

CURRICULUM VITAE

PHILIP TURK

CONTACT INFORMATION

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EDUCATION

PhD Statistics, Montana State University (MSU), Bozeman, MT, 2003
Dissertation: "A Response Surface Approach to Assessing the Relative Efficiency of Adaptive Cluster Sampling"
Advisor: Dr. John Borkowski
MS Statistics, Montana State University, Bozeman, MT, 1998
MS Biology, Western Illinois University, Macomb, IL, 1989
BS Zoology, Ohio University, Athens, OH, 1986

EXPERIENCE

- Joint Appointment, 2024 - present
Professor, Department of Family and Community Medicine;
Director, Office of Research and Sponsored Programs
Northeast Ohio Medical University (NEOMED)
Rootstown, OH
- Chair; Professor of Data Science, 2022 - 2024
MS/PhD Program Director, 2023 - 2024
Department of Data Science
John D. Bower School of Population Health
University of Mississippi Medical Center (UMMC)
Jackson, MS
- Director of Data Science and Artificial Intelligence; Associate Professor, 2022
Director of Biostatistics and Data Science; Associate Professor, 2019 - 2022
Center for Outcomes Research and Evaluation (CORE)
Atrium Health
Charlotte, NC
- Joint Appointment, 2014 - 2018
Associate Professor of Statistics, Department of Statistics;
Statistical Consultant, Graybill Statistical Laboratory
Colorado State University (CSU)
Fort Collins, CO

- Joint Appointment, 2008 - 2014
Assistant Professor of Statistics, Department of Statistics;
Statistical Consultant, Davis College Experiment Station
West Virginia University (WVU)
Morgantown, WV
- Teaching Assistant Professor of Statistics, 2006 - 2008
Department of Mathematics and Statistics
Northern Arizona University (NAU)
Flagstaff, AZ
- Teaching Assistant Professor of Statistics, 2004 - 2006
Department of Mathematics
University of Alaska – Anchorage (UAA)
Anchorage, AK
- Statistician, 1993 - 1995
Associate Biochemist, 1991 - 1993
Abbott Laboratories Inc.
Abbott Park, IL
- Research Scientist, Immuno-Oncology, 1990 - 1991
Cancer Treatment Centers of America
Zion, IL

REFEREED PUBLICATIONS

1. Turk, P., Anderson, W., Burns, R., Chou, S.-H., Kearns, J., McCarter, M., Nguyen, H., Passaretti, C., Rose, G., Stephens, C., Zhao, J., and McWilliams, A. (2023), “A Regionally Tailored Epidemiological Forecast and Monitoring Program to Guide a Healthcare System in the COVID-19 Pandemic,” submitted to *Journal of Infection and Public Health*.
2. Wofford, M., Brown, C., Walston, B., Whiteside, H., Rigdon, J., and Turk, P. (2023), “High-Fidelity Simulation and Cultural Humility in Simulation Centers,” submitted to *Simulation in Healthcare*.
3. Toyserkani, G., Ewusie, S., Turk, P., Quick, J., and Morrato, E. (2023), “Evolution of Cross-Sectional Survey Protocol Quality Over Time: A Case Series of U.S. Rems Knowledge Survey Protocols (2007 – 2020),” *Drug Safety*, 46(11):1073-1087.
4. Fox, C., Ekaney, M., Runyon, M., Nguyen, H., Turk, P., McKillop, I., Murphy, C. (2023), “Assessing Platelet Mitochondrial Dysfunction in a Murine Model of Acute Acetaminophen Toxicity,” *Journal of Medical Toxicology*, 19(4):341–351.
5. Goyal, R., Slipher, S., Turk, P., Carnegie, N., Little, S., and De Gruttola, V. (2023), “Estimating Contact Network Properties by Integrating Multiple Data Sources Associated With Infectious Diseases,” *Statistics in Medicine*, 42(20):3593-3615.
6. Wofford, M., Brown, C., Walston, B., Whiteside, H., Rigdon, J., and Turk, P. (2023), “Skin Tone and Gender of High-Fidelity Simulation Manikins in Emergency Medicine Residency Training and Their Use in Cultural Humility Training,” *Western Journal of Emergency Medicine*, 24(4):668-674.

7. Skallsjö, K., von Bültzingslöwen, I., Hasséus, B., Johansson, J.-E., Öhman, J., Raber-Durlacher, J., Huysmans, M.-C., Laheij, A., van Leeuwen, S., Hovan, A., Garming-Legert, K., Nguyen, H., Turk, P., Rozema, F., Blijlevens, N., and Brennan, M. (2023), “Oral Health in Patients Scheduled for Hematopoietic Stem Cell Transplantation in the Orastem Study,” *PLOS One*, 18(5):e0285615.
8. Watson, M., Zhao, J., Turk, P., Hetherington, T., Schiffern, L., Ross, S., Matthews, B., and Reinke, C. (2022), “Emergency General Surgery Transfers Have Higher Inpatient Mortality and Post-Discharge Emergency Department Visits: A Propensity Score Matched Analysis,” *Journal of American College of Surgeons*, 234(5):737-746.
9. Chou, S.-H., Turk, P., Kowalkowski, M., Kearns, J., Roberge, J., Priem, J., Taylor, Y., Burns, R., Palmer, P., and McWilliams, A. (2022), “Implementation of an Adaptable COVID-19 Utilization and Resource Visualization Engine (CURVE) to Depict In-Hospital Resource Forecasts Over Time,” *Journal of Data Science, Statistics, and Visualization*, 2(7):1-13.
10. Nguyen, H., Turk, P., and McWilliams, A. (2021), “Forecasting COVID-19 Hospital Census: A Multivariate Time-Series Model Based on Local Infection Incidence,” *Journal of Medical Internet Research Public Health and Surveillance*, 7(8):e28195.
11. Johnson, S., Valdés-Martínez, A., Turk, P., McIlwraith, W., Barrett, M., McGilvray, K., and Frisbie, D. (2021), “Longitudinal Tendon Healing Assessed With Multi-Modality Advanced Imaging and Tissue Analysis,” *Equine Veterinary Journal*, DOI: 10.1111/evj.13478.
12. Turk, P., Tran, T., Rose, G., and McWilliams, A. (2021), “A Predictive Internet-Based Model for COVID-19 Hospitalization Census,” *Scientific Reports*, 11:5106. *Recognized as a Wake Forest Department of Internal Medicine 2021 Outstanding Publication.* Media coverage: *Voice of America*.
13. Reed, K., Kunz, I., Scare, J., Nielsen, M., Turk, P., Coleman, R., and Coleman, S. (2021), “The Pelvic Flexure Separates Distinct Microbial Communities in the Equine Hindgut,” *Scientific Reports*, 11:4332.
14. Turk, P., Chou, S.-H., Kowalkowski, M., Palmer, P., Priem, J., Spencer, M., Taylor, Y., and McWilliams, A. (2020), “Modeling COVID-19 Latent Prevalence to Assess a Public Health Intervention at a State and Regional Scale: Retrospective Cohort Study,” *Journal of Medical Internet Research Public Health and Surveillance*, 6(2):e19353.
15. Cohen, J., and Turk, P. (2020), “Correction of Joel E. Cohen (2020) Sum of a Random Number of Correlated Random Variables that Depend on the Number of Summands,” *The American Statistician*, 73(1):56-60.
16. Allison, T., Moritz, J., Turk, P., and Stone-Roy, L. (2020), “Lingual Electrotactile Discrimination Ability Is Associated With the Presence of Specific Connective Tissue Structures (Papillae) On the Tongue Surface,” *PLOS One*, 15(8):e0237142.
17. Sexton, I., Turk, P., Ringer, L., and Brown, C. (2020), “Slash Pile Burn Scar Restoration: Tradeoffs Between Abundance of Non-Native and Native Species,” *Forests*, 11(8):813.
18. Magee, C., McDaniel, S., Turk, P., Striegel, N., and Roman-Muniz, I. (2020), “Information-Seeking Preferences of the Colorado Equine Industry for Distribution of Disease Outbreak Information,” *Journal of Equine Veterinary Science*, 91:103126.

