

Education

PhD Biostatistics	2022
Vanderbilt University	
Advisor: Leena Choi, PhD	
Dissertation: <i>Bayesian Methods for Cumulative Probability Models and Population Pharmacokinetic Models</i>	
ScM Biostatistics	2010
Johns Hopkins University	
Advisor: Frank Curriero, PhD	
Thesis: <i>Quantifying Walking Path Quality Using an Objective Measure of Physical and Social Disorder</i>	
B.A. Mathematics (minor in Statistics)	2006
Messiah College	

Professional Experience

Statistical Scientist	2022 - present
Berry Consultants	
Austin, TX	
ORISE Research Fellow	2018 - 2019
US Food and Drug Administration, Center for Drug Evaluation and Research	
Silver Spring, MD	
Biostatistician	2014 - 2016
The Emmes Corporation	
Rockville, MD	
Statistical Analyst	2013 - 2014
Biostat Solutions, Inc.	
Frederick, MD	
Research Associate	2010 - 2013
Johns Hopkins School of Medicine, Department of Surgery	
Baltimore, MD	
Research Associate	2009 - 2010
Johns Hopkins School of Public Health, Biostatistics Center	
Baltimore, MD	
Statistical Analyst	2006 - 2008
Pennsylvania Department of Health, Bureau of Health Statistics and Research	
Harrisburg, PA	

Professional Affiliations & Service

Treasurer, Vanderbilt Biostatistics Graduate Student Association
International Biometric Society, Eastern North American Region
American Statistical Association

2018 - 2019
2015 - present
2009 - present

Technical Skills

Statistical Software: R, Stan, JAGS, Monolix, Stata, SAS
Other: FACTS, Python, MATLAB, LaTeX

Oral Presentations

James, N, Lorenzi E, Innovative Clinical Trial Design in Angelman Syndrome: Learning Efficiently Using Every Participant and Every Outcome. *FAST Translational Research Symposium and Angelman Syndrome Biomarker and Outcome Measure Consortium Scientific Meeting*. Hollywood, FL. 2023.

James, N Bayesian Cumulative Probability Models for Continuous and Mixed Outcomes. *Vanderbilt Biostatistics Weekly Seminar*. Nashville, TN. 2019.

James, N Intro to Bayesian Regression Modeling in R using rstanarm. *Vanderbilt Biostatistics Statistical Computing Series*. Nashville, TN. 2019.

James, N, Curriero F, Pollack K, Roman C, Shields T, Furr-Holden D, Cooley M. The Importance of Considering Path Quality When Exploring Environmental Determinants of Walking to School. *Active Living Research Annual Conference*. San Diego, CA. 2011.

Poster Presentations

James, N, Harrell, F. Bayesian Joint Benefit-Risk Copula Model Calibration. *ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop*. Washington, DC. 2019.

James, N, Harrell, F. Operating Characteristics of Bayesian Joint Benefit-Risk Copula Models. *International Biometric Society, Eastern North American Region Meeting*. Philadelphia, PA. 2019.

James, N, Harrell, F, Shepherd, B. Bayesian Cumulative Probability Models for Continuous Response Variables. *Joint Statistical Meetings*. Vancouver, Canada. 2018.

Publications

Horvat, CM, Suresh, S, **James, N**, Aneja, RK, Au, AK, Berry, S, Blumer, A, Bricker, K, Clark, RSB, Dolinich, H, Hahner, S, Jockel, C, Kalivoda, J, Loar, I, Marasco, D, Marcinick, A, Marroquin, O, O'Brien, J, Pelletier, J, Ramgopal, S, Venkataraman, S, Angus, DC, Butler, G. (2024). A randomized, embedded, pragmatic, Bayesian clinical trial examining clinical decision support for high flow nasal cannula management in children with bronchiolitis: design and statistical analysis plan. *Trials*. 2024; 25(1), 484.

