

Adam J. Dugan

CONTACT INFORMATION	University of Kentucky Department of Biostatistics 725 Rose Street Lexington, Kentucky 40536	Email: adam.dugan@uky.edu
PROFESSIONAL EXPERIENCE	Assistant Professor of Biostatistics College of Public Health University of Kentucky, Lexington, Kentucky USA	Sept. 2021 – Present
	Statistician Department of Biostatistics, College of Public Health University of Kentucky, Lexington, Kentucky USA	Dec. 2018 – Aug. 2021
	Statistician Department of Surgery, College of Medicine University of Kentucky, Lexington, Kentucky USA	May 2015 – Nov. 2018
EDUCATION	University of Kentucky , Lexington, Kentucky USA Ph.D., Epidemiology and Biostatistics <ul style="list-style-type: none">Dissertation: Investigations into the genetics of mixed pathologies in dementiaChairs: David W. Fardo and Olga A. Vsevolozhskaya University of Kentucky , Lexington, Kentucky USA M.S., Statistics	Aug. 2021 May 2015
	University of Georgia , Athens, Georgia USA B.S., Mathematics	May 2011
PEER-REVIEWED PUBLICATIONS	<ol style="list-style-type: none">Dugan AJ, Nelson PT, Katsumata Y, Shade LMP, Boehme KL, Teylan MA, Cykowski MD, Mukherjee S, Kauwe JSK, Hohman TJ, Schneider JA; Alzheimer’s Disease Genetics Consortium, Fardo DW. Analysis of genes (TMEM106B, GRN, ABCC9, KCNMB2, and APOE) implicated in risk for LATE-NC and hippocampal sclerosis provides pathogenetic insights: a retrospective genetic association study. <i>Acta Neuropathol Commun.</i> 2021 Sep 15;9(1):152. doi: 10.1186/s40478-021-01250-2. PMID: 34526147.Womble TN, Comadoll SM, Dugan AJ, Davenport DL, Ali SZ, Srinath A, Matuszewski PE, Aneja A. Is supplemental regional anesthesia associated with more complications and readmissions after ankle fracture surgery in the inpatient and outpatient setting? <i>Foot Ankle Surg.</i> 2021 Jul;27(5):581-587. doi: 10.1016/j.fas.2020.07.015. Epub 2020 Aug 14. PMID: 32917527.Reynolds, L.J., Vsevolozhskaya, O.A., Rice, B.B., Chavan, N.R., Dugan, A.J., Maddox, H.F., Preston, J.D., DeHoff, L.B., O'Brien, J.M., & Pearson, K.J. (2021). Physical activity during pregnancy alters gene expression in neonatal tissue, <i>Physiology International</i>, 108(1), 80-94.	

