

Peer Reviewed Methodological Manuscripts

1. Gregg, M.E., Datta, S., **Lorenz, D.J.**. Variance estimation in tests of clustered categorical data with informative cluster size. *Statistical Methods in Medical Research*. 2020 Nov;29(11):3396-3408. doi: 10.1177/0962280220928572. PMID: 32513073.
2. Gregg, M.E., Datta, S., **Lorenz, D.J.**. A log rank test for clustered data with informative within-cluster group size. *Statistics in Medicine*. 30 November 2018; 37(27):4071-82. DOI: 10.1002/sim.7899. PMID: 30003565.
Lorenz, D. Correction for “A log rank test for clustered data with informative within-cluster group size” by Mary E. Gregg, Somnath Datta, and Doug Lorenz. *Statistics in Medicine*. DOI: 10.1002/sim.8161. PMID: 31264734.
3. **Lorenz, D.J.**, Levy, S., Datta, S. Inferring marginal association with paired and unpaired clustered data. *Statistical Methods in Medical Research*. 2018; 27(6): 1806-1817. DOI: 10.1177/0962280216669184. PMID: 27655806. PMCID: PMC5524605.
4. **Lorenz, D.J.**, Datta, S. A nonparametric analysis of waiting times from a multistate model using a novel linear hazards model approach. *Electronic Journal of Statistics*. 2015; 9: 419-443. DOI: 10.1214/15-EJS1003.
5. **Lorenz, D.J.**, Datta S. Comparing waiting times in a multi-stage model: A log-rank approach. *Journal of Statistical Planning and Inference*. 2012; 142(10): 2832-2843. DOI: 10.1016/j.jspi.2012.04.003.
6. **Lorenz, D.J.**, Datta, S., Harkema S.J. Marginal association measures for clustered data. *Statistics in Medicine*. 30 Nov. 2011; 30(27): 3181-91. DOI: 10.1002/sim.4368. PMID: 21953204.

Peer Reviewed Collaborative Manuscripts

1. Ramgopal, S., **Lorenz, D.**, Ruddy, R.M., Shah, S., Kachelmeyer, A., Ambroggio, L., Florin, T.A. Nasopharyngeal pneumococcus and disease severity in children with suspected pneumonia. *European Respiratory Journal*. Under review.
2. Ramgopal, S., **Lorenz, D.**, Shah, S., Ruddy, R.M., Ambroggio, L., Florin, T.A. Incorporation of biomarkers into a clinical prediction model for pediatric radiographic pneumonia. *Pediatrics*. Under review.
3. Ramgopal, S., **Lorenz, D.**, Navanandan, N., Cotter, J., Shah, S., Ruddy, R.M., Ambroggio, L., Florin, T.A. External validation of prediction models for pediatric pneumonia. *Pediatrics*. Revision submitted.
4. Witting, C., Simon, N.J., **Lorenz, D.**, Murphy, J., Nelson, J., Lehnig, K., Alpern, E.R. Sepsis electronic decision-support screen across age groups in a pediatric emergency department. *Pediatric Emergency Care*. Revision submitted.
5. Zhou, A.Z., **Lorenz, D.**, Simon, N.J., Florin, T. Emergency Department and Ambulatory Diagnosis and Management of Constipation in the United States, 2006-2017. *Academic Journal of Emergency Medicine*. In press.
6. Schinasi, D.A., Colgan, J., Nadel, F.M., Hales, R.L., **Lorenz, D.**, Donoghue, A.J. A brief just-in-time sedation training in the pediatric emergency department improves performance during adverse events encountered in simulated procedural sedations. *Pediatric Emergency Care*. In press.
7. Baca, J., Foster, C.C., Simon, N.J., **Lorenz, D.**, Gregg, M., Schinasi, D.A. Children's Hospital Transfers from Referring Emergency Departments: Which Patients Bypassed the Pediatric Emergency Department? *Pediatric Emergency Care*. In press.
8. Hall, M.T., Walton, M.T., Heubner, R.A., Higgins, G.E., Kelmel, A.B., **Lorenz, D.** Sobriety treatment and recovery teams for families with co-occurring substance use and child maltreatment: A propensity score-matched evaluation. *Children and Youth Services Review*. 2021 Dec; 131: Article 106256. DOI: 10.1016/j.chilyouth.2021.106256.
9. Ramgopal, S., Ambroggio, L., **Lorenz, D.**, Shah, S., Ruddy, R.M., Florin, T.A. A Prediction Model for Pediatric Radiographic Pneumonia. *Pediatrics*. 2022 Jan 1;149(1):e2021051405. doi: 10.1542/peds.2021-051405. PMID: 34845493. DOI: 10.1542/2020-000123
10. Gordinier, M.E., Shields, L.B.E., Davis, M.H., Cagata, S., **Lorenz, D.J.** Impact of Screening for Sexual Trauma in a Gynecologic Oncology Setting. *Gynecologic and Obstetric Investigation*. 2021;86(5):438-444. doi: 10.1159/000518511. Epub 2021 Sep 2. PMID: 34515127
11. Hoffman, J. Hall, M., **Lorenz, D.**, Berry, J. Emergency Department Visits for Suicidal Ideation and Self-Harm in Rural and Urban Youth. *J Pediatr*. 2021 Nov;238:282-289.e1. doi: 10.1016/j.jpeds.2021.07.013. PMID: 34274309
12. McPheeters, C., **Lorenz, D.**, Burcham P.K., Barger, C.D., Bhandari, B., Bauldoff, G.S., Truelove, D.B., Nunley, D.R. Calcineurin Inhibitor Based Maintenance Immunosuppression in Lung Transplant Recipients: Optimal Dosing for Acute Rejection and Renal Function. *Transplantation Proceedings*. 2021 Jul-Aug;53(6):1998-2003. doi: 10.1016/j.transproceed.2021.05.005. PMID: 34253383
13. Winston, J., Rojas, P.G., Stocker, A., Mathur, P., **Lorenz, D.**, Daniels, M., Abell, T. Development of a Motility Frailty Index in Patients with Gastrointestinal Motility Symptoms. *Gastrointestinal Disorders*. 2021, 3(2), 78-83; <https://doi.org/10.3390/gidisord3020008>
14. Pierce, M.C., Kaczor, K., **Lorenz, D.**, Bertocci, G., Fingarson, A.K., Makoroff, K., Berger, R.P., Bennett, B., Magana, J., Staley, S., Ramaiah, V., Fortin, F., Currie, M., Herman, B.E., Herr, S., Hymel, K.P., Jenny, C., Sheehan, K., Zuckerbraun, N., Hickey, S., Meyers, G., Leventhal, J.M. Bruising characteristics predict abuse in young children: a validated clinical decision rule. *JAMA Network Open*, 2021 Apr 1;4(4):e215832. doi:10.1001/jamanetworkopen.2021.5832. PMID: 33852003. PMCID: PMC8047759.
15. Azadi, A., Bradley, J.A., Marchand, G.J., **Lorenz, D.J.**, Doering, D., Ostergard, D.R. Feasibility of Risk Reducing Salpingo-Oophorectomy at the Time of Abdominal Surgery for Correction of Pelvic Organ Prolapse and Urinary Incontinence. *Gynecol Minim Invasive Ther*. 2021 Jan 30;10(1):10-18. DOI: 10.4103/GMIT.GMIT-21-20. eCollection 2021 Jan-Mar. PMID: 33747767