Tian, Y, Li, C, Tu, S, **James, N**, Harrell, F, Shepherd, B. Addressing Detection Limits with Semiparametric Cumulative Probability Models. *Journal of the American Statistical Association*. 2024; 119(546): 864-874.

Shannon, M, Muhammad, A, **James, N**, Williams, M, Breeyear, J, Edwards, T, Mosley, J, Choi, L, Kannankeril, P, Van Driest, S. Variant-Based Heritability Assessment of Dexmedetomidine and Fentanyl Clearance in Pediatric Patients. *Clinical and Translational Science*. 2023.

James, N, Breeyear, J, Caprioli, R, Edwards, T, Hachey, B, Kannankeril, P, Keaton, J, Marshall, M, Van Driest, S, Choi, L. Population Pharmacokinetic Analysis of Dexmedetomidine in Children using Real World Data from

Electronic Health Records and Remnant Specimens. *British Journal of Clinical Pharmacology*. 2022; 88(6): 2885-2898.

McNeer, E, Beck, C, Weeks, H, Williams, M, **James, N**, Bejan, C, Choi, L. Building longitudinal medication dose data using medication information extracted from clinical notes in electronic health records. *Journal of the American Medical Informatics Association*. 2020; 1-9.

Choi, L, Beck, C, McNeer, E, Weeks, H, Williams, M, **James, N**, Niu, X, Abou-Khalil, B, Birdwell, K, Roden, D, Stein, C, Bejan, C, Denny, J, Van Driest, S. Development of a System for Postmarketing Population Pharmacokinetic and Pharmacodynamic Studies Using Real-World Data From Electronic Health Records. *Clinical Pharmacology and Therapeutics*. 2020; 107(4):934-943.

Wetzel, P, Lindblad, A, Raizada, H, **James, N**, Mulatya, C, Kannan, M, Villamar, Z, Gitchel, G, Weaver, L. Eye tracking results in post-concussive syndrome versus normative participants. *Investigative Ophthalmology & Visual Science*. 2018; 59(10): 4011-4019.

Walker, J, **James, N**, Campbell, H, Wilson, S, Churchill, S, Weaver, L. Sleep Assessments for a Mild Traumatic Brain Injury trial in a Military Population. *Undersea and Hyperbaric Medicine*. 2016; 43(5): 549-566.

Osband, A, **James, N**, Segev, D. Extraction Time of Kidneys from Deceased Donors and Impact on Outcomes. *American Journal of Transplantation*. 2016; 16(2): 700-703.

Wang, Y, Springer, S, Mulvey, C, Silliman, N, Schaefer, J, Sausen, M, **James, N**, Rettig, E, Guo, T, Pickering, C, Bishop, J, Chung, C, Califano, J, Eisele, D, Fakhry, C, Gourin, C, Ha, P, Kang, H, Kiess, A, Koch, W, Myers, J, Quon, H, Richmon, J, Sidransky, D, Tufano, R, Westra, W, Bettegowda, C, Diaz, L, Papadopoulos, N, Kinzler, K, Vogelstein, B, Agrawal, N. Detection of somatic mutations and HPV in the saliva and plasma of patients with head and neck squamous cell carcinomas. *Science Translational Medicine*. 2015; 7(293): 293ra104.

Orandi, B, **James, N**, Hall, E, Van Arendonk, K, Garonzik-Wang, J, Gupta, N, Montgomery, R, Desai, N, Segev, D. Center-Level Variation in the Development of Delayed Graft Function After Deceased Donor Kidney Transplantation. *Transplantation*. 2015; 99(5): 997-1002.

Van Arendonk, K, King, E, Orandi, B, **James, N**, Smith, J, Colombani, P, Magee, J, Segev, D. Loss of Pediatric Kidney Grafts During the “High-Risk Age Window”: Insights From Pediatric Liver and Simultaneous Liver-Kidney Recipients. *American Journal of Transplantation*. 2015; 15(2): 445-452.