4. Mason MR, Hudgins JH, Campbell MS, Biddle MJ, Ickes MJ, **Dugan A**, Bollinger LM. Changes in physical activity during the initial stages of the COVID-19 pandemic. *J Sports Sci*. 2021 Sep 10:1-9. doi: 10.1080/02640414.2021.1976569. Epub ahead of print. PMID: 34503395.
5. Kloske CM, **Dugan AJ**, Weekman EM, Winder Z, Patel E, Nelson PT, Fardo DW, Wilcock DM. Inflammatory Pathways Are Impaired in Alzheimer Disease and Differentially Associated With Apolipoprotein E Status. *J Neuropathol Exp Neurol*. 2021 Sep 6:nlab085. doi: 10.1093/jnen/nlab085. Epub ahead of print. PMID: 34486652.
6. Donigian, A., Hensley, P., Goodwin, J., **Dugan, A. J.**, Hanaoka, M., Bylund, J., & Harris, A. M. (2021). A Quality Improvement Initiative: Patient-Specific Factors Contributing to Extended Pacu Length of Stay and Subsequent Cost. *Physician Leadership Journal*, 8(1), 38–45.
7. Lee JT, Slade E, Uyeda J, Steenburg SD, Chong ST, Tsai R, Raptis D, Linnau KF, Chinapuvvula NR, Dattwyler MP, **Dugan A**, Baghdanian A, Flink C, Baghdanian A, LeBedis CA. American Society of Emergency Radiology Multicenter Blunt Splenic Trauma Study: CT and Clinical Findings. *Radiology*. 2021 Feb 2:202917. doi: 10.1148/radiol.2021202917. Epub ahead of print. PMID: 33529133.
8. Lawrence KA, Vogt D, **Dugan AJ**, Nigam S, Slade E, Smith BN. Mental Health and Psychosocial Functioning in Recently Separated U.S. Women Veterans: Trajectories and Bi-Directional Relationships. *Int J Environ Res Public Health*. 2021 Jan 22;18(3):935. doi: 10.3390/ijerph18030935. PMID: 33498982.
9. Garrett B. Hile, Kaitlin L. Musick, **Adam J. Dugan**, Abby M. Bailey, Gavin T. Howington; Occurrence of Hyperbilirubinemia in Neonates Given a Short-term Course of Ceftriaxone versus Cefotaxime for Sepsis. *The Journal of Pediatric Pharmacology and Therapeutics* 1 January 2021; 26 (1): 99–103. doi: <https://doi.org/10.5863/1551-6776-26.1.99>.
10. Nisiewicz MJ, Kapoor H, Fowler KJ, Furlan A, **Dugan AJ**, Owen JW. Improved survival following transarterial radioembolization of infiltrative-appearance hepatocellular carcinoma. *Abdom Radiol (NY)*. 2021 Jan 1. doi: 10.1007/s00261-020-02870-3. Epub ahead of print. PMID: 33385248.
11. Alnabelsi T, Annabathula R, Shelton J, Paranzino M, Faulkner SP, Cook M, **Dugan AJ**, Nerusu S, Smyth SS, Gupta VA. Predicting in-hospital mortality after an in-hospital cardiac arrest: A multivariate analysis. *Resusc Plus*. 2020 Nov 7;4:100039. doi: 10.1016/j.resplu.2020.100039. PMID: 34223316; PMCID: PMC8244474.
12. Nisiewicz MJ, Roberts JM, Dobbs MR, Ajadi EA, Kitzman P, Wolfe M, Elkins K, **Dugan AJ**, Fraser JF. High Prevalence of Moyamoya Syndrome in Appalachia. *Cerebrovasc Dis*. 2020 Oct 7:1-6. doi: 10.1159/000510750. Epub ahead of print. PMID: 33027801.
13. Sexton T, Chalhoub G, Ye S, Morris W, Annabathula R, **Dugan A**, Smyth S. Autotaxin Activity Predicts 30 Day Mortality in Sepsis Patients and Correlates With Platelet

Count and Vascular Dysfunction. Shock. 2020 Aug 20. doi: 10.1097/SHK.0000000000001569. Epub ahead of print. PMID: 32826822.

14. Annabathula R, **Dugan A**, Bhalla V, Davis GA, Smyth SS, Gupta VA. Value-based assessment of implementing a Pulmonary Embolism Response Team (PERT). J Thromb Thrombolysis. 2020 Jun 15. doi: 10.1007/s11239-020-02188-3. Epub ahead of print. PMID: 32542527.
15. Chang YW, Davenport D, **Dugan A**, Patel JA. Significant morbidity is associated with proximal fecal diversion among high-risk patients who undergo colectomy: A NSQIP analysis [published online ahead of print, 2020 May 18]. Am J Surg. 2020;S0002-9610(20)30264-6. doi:10.1016/j.amjsurg.2020.05.007.
16. Gupta M, **Dugan A**, Chacon E, Davenport DL, Shah MB, Marti F, Roth JS, Bernard A, Zwischenberger JB, Gedaly R. Detailed perioperative risk among patients with extreme obesity undergoing nonbariatric general surgery. Surgery. 2020 May 14. pii: S0039-6060(20)30159-8. doi: 10.1016/j.surg.2020.03.016. [Epub ahead of print] PubMed PMID: 32418709.
17. Burns JC, DeCoster RC, **Dugan AJ**, Davenport DL, Vasconez HC. Trends in the Surgical Management of Lower Extremity Gustilo Type IIIB/IIIC Injuries. Plast Reconstr Surg. 2020;146(1):183-189. doi:10.1097/PRS.00000000000006912.
18. Higgins MM, **Dugan A**, Bell JR, Bylund JR, Harris AM, Bhalodi AA. Identifying a break in the chain: An analysis of where ureteroscopy damage occurs in the hospital cycle. Urology. 2020 Apr 8. pii: S0090-4295(20)30337-X. doi: 10.1016/j.urology.2020.02.030. [Epub ahead of print] PubMed PMID: 32277991.
19. Vyas KS, DeCoster RC, Burns JC, Rodgers LT, Shrout MA, Mercer JP, Coquillard C, **Dugan AJ**, Baratta MD, Rinker BD, Vasconez HC. Autologous Fat Grafting Does Not Increase Risk of Oncologic Recurrence in the Reconstructed Breast. Ann Plast Surg. 2020 Feb 11. doi: 10.1097/SAP.0000000000002285. [Epub ahead of print] PubMed PMID: 32049757.
20. Wayne NB, Davis GA, Macaulay TE, Beavers CJ, Messerli AW, **Dugan A**, Smyth SS. Reduced dose thrombolysis with ultrasound-facilitated catheter-directed administration for acute pulmonary embolism reduces length of stay. Journal of Thrombosis and Thrombolysis. 2019 Dec 3. doi: 10.1007/s11239-019-02009-2. [Epub ahead of print] PubMed PMID: 31797241.
21. O'Brien KJ, Snapp KR, **Dugan AJ**, Westgate PM, Gupta N. Risk factors affecting length of stay in patients with deep neck space infection. Laryngoscope. 2019 Nov 25. doi: 10.1002/lary.28367. [Epub ahead of print] PubMed PMID: 31763702
22. DeCoster RC, Stout MA, Burns JC, Shrout MA, Wetzel M, **Dugan AJ**, Rinker BD, Butterfield TA, Webster JM, Vasconez HC. Appalachian Status Is a Negative Predictor of Breast Reconstruction Following Breast Cancer Resection. Ann Plast Surg. 2019 Sep 10. doi: 10.1097/SAP.0000000000001965. [Epub ahead of print] PubMed PMID: 31513081.

23. DeCoster RC, Bautista RF Jr, Burns JC, **Dugan AJ**, Edmunds RW, Rinker BD, Webster JM, Vasconez HC. Rural-Urban Differences in Breast Reconstruction Utilization Following Oncologic Resection. *J Rural Health*. 2019 Sep 11. doi: 10.1111/jrh.12396. [Epub ahead of print] PubMed PMID: 31508853.
24. Woolum JA, Bailey AM, **Dugan A**, Agrawal R, Baum RA. Evaluation of infection rates with narrow versus broad-spectrum antibiotic regimens in civilian gunshot open-fracture injury. *Am J Emerg Med*. 2019 Jul 23:158358. doi: 10.1016/j.ajem.2019.158358. PubMed PMID: 31402235.
25. Hulou MM, Garcia CR, Slone SA, **Dugan A**, Lei F, Huang B, Pittman T, Villano JL. Comprehensive Review of Cranial Chordomas Using National Databases in the USA. *Clin Oncol (R Coll Radiol)*. 2019 Jul 11. pii: S0936-6555(19)30254-7. doi: 10.1016/j.clon.2019.06.004. [Epub ahead of print] PubMed PMID: 31303332.
26. Guthrie AM, Baum RA, Carter C, **Dugan A**, Jones L, Tackett T, Bailey AM. Use of Intranasal Ketamine in Pediatric Patients in the Emergency Department. *Pediatr Emerg Care*. 2019 Jul 8. doi: 10.1097/PEC.0000000000001863. [Epub ahead of print] PubMed PMID: 31290798.
27. Chacon E, Eman P, **Dugan A**, Davenport D, Marti F, Ancheta A, Gupta M, Shah M, Gedaly R. Effect of operative duration on infectious complications and mortality following hepatectomy. *HPB (Oxford)*. 2019 Jun 19. pii: S1365-182X(19)30539-8. doi: 10.1016/j.hpb.2019.05.001. [Epub ahead of print] PubMed PMID: 31229489.
28. Harris AM, James A, **Dugan A**, Bylund J. Increased Operative Duration in Minimally Invasive Partial Nephrectomy Is Associated with Significantly Increased Risk of 30-Day Morbidity. *J Endourol*. 2019 Jul;33(7):549-556. doi: 10.1089/end.2019.0233. Epub 2019 May 29. PMID: 31044616.
29. Peard LM, Goodwin J, Hensley P, **Dugan A**, Bylund J, Harris AM. Examining and Understanding Value: The Impact of Preoperative Characteristics, Intraoperative Variables, and Postoperative Complications on Cost of Robotic-Assisted Laparoscopic Radical Prostatectomy. *J Endourol*. 2019 Apr 24. doi: 10.1089/end.2019.0066. [Epub ahead of print] PubMed PMID: 31017013.
30. Jaclyn M Stoffel, Regan A Baum, **Adam J Dugan**, Abby M Bailey; Variability in training, practice, and prioritization of services among emergency medicine pharmacists, *American Journal of Health-System Pharmacy*, Volume 76, Issue Supplement_1, 8 February 2019, Pages S21–S27.
31. Luis F. Acosta, Roberto Galuppo, Catherine R. García, Evelyn Villacorta, **Adam Dugan**, Ana Lía Castellanos, Roberto Gedaly, James T. Lee. Association Between Sarcopenia and AFP Level in Patients Undergoing Liver Transplantation for Hepatocellular Carcinoma. *Journal of Surgical Research*, Volume 238, 2019, Pages 10-15.
32. Acosta LF, Chacon E, Eman P, **Dugan A**, Davenport D, Gedaly R. Risk of Infectious Complications After Simultaneous Gastrointestinal and Liver Resections for Neuroendocrine Tumor Metastases. *J Surg Res*. 2019 Mar;235:244-249. Epub 2018 Nov 1. PubMed PMID: 30691802.

33. De Stefano F, Garcia CR, Gupta M, Marti F, Turcios L, **Dugan A**, Gedaly R. Outcomes in patients with portal hypertension undergoing gastrointestinal surgery: A propensity score matched analysis from the NSQIP dataset. *Am J Surg*. 2019 Apr;217(4):664-669. doi: 10.1016/j.amjsurg.2018.12.008. Epub 2018 Dec 11. PubMed PMID: 30578032.
34. Zhou Z, Mims T, **Dugan A**, Trott T, Sanderson W, Bronner J. Randomized Evaluation of Videoconference Meetings for Medical Students' Mid-clerkship Feedback Sessions. *West J Emerg Med*. 2018;20(1):163-169.
35. Regan A. Baum, **Adam Dugan**, Elise Metts, Kyle A. Weant, Abby M. Bailey & Scott Wilkie (2018) Modified two step N-acetylcysteine dosing regimen for the treatment of acetaminophen overdose a safe alternative, *Toxicology Communications*, 2:1, 81-84, DOI: 10.1080/24734306.2018.1535537
36. Chacon E, Vilchez V, Eman P, Marti F, Morris-Stiff G, **Dugan A**, Turcios L, Gedaly R. Effect of critical care complications on perioperative mortality and hospital length of stay after hepatectomy: A multicenter analysis of 21,443 patients. *Am J Surg*. 2019 Jul;218(1):151-156. doi: 10.1016/j.amjsurg.2018.11.016. Epub 2018 Nov 30. PubMed PMID: 30528789.
37. Luis F. Acosta, Eduardo Chacon, Pedro Eman, **Adam Dugan**, Daniel Davenport, Roberto Gedaly. Risk of Infectious Complications After Simultaneous Gastrointestinal and Liver Resections for Neuroendocrine Tumor Metastases. *Journal of Surgical Research*, Volume 235, 2019, Pages 244-249.
38. Erpelding SG, Hopkins M, **Dugan A**, Liau JY, Gupta S. Outpatient Surgical Management for Acquired Buried Penis. *Urology*, Volume 123, 247 - 251. PubMed PMID: 30312674.
39. Erpelding SG, **Dugan A**, Isharwal S, Strup, S, James A, Gupta S. Cystectomy for benign disease: readmission, morbidity, and complications. *Can J Urol*. 2018 Oct;25(5):9473-9479.
40. Harris A, Hensley P, Goodwin J, **Dugan A**, Bell J, Bhalodi A, Bylund J. Examining and Understanding Value: The Cost of Preoperative Characteristics, Intraoperative variables, and Postoperative Complications of Minimally-Invasive Partial Nephrectomy. *Urology Practice* 2018; ISSN 2352-0779.
41. Boustany AN, Elmaraghi S, Agochukwu N, Cloyd B, **Dugan AJ**, Rinker B. A breast prosthesis infection update: Two-year incidence, risk factors and management at single institution. *Indian J Plast Surg* 2018;51:7-14.
42. Murphy M, Erpelding S, Chishti A, **Dugan A**, Ziada A, Kiessling S. Influence of BMI in nephrolithiasis in an Appalachian pediatric population: A single-center experience. *Journal of Pediatric Urology*, Volume 14, Issue 4, 330.e1 - 330.e8.
43. Lacy J, Johnson S, **Dugan A**, Gupta S. Urethroplasty Practice Patterns of Genitourinary Reconstructive Surgeons. *Urology Practice*. 2018 May. Volume 5, Issue 3, 223-227.

44. Avila, J. , Smith, B. , Mead, T. , Jurma, D. , Dawson, M. , Mallin, M. and **Dugan, A.** (2018), Does the Addition of M-Mode to B-Mode Ultrasound Increase the Accuracy of Identification of Lung Sliding in Traumatic Pneumothoraces?. *J Ultrasound Med*, 37: 2681-2687.
45. Plymale MA, Davenport DL, **Dugan A**, Zachem A, Roth JS. Ventral hernia repair with poly-4-hydroxybutyrate mesh. *Surg Endosc*. 2018 Apr;32(4):1689-1694. PubMed PMID: 28916979.
46. Ruiz J, **Dugan A**, Davenport DL, Gedaly R. Blood transfusion is a critical determinant of resource utilization and total hospital cost in liver transplantation. *Clin Transplant*. 2018 Feb;32(2). PMID: 29193383.
47. Song K, Chakraborty A, Dawson M, **Dugan A**, Adkins B, Doty C. Does the Podcast Video Playback Speed Affect Comprehension for Novel Curriculum Delivery? A Randomized Trial. *West J Emerg Med*. 2018 Jan;19(1):101-105. PubMed PMID: 29383063.
48. Lacy JM, Madden-Fuentes RJ, **Dugan A**, Peterson AC, Gupta S. Short-term Complication Rates Following Anterior Urethroplasty: An Analysis of National Surgical Quality Improvement Program Data. *Urology*. 2018 Jan;111:197-202. PubMed PMID: 28823639.
49. Lacy, J., **Dugan, A.**, Gupta, S. Characteristics and predictors of complications after urethroplasty: Effect of operative duration, length of stay, and use of tissue transfer. *European Urology Supplements*, 2017; 16(3), E486-E487.
50. Acosta LF, Garcia CR, **Dugan A**, Marti F, Davenport D, Gedaly R. Impact of super obesity on perioperative outcomes after hepatectomy: The weight of the risk. *Surgery*. 2017 Nov;162(5):1026-1031. PubMed PMID: 28866313.
51. Morizio KM, Baum RA, **Dugan A**, Martin JE, Bailey AM. Characterization and Management of Patients with Heroin versus Nonheroin Opioid Overdoses: Experience at an Academic Medical Center. *Pharmacotherapy*. 2017 Jul;37(7):781-790. PubMed PMID: 28100012.
52. Kim S, Kramer SP, **Dugan AJ**, Minion DJ, Gurley JC, Davenport DL, Ferraris VA, Saha SP. Cost analysis of iliac stenting performed in the operating room and the catheterization lab: A case-control study. *Int J Surg*. 2016 Dec;36(Pt A):1-7. PubMed PMID: 27746156.
53. Jackson N, **Dugan A**, Davenport D, Daily M, Shah M, Berger J, Gedaly R. Risk factors for increased resource utilization and critical care complications in patients undergoing hepaticojejunostomy for biliary injuries. *HPB (Oxford)*. 2016 Sep;18(9):712-7. PubMed Central PMCID: PMC5011122.
54. Wade A, **Dugan A**, Plymale MA, Hoskins J, Zachem A, Roth JS. Hiatal Hernia Cruroplasty with a Running Barbed Suture Compared to Interrupted Suture Repair. *Am Surg*. 2016 Sep;82(9):e271-4. PubMed PMID: 27670546.

55. Webb AL, **Dugan A**, Burchett W, Barnett K, Patel N, Morehead S, Silverberg M, Doty C, Adkins B, Falvo L. Effect of a Novel Engagement Strategy Using Twitter on Test Performance. *West J Emerg Med*. 2015 Nov;16(6):961-4. Central PMCID: PMC4651604.

ACCEPTED
MANUSCRIPTS
PENDING
PUBLICATION

1. Stratification by Obesity Class, Rather than Age, Can Identify a Higher Percent of Children at Risk for NAFLD and Metabolic Dysfunction. *Pediatric Obesity*.

GRANT
FUNDING

NIH/NIDA 5K12DA035150 - Thomas Curry (PI) 1/2019 - 12/2021

Building Interdisciplinary Research Careers in Women's Health (BIRCWH)

Project Title: Longitudinal Trajectories of Mental Health Symptomatology and Psychosocial Functioning in Male and Female Iraq and Afghanistan Veterans: Associations with Suicidal Ideation.

Role: Statistician

American Society of Emergency Radiology – James Lee (PI) 6/2019 – 6/2020

ASER Multi-Center Review of Blunt Splenic Trauma: Optimal CT Diagnosis, Characterization, and Treatment

The goal is to collect and analyze data from multiple institutions around the United States to better understand how blunt splenic traumas are treated.

Role: Statistician

UL1TR001998 – Phillip Kern (PI) 6/2017 – 5/2020

Kentucky Center for Clinical and Translational Science

The goal, as a Clinical and Translational Science Awards hub, is to continue to champion innovation in the full spectrum of clinical and translational research while educating the workforce of the future, engaging our communities in biomedical science and working with the national network to advance cohesive multi-center clinical trials, which will ultimately elevate the health and quality of life of the populace of Central Appalachia.

Role: Co-Investigator

CONFERENCE
PRESENTATIONS

- **Dugan, A.J.**, Nelson, P.T., Fardo, D.W. Association Between WWOX Gene Variants and Neuropathologic Endophenotypes. Poster Presentation. Markesbery Symposium, November 2020.
- **Dugan, A.J.**, Fardo, D.W., Vsevolozhskaya, O.A. Statistical Inference for Gene-Level Analysis Based on Functional Linear Models. Oral presentation. Joint Statistical Meetings, July 2019.
- **Dugan, A.J.**, Vsevolozhskaya, O.A. Functional Linear Models: An Application to the Effect of Pain on the Rewarding Properties of Opioids. Poster Presentation. UK Substance Use Research Day, March 2019.
- **Dugan, A.J.**, Fardo, D.W., Vsevolozhskaya, O.A. Testing for Pleiotropy Using Functional Linear Regression: An Application with Neurodegeneration Endophenotypes. Poster presentation. American Society of Human Genetics Conference, October 2018.

- **Dugan, A.J.**, Vsevolozhskaya, O.A. Uncovering Genetic Architecture with Simultaneous Confidence Bands: Towards Correct Coverage. Poster Presentation. Southern Regional Council on Statistics Summer Research Conference, June 2018.

TEACHING
EXPERIENCE

University of Kentucky, Invited Lectures:

- MDE 801: Study Design and Statistical Methods in Clinical Research. University of Kentucky, College of Medicine, July 2021.
- BST 693: Strategies for Reproducibility in Statistical Programming. University of Kentucky, College of Public Health, March 2021.
- MDE 801: Study Design and Statistical Methods in Clinical Research. University of Kentucky, College of Medicine, October 2020.
- MDE 801: Study Design and Statistical Methods in Clinical Research. University of Kentucky, College of Medicine, July 2020.
- BST 693: Strategies for Reproducibility in Statistical Programming. University of Kentucky, College of Public Health, February 2020.
- MDE 801: Study Design and Statistical Methods in Clinical Research. University of Kentucky, College of Medicine, November 2019.
- ICR Summer Workshop: Introduction to Data Analysis. University of Kentucky, College of Medicine, July 2019.

University of Kentucky, Department of Statistics - Graduate Teaching Assistant

- STA 570 Basic Statistical Analysis (Fall 2014, Spring 2015)
- STA 210 Introduction to Statistical Reasoning (Fall 2013, Spring 2014)

University of Kentucky, Department of Statistics - Primary Instructor

- STA 210 Introduction to Statistical Reasoning (Summer 2014)

PROFESSIONAL
DEVELOPMENT

- Regression Modeling Strategies Short Course from Dr. Frank Harrell. May 2020.
- State of the Art Methods to Estimate Propensity Scores from the RAND Corporation. September 2019.
- Mendelian Randomization Boot Camp from Columbia University. June 2018.
- Secondary Survey Analysis Workshop from the University of Kentucky. June 2016.
- Generalized Linear Mixed Models Short Course from the American Statistical Association. November 2015.

SOFTWARE
AND
PROGRAMMING
LANGUAGES

- Expert programmer in R, proficient in SAS, SPSS, and JMP.
- Highly skilled with LaTeX, Markdown, and Microsoft Office.
- Experienced with genomic, RNA-seq, and NanoString data processing and analysis pipelines.

PEER REVIEW
ACTIVITIES

- Statistical Reviewer, Journal of the American Heart Association. August 2021 – present.
- Manuscript reviewer, Frontiers in Genetics, Applied Genetic Epidemiology Section. February 2019.
- Manuscript reviewer, Journal of Alzheimer's Disease. July 2018.

HONORS AND AWARDS

- Best Lower Extremity Reconstruction Paper Award, Calendar 2020, for *Trends in the Surgical Management of Lower Extremity Gustilo Type IIIB/IIIC Injuries*. Plastic and Reconstruction Surgery, October 2021.
- Outstanding Doctoral Student Award from the University of Kentucky's College of Public Health. April 2021.
- NSF-Funded Travel Award – Workshop on Emerging Data Science Methods for Complex Biomedical and Cyber Data. March 2020 (delayed due to COVID-19).
- Eastern North American Region (ENAR) of the International Biometric Society Conference Student Travel Award from the University of Kentucky's Biostatistics, Epidemiology, and Research Design (BERD) Core. March 2020 (virtual conference due to COVID-19).
- NSF-Funded Harshbarger Travel Award - SRCOS Summer Research Conference, June 2018
- Best Undergraduate Medical Education Research Abstract at the Council of Residency Directors in EM Academic Assembly 2018. Videoconferencing for Third Year Medical Students' Mid-Clerkship Feedback Sessions. San Antonio, TX, April 2018

MENTORING

MPH Biostatistics Practicum, Summer 2016, Fei Yang - Surgical databases and propensity score analyses

SERVICE

- Hiring committee member for Biomedical Data Scientist positions, Biostatistics CIRCL, Department of Biostatistics, University of Kentucky. May 2021.
- Biostatistical committee member, CCTS, Electronic Data Capture System product review. February 2020.
- Hiring committee member for statistician positions, Department of Biostatistics, College of Public Health, University of Kentucky. January 2020.

MEMBERSHIPS

2014 – present	Member, American Statistical Association
2018 – present	Member, American Society of Human Genetics
2019 – present	Member, Association of Clinical and Translational Statisticians
2021 - present	Member, Eastern North American Region International Biometric Society