16. Fant, C., Koopmans, J., Simon, N.J., **Lorenz, D.J.**, Rychlik, K., Sheehan, K. Urban versus rural setting as a predictor of injury type and severity among pediatric pedestrians in Illinois: a novel database derived from state-wide crash data and hospital discharge data. *International Journal of Injury Control and Safety Promotion*. 2021 Mar;28(1):22-28. doi: 10.1080/17457300.2020.1835988. PMID: 33106099
17. Florin, T.A., Ambroggio, L., **Lorenz, D.**, Kachelmeyer, A., Ruddy, R.M., Kuppermann, N., Shah, S. Development and Internal Validation of a Prediction Model to Risk Stratify Children with Community-Acquired Pneumonia. *Clinical Infectious Diseases*. 2020 Nov 7:ciaa1690. DOI: 10.1093/cid/ciaa1690. PMID: 33159514
18. Atkinson, D.A., Sayenko, D.G., Mink, A.M., **Lorenz, D.J.**, D'Amico, J.M., Gerasimenko, Y.P., Harkema, S.J. Interlimb conditioning of lumbosacral spinally evoked motor responses after spinal cord injury. *Clinical Neurophysiology*. 2020 Jul;131(7):1519-1532. doi: 10.1016/j.clinph.2020.03.021. PMID: 32403065.
19. Fortin, K., Bertocci, G., Nicholas, J.L., **Lorenz, D.J.**, Pierce, M.C. Long bone fracture characteristics in children with medical conditions linked to bone health. *Child Abuse and Neglect*. 2020 May;103:104396. doi: 10.1016/j.chiabu.2020.104396. PMID: 32135374.
20. Shields, L.B.E., Fowler, P., Siemens, D.M., **Lorenz, D.J.**, Wilson, K.C., Hester, S.T., Honaker, J.T. Standardized Warfarin Monitoring Decreases Adverse Drug Reactions. *BMC Family Practice*. 2019 Nov 7;20(1):151. DOI: 10.1186/s12875-019-1041-5. PMID: 31699045.
21. Fingarson, A.K., **Lorenz, D.J.**, Pierce, M.C., Kaczor, K., Bennett, B., Berger, R.P., Currie, M., Herr, S., Hickey, S., Magana, J., Makoroff, K., Williams, M., Young, A., Sheehan, K., Zuckerbraun, N., Thompson, R., Pierce, M.C. Who's watching the children? Caregiver features associated with physical child abuse vs. accidental injury. *Journal of Pediatrics*. pii: S0022-3476(19)30657-2. DOI: 10.1016/j.jpeds.2019.05.040. PMID: 31255388.
22. Shields, L.B.E., Johnson, T.A., Murphy, J.P., **Lorenz, D.J.**, Bell, A.D., Wilson, K.C., Hester, S.T., Honaker, J.T. Decline in Primary Care Providers' Prescribing of Schedule II Opioids Following the Implementation of Federal and State Guidelines. *Journal of Opioid Management*. 2019 Mar; 15(2):111-118. DOI: 10.5055/jom.2019.0492. PMID: 31343712.
23. Behrman, A.L., Trimble, S.A., Argetsinger, L., Roberts, M., Mulcahey, M.J., Clayton, L.R., Gregg, M.E., **Lorenz, D.**, Ardolino, A. Interrater Reliability of the Pediatric Neuromuscular Recovery Scale for Spinal Cord Injury. *Top Spinal Cord Inj Rehabil*. 2019 Spring;25(2):121-131. DOI: 10.1310/sci2502-121. PMID: 31068744.
24. Fowler, J., **Lorenz D.J.**, Ireland, A., et al. The Effects of Merino Wool on Atopic Dermatitis Using Clinical, Quality of Life, and Physiological Outcome Measures. *Dermatitis*. DOI: 10.1097/DER.000000000000449. PMID: 30864970.
25. Rosado, N., Charleston, E., Gregg, M.E., **Lorenz, D.** Characteristics of accidental versus abusive pediatric burn injuries in an urban burn center over a 14 year period. *Journal of Burn Care and Research*. 2019 Jun 21;40(4):437-443. DOI: 10.1093/jbcr/irzo32. PMID: 30869138.
26. Hymel K.P., Laskey A.L., Crowell K.R., Wang M., Armijo-Garcia V., Frazier T.N., Tieves K.S., Foster R., Weeks K., **Pediatric Brain Injury Research Network (PediBIRN) Investigators**. Racial and Ethnic Disparities and Bias in the Evaluation and Reporting of Abusive Head Trauma. *J Pediatr*. 2018 Jul;198:137-143.e1. doi: 10.1016/j.jpeds.2018.01.048. PMID: 29606408
27. Young, A., Pierce, M.C., Kaczor, K., **Lorenz, D.J.**, Hickey, S., Berger, S.P., Schmidt, S.M., Fingarson, A., Fortin, K., Thompson, R. Are negative/unrealistic parent descriptors of infant attributes associated with physical abuse? *Child Abuse and Neglect*. 2018 Jun;80:41-51. DOI: 10.1016/j.chiabu.2018.03.020. PMID: 29567456. PMID: PMC5953822.
28. **Lorenz, D.J.**, Pierce, M.C., Kaczor, K., Berger, R.P., Bertocci, G., Herman, B.E., Herr, S., Hymel, K.P., Jenny, C., Leventhal, J.M., Sheehan, K., Zuckerbraun, N. Classifying injuries in young children as abusive or accidental: reliability and accuracy of an expert panel approach. *Journal of Pediatrics*. 2018 Mar 15. pii: S0022-3476(18)30057-X. DOI: 10.1016/j.jpeds.2018.01.033. PMID: 29550228. PMID: PMC6019119.
29. Morrison, S., **Lorenz, D.J.**, Eskay, C., Forrest, G., Basso, D.M. Longitudinal recovery and reduced costs after 120 sessions of locomotor training for motor incomplete spinal cord injury. *Arch Phys Med Rehabil*. 2018 March, 99(3): 555-562. DOI: 10.1016/j.apmr.2017.10.003. PMID: 29107040.