Van Arendonk, K, Chow, E, **James, N**, Orandi, B, Ellison, T, Smith, J, Colombani, P, Segev, D. Choosing the Order of Deceased Donor and Living Donor Kidney Transplantation in Pediatric Recipients: A Markov Decision Process Model. *Transplantation*. 2015; 99(2): 360-366.

McAdams-DeMarco, M, **James, N**, Salter, M, Walston, J, Segev, D. Trends in Kidney Transplant Outcomes in Older Adults. *Journal of the American Geriatrics Society*. 2014; 62(12): 2235-2242.

Van Arendonk, K, Boyarsky, B, Orandi, B, **James, N**, Smith, J, Colombani, P, Segev, D. National Trends over 25 years in pediatric kidney transplant outcomes. *Pediatrics*. 2014; 133(4): 594-601.

Locke, J, **James, N**, Mannon, R, Mehta, S, Pappas, P, Baddley, J, Desai, N, Montgomery, R, Segev, D. Immunosuppression Regimen and the Risk of Acute Rejection in HIV-infected Kidney Transplant Recipients. *Transplantation*. 2013; 97(4): 446-450.

Van Arendonk, K, Orandi, B, **James, N**, Segev, D, Colombani, P. Living Unrelated Renal Transplantation: A Good Match for the Pediatric Candidate? *Journal of Pediatric Surgery*. 2013; 48(6): 1277-1282.

Van Arendonk, K, **James, N**, Orandi, B, Garonzik-Wang, J, Smith, J, Colombani, P, Segev, D. Order of Donor Type in Pediatric Kidney Transplant Recipients Requiring Retransplantation. *Transplantation*. 2013; 96(5): 487-493.

Van Arendonk, K, Garonzik-Wang, J, Deshpande, N, **James, N**, Smith, J, Montgomery, R, Colombani, P, Segev, D. Practice Patterns and Outcomes in Retransplantation among Pediatric Kidney Transplant Recipients. *Transplantation*. 2013; 95(11): 1360-1368.

Van Arendonk, K, **James, N**, Boyarsky, B, Garonzik-Wang, J, Orandi, B, Magee, J, Smith, J, Colombani, P, Segev, D. Age at Graft Loss after Pediatric Kidney Transplantation: Exploring the High-Risk Age Window. *Clinical Journal of the American Society of Nephrology*. 2013.

Garonzik-Wang, J, **James, N**, Van Arendonk, K, Gupta, N, Orandi, B, Hall, E, Massie, A, Montgomery, R, Dagher, N, Singer, A, Cameron, A, Segev, D. The Aggressive Phenotype Revisited: Utilization of Higher-Risk Liver Allografts. *American Journal of Transplantation*. 2013; 13(4): 936-942.

Curriero, F, **James, N**, Shields, T, Gouvis Roman, C, Furr-Holden, D, Cooley-Strickland, M, Pollack, K. Exploring Walking Path Quality as a Factor for Urban Elementary School Children's Active Transport to School. *Journal of Physical Activity & Health*. 2013; 10: 323-334.

Deshpande, N, **James, N**, Kucirka, L, Boyarsky, B, Garonzik-Wang, J, Cameron, A, Singer, A, Dagher, N, Segev, D. Pregnancy Outcomes of Liver Transplant Recipients: A Systematic Review and Meta-Analysis. *Liver Transplantation*. 2012; 18(6): 621-629.

Garonzik-Wang, J, Berger, J, Ros, R, Kucirka, L, Deshpande, N, Boyarsky, B, Montgomery, R, Hall, E, **James, N**, Segev, D. Live Donor Champion: Finding Live Donors by Separating the Advocate From the Patient. *Transplantation*. 2012; 93(11): 1147-1150.

Hall, E, **James, N**, Garonzik-Wang, J, Berger, J, Montgomery, R, Dagher, N, Desai, N, Segev, D. Center-Level Factors and Racial Disparities in Living Donor Kidney Transplantation. *American Journal of Kidney Diseases*. 2012; 59(6): 849-857.