19. Rink, K., Turk, P., Archibeque-Engle, S., Wilmer, H., Ahola, J., Hadrich, J., and Roman-Muniz, I. (2019), "Dairy Producer Perceptions of the Farmers Assuring Responsible Management (FARM) Animal Care Program," *Journal of Dairy Science*, 102(12): 11317-11327.
20. Flaherty, K., Turk, P., and Anderson, J. (2019), "Comparing Stakeholder Attitudes Toward White-tailed Deer and Rare Plant Management in Canaan Valley, West Virginia," *Global Ecology and Conservation*, 17:e00519.
21. Bricklemeyer, R., Brown, D., Turk, P., and Clegg, S. (2018), "Comparing VisNIR, LIBS, and Combined VisNIR-LIBS for Intact Soil Core Soil Carbon Measurement," *Soil Science of America Journal*, 82(6):1482-1496.
22. Tipton, C., Ocheltree, T., Mueller, K., Turk, P., and Fernandez-Gimenez, M. (2018), "Revision of a State-and-Transition Model to Include Descriptions of State Functional Attributes," *Ecosphere*, 9(5):e02201. *Awarded Colorado Section of the Society for Range Management 2018 Outstanding Publication.*
23. Fetsch, R., and Turk, P. (2018), "A Quantitative Assessment of the Effectiveness of USDA's AgrAbility Project," *Disability and Health Journal*, 11(2):249-255.
24. Strain, G., Turk, P., Helmick, J., and Anderson, J. (2017), "Amphibian Reproductive Success as a Gauge of Functional Equivalency of Created Wetlands in the Central Appalachians," *Wildlife Research*, 44(4):354-364.
25. Moritz, J., Turk, P., Williams, J., and Stone-Roy, L. (2017), "Perceived Intensity and Discrimination Ability for Lingual Electrotactile Stimulation Depends on Location and Orientation of Electrodes," *Frontiers in Human Neuroscience*, 11(186).
26. Strain, G., Turk, P., Anderson, J., and Tri, A. (2017), "Anuran Occupancy of Created Wetlands in the Central Appalachians," *Wetlands Ecology and Management*, 25:369-384.
27. Choi, E., Tang, F., Kim, S., and Turk, P. (2016), "Longitudinal Relationships Between Productive Activities and Functional Health in Later Years: A Multivariate Latent Growth Curve Modeling Approach," *The International Journal of Aging and Human Development*, 83(4):418-440.
28. Sugovic, M., Turk, P., and Witt, J. (2016), "Perceived Distance and Obesity: It's What You Weigh, Not What You Think," *Acta Psychologica*, 165:1-8. Media coverage: *The Late Show with Stephen Colbert*, *New York Magazine*, *The Guardian*.
29. Lyons, S., Alizadeh, E., Mannheimer, J., Schuamberg, K., Castle, J., Turk, P., Thamm, D., Schroder, B., and Prasad, A. (2016), "Changes in Cell Shape are Correlated with Metastatic Potential in Murine and Human Osteosarcomas," *Biology Open*, 5(3):289-299.
30. McCoard, K., McCoard, N., Turk, P., and Anderson, J. (2016), "Habitat Characteristics that Influence the Occurrence of Wood Turtles at the Southern Limits of Their Range in the Central Appalachians," *Journal of Herpetology*, 50(3):381-387.
31. Katzner, T., Turk, P., Duerr, A., Miller, T., Lanzone, M., Cooper, J., Brandes, D., Tremblay, J., and Lemaitre, J. (2015), "Use of Multiple Modes of Flight Subsidy by a Soaring Terrestrial Bird, the Golden Eagle, When on Migration," *Journal of the Royal Society Interface*, 12(112):20150530.

32. Nottingham, A., Thompson, J., Turk, P., Li, Q., and Connolly, S. (2015), "Seasonal Dynamics of Surface Soil Bulk Density in a Forested Catchment," *Soil Science Society of America Journal*, 79:1163-1168.
33. St. Laurent, R., and Turk, P. (2014), "Power of a Rank-Based Test for Differences Between Treatment Distributions in a Randomized Complete Block Design," *Journal of Data Science*, 12:415-436.
34. Strain, G., Turk, P., and Anderson, J. (2014), "Functional Equivalency of Created and Natural Wetlands: Diet Composition of Red-Spotted Newts," *Wetlands Ecology and Management*, 22(6):659-669.
35. Davidson, J., Kenney, P., Manor, M., Good, C., Weber, G., Aussanasuwannakul, A., Turk, P., Welsh, C., and Summerfelt, S. (2014), "Growth Performance, Fillet Quality, and Reproductive Maturity of Rainbow Trout Cultured to 5 Kilograms Within Freshwater Recirculating Systems," *Journal of Aquaculture Research and Development*, 5:4.
36. Rose, C., Turk, P., Selego, S., and Anderson, J. (2014), "White-Footed Mouse Select Fruits of Native Species over Invasive Honeysuckle Fruits," *Journal of Mammalogy*, 95(1):108-116.
37. Turk, P., and Lorimer, D. (2013), "An Empirical Bayesian Analysis Applied to the Globular Cluster Pulsar Population," *Monthly Notices of the Royal Astronomical Society*, 436(4):3720-3726.
38. Thompson, J., Pollio, A., and Turk, P. (2013), "Comparison of Munsell Soil Color Charts and the GLOBE Soil Color Book," *Soil Science Society of America Journal*, 77(6):2089-2093.
39. Bricklemeyer, R., Brown, D., Turk, P., and Clegg, S. (2013), "Improved Intact Soil-Core Carbon Determination Applying Regression Shrinkage and Variable Selection Techniques to Complete Spectrum Laser-Induced Breakdown Spectroscopy," *Applied Spectroscopy*, 67(10):1185-1199.
40. St. Laurent, R., and Turk, P. (2013), "The Effects of Misconceptions on the Properties of Friedman's Test," *Communications in Statistics: Simulation and Computation*, 42(7):1596-1615.
41. Beaman, K., Lilly, K., Gehring, C., Turk, P., and Moritz, J. (2012), "Influence of Pelleting on the Efficacy of an Exogenous Enzyme Cocktail Using Broiler Performance and Metabolism," *Journal of Applied Poultry Research*, 21(4):744-756.
42. Shires, L., Loop, S., Gehring, C., Lilly, K., Beaman, K., Turk, P., and Moritz, J. (2012), "Justifying Phytogetic Feed Additive Matrix Values in Conjunction with Exogenous Feed Enzymes," *Journal of Applied Poultry Research*, 21(1):39-47.
43. Lanzone, M., Miller, T., Turk, P., Brandes, D., Halverson, C., Maisonneuve, C., Tremblay, J., Cooper, J., O'Malley, K., Brooks, R., and Katzner, T. (2012), "Flight Responses by a Migratory Soaring Raptor to Changing Meteorological Conditions," *Biology Letters*, 8(5):710-713.
44. Smith, D., Welsh, S., and Turk, P. (2012), "Available Benthic Habitat Type May Influence Predation Risk in Larval Lampreys," *Ecology of Freshwater Fish*, 21(1):160-163.
45. Strain, G., Anderson, J., Michael, E., and Turk, P. (2012), "Hibernacula Use and Hibernation Phenology in the Common Snapping Turtle in Canaan Valley, West Virginia," *Journal of Herpetology*, 46(2):269-274.

46. Smith, D., Schweitzer, J., Turk, P., Bailey, J., Hart, S., Shuster, S., and Whitham, T. (2012), "Soil-Mediated Local Adaptation Alters Seedling Survival and Performance," *Plant and Soil*, 352(1-2):243-251.
47. Boyles, J., Lorimer, D., Turk, P., Mnatsakanov, R., Lynch, R., Ransom, S., Freire, P., and Belczynski, K. (2011), "Young Radio Pulsars in Galactic Globular Clusters," *The Astrophysical Journal*, 742(1), No. 51.
48. Smith, D., Welsh, S., and Turk, P. (2011), "Selection and Preference of Benthic Habitat by Small and Large Larval Ammocoetes of the Least Brook Lamprey," *Environmental Biology of Fishes*, 91(4):421-428.
49. Borkowski, J., Turk, P., and Chomtee, B. (2011), "Using Weak and Strong Heredity to Generate Weighted Design Optimality Criteria for Response Surface Designs," Invited submission, *Journal of Statistical Theory and Applications*, 10(2):163-192.
50. Lilly, K., Shires, L., West, B., Beaman, K., Loop, S., Turk, P., Bissonnette, G., and Moritz, J. (2011), "Strategies to Reduce Preharvest Salmonella in Organic Broilers," *Journal of Applied Poultry Research*, 20(3):313-321.
51. Lilly, K., Gehring, C., Beaman, K., Turk, P., Sperow, M., and Moritz, J. (2011), "Examining the Relationship Between Pellet Quality, Broiler Performance and Bird Sex," *Journal of Applied Poultry Research*, 20(2):231-239.
52. Simmons, C., Turk, P., Beamer, S., Jaczynski, J., Semmens, K., and Matak, K. (2011), "The Effect of a Flaxseed Oil-Enhanced Diet on the Product Quality of Farmed Brook Trout Fillets," *Journal of Food Science*, 76(3):192-197.
53. Shaffer, K., Turk, P., Wagner, W., and Felton, E. (2011), "Residual Feed Intake, Body Composition, and Fertility in Yearling Beef Heifers," *Journal of Animal Science*, 89(4):1028-1034.
54. Hassler, C., Grushecky, S., Slahor, J., and Turk, P. (2010), "An Assessment of the Impacts of a Domestic Phytosanitary Treatment Regulation for WPM in the US," *Forest Products Journal*, 60(4):309-314.
55. Basweti, E., Turk, P., Rayburn, E., and Bryan, W. (2009), "No-Till Sequential Cropping of Summer and Fall Annual Forage Species Compared with Grassland," *Agronomy Journal*, 101(6):1497-1502.
56. Bricklemeyer, R., Miller, P., Turk, P., Paustian, K., Keck, T., Nielsen, G., and Antle, J. (2007), "Sensitivity of the Century Model to Scale-Related Soil Texture Variability," *Soil Science Society of America Journal*, 71(3):784-792.
57. Turk, P., and Borkowski, J. (2005), "A Review of Adaptive Cluster Sampling: 1990-2003," *Ecological and Environmental Statistics*, 12(1):55-94.
58. Wilson, D., Bogacz, J., Forsythe, C., Turk, P., Lane, T., Gates, R., and Brandt, D. (1993), "Fully Automated Assay of Glycohemoglobin with the Abbott IMx Analyzer: Novel Approaches for Separation and Detection," *Clinical Chemistry*, 39(10):2090-2097.

CONFERENCE PROCEEDINGS AND TECHNICAL BULLETINS

1. Lewis, S., Moran, D., Turk, P., Inskeep, E., and Felton, E. (2017), "Relationship of Weight to Heart Girth and Age in Young Alpaca Cria," *West Virginia Agriculture and Forestry Experiment Station*, Bulletin #731.
2. Borkowski, J., and Turk, P. (2013), "Adaptive Cluster Sampling: An Introduction," *The International Conference on Applied Statistics 2013 Proceedings*, 24-37.
3. Lynch, R., Boyles, J., Lorimer, D., Mnatsakanov, R., Turk, P., and Ransom, S. (2012), "Non-recycled Pulsars in Globular Clusters," *The American Institute of Physics Conference Proceedings*, 1357:199-200.

TECHNICAL REVIEWS

- Review of Manly, B. F. J. (2004), "Two-Phase Adaptive Stratified Sampling," *Sampling Rare or Elusive Species*, Island Press.

JOURNAL REVIEWER

- *Journal of Statistics Education, Environmetrics*

GRANTS AND EXTRAMURAL FUNDING

1. CoI: "Evaluating State Policies to Facilitate Emergency Department-Based Treatment Initiation for Opioid Use Disorder," *R01 submission June 2023*, National Institutes of Health/National Institute on Drug Abuse, MPIs: Barbara Andraka-Christou (University of Central Florida); Thuy Nguyen (University of Michigan), 2024 - 2029. Requesting \$3,661,194.
2. Co-Project Lead: "Mississippi Practice-Based Research Network EHR Enhancement to Advance Health," 5U54GM115428-08, National Institutes of Health/National Institute of General Medical Sciences, PD/PI: Joey Granger (Mississippi Center for Clinical and Translational Research/University of Mississippi Medical Center), 2023 - 2024. Total award amount \$1,497,642.
3. Subaward CoI: "Southern Center for Maternal Health Equity," 1U54HD113159-01, National Institutes of Health/National Institute of Child Health and Human Development, PIs: Emily Harville, Susan Perez (Tulane University); Joseph Biggio (University of Alabama at Birmingham), 2023 - 2030. Subaward amount \$1,967,693.
4. CoI: "Jackson Heart Study Graduate Training and Education Center at UMMC," HHSN268201800012I, National Institutes of Health/National Heart, Lung, and Blood Institute, PI: Jennifer Reneker (University of Mississippi Medical Center), 2022-2025. Total award amount \$2,687,755.
5. Subaward PI: "Modeling and Simulation Tools for Optimizing Design of Network-Informed Clinical Trials of Combination HIV Prevention Interventions," 1R01AI147441-01, National Institutes of Health/National Institute of Allergy and Infectious Diseases, PIs: Nicole Carnegie, Breschine Cummins (Montana State University); Ravi Goyal (University of California San Diego), 2019 - 2023. Subaward amount \$152,669.
6. CoI: "Pyridoxine, P2 Receptor Antagonism, and ATP-Mediated Vasodilation in Young and Older Adults," 5R21AG058023-02, National Institutes of Health, PI: Frank Dinunno (Colorado State University), 2018 - 2019. Total award amount \$412,612.

7. CoPI: "Quantifying Cumulative Effects Over Time in Two Little River Watersheds, Northwestern California," California Department of Forestry and Fire Protection, PI: Lee MacDonald (Colorado State University), 2015 - 2017. Total award amount \$71,206.
8. CoI: "Movement Ecology of California Condors Within the DRECP Area," California Department of Fish and Game, PI: Todd Katzner (West Virginia University), 2014. Total award amount \$83,540.
9. Site CoI: "Golden Eagle Demography: Genetic Approaches to Population Biology in the Face of Renewable Energy Development in the California Desert," US Bureau of Land Management, PIs: Todd Katzner (West Virginia University); Andrew DeWoody (Purdue University), 2012 - 2014. Site award amount \$26,907 (total award amount \$354,821).
10. CoI: "Assessing Granite Wind for RES America," Granite Wind, LLC, PI: Todd Katzner (West Virginia University), 2012 - 2013. Total award amount \$41,440.
11. CoI: "California DFG Golden Eagle Research," California Department of Fish and Game, PI: Todd Katzner (West Virginia University), 2012 - 2013. Total award amount \$252,500.
12. CoPI: "Golden Eagle Home Range, Habitat Use, Demography and Renewable Energy Development in the California Desert," US Bureau of Land Management, PI: Todd Katzner (West Virginia University), 2011 - 2014. Total award amount \$409,444.
13. CoI: "Developing High-Resolution Spatial Data of Migration Corridors for Avian Species of Concern in Regions of High Potential Wind Development," US Department of Energy, PI: Todd Katzner (West Virginia University), 2011 - 2012. Total award amount \$193,000.
14. CoPI: "Influence of Natural Stream Channel Design on Sediment in the Cacapon Watershed," Canaan Valley Institute, PI: Jim Anderson (West Virginia University), 2010 - 2012. Total award amount \$75,005.
15. CoI: "Age Structure Determination for Wild Populations of Double-Crested Cormorants," The Berryman Institute, PI: Jim Anderson (West Virginia University), 2010 - 2011. Total award amount \$15,150.
16. CoPI: "Refining a Pentosidine Aging Technique to Investigate Effects of Management on Survival and Fecundity of Double-Crested Cormorants," United States Department of Agriculture/National Wildlife Research Center, PI: Jim Anderson (West Virginia University), 2009 - 2012. Total award amount \$54,930.
17. CoI: "A New Census of Globular Cluster Pulsars," National Science Foundation, PI: Duncan Lorimer (West Virginia University), 2009 - 2011. Total award amount \$267,983.
18. PI: "A Comparison of Methods Used to Simulate a Neyman-Scott Process in Adaptive Cluster Sampling Research," Intramural Grant Program, Northern Arizona University, 2007. Total award amount \$6,250.
19. PI: "The Population Genetics of Reestablished Wild Turkey in Illinois," CoPI: Michael Romano (Western Illinois University), The Professional Bowhunter's Society, 1988. Total award amount \$1,250.

OTHER EXTRAMURAL FUNDING (as Collaborator/Consultant/Other Significant Contributor)

1. "Platelet Mitochondrial Dysfunction in Acute Acetaminophen Toxicity with 4-Methylpyrazole Treatment," Medical Toxicology Foundation, PI: Carolyn Fox (Atrium Health), 2020 - 2021, total budget \$10,823.
2. "A Sepsis Transition Program to Reduce Morbidity and Mortality in High Risk Individuals," 1R01NR018434-01A1, National Institutes of Health, PIs: Marc Kowalkowski and Stephanie Taylor (Atrium Health), 2019 - present, total budget \$3,038,483.
3. "Oral Complications in Stem Cell Transplant Patients: ORASTEM," Western Region of Public Medical and Dental Health - Sweden, PIs: Mike Brennan (Atrium Health) and Inger von Bültzingslöwen (Gothenburg University), 2011 - present, total budget \$65,000.
4. "A Peripheral Blood Biomarker for Alzheimer's Disease," 1R43AG069523-01, National Institute of Health, PI: Mark Muller (TopoGEN), 2020 - 2021, total budget \$395,044.
5. "Determining the Effect of Biological Sex and Therapy on Diet-Induced Alterations in Liver and Kidney Health in Mice," American Osteopathic Association, PI: Joey Gigliotti (Liberty University), 2019 - 2021, total budget \$145,838.
6. "Advancing Methods for Estimating the Economic Value of and Assessing User Preferences for Nonmarket Remotely Sensed Information," United States Geological Survey, PI: John Loomis (Colorado State University), 2017 - 2018, total budget \$132,000.
7. "Lumbosacral (Lower Back) Disease in Working Dogs," USDA, National Institute of Food and Agriculture, PI: Jeryl Jones (West Virginia University), 2012 - 2017, total budget \$138,000.
8. Fort Collins Veterinary Emergency and Rehabilitation Hospital, Fort Collins, CO. Sponsored by Nestle Purina PetCare Company, 2016, \$1,500. Graduate student supervision.
9. Market Force Information Inc., Boulder, CO. Sponsored by U.S.-based multinational energy company, 2015, \$18,900.
10. "Report of Appropriate Methods to Analyze Fish Anesthetic Efficacy Data." Funded by United States Fish and Wildlife Service, supervisor: John Borkowski (Montana State University), 2002, total budget \$2,490.
11. "A Public Access Resource Center Empowering the General Public to Earth Observing System Data and Information System: Implementation." Funded by the Upper Midwest Aerospace Consortium of NASA, supervisor: Perry R. Miller (Montana State University), 2000 - 2002, total budget \$36,890.
12. "Quantitative Methods for Analyzing Feeding Behavior of Animals in Commercial Feedlot Settings." Funded by Hoffman and LaRoche Inc., supervisor: Bill Quimby (Montana State University), 1997, total budget \$10,000.
13. "Evaluating Regeneration of Lodgepole Pine Under Varied Utilization Standards." Funded by United States Forest Service, Rocky Mountain Research Station, supervisor: Elsie Valeroso (Montana State University), 1997, total budget \$2,200.
14. "Development of a Discrimination Procedure and Software for Detection of Antibodies." Funded by Intellignostics Inc., Ames, IA, supervisor: Jim Robison-Cox (Montana State University), 1996, total budget \$16,463.

POSTERS AND TALKS

1. Nelin, S., Karam, S., Desai, J., Foglia, E., Turk, P., and Peddireddy, V. (2024), “Does the Use of an Automated Resuscitation Recorder Improve Adherence to Neonatal Resuscitation Program Algorithms and Code Documentation?,” accepted by Pediatric Academic Societies Meeting, Toronto, ON, Canada.
2. Nelin, S., Karam, S., Desai, J., Foglia, E., Turk, P., and Peddireddy, V. (2024), “Does the Use of an Automated Resuscitation Recorder Improve Adherence to Neonatal Resuscitation Program Algorithms and Code Documentation?,” Southern Regional Meeting, New Orleans, LA.
3. Sylvester, H., Turk, P., Anugu, A., Blackshear, C., Christman, B., Welsch, M., and Gamble, A. (2023), “Telehealth Diabetes Prevention Intervention for the Next Generation of African American Youth Pilot Trial,” Southern Regional Meeting, New Orleans, LA. Abstract published in *The American Journal of the Medical Sciences*, 365(Supplement 1):S404-S405.
4. Taylor, S., Turk, P., and Kowalkowski, M. (2021), “Days Alive and Out of the Hospital as a Summary Outcome Measure of Health Outcomes for Sepsis Survivors,” American Thoracic Society International Conference, held virtually.
5. Skallsjö, K., Bültzingslöwen, I., Hasséus, B., Johansson, J.-E., Huysmans, M.-C., Raber-Durlacher, J., Blijlevens, N., Laheij, A., Van Leeuwen, S., Rozema, F., Hovan, A., Garming-Legert, K., Nguyen, H., Turk, P., and Brennan, M. (2021), “Oral Health in Patients Planned for Hematopoietic Stem Cell Transplantation,” Multinational Association of Supportive Care in Cancer (MASCC)/International Society for Oral Oncology (ISOO) Annual Meeting, held virtually.
6. Watson, M., Zhao, J., Turk, P., Hetherington, T., Schiffert, L., Ross, S., Matthews, B., and Reinke, C. (2021), “Emergency General Surgery Transfers Have Higher Inpatient Mortality and Post-Discharge Emergency Department Visits: A Propensity Score Matched Analysis,” American College of Surgeons, Clinical Congress, held virtually.
7. Turk, P., Anderson, W., Burns, R., Chou, S.-H., Kearns, J., McCarter, M., Nguyen, H., Passaretti, C., Rose, G., Stephens, C., Zhao, J., and McWilliams, A. (2021), “A Regionally Tailored Epidemiological Forecast and Monitoring Program to Guide a Healthcare System in the COVID-19 Pandemic,” International Statistical Institute; Data Science, Statistics, and Visualization Conference, held virtually.
8. Turk, P., Tran, T., Rose, G., and McWilliams, A. (2021), “A Predictive Internet-Based Model for COVID-19 Hospitalization Census,” American Statistical Association, Symposium for Data Science and Statistics (SDSS), held virtually. *Invited talk.*
9. Nguyen, H., Turk, P., and McWilliams, A. (2021), “Forecasting COVID-19 Hospital Census: A Multivariate Time-series Model Based on Local Infection Incidence,” International Statistical Institute, World Statistics Congress, held virtually.
10. Nguyen, H., Turk, P., and McWilliams, A. (2021), “Forecasting COVID-19 Hospital Census: A Multivariate Time-series Model Based on Local Infection Incidence,” American Statistical Association, Symposium for Data Science and Statistics (SDSS), held virtually.
11. Chou, S.-H., and Turk, P. (2020), “CURVE: a Web Application for In-Hospital Resource Forecasting During the COVID-19 Outbreak,” International Statistical Institute; Data Science, Statistics, and Visualization Conference, Research Triangle Park, NC. *Invited talk.*

12. Pearsall, S., and Turk, P. (2020), "Using Machine Learning to Model Cancellation in Leadership Training Programs," American Statistical Association, Conference on Statistical Practice, Sacramento, CA.
13. Turk, P. (2019), "What's New in Data Analytics and Machine Learning," Center for Creative Leadership, Greensboro, NC. *Invited talk.*
14. Sexton, I., Brown, C., Turk, P., and Ringer, L. (2019), "Pile Burn Scar Restoration at Lily Lake: Tradeoffs Between Abundance of Non-Native and Native Species," High Altitude Revegetation, Society for Ecological Restoration-Rocky Mountains 2019 Conference, Fort Collins, CO.
15. Stone-Roy, L., Turk, P., Allison, T., and Moritz, J. (2018), "Analysis of Tongue Features to Enhance Lingual Electrotactile Stimulation for Sensory Substitution Applications," Society for Neuroscience, Neuroscience 2018, San Diego, CA.
16. Rink, K., Turk, P., Archibeque-Engle, S., Ahola, J., Hadrich, J., and Roman-Muniz, I. (2018), "Producer Perceptions of the National Dairy Farmers Assuring Responsible Management (FARM) Animal Care Program," American Dairy Science Association Annual Meeting, Knoxville, TN.
17. Turk, P. (2017), "Using Statistics in Natural Science: An Application in Botany," Chinese Academy of Forestry, Beijing, China. *Invited talk.*
18. Holobinko, A., Meier-Augenstein, W., Kemp, H., Ford, S., and Turk, P. (2016), "What Level of Biogeographical Information is Available from ^{18}O and ^{13}C Signatures in Late-Erupting Molars of Modern Humans?," Annual Meeting of the American Association of Physical Anthropologists, Atlanta, GA.
19. Turk, P., and Lorimer, D. (2014), "An Empirical Bayesian Analysis Applied to the Globular Cluster Pulsar Population," Annual Joint Statistical Meetings, Boston, MA.
20. Nottingham, A., Thompson, J., Turk, P., Li, Q., and Connolly, S. (2014), "Seasonal Dynamics of Surface Soil Bulk Density in a Forested Catchment," poster, Northeast Regional Cooperative Soil Survey Conference, Plymouth, NH.
21. Li, Q., Turk, P., Thompson, J., and Nottingham, A. (2014), "Modeling Seasonal Dynamics of Surface Soil Bulk Density in a Forest in West Virginia," poster, Spring Banquet of the Pittsburgh Chapter of the American Statistical Association, Pittsburgh, PA.
22. Turk, P., Li, Q., Thompson, J., and Nottingham, A. (2014), "Modeling Seasonal Dynamics of Surface Soil Bulk Density in a Forest in West Virginia," Chinese Academy of Forestry, Beijing, China. *Invited talk.*
23. Turk, P., and Lorimer, D. (2014), "An Empirical Bayesian Analysis Applied to the Globular Cluster Pulsar Population," Department of Statistics, Colorado State University, Fort Collins, CO. *Invited talk.*
24. Lorimer, D., and Turk, P. (2013), "Pulsar Populations in Globular Clusters," Department of Physics and Astronomy, Southampton University, Southampton, United Kingdom. *Invited talk.*
25. Lanzone, M., Turk, P., Miller, T., Duerr, A., Brandes, D., Cooper, J., and Tremblay, J. (2013), "Subsidized Lift in Migratory Flight of Golden Eagles," Worldwide Raptor Conference, Bariloche, Argentina.

26. Borkowski, J., and Turk, P. (2013), "Adaptive Cluster Sampling: An Introduction," International Conference on Statistics and Its Applications with Other Disciplines, Ho Chi Minh City, Vietnam. *Invited talk.*
27. Katzner, T., Turk, P., Duerr, A., Miller, T., Lanzone, M., Cooper, J., Brandes, D., Maisonneuve, C., and Tremblay, J. (2013), "Subsidized Lift in Migratory Flight of Golden Eagles," Wilson Ornithological Society Annual Meeting, Williamsburg, VA.
28. Nottingham, A., Thompson, J., Cook, J., Turk, P., and Connolly, S. (2013), "Seasonal Dynamics of Surface Soil Bulk Density in a Forested Catchment," poster, The Soil Science of America Annual Meeting, Tampa, FL.
29. St. Laurent, R., and Turk, P. (2013), "Power of a Rank-Based Test for Differences Between Treatment Distributions in a Randomized Complete Block Design," Annual Joint Statistical Meetings, Montreal, QC, Canada.
30. Chidester, R., Turk, P., Katzner, T., Duerr, A., Miller, T., and Lanzone, M. (2013), "Using a Logistic Model to Assess Misclassification of Predicted Flight of Golden Eagles," poster, Spring Banquet of the Pittsburgh Chapter of the American Statistical Association, Pittsburgh, PA.
31. Borkowski, J., and Turk, P. (2013), "Adaptive Cluster Sampling: An Introduction," International Conference on Applied Statistics, Maha Sarakham, Thailand. *Invited keynote talk.*
32. Miller, T., Lanzone, M., Brooks, R., Cooper, J., Turk, P., Katzner, T., Maisonneuve, C., and Tremblay, J. (2012), "Seasonal Variation in Home Range Size and Movement Patterns of Golden Eagles in Eastern North America," Northeastern Association of Fish and Wildlife Agencies Annual Meeting, Charleston, WV.
33. Pollio, A., Thompson, J., and Turk, P. (2012), "Soil Color Measurement: A Comparison of Munsell Soil-Color Charts and the GLOBE Soil Color Book," poster, The Soil Science of America Annual Meeting, Cincinnati, OH.
34. Duerr, A., Miller, T., Lanzone, M., Brandes, D., Cooper, J., Maisonneuve, C., Tremblay, J., Turk, P., Katzner, T., O'Malley, K., and Brooks, R. (2012), "Golden Eagles in Eastern North America: Population Status and Habitat Use Relative to Wind Energy Development," The Wildlife Society Annual Conference, Portland, OR. *Invited talk.*
35. Katzner, T., Duerr, A., Miller, T., Lanzone, M., Brandes, D., and Turk, P. (2012), "Monitoring Seasonal Movements and Ranging Behavior Of Golden Eagles in the Context of Energy Development," California-Nevada Golden Eagle Working Group Symposium, Sacramento, CA.
36. Berg, L., Gatrell, S., Cleveland, B., Grimmett, J., Turk, P., Leeds, T., Weber, G., Semmens, K., and Blemings, K. (2012), "Effect of Genetics and Feeding Strategies on Growth of Rainbow Trout," poster, Annual Meeting of The Federation of American Societies for Experimental Biology, San Diego, CA.
37. Berg, L., Gatrell, S., Cleveland, B., Grimmett, J., Turk, P., Leeds, T., Weber, G., Semmens, K., and Blemings, K. (2012), "Effect of Genetics and Feeding Strategies on Growth of Rainbow Trout," poster, West Virginia Aquaculture Forum, Morgantown, WV.

38. St. Laurent, R., and Turk, P. (2012), "A Rank-Based Test for Non-Location Differences Between Treatment Distributions in a Randomized Complete Block Design," Annual Joint Statistical Meetings, San Diego, CA.
39. St. Laurent, R., and Turk, P. (2012), "Detecting Non-Location Differences Between Treatments in a Randomized Block Design," Department of Statistics, California Polytechnic Institute, San Luis Obispo, CA. *Invited talk.*
40. Rose, C., Turk, P., and Anderson, J. (2011), "Selection of Exotic Morrow's Honeysuckle and Native Mast Species by White-Footed Mice Across Seasons and Cover Types in the Northeastern United States," Joint Meeting of The American Society of Mammologists and The Australian Mammal Society, Portland, OR.
41. Katzner, T., Miller, T., Brandes, D., Cooper, J., Duerr, A., Lanzone, M., Maisonneuve, C., Tremblay, J., Brooks, R., Turk, P., and O'Malley, K. (2011), "High Frequency GPS Telemetry to Evaluate Migration and Habitat Use of Raptors Relative to Wind Development," The Wildlife Society Annual Conference, Kona, HI.
42. Lanzone, M., Halverson, C., Miller, T., Turk, P., Brandes, D., and Katzner, T. (2011), "High Frequency GSM Telemetry Provides New Insights into Raptor Behavior and Ecology," Annual Meeting of The Raptor Research Foundation, Duluth, MN.
43. Duerr, A., Miller, T., Lanzone, M., Cooper, J., Turk, P., and Katzner, T. (2011), "High Frequency GPS-GSM Telemetry to Measure Migration Speed: Do Golden Eagles Migrate Faster When Using Orographic or Thermal Lift?," Annual Meeting of The Raptor Research Foundation, Duluth, MN.
44. Miller, T., Lanzone, M., Katzner, T., Turk, P., Brandes, D., Maisonneuve, C., Tremblay, J., Cooper, J., O'Malley, K., and Brooks, R. (2011), "Striking a Balance: Modeling Migration of Golden Eagles Through Wind Energy Developments of the Central Appalachians, USA," Annual Meeting of The Raptor Research Foundation, Duluth, MN.
Student presentation award winner.
45. Miller, T., Lanzone, M., Turk, P., Brandes, D., Maisonneuve, C., Tremblay, J., Cooper, J., O'Malley, K., and Katzner, T. (2011), "Striking a Balance: Modeling Migration of Golden Eagles Through Wind Energy Developments of the Central Appalachians, USA," Spatial Ecology and Conservation International Conference, Birmingham, United Kingdom.
46. Anderson, J., Strain, G., Flaherty, K., Turk, P., and Michael, E. (2011), "Potential Implications of Climate Change for Common Snapping Turtle Survivorship and Hibernation Ecology," Joint Meeting of The Society of Wetland Scientists, WETPOL, and Wetland Biogeochemistry Symposium, Prague, Czech Republic.
47. Smith, D., Welsh, S., and Turk, P. (2011), "The Influence of Available Benthic Habitat Type on Predation Risk in Larval Least Brook Lampreys," Annual Meeting of The American Fisheries Society, Seattle, WA.
48. Gigliotti, J., Turk, P., Benedito, V., Livengood, R., and Tou, T. (2011), "Characterizing the Influence of Different Sources of Omega-3 Polyunsaturated Fatty Acids on Renal Function and Health in Female Rats," poster, Annual Meeting of The Federation of American Societies for Experimental Biology, Washington, DC.

49. Smith, D., Shuster, S., Turk, P., and Whitham, T. (2011), "Evolution as an Ecological Force: Evolution of Inflorescence Size Causes a Shift in the Plant-associated Insect Community," Annual Meeting of The Society for Integrative and Comparative Biology, Salt Lake City, UT.
50. Smith, D., Shuster, S., Turk, P., and Whitham, T. (2011), "Ungulate-Induced Evolution of Plant Traits Changes the Plant-Associated Arthropod Community," Annual Meeting of The Ecological Society of America, Austin, TX.
51. Turk, P., Borkowski, J., and Chomtee, B. (2010), "Using Weak and Strong Heredity to Generate Weighted Design Optimality Criteria for Response Surface Designs," Annual Joint Statistical Meetings, Vancouver, BC, Canada.
52. Lilly, K., Beaman, K., West, B., Shires, L., Loop, S., Turk, P., Bissonnette, G., and Moritz, J. (2010), "Strategies to Reduce Preharvest Salmonella in Organic Broilers," Annual Meetings of The American Dairy Science Association, Poultry Science Association, Asociación Mexicana de Producción Animal, Canadian Society of Animal Science, and American Society of Animal Science, Denver, CO.
53. Smith, D., Welsh, S., and Turk, P. (2010), "Benthic Stream Habitat and Its Influence on Larval Lamprey Survival," Annual Association of Mid-Atlantic Aquatic Biologists Meeting, Berkeley Springs, WV.
54. Lilly, K., Beaman, K., West, B., Shires, L., Loop, S., Bissonnette, G., Turk, P., and Moritz, J. (2010), "Strategies to Reduce Preharvest Salmonella in Organic Broilers," poster, Annual Mid-Atlantic Nutrition Conference, Timonium, MD.
55. Lorimer, D., Boyles, J., Turk, P., Mnatsakanov, R., Ransom, S., and Lynch, R. (2010), "The Globular Cluster Population," poster, Annual American Astronomical Society Meeting, Washington, DC.
56. Turk, P., and St. Laurent, R. (2009), "Misconceptions and Properties of Friedman's Test," Annual Joint Statistical Meetings, Washington, DC.
57. St. Laurent, R., and Turk, P. (2009), "Misconceptions and Properties of Friedman's Test," Annual Meeting of the Western North American Region of The International Biometric Society, Portland, OR.
58. Smith, D., Welsh, S., and Turk, P. (2009), "Relationship Between Available Habitat Type and Predator Avoidance of Least Brook Lamprey *Ammocoetes*," WV/KY Chapters of The American Fisheries Society, Spring Technical Meeting, Huntington, WV.
59. Smith, D., Welsh, S., and Turk, P. (2009), "Relationship Between Habitat Selection and Susceptibility to Predation in Larval Lampreys," The 84th Annual Meeting of The West Virginia Academy of Sciences, Glenville, WV.
60. Turk, P. (2008), "Experiences Using R to Teach Undergraduate Statistics Courses: Enabling Critical Thinking," Annual Joint Statistical Meetings, Denver, CO.
61. Jones, M., Harman, M., Thompson, J., Carpenter, S., and Turk, P. (2008), "Seasonal and Land Use Effects on Hydraulic Conductivity Across Benchmark Soil Catenas Of Eastern West Virginia," poster, International Hydrogeology Conference, University Park, PA.
Awarded second-place best poster.

62. Turk, P., and Borkowski, J. (2008), "A Comparison of Methods Used to Simulate a Neyman-Scott Process in Adaptive Cluster Sampling Research," Annual Meeting of The Western North American Region of The International Biometric Society, Davis, CA.
63. Turk, P. (2007), "Experiences Using R to Teach Undergraduate Statistics Courses," Annual R User Conference, Ames, IA. *Invited and awarded \$1,000 travel support.*
64. Turk, P. (2001), "An Introduction to Adaptive Cluster Sampling," Meeting of the Montana Chapter of The American Statistical Association, Butte, MT.
65. Quinn, F., Cohen, J., Mallas, T., Yu, J., and Turk, P. (1993), "Demonstration of Third Generation TSH Assay Performance on the Abbott IMx Automated Immunoassay Analyzer," poster, Annual Meeting of The American Association for Clinical Chemistry, Chicago, IL.
66. Wilson, D., Bogacz, J., Brandt, D., Forsythe, C., Gates, R., Lane, T., and Turk, P. (1992), "An Automated Assay for Glycated Hemoglobin on the IMx Analyzer Utilizing Ion Capture for Separation and Fluorescence Quenching for Detection," poster, Annual Meeting of The American Association of Clinical Chemistry, Chicago, IL.
67. Wass, J., Steinert, D., and Turk, P. (1990), "Methodological Variables in Some Common Measurements of Immune Status," Annual Meeting of The Illinois State Academy of Science, Champaign, IL.
68. Turk, P., and Romano, M. (1989), "The Genetic Effects of Trap and Transfer on Reestablished Populations of Wild Turkey in Illinois," Joint Annual Meeting of The American Society for the Study of Evolution and the American Society of Naturalists, University, PA.
69. Romano, M., and Turk, P. (1989), "The Genetic Effects of Trap and Transfer on Reestablished Populations of Wild Turkey in Illinois," Annual Meeting of The American Society of Zoologists, Boston, MA.

COURSES TAUGHT

At UMMC:

BDS 792 Statistical Consulting (graduate course)
BDS 797 Biostatistics and Data Science Internship (graduate-level)
BDS 798 Dissertation Research (graduate-level)

At Atrium Health:

2021 Text Mining with R
2022 Python: Elementary and Intermediate Tools

At CSU:

STAT 460/560 Applied Multivariate Analysis (co-convened)
STAT 472 Statistical Consulting -
2016, 2017, 2018 CSU Undergraduate Research and Creativity College Honors award
2017 CSU Undergraduate Research and Creativity High Honors award
2017 ASA/CAUSE Undergraduate Statistics Class Project (USCLAP) Honorable Mention
STAT 495 Independent Study
STAT 511 Experimental Design and Data Analysis for Researchers I (graduate course)
STAT 586 Practicum in Consulting Techniques (graduate course)
STAT 650 Design and Linear Modeling 2 (graduate course)
STAT 695 Independent Study (graduate-level)
STAT 699 Thesis (graduate-level)

At WVU:

STAT 482 Statistics Practicum
STAT 494 Undergraduate Seminar: Capstone
STAT 496 Senior Thesis: Capstone
STAT 512 Statistical Methods 2 (graduate course)
STAT 582 Statistics Consulting (graduate course)
STAT 591-M Spatiotemporal Data Analysis (graduate course; wrote and initially taught new course)
STAT 591-O Applied Time Series (graduate course; wrote and initially taught new course)
STAT 645 Linear Models (graduate course)
STAT 682 Analysis of Experiments (graduate course)
STAT 696 Graduate Seminar (graduate course)

At NAU:

STA 270 Applied Statistics (included supervisory role for all course sections)
STA 471 Regression Analysis
STA 477 Time Series Analysis (wrote and initially taught new course),
VEE approved by Society of Actuaries
STA 497 Independent Study
STA 570 Statistical Methods I (graduate course)
STA 575 Applied Sampling (graduate course)
STA 697 Independent Study (graduate course via NSF IGERT)

COURSES TAUGHT

At UAA:

AS 252	Elementary Statistics
AS 307	Probability
AS 308	Intermediate Statistics
AS 402	Scientific Sampling
AS 403	Regression Analysis
AS 404	Analysis of Variance
AS 407	Time Series Analysis

At MSU:

STAT 216	Elementary Statistics
STAT 217	Intermediate Statistical Concepts
STAT 412	ANOVA and Design of Experiments
STAT 446	Sampling
MATH 150	Liberal Arts Mathematics
MATH 181	Calculus and Analytic Geometry I

WORKSHOPS CONDUCTED

1. "R Bootcamp," Wake Forest University, School of Medicine, 1 day, Winston-Salem, NC (2021)
2. "R Bootcamp," Atrium Health, 1 day, Charlotte, NC (2020)
3. "Basic R and More," Center for Creative Leadership, 1/2 day, Greensboro, NC (2019)
4. "Advanced R and Some Statistical Applications," Center for Creative Leadership, 1/2 day, Greensboro, NC (2019)

STUDENT RESEARCH ADVISING AND MENTORING

- Committee member on 29 MS and 6 PhD committees (includes all disciplines)
 - Graduate advisees specifically in Statistics, Biostatistics, and Data Science
- Chair of MS committee:
1. Matt Branan (CSU), 2015, *Impact of Actual and Self-Perceived Body Type on Visual Perception of Distances*
 2. Shi Chen (WVU), 2014, *Misspecification of the Error Variance Under Temporal Correlation*
 3. Qiuchen Li (WVU), 2014, *Modeling Seasonal Dynamics of Surface Soil Bulk Density in a Forest in West Virginia*
 4. Lisa Catanzaro (WVU), 2013, *Discrete Choice Analysis Methods*
 5. Rachel Chidester (WVU), 2013, *Using a Logistic Model to Assess Misclassification of Predicted Flight of Golden Eagles*
 6. Jordan Helmick (WVU), 2013, *Estimation of Amphibian Metamorph Abundance in Wetlands of West Virginia using N-Mixture Models*
 7. Andrew Tri (WVU), 2013, *Occupancy Modeling of Cope's Grey Tree Frog in Created Wetlands*, (Certificate in Applied Statistics, capstone advisor)

8. Bingbing Wu (WVU), 2013, *Using Linear Mixed Models for a Community-Based Diabetes Education Program Impact Analysis*
9. Xiangyi Zhao (WVU), 2012, *Logistic Regression via Firth's Correction on Factors Affecting Distribution of Wood Turtles at Their Southern Range Limits*
10. David Bueller (WVU), 2011, *Noise Reduction and Modeling of Transient Radio Burst Data*
11. Angela Brenneman (WVU), 2009, *Statistical Analysis of Associations of Placental Efficiency and Nutrient Transporter Expression in Pigs*
12. Jingcheng Lin (WVU), 2009, *Non-Parametric Multivariate Analysis of Variance*
13. Yan Sun (WVU), 2009, *A Direct Regression Modeling Approach for Analyzing a Split Plot Design*

- Chair of PhD committee:

1. Taylor Ward (UMMC; FDA-ORISE Research Fellow), presently advising, (William Hillegass, co-advisor)
- Capstone advisor for undergraduate senior thesis:
 1. Chris Freyder (WVU), 2014, *Multiple Imputation of Missing Data*
 2. Alison Mergaman (WVU), 2014, *Quantile Regression*
 3. Kati O'Neill (WVU), 2014, *Time Series Regression in Marketing*
 4. Kathryn Durko (WVU), 2013, *The Makings of an Actuary*
 5. Yuan Hu (WVU), 2013, *A Primer on the Cox Proportional Hazard Model*
 6. Nishan Moghal (WVU), 2013, *Model Validation: Cross-Validation Procedures*

COMPUTING

- High-level programming languages: R, SAS, Python, Stan
- Fluent in numerous R packages (e.g., `dplyr`, `ggplot2`, `shiny`)
- Reproducible research and dynamic reports: R Markdown, Jupyter Notebook, Sweave
- Markup languages: \LaTeX , HTML
- General programming languages: C, SQL
- Cloud computing: AWS, Azure, Apache Spark
- Version control and collaboration: Git + GitHub

PROFESSIONAL SERVICE

Conference Organization

- Conference Co-organizer: American Statistical Association, 2020 Symposium for Data Science and Statistics (SDSS), Track on Software and Data Science Technologies, Pittsburgh, PA.

Academic Service

- University of Mississippi Medical Center, Department Service
 - Curriculum Committee - (2023)
 - Coordinator for internship program - (Summer 2023)
- University of Mississippi Medical Center, School Service
 - Program Review Committee - (2023)
 - Academic Council - (2022 - 2023)
 - Executive Council - (2022 - 2023)
- University of Mississippi Medical Center, University Service
 - Emeritus Status Committee - (2022 - 2023)
 - Mississippi Center for Clinical and Translational Research, Internal Advisory Committee - (2022 - 2023)
- Colorado State University, Department Service
 - Graduate admissions committee for Master of Applied Statistics - (2017 - 2018)
 - Computing committee - (2017 - 2018)
 - Search committee for new faculty hire - (2016)
- Colorado State University, University Service
 - Represented university in effort to set up partnerships with Can Tho University, Vietnam (2015) and Hunan University, China (2016)
 - Alternate, Institutional Animal Care and Use Committee (IACUC) - (2015 - 2018)
 - Judge, Colorado State University Graduate Student Showcase, Fort Collins, CO - (2014 - 2017)
- West Virginia University, Department Service
 - Chair, Search committee for new faculty hire - (2013)
 - Chair, Governance committee - (2013)
 - Graduate Curriculum committee - (2013)
 - Search committee for new faculty hire - (2012)
 - Faculty Evaluation committee - (2012 - 2013)
 - Statistics External Evaluation committee - (2012)
 - Chair of committee for implementation of graduate certificate program - (2009 - 2010)
 - Search committee for new faculty hire - (2009)
- West Virginia University, College Service
 - Supervisor for Davis College statistical consulting graduate research assistant - (2008 - 2012)
 - Search committee for new faculty hire in Biology - (2010)
- West Virginia University, University Service
 - PhD/Statistical Consulting Advisory Committee - (2011)

- Northern Arizona University, Department Service
 - Faculty mentor - (2007 - 2008)
 - Scholarship committee - (2006 - 2008)
 - Student advisor (undergraduate and graduate) - (2006 - 2008)
 - Course supervisor for Statistics 270 - (Spring 2007)
 - Website committee - (2006 - 2007)
- Northern Arizona University, College and University