30. McCulloch, J., **Lorenz, D.**, Kloby, M.A., Aslan, S.G., Love, M.D., Terson de Paleville, D.G.L. Prediction of maximal oxygen consumption from rating of perceived exertion (RPE) using a modified total-body recumbent stepper. *International Journal of Exercise Science*. Aug 2018. 8(4): 414-424. PMID: 30159108.
31. Pierce, M.C., Kaczor, K., Acker, D., Webb, T., Brenzel, A., **Lorenz, D.J.**, Young, A., Thompson, R. Dataset on psychosocial risk factors in cases of fatal and near-fatal physical child abuse. *Data in Brief*. 2017 Jul 11;14:107-109. DOI: 10.1016/j.dib.2017.07.003. eCollection 2017 Oct.
32. Pierce, M.C., Kaczor, K., Acker, D., Webb, T., Brenzel, A., **Lorenz, D.J.**, Young, A., Thompson, R. History, injury, and psychosocial risk factor commonalities among cases of fatal and near-fatal physical child abuse. *Child Abuse and Neglect*. 2017 May 10;69:263-277. doi: 10.1016/j.chiabu.2017.04.033. PMID: 28500923.
33. Alver, S.K., **Lorenz, D.J.**, Marvin, M.R., Brock, G.N. Comparison of two equivalent MELD scores for hepatocellular carcinoma patients using data from the United Network for Organ Sharing liver transplant waiting list registry. *Transplant International*. DOI: 10.1111/tri.12967. PMID: 28403575.
34. Isacoff, A.M., McLario, D., Cross, K., O'Hagan, A., Holland, B., **Lorenz, D.**, Stevenson M. Right internal jugular ultrasound measurements during the respiratory cycle in children. *West Indian Medical Journal*. DOI: 10.7727/wimj.2016.540
35. Thompson, R., Kaczor, K., **Lorenz, D.J.**, Bennett, B.L., Meyers, G., Pierce, M.C. Is the Use of Physical Discipline Associated with Aggressive Behaviors in Young Children? *Acad Pediatr*. 2017 Jan - Feb;17(1):34-44. DOI: 10.1016/j.acap.2016.02.014. PMID: 26924534
36. Patterson, A.C., Wadia, S.A., **Lorenz, D.J.**, Stevenson M. Changes in blood pressure during sedation with ketamine in the pediatric emergency department. *American Journal of Emergency Medicine*. 2017 Feb;35(2):322-325. DOI: 10.1016/j.ajem.2016.10.019. PMID: 27939800.
37. Alver, S.K., **Lorenz, D.J.**, Marvin, M.R., Brock, G.N. Projected outcomes of six-month delay in exception points vs. an equivalent MELD score for HCC liver transplant candidates. *Liver Transplantation*. 2016 Oct; 22(10):1343-55. DOI: 10.1002/lt.24503. PMID: 27343202.
38. Harkema, S.J., Shogren, C., Ardolino, E., **Lorenz, D.J.** Assessment of functional improvement without compensation for human spinal cord injury: extending the Neuromuscular Recovery Scale to the upper extremities. *Journal of Neurotrauma*. 2016 Dec 15;33(24):2181-2190. DOI: 10.1089/neu.2015.4213. PMID: 27071494
39. Pierce, M.C., Magana, J.N., Kaczor, K., **Lorenz, D.J.**, Meyers, G., Bennett, B.L., Kanegaye, J.T. The Prevalence of Bruising Among Infants in Pediatric Emergency Departments. *Annals Emerg Med*. 2016. 67: 1-8. DOI: 10.1016/j.annemergmed.2015.06.021. PMID: 26233923.
40. Tester, N.J., **Lorenz, D.J.**, Suter, S.P., Beuhner, J., Falanga, D., Watson, E., Velozo C.A., Behrman A.L., Basso M. Responsiveness of the Neuromuscular Recovery Scale during Outpatient Activity-Dependent Rehabilitation for Spinal Cord Injury. *Neurorehabilitation and Neural Repair*. 2016; 30(27): 528-538. DOI: 10.1177/1545968315605181. PMID: 26359344
41. Hymel K.P., Herman B.E., Narang S.K., Graf J.M., Frazier T.N., Stoiko M., Christie L.M., Harper N.S., Carroll C.L., Boos S.C., Dias M., Pullin D.A., Wang M.; **Pediatric Brain Injury Research Network (PediBIRN) Investigators**. Potential Impact of a Validated Screening Tool for Pediatric Abusive Head Trauma. *J Pediatr*. 2015 Dec;167(6):1375-81.e1. doi: 10.1016/j.jpeds.2015.09.018. PMID: 26477871.
42. Fowler, J., Shaughnessy, C., *et al*, **Lorenz, D.** Cutaneous delayed-type hypersensitivity to surfactants. *Dermatitis*. 2015 Nov-Dec;26(6):268-70. DOI: 10.1097/DER.000000000000150. PMID: 26551605
43. Terson de Paleville, D., **Lorenz, D.J.** Compensatory muscle activation during forced respiratory tasks in individuals with chronic spinal cord injury. *Respiratory Physiology & Neurobiology*. 2015 Oct; 217: 54-62. DOI: 10.1016/j.resp.2015.07.001. PMID: 26169572
44. Behrman, A.L., Velozo, C., Suter, S., **Lorenz, D.**, Basso, D.M. Test-retest reliability of the Neuromuscular Recovery Scale. *Arch Phys Med Rehabil*. 2015;96:1375-84. DOI: 10.1016/j.apmr.2015.03.022. PMID: 25883038

45. Basso, D.M., Velozo, C., **Lorenz, D.**, Suter, S., Behrman, A.L. Interrater reliability of the Neuromuscular Recovery Scale for spinal cord injury. *Arch Phys Med Rehabil.* 2015; 96:1397-403. DOI: 10.1016/j.apmr.2014.11.026. PMID: 25546720
46. Velozo, C., Moorhouse, M., Ardolino, E., **Lorenz, D.**, Suter, S., Basso, D.M., Behrman, A.L. Validity of the Neuromuscular Recovery Scale: A measurement model approach. *Arch Phys Med Rehabil.* 2015;96:1385-96. DOI: 10.1016/j.apmr.2015.04.004. PMID: 25912666
47. Hymel K.P., Armijo-Garcia V., Foster R., Frazier T.N., Stoiko M., Christie L.M., Harper N.S., Weeks K., Carroll C.L., Hyden P., Sirotiak A., Truemper E., Ornstein A.E., Wang M., **Pediatric Brain Injury Research Network (Ped-iBIRN) Investigators.** Validation of a clinical prediction rule for pediatric abusive head trauma. *Pediatrics.* 2014 Dec;134(6):e1537-44. doi: 10.1542/peds.2014-1329. PMID: 25404722.
48. Wadia, S., Bhola, R., **Lorenz, D.J.**, Padmanabhan, P., Gross, J., Stevenson, M.D. Ketamine and intraocular pressure in children. *Annals of Emergency Medicine.* 2014; 64(4): 385-388. PMID: 24582603. DOI: 10.1016/j.annemergmed.2014.01.029.
49. Khudhair, M., Melloy, P., **Lorenz, D.J.**, Obonor, F., Aitken, E., Datta, S., Luck, J., Fitzgerald, G., and Chakraborty, S. Fusarium crown rot under continuous cropping of susceptible and partially resistant wheat in microcosms at elevated CO₂. *Plant Pathology.* 2014; 63(5): 1033-1043. DOI: 10.1111/ppa.12182
50. Forrest, G.F., Hutchinson, K.J., **Lorenz, D.J.**, VanHiel, L., Basso, M., Sisto, S.A. Are the 10 Meter and 6 Minute Walk Tests Redundant in Patients with Spinal Cord injury? *PLOS One.* 2014; 9(5):e94108. DOI:10.1371/journal.pone.0094108. PMID: 24788068.
51. Vidoni, C., **Lorenz, D.**, Terson de Paleville, D. Incorporating a Movement Skill Program into a Preschool Daily Schedule. *Early Child Development and Care.* 2014; 184(8):1211-1222. DOI: 10.1080/03004430.2013.856895.
52. Helm, C.W., **Lorenz, D.J.**, Meyer, N.J., Rising, W.R., Wilff, J.L. Retinoids for preventing the progression of cervical intra-epithelial neoplasia. *Cochrane Database Syst Rev.* 2013 Jun 6; (6):CD003296. DOI: 10.1002/14651858.CD003296.pub3. PMID: 23740788
53. Jackson, J.M., Kircik, L.H., **Lorenz, D.J.** Efficacy of Extended-Release 45 mg Oral Minocycline and Extended Release 45 mg Oral Minocycline Plus 15% Azelaic Acid in the Treatment of Acne Rosacea. *J Drugs Dermatol.* 2013;12(3):292. PMID: 23545911.
54. Hymel, K.P., Wilson, D.F., Boos, S.C., Pullin, D.A., Homa, K., **Lorenz, D.J.**, Herman, B.E., Graf, J.M., Isaac, R., Narang, S.K., Armijo-Garcia, V. Derivation of a clinical prediction rule for pediatric abusive head trauma. *Pediatr Crit Care Med.* 2013 Feb;14(2):210-20. DOI: 10.1097/PCC.0b013e3182712b09. PMID: 23314183.
55. **Lorenz, D.J.**, Datta, S., Harkema, S.J. Longitudinal patterns of functional recovery in patients with incomplete spinal cord injury receiving activity-based rehabilitation. *Arch Phys Med Rehabil.* Sep. 2012; 93(9): 1541-1552. DOI: 10.1016/j.apmr.2012.01.027. PMID: 22920451.
56. Datta, S., **Lorenz, D.J.**, Harkema, S.J. A dynamic longitudinal evaluation of the utility of the Berg Balance Scale in patients with motor incomplete spinal cord injury. *Arch Phys Med Rehabil.* Sep. 2012; 93(9): 1565-1573. DOI: 10.1016/j.apmr.2012.01.026. PMID: 22920453.
57. Forrest, G.F., **Lorenz, D.J.**, Hutchinson, K., Van Hiel, L., Basso, D.M., Datta, S., Sisto, S.A., Harkema, S.J. Ambulation and balance outcomes measure different aspects of recovery in individuals with chronic incomplete spinal cord injury. *Arch Phys Med Rehabil.* Sep. 2012; 93(9): 1553-1564. PMID: 22920452. DOI: 10.1016/j.apmr.2011.08.051.
58. Behrman, A.L., Ardolino, E., VanHiel, L., Kern, M., Arkinson, D., **Lorenz, D.**, Harkema, S. Assessment of functional improvement without compensation reduces variability of outcome measures after human spinal cord injury. *Arch Phys Med Rehabil.* Sep. 2012; 93(9): 1518-1529. DOI: 10.1016/j.apmr.2011.04.027. PMID: 22920449.
59. Harkema, S.J., Schmidt-Read, M., **Lorenz, D.**, Edgerton, V.R., Behrman, A. Balance and ambulation improvements in individuals with chronic incomplete spinal cord injury using locomotor training-based rehabilitation. *Arch Phys Med Rehabil.* Sep. 2012; 93(9): 1508-1517. DOI: 10.1016/j.apmr.2011.01.024. PMID: 21777905.

60. Sisto, S.A., **Lorenz, D.**, Hutchinson, K., Wenzel, L., Harkema, S., Krassioukov, A. Cardiovascular status of individuals with incomplete spinal cord injury from 7 Neurorecovery Network rehabilitation centers. *Arch Phys Med Rehabil.* Sep. 2012; 93(9): 1578-1587. DOI: 10.1016/j.apmr.2012.04.03. PMID: 22920455.
61. Newton, T.L., Fernandez-Botran, R., Miller, J.J., **Lorenz, D.J.**, Burns, V.E., Fleming, K.N. Markers of Inflammation in Midlife Women with Intimate Partner Violence Histories. *J Womens Health (Larchmt).* 2011 Dec;20(12):1871-80. DOI: 10.1089/jwh.2011.2788. PMID: 22044065.
62. Tate, S.B., Blackwell, L., **Lorenz, D.J.**, Steptoe, M.M., Culligan, P.J. Randomized Trial of Fascia Lata and Polypropylene Mesh for Abdominal Sacrocolpopexy: 5-Year Follow-up. *Int Urogynecol J Pelvic Floor Dysfunct.* 2011; 22(2): 137-143. DOI: 10.1007/s00192-010-1249-3. PMID: 20798922.
63. Jackson, J.M., Fowler, J.F., Callen, J.P., **Lorenz, D.J.** Mycophenolate Mofetil for the Treatment of Chronic Dermatitis: An Open-Label Study of 16 Patients. *J Drugs Dermatol.* 2010 Apr; 9(4): 356-62. PMID: 20514793.
64. Condra, C.S., Parbhu, D., **Lorenz, D.**, Herr, S.M. Charges and complications associated with the medical evaluation of febrile infants. *Pediatr Emerg Care.* 2010 Mar; 26(3): 186-91. PMID: 20179660. DOI: 10.1097/PEC.0b013e3181d1e180.
65. Alur, A.A., Rane, M.J., Scheetz, J.P., **Lorenz, D.J.**, Gettleman, R. Simulated Microbe Removal Around Finger Rings Using Different Hand Sanitation Methods. *International Journal of Oral Science*, 1(3): 138-44, 2009. DOI: 10.4248/IJOS.09061. PMID: 20695078.
66. Pierce, M.C., Kaczor, K., Aldridge, S., O'Flynn, J., **Lorenz, D.** Bruising Characteristics Discriminate Physical Child Abuse From Accidental Trauma in Young Children. *Pediatrics.* 2010 Jan; 125(1):67-74. 10.1542/peds.2008-3632. PMID: 19969620.
67. Padmanabhan, P., Berkenbosch, J.W., **Lorenz, D.J.**, Pierce, M.C. Evaluation of Cerebral Oxygenation during Procedural Sedation in Children using Near Infrared Spectroscopy. *Ann Emerg Med.* Aug 2009; 54(2). DOI: 10.1016/j.annemergmed.2009.02.009. PMID: 19285362.
68. Datta, S., **Lorenz, D.J.**, Morrison, S., Ardolino, E., Harkema, S.J. A Multivariate Examination of Temporal Changes in Berg Balance Scale Items for Patients with ASIA Impairment Scale C and D Spinal Cord Injuries. *Arch Phys Med Rehabil.* 2009 Jul; 90(7): 1208-17. DOI: 10.1016/j.apmr.2008.09.577. PMID: 19577035.
69. Fortu, J.M., Kim, I.K., Cooper, A., Condra, C., **Lorenz, D.J.**, Pierce, M.C. Psychiatric patients in the pediatric emergency department undergoing routine urine toxicology screens for medical clearance: results and use. *Pediatr Emerg Care.* 2009 Jun; 25(6): 387-92. DOI: 10.1097/PEC.0b013e3181a79305. PMID: 19458561.
70. Spiller, H., **Lorenz, D.J.** Trends in Volatile Substance Abuse. *J Addict Dis.* 2009;28(2):164-70. DOI: 10.1080/10550880902772894. PMID: 19340679.
71. Spiller, H., **Lorenz, D.J.**, Bailey, E.J., Dart, R.C. Epidemiological trends in abuse and misuse of prescription opioids. *J Addict Dis.* 2009;28(2):130-6. DOI: 10.1080/10550880902772431. PMID: 19340675.
72. Ruble, L.I., McDuffie, A.S., King, A.S., **Lorenz, D.J.** Caregiver responsiveness and social interaction behaviors of young children with autism. *Topics in Early Childhood Special Education.* Nov 2008; 28: 158-70. DOI: 10.1177/0271121408323009.
73. Warkentine, F., Pierce, M.C., Kim, I.K., **Lorenz, D.J.**, Paul, R.I. The anatomic relationship of femoral vein to femoral artery in euvoletic pediatric patients by ultrasonography: implications for pediatric femoral central venous access. *Acad Emerg Med.* 2008 May 15; 15(5):426-30. DOI: 10.1111/j.1553-2712.2008.00087.x. PMID: 18439197.
74. Koller, D.M., Myers, A.B., **Lorenz, D.**, Godambe, S.A. Effectiveness of Oxycodone, Ibuprofen, or the Combination in the Initial Management of Orthopedic Injury-Related Pain in Children. *Ped Emerg Care.* Sep 2007; 23(9). PMID: 17876251.
75. Hoffman, J.S., Cunningham, D.R., **Lorenz, D.J.** Auditory Thresholds and Factors Contributing to Hearing Loss in a Large Sample of Percussionists. *Medical Problems of Performing Artists.* June 2006; 21(2): 47-58.

76. Raj, A.B., Condurache, T., Bertolone, S., Williams, D., **Lorenz, D.**, Sobczyk, W. Qualitative assessment of ventricular function in sickle cell disease: effect of long term erythrocytapheresis. *Pediatr Blood Cancer*. Dec. 2005; 45(7): 976-981. DOI: 10.1002/pbc.20521.
77. Chao, C., Studts, J.L., Abell, T., Hadley, T., Roetzer, L., Dineen, S., **Lorenz, D.**, YoussefAgha, A., McMasters, K.M. Adjuvant chemotherapy for breast cancer: how presentation of recurrence risk influences decision-making. *J Clin Oncol*. 2003 Dec 1; 21(23): 4299-305. PMID: 14581440.

Non Peer-Reviewed Manuscripts

1. Morrison, S.A., **Lorenz, D.**, Eskay, C.P., Forrest, G.F., Basso, D.M. Longitudinal Recovery and Reduced Costs After 120 Sessions of Locomotor Training for Motor Incomplete Spinal Cord Injury. Response to Letter to the Editor. PMID: 29699647. *Arch Phys Med Rehabil*. 2018 May; 99(5):1024-1026.
2. Harkema, S.J., Schmidt-Read, M., **Lorenz, D.**, Edgerton, V.R., Behrman, A. Balance and ambulation improvements in individuals with chronic incomplete spinal cord injury using locomotor training-based rehabilitation. Response to Letter to the Editor. *Arch Phys Med Rehabil*. 2012 May; 93(5):919-21.

Conference Posters/Presentations

Peer Reviewed Presentations

1. Fortin, K., Kaczor, K., Makoroff, K., Currie, M., **Lorenz, D.**, Pierce, M.C. Presenting complaints differ between young children with abusive and accidental injuries. Ray E. Helfer Society Annual Meeting, 2022, San Diego, CA.
2. Florin, T.A., **Lorenz, D.J.**, Ramgopal, S., Burns, R.R., Rainwater, D., Benedetti, J., Ruddy, R.M., Gerber, J.S., Kupperman, N. Reliability and Feasibility of Telehealth Examination for Pediatric Respiratory Infections. Pediatric Academic Societies Meeting, 2022, Denver, CO.
3. Ramgopal, S., Ambroggio, L., **Lorenz, D.J.**, Shah, S.S., Ruddy, R.M., Florin, T.A. Incorporation of biomarkers into a clinical prediction model for pediatric radiographic pneumonia. Pediatric Academic Societies Meeting, 2022, Denver, CO.
4. Field, M.E., **Lorenz, D.J.**, Ambroggio, L., Ruddy, R.M., Shah, S.S., Florin, T.A. Time to Clinical Stability in Children with Community-Acquired Pneumonia. Pediatric Academic Societies Meeting, 2022, Denver, CO.
5. Hertweck P., Pierson, R., **Lorenz, D.J.**, Bauer, J., et al. Characterization of Response to Hormonal Therapy in an Adolescent Population with Pelvic Pain. North American Society for Pediatric and Adolescent Gynecology Annual Clinical and Research Meeting. Chicago, IL. April 2022.
6. Castillo, R.M., Smith, A., Pierce, M.C., Loftus, K., Kaczor, K., **Lorenz, D.J.**, Kshetrapal, A. Recognizing Abuse-Related Fractures: Why Do Pediatric Trainees Decide to Report? American Academy of Pediatrics National Conference & Exhibition. Philadelphia, PA. October 2021.
7. Merrick, E., Chrisman, L.P., **Lorenz, D.J.**, Parul, S. Promoting Childhood and Adolescent Cardiovascular Health: Analyzing School Meal Nutrition. American Academy of Pediatrics National Conference & Exhibition. Philadelphia, PA. October 2021.
8. Smith, A., Loftus, K., Castillo, R.M., Kaczor, K., **Lorenz, D.J.**, Pierce, M.C., . Fractures in Young Children: Abuse or Accident? There's An App For That. American Academy of Pediatrics National Conference & Exhibition. Philadelphia, PA. October 2021.
9. Smith, A., Loftus, K., Castillo, R.M., Kaczor, K., **Lorenz, D.J.**, Pierce, M.C.. Fractures in Young Children: Abuse or Accident? There's An App For That. 13th International Pediatric Simulation and Symposia and Workshops, a Virtual Experience. September 2021.

10. Pierce, M.C., Lehnig, K., Kaczor, K., Marsit, C.J., Bennett, B., **Lorenz, D.**, Meyers, G., Everson, T.M. Lower DNA methylation in the stress response gene, FKBP5, in young children with abusive versus accidental injuries. Pediatric Academic Societies Meeting, Virtual, 2021.
11. Ramgopal, S., Ambroggio, L., **Lorenz, D.**, Shah, S.S., Ruddy, R., Florin, T. Derivation of a prediction rule for radiographic pneumonia in children. Pediatric Academic Societies Meeting, Virtual, 2021.
12. Gregory, K., **Lorenz, D.**, et al. Intimate partner violence: yield of universal vs dedicated social work screening in pediatric emergency department child physical abuse evaluations. The Ray Helfer Society Annual Meeting, Tucson, AZ, 2019.
13. Gregg, M.E., Datta, S., **Lorenz, D.** htest.clust: An R Package for Informative Cluster Size. Conference on Statistical Practice (CSP) 2020, Sacramento, CA, USA.
14. Witting, C., Simon, N.J.E., **Lorenz, D.**, Jones, R.C., Lehnig, K., Corboy, J., Alpern, E. Decision-support algorithm for detection of severe sepsis in adults and children in a pediatric emergency department. Virtual Poster at The American Academy of Pediatrics National Conference and Exhibition. October 3-5, 2020.
15. Witting, C., Simon, N.J.E., **Lorenz, D.**, Jones, R.C., Lehnig, K., Alpern, E. Pediatric sepsis screen accuracy: Comparison of two reference standards. Virtual Poster at The American Academy of Pediatrics National Conference and Exhibition. October 3-5, 2020. **Winner: Best Poster Abstract**
16. Pierce, M.C., Kaczor, K., Marsit, C.J., Rosado, N., Makoroff, K., Myers, G., **Lorenz, D.**, Lehnig, K., Charleston, E., Everson, T. Differences in DNA methylation in stress response gene FKBP5 in young children with abuse versus accidental injuries. Pediatric Academic Societies 2020 Meeting, Philadelphia, PA, USA.
17. Abell, T., Daniels, M., **Lorenz D.**, et al. Development of a Motility Frailty Index in Patients with Gastrointestinal Motility Symptoms. Digestive Disease Week 2020, Chicago, IL.
18. Daniel, H., Gala, K., Burlen, J., Stocker, A., Ramirez, A., **Lorenz, D.**, Abell, T. Exploring the Role of Gastrointestinal Motility and Non-Acid Reflux in Lung Transplant: Prognosis and Risk of Acute Rejection. American College of Gastroenterology Meeting, 2019, San Antonio, TX.
19. Fingarson, A., Charleston, E., Ryan, M., **Lorenz, D.** Single parietal skull fractures versus occipital fractures and multiple fractures in infants: are there differences in history, findings, and determination of abuse? American Academy of Pediatrics National Conference and Exhibition, 2019, New Orleans, LA.
20. Colgan, J., Kaczor, K., **Lorenz, D.**, Pierce, M.C. Accuracy of Clinician Documentation of Bruising in a Pediatric Emergency Department. Pediatric Academic Societies 2019 Meeting, Baltimore, MD.
21. Baca, J., Simon, N.J.E., Foster, C.C., **Lorenz, D.**, Gregg, M., Schinasi, D.A. Community Emergency Department (ED) Patients Transferred to a Children's Hospital for Admission: Who is Routed to the Pediatric ED Prior to Hospitalization? Pediatric Academic Societies 2019 Meeting, Baltimore, MD.
22. Pierce, M.C., Kaczor, K., **Lorenz, D.**, Leventhal, J., Bertocci, G., Zuckerbraun, N., Magana, J., Fingarson, A., Powell, E., Makoroff, K., Herr, S. An injury plausibility model to differentiate abusive from accidental fractures in young children. Pediatric Academic Societies 2019 Meeting, Baltimore, MD.
23. Johnson, N., Raviv, T., Rosado, N., Charleston, E., **Lorenz, D.J.**, Pierce, M.C. Documentation of sexual abuse history in psychiatric patients in a pediatric emergency department. The Ray Helfer Society Annual Meeting, Orlando, FL, 2019.
24. Gutina, A., Roben, E., Augustine, E., **Lorenz, D.J.** NOW I KNOW MY ABC's: An Evidence-Based Hands-On Curriculum to Improve Pediatric Residents' Procedural Skills in Airway, Breathing, and Circulation. Academic Pediatric Association Region 5 Meeting, Loyola University, Maywood, IL, 2018.
25. Pierce, M.C., Kaczor, K., **Lorenz, D.J.**, Makoroff, K., Berger, R.P., Sheehan, K., Fortin, K., Hymel, K., Bertocci, G., Jenny, C., Herman, B. Leventhal, J.M. Bruising Clinical Decision Rule (BCDR) Discriminates Physical Child Abuse from Accidental Trauma in Young Children. Pediatric Academic Societies Meeting, San Francisco, CA, 2017. **Best Emergency Medicine abstract winner.**

26. Kaczor, K., Pierce, M.C., **Lorenz, D.J.**, Makoroff, K., Jenny, C., Hymel, K., Herman, B. An Analysis of the impact of Age Threshold on the Performance of a Bruising Clinical Decision Rule (BCDR) for Discriminating Physical Abuse from Accidental Trauma in Infants 0-12 Months of Age. Pediatric Academic Societies Meeting, San Francisco, CA, 2017.
27. Pierce, M.C., Kaczor, K., **Lorenz, D.J.**, Williams, M., Hickey, S., Stutz, T., Makoroff, K., Sheehan, K., Thompson, R. Development and validation of an emergency department screening tool for assessing psychosocial risk factors (PRF) in patients undergoing an evaluation for physical child abuse. Pediatric Academic Societies Meeting, San Francisco, CA, 2017.
28. Kaczor, K., Pierce, M.C., **Lorenz, D.J.**, Makoroff, K., Jenny, C., Hymel, K., Herman, B. An Analysis of the impact of Age Threshold on the Performance of a Bruising Clinical Decision Rule (BCDR) for Discriminating Physical Abuse from Accidental Trauma in Infants 0-12 Months of Age. The Ray Helper Society Annual Meeting, Denver, CO, 2017. **Short Presentation, Regular Member Award Co-winner.**
29. Pierce, M.C., Kaczor, K., **Lorenz, D.J.**, Makoroff, K., Leventhal, J.M. Bruising Clinical Decision Rule (BCDR) discriminates physical child abuse from accidental trauma: a validation study. The Ray Helper Society Annual Meeting, Denver, CO, 2017. **Short Presentation, Regular Member Award Co-winner.**
30. Fingarson, A., Pierce, M.C., Kaczor, K., **Lorenz, D.J.** The Role of Male Caregivers and Childcare Consistency in Child Physical Abuse. The Ray Helper Society Annual Meeting, Denver, CO, 2017.
31. Pierce, M.C., Kaczor, K., **Lorenz, D.J.**, Hickey, Williams, Makoroff, K., Thompson, R. Development and validation of an emergency department screening tool for assessing psychosocial risk factors (PRF) in patients undergoing an evaluation for physical child abuse. The Ray Helper Society Annual Meeting, Denver, CO, 2017.
32. Brock, G.N., **Lorenz, D.J.**, Alver, S., Marvin, M. Projected outcomes of six-month delay in exception points vs. an equivalent MELD score for HCC liver transplant candidates. Joint Statistical Meetings, American Statistical Association, Chicago, July, 2016.
33. Manning, J., **Lorenz, D.**, Terson de Paleville, D. Graded Exercise Test to Predict Cardiovascular Fitness in Individuals with Spinal Cord Injury. 26th Annual Neuroscience Day, Society for Neuroscience, Louisville Chapter, April, 2016.
34. Pierce, M.C., Kaczor, K., Fortin, K., **Lorenz, D.J.**, Makoroff, K. Bruising Characteristics Help Discriminate Abusive From Accidental Head Trauma. Pediatric Academic Societies Annual Meeting, San Diego, April, 2015.
35. Isacoff, A.M., McLario, D., Cross, K., O'Hagan, A., Holland, B., **Lorenz, D.**, Stevenson, M. Pulmonary Physiology Assessment by Bedside Ultrasonography in Children. Pediatric Academic Societies Annual Meeting, San Diego, April, 2015.
36. Magana, J., Kanegaye, J.T., Kaczor, K., **Lorenz, D.J.**, Bennett, B.L., Myers, G., Hickey, S., Pierce, M.C. Prevalence of Bruising Among Infants in Pediatric Emergency Departments. American Academy of Pediatrics National Conference & Exhibition. Orlando, FL. October, 2013.
37. Myers, G., Bennett, B.L., Kaczor, K., **Lorenz, D.J.**, Thompson, R., Pierce, M.C. Aggressive Behavior in Children Less Than 4 Years of Age Is Associated With Parental Use of Physical Discipline: Are Children Learning to Hit From Their Parents? American Academy of Pediatrics National Conference & Exhibition. Orlando, FL. October, 2013.
38. Lovell, J., **Lorenz, D.J.**, et al. Ultrasound Measurements of Inferior Vena Cava to Aorta Ratio and Inferior Vena Cava Collapse in Euvolemic Pediatric Patients. Pediatric Academic Societies Annual Meeting. Washington DC. May, 2013.
39. Padmanabhan, P., Berkenbosch, J.W., **Lorenz, D.J.**, Myers, A., Kang, K.A., Pierce, M.C. Evaluation of Cerebral Oxygenation During Procedural Sedation in Children by Near Infrared Spectroscopy. 35th Annual Meeting of the International Society of Oxygen Transport to Tissue, Uppsala, Sweden, August, 2007.
40. Datta, S., **Lorenz, D.**, Schmidt-Read, M., Ardolino, E., Morrison, S., Harkema, S. A multivariate examination of temporal changes in Berg Balance Scale variables for patients with ASIA C and D spinal cord injuries. 33rd Annual Meeting of the American Spinal Injury Association, Tampa, FL, May 2007. **Winner, Best Poster Award.**

41. Lajoie, A.S., De La Cruz, R., **Lorenz, D.J.**, Ramirez, J.A. Predicting time to clinical stability and length of hospital stay in patients with community-acquired pneumonia. Joint Statistical Meetings, Minneapolis, MN. August, 2005.
42. Jackson, J.M., Fowler, J.F., Callen, J.P., **Lorenz, D.** Mycophenolate mofetil for the treatment of chronic dermatitis: An open-label study of 16 patients. [Abstract], *J Am Acad Dermatol*, March 2005; 52(3, S1): P78.
43. Aqil, A., Furman, C.D., Miles, T., Dodds, H., **Lorenz, D.J.** Consistency of documentation of do not hospitalize (DNH) orders in nursing homes (NH). Annual Symposium of the American Medical Directors Association, New Orleans, LA. March, 2005.
44. Kurian, R.T., Barve, S.S., Ritchie, C.S., Stagner, I.J., Adams, K.A., **Lorenz, D.J.**, Mokshagundam, S.L. Resistance Training Improves Neurological Function and Cardiovascular Risk Factors in Elderly Subjects with Type 2 Diabetes Mellitus and Peripheral Neuropathic Symptoms. 64th Annual Scientific Sessions of the American Diabetes Association, Orlando, FL. June, 2004.
45. Fowler, J., **Lorenz, D.**, Parneix-Spake, A. Evaluation of skin reactions to pimecrolimus cream 1% in patients allergic to propylene glycol. American Academy of Dermatology 63rd Annual Meeting, New Orleans, LA. February, 2004.
46. LaJoie, A.S., Edgell, S.E., **Lorenz, D.J.**, McCabem S.J. A study of the influence of affect on utility assessment and decision making. *Medical Decision Making*. 2003; 23(5): 556.
47. **Lorenz, D.J.**, Bradley, M., Tsukayama, D. Antibiotic Resistance in the Intensive Care Unit: Rotation of Antibiotics and the Result of a Clinical Trial. 2nd Annual Conference of the Society for Mathematical Biology, University of Tennessee, Knoxville, Tennessee, July, 2002.

Non-Peer Reviewed/Invited Presentations

1. McCulloch, J., **Lorenz, D.**, Kloby, M., Aslan, S., Terson de Paleville, D. Validation of an RPE-based submaximal oxygen consumption test using a total body recumbent stepper for individuals with spinal cord injury. Research! Louisville. University of Louisville, Louisville, KY. October, 2013.
2. **Lorenz, D.J.** Marginal association measures for clustered data. Meeting of the Kentucky Chapter of the American Statistical Association. Louisville, KY. March, 2012.
3. **Lorenz, D.J.** A log-rank test for waiting times from multi-stage models. Seminar Series, Department of Bioinformatics and Biostatistics, University of Louisville, Louisville, KY. April, 2011.
4. **Lorenz, D.J.** Fitting Linear Mixed Effects Models in R: An Application to Spinal Cord Injury Data. Seminar Series, Department of Bioinformatics and Biostatistics, University of Louisville, Louisville, KY. February, 2008.
5. **Lorenz, D.J.** Statistics for the Orthopedist. Grand Round Presentation, Department of Orthopedic Surgery, University of Louisville, Louisville, KY, April, 2007.

Funded Research

Pierce, M.C. (PI). 5R01HD060997. Clinical Decision Rules to Discriminate Bruising Caused by Physical Child Abuse. Department of Health and Human Services, National Institutes of Health, Eunice Kennedy Shriver National Institute of Child Health and Human Development. Role: Co-Principal Investigator.

Harkema, S.J. (PI). ES2-CHN-2013(SH). Recovery of Cardiovascular Function with Epidural Stimulation After Human Spinal Cord Injury Christopher and Dana Reeve Foundation. Role: Biostatistician.

Behrman, A. (PI). Award No. 260284. Neuromuscular Recovery Scale for Pediatric Spinal Cord Injury. Craig H. Neilsen Foundation. Role: Co-Principal Investigator.

Harkema, S.J. (PI). 1U59DD000838. Development of Neural Recovery Rehabilitation and Research Centers for Functional Health and Quality of Life Improvements after Neurologic Injury – The NeuroRecovery Network. Christopher and Dana Reeve Foundation. Role: Biostatistician.

- Ovechkin, A. (PI). R01HL103750-04. Respiratory Motor Control and Blood Pressure Regulation in Chronic Spinal Cord Injury. Department of Health and Human Services, National Institutes of Health. Role: Co-Principal Investigator.
- Behrman, A. (PI). Award No. 164521. A New Measure of Neurological and Behavioral Recovery after Spinal Cord Injury. Craig H. Nielsen Foundation. Role: Co-Principal Investigator.
- Sisto, S.A. (PI). Health Outcomes after Locomotor Training across the NeuroRecovery Network. Craig H. Nielsen Foundation. Role: Co-Principal Investigator.
- Harkema, S.J. (PI). NOA3-2010(SH) Natural Progression & Recovery of Cardiovascular Parameters Following Traumatic Spinal Cord Injury. Christopher and Dana Reeve Foundation. Role: Biostatistician.
- Harkema, S.J. (PI). 5R01NS049209 Plasticity of Human Spinal Neural Networks After Injury. National Institutes of Health. Role: Biostatistician.
- Pfeffer, M.P. (PI). 1R21CA115345. A Telehealth Intervention to Improve Symptom Management for Patients with Head and Neck Cancer. National Cancer Institute, National Institutes of Health. Role: Biostatistician.
- Ruble, L.A. (PI). 1R34MH073071. Outcomes of Teacher Training on Autism. Department of Health and Human Services, National Institutes of Health. Role: Biostatistician.
- Barnett, R. (PI). PO25900700013372. Air Toxic Monitoring and Risk Management Program. Kentucky Natural Resource Council. Role: Co-Principal Investigator.
- Newton, T.L. (PI). R21AG0249002-02. Intimate partner violence and inflammatory processes. National Institute on Aging, National Institutes of Health. Role: Biostatistical consultant.

Teaching

University of Louisville

PHST 500	Introduction to Biostatistics and Data Management for Health Sciences I <i>Substantial course revision (2013)</i>	2011, 2013-
PHST 501	Introduction to Biostatistics and Data Management for Health Sciences II <i>University "Top 4" Faculty Favorite (2013-2014)</i>	2014-
PHST 602	Biostatistics-Decision Science Seminar	2012
PHST 603	Biostatistics-Decision Science Practicum	2013, 2016, 2021
PHST 624	Clinical Trials I	2013
PHST 625	Clinical Trials II <i>New online section (2019)</i>	2019
PHST 650	Intermediate Biostatistics for Health Sciences <i>New course (2016)</i>	2016-2017
PHST 666	Master's Thesis Research (2 sections)	2016
PHST 675	Independent Study in Biostatistics	2017
PHST 681	Biostatistical Methods II	2013
PHST 683	Survival Analysis <i>New online section (2019)</i>	2012, 2019-
PHST 703	Doctoral Practicum in Biostatistics	2018
PHST 726	Clinical Trials Statistics Laboratory	2013
PHST 762	Advanced Statistical Inference	2011-2012
PHST 783	Advanced Survival Analysis	2012
PHPH 697-699	Public Health Practicum I-III (8 students)	2014-2022
PHPH 698	Public Health Integrated Learning Experience	2019
MED 909	Medicine Research (2 students)	2017

Student Supervision

University of Louisville

Principal Advisor - Biostatistics

Mary Gregg, PhD Biostatistics (2020). *Dissertation*: “Marginal methods and software for clustered data with cluster- and group-size informativeness”.

Mary Gregg, MS Biostatistics (2016). *Thesis*: “A log rank test for clustered data under informative within-cluster group size”.

Dake Yang, Ph.D. Biostatistics (2016). Co-advisor with Guy Brock, Ph.D. *Dissertation*: “Integrated Analysis of miRNA/ mRNA Expression and Gene Methylation using Sparse Canonical Correlation Analysis”.

Mike Daniels, MS Biostatistics (2016). Co-advisor with Guy Brock, Ph.D. *Thesis*: “Predicting Risk of Breast Carcinoma Recurrence using Expression of Genes for Protein Hormones and Their Receptors”.

Jennifer Megibben, MS Biostatistics (2014). *Practicum*: “Determinants of emergency room readmission among participants in the Jewish Hospital Transitions of Care program.”

Principal Advisor - Master’s of Public Health (MPH)

Julianne Sutton, MPH (2020). *Practicum*: “Association between asthma and depression in the national BRFFS data set”.

Connor English, MPH (2018). *Practicum*: “Pneumonia severity indices as predictors of mortality”.

Anne Doughtie, M.D., MPH (2016). *Practicum*: Cancer Care in an Uninsured Population, Colon Care Prevention Project, James Graham Brown Cancer Center.

Laura Binford, MPH (2015). *Practicum*: Division of Infectious Diseases, University of Louisville.

Stacy Cambron, MPH (2015). *Practicum*: Gilda’s Club of Louisville.

Marie Dever, MPH (2015). *Practicum*: Travel Center, Division of Infectious Diseases, University of Louisville.

Principal Advisor - M.Sc Clinical Investigation; Clinical Research, Epidemiology, and Statistical Training (CREST)

Jennie Green, M.D., M.Sc. (2020). “A retrospective study of hospital practices related to failure to thrive admissions at a tertiary-care children’s hospital”.

Veronica Sepulveda, M.D., M.Sc. (2019). “Implementation of an ultrasound training program in a hospital in Puerto Rico”.

Megan Evers, M.D., M.Sc. (2018). “Correct Identification of Non-Accidental Trauma by Medical Providers”.

Adam Patterson, M.D., M.Sc. (2017). “Development of a Milestone-Based Evaluation Tool for the Pediatric Emergency Department”.

Brooke Jones, M.D., M.Sc. (2017). “A retrospective study of jaw-line bruising patterns and the extent of associated injury in children evaluated for physical abuse”.

Elizabeth Ristagno, M.D., M.Sc. (2017). “Effect of Intranasal Mupirocin Prophylaxis on MRSA Transmission and Invasive Staphylococcal Infections in a Neonatal Intensive Care Unit”.

Scott Bickel, M.D., M.Sc. (2016). “The Missing Link in Asthma Adherence: First-Fill Prescription Rates”.

Danielle Graff, M.D., M.Sc. (2016). “Concussion Management in the Classroom”.

Adam Isacoff, M.D., CREST (2015). “Pulmonary Physiology Assessment by Bedside Ultrasonography in Children”.

Katherine Nichols, M.D., CREST (2015). “Analysis of Patient Visits and Collections after Opening a Satellite Pediatric Emergency Department”.

Wayne Stark, M.D., CREST (2015). “The Utility of Head Computed Tomography in the Evaluation of Apparent Life Threatening Event”.

Donna Phillips, CREST (2015). “Evaluation of Sponsor Provided Informed Consent Form Templates and Their Ability to Meet Industry Guidelines for Subject Readability.”

Jami Lovell, M.D., CREST (2013). “Ultrasound Measurements of Inferior Vena Cava to Aorta Ratio and Inferior

Vena Cava Collapses in Euvolemic Pediatric Patients.”

Shernaz Wadia, M.D., CREST (2013). “Measuring Ketamine’s Effect on Intraocular Pressure in Children.”

Jennifer Hopkins, M.D., CREST (2013). “The Anatomic Relationship Between the Common Femoral Artery and Common Femoral Vein in Frog Leg Position Versus Straight Leg Position in Pediatric Patients.”

Committee Member - Biostatistics

John Craycroft, PhD, Biostatistics (2020). “Aspects of causal inference.”

Sarah Alver, MS, Biostatistics (2015). “Evaluation of liver transplant prioritization methods for hepatocellular carcinoma patients using multistate models.”

Lei Zhou, MS, Biostatistics (2012). “Mixed effects models for crossover studies.”

Committee Member - Other

Rachel Torres, Ph.D. (TBA). Translational Neuroscience. TBA

Sahal Alzahrani, Ph.D. (TBA). Health Management and Systems Science. “Rehabilitation Length of Stay in Patients with Paraplegia.”

Emmanuel Ezekekwa, Ph.D. (TBA). Health Management and Systems Science. “The influence of long working hours on the use of sedative-hypnotic and sleep-aid substances in US workers.”

Luis Alvarado, Ph.D. (2021). Anatomical Science and Neurobiology. TBA.

Kendra Sikes, M.Sc. (2021). “Implementation of an Appendicitis Evaluation Algorithm and the Effect of CT Utilization in a Pediatric Emergency Department.”

Amar Singh, M.D., M.Sc. (2021). “The impact of bedside cardiac point-of-care ultrasound on the utilization of cardiology subspecialty resources in a pediatric emergency dept.”

Robin Lund, M.D., M.Sc. (2021). “Pediatric emergency education during pediatric residency: a national survey.”

Elizabeth Lehto, M.D., M.Sc. (2021). “Impact of rapid testing for gonorrhea and chlamydia in an urban pediatric emergency department.”

Rosina Hussain, M.D., M.Sc. (2020). “Impostor syndrome and burnout in pediatric emergency medicine fellows”.

Johanna Said, M.D., M.Sc. (2020).

Timothy Roach, M.D., M.Sc. (2020). “Utility of physical evidence collected in child sexual assault cases”.

Hanna Martin, M.Sc. (2019). Grant proposal: muscle vibration stimulation treatment to improve postural control in individuals with spinal cord injury.

Christine Swanson, Ph.D., Health Management and System Science (2019). “An evaluation of the supply and demand of radiation oncology medical physicists in the United States”.

Austin Zachary, M.S., Epidemiology (2018). “Evaluation of the predictive ability of a screening instrument used to diagnose co-occurrence of anxiety in children with high-functioning autism.”

Liliana Vargas, M.S., Exercise Physiology (2018). “The effects of a physical activity program called ‘Minds in Motion - The Maze’ on balance and motor skills in middle school aged students”.

Maresa Corder, Ph.D., Health Management and System Science (2017). “Comparing total expenditures by source of long-term services and supports”.

Aisha Khalifa, M.Sc., Clinical Investigation (2017). The Relationship Between Obesity and 1-Year Mortality for Patients with Community-Acquired Pneumonia (CAP): Is Obesity Protective?

Jack Pfeiffer, MS, Epidemiology (Summer 2016). “Coal Ash Exposure and Asthma in Children”.

Lindsay Tompkins, MS, Epidemiology (Summer 2016). “Memory and Fine Motor Skill Test Performance among Children Living Near Coal Ash Storage Sites”.

Carlos Paniagua, Ph.D., Mathematics (Summer 2016). “PDEs and the Problem of Image Segmentation”.

Craig Ziegler, Ph.D., Health Management and System Science (2015). “Socioeconomic mediators of the student debt-residency choice relationship.”

Sarah Walsh, Ph.D., Health Promotion and Behavioral Sciences (2013). “The Impact of Social Capital on Mental Health in Assisted Living Communities.”

John McCulloch, MS, Exercise Physiology (2013). “Validation of submaximal oxygen consumption tests using an arm crank ergometer and NuStep ergometer for individuals with spinal cord injury.”

Lisa Martin, CSCS, FMS, MS Exercise Physiology (2012). Assessment of fatigue in Division I female soccer players by weekly measurement of cognitive speed and power output.”

Swapna Nadikunda, MS, Oral Biology (2011). “Effect of finger rings on microbial cross-contamination during dental clinical procedures.”

Professional Service

Editorial Board Service

Journal of Medical Statistics and Informatics (2013 –), *Annals of Biometrics & Biostatistics* (2013 –) *International Journal of Statistics and Probability* (2012 – 2014),

Journal Referee

Statistics in Medicine (2021, 2020, 2019, 2015), *Annals of Applied Statistics* (2021, 2019), *Pediatrics* (2020, 2015, 2010), *Journal of Pediatric Rehabilitation Medicine* (2018), *Biometrics* (2018), *University of Louisville Journal of Respiratory Infections* (2017), *The R Journal* (2016), *Journal of Neurology and Neuromedicine* (2016), *Journal of Statistical Computation and Simulation* (2016), *Journal of Agricultural, Biological, and Environmental Statistics* (2015), *Statistics and Its Interface* (2012-2013), *Statistics and Probability Letters* (2012), *BMC Bioinformatics* (2012), *Bioinformatics* (2012), *Archives of Physical Medicine and Rehabilitation* (2012), *Physical Therapy* (2012)

Book Review

Motulsky, H. *Intuitive Biostatistics*, 4th ed, Oxford Press

Program Review

Florida Department of Health, William G. “Bill” Bankhead, Jr., and David Coley Cancer Research Program (Oak Ridge Associated Universities, 2016)

Pennsylvania Department of Health, 2008 Non-formula Grants on Autism, Antibiotic Resistance (Oak Ridge Associated Universities, 2014)

Department of Bioinformatics and Biostatistics, University of Louisville

Director of Online Programs (2017 –)
 Director, Statistical Consulting Center (2016 –)
 Graduate committee (admissions and curriculum, 2012 –)
 Student recruitment committee (chair, 2012 – 2018)
 Student grievance committee (2011 –)
 Curator of department website (2011 –)
 Dual Degree coordinator (2011 –)
 Faculty search committees (2008, 2011, 2013)
 System backup committee (2004 – 2006)

School of Public Health and Information Science, University of Louisville

Faculty council (2019 – 2021)
MPH Curriculum review committee (2018 – 2019)
Student academic grievance committee (2013 – 2016, 2021)
MPH Practicum mentoring committee (2013 – 2015)
MPH Advisory committee (2013 – 2015)
Student affairs advisory council (2011 – 2013)

University of Louisville

Graduate student academic grievance committee (2021 –)
Research Computing Advisory Committee (RCAC) (2021)
Ideas to Action (i2a) Leadership Committee (2014)
Poster judge for Research! Louisville (2013, 2014, 2018, 2019)

Last updated: January 30, 2022