Garonzik-Wang, J, Govindan, P, Grinnan, J, Liu, M, Ali, H, Chakraborty, A, Jain, V, Ros, R, **James, N**, Kucirka, L, Hall, E, Berger, J, Montgomery, R, Desai, N, Dagher, N, Sonnenday, C, Englesbe, M, Makary, M, Walston, J, Segev, D. Frailty and Delayed Graft Function in Kidney Transplant Recipients. *Archives of Surgery*. 2012; 147(2): 190-193.

Montgomery, J, Berger, J, Warren, D, **James, N**, Montgomery, R, Segev, D. Outcomes of ABO-Incompatible Kidney Transplantation in the United States. *Transplantation*. 2012; 93(6): 603-609.

Garonzik-Wang, J, **James, N**, Weatherspoon, K, Deshpande, N, Berger, J, Hall, E, Montgomery, R, Segev, D. The Aggressive Phenotype: Center-Level Patterns in the Utilization of Suboptimal Kidneys. *American Journal of Transplantation*. 2012; 12(2): 400-408.

Hall, E, Massie, A, **James, N**, Garonzik-Wang, J, Montgomery, R, Berger, J, Segev, D. Effect of Eliminating Priority Points for HLA-B Matching on Racial Disparities in Kidney Transplant Rates. *American Journal of Kidney Diseases*. 2011; 58(5): 813-816.

Van Arendonk, K, **James, N**, Locke, J, Montgomery, R, Segev, D. Late Graft Loss among Pediatric Recipients of DCD Kidneys. *Clinical Journal of the American Society of Nephrology*. 2011; 6(11): 2705-2711.

Kucirka, L, Grams, M, Lessler, J, Hall, E, **James, N**, Massie, A, Montgomery, R, Segev, D. Association of Race and Age With Survival Among Patients Undergoing Dialysis. *JAMA: The Journal of the American Medical Association*. 2011; 306(6): 620-626.

Deshpande, N, **James, N**, Kucirka, L, Boyarsky, B, Garonzik-Wang, J, Montgomery, R, Segev, D. Pregnancy Outcomes in Kidney Transplant Recipients: A Systematic Review and Meta-Analysis. *American Journal of Transplantation*. 2011; 11(11): 2388-2404.

Berger, J, Muzaale, A, **James, N**, Hoque, M, Garonzik-Wang, J, Montgomery, R, Massie, A, Hall, E, Segev, D. Living Kidney Donors Ages 70 and Older: Recipient and Donor Outcomes. *Clinical Journal of the American Society of Nephrology*. 2011; 6(12): 2887-2893.

Butz, A, Kub, J, Donithan, **James, N**, Thompson, R, Bellin, M, Tsoukleris, M, Bollinger, M. Influence of Caregiver and Provider Communication on Symptom Days and Medication Use for Inner-City Children With Asthma. *Journal of Asthma*. 2010; 47(4): 478-485.

Teaching Experience

Teaching Assistant

Modeling & Machine Learning I, Vanderbilt University	Spring 2020
Regression Modeling Strategies, Vanderbilt University	Spring 2019
Applied Survival Analysis, Vanderbilt University	Fall 2017, 2018
Modern Regression Analysis, Vanderbilt University	Spring 2017
Principles of Modern Biostatistics, Vanderbilt University	Fall 2016
Methods in Biostatistics I & II, Johns Hopkins University	Fall 2010
Data Analysis Workshop I & II, Johns Hopkins University	Summer 2010
Spatial Analysis and GIS I & II, Johns Hopkins University	Spring 2010
Biostatistics in Public Health, Johns Hopkins University	Fall 2009

Fellowships

FDA/CDER ORISE Fellowship	2018 - 2019
Vanderbilt University Provost's Graduate Fellowship	2016 - 2021

Honors & Awards

Commodore Award, Vanderbilt Department of Biostatistics	2020
First Place, GSS Student Data Challenge, Joint Statistical Meetings	2017
Information Processing in Medical Imaging Underrepresented Populations Travel Award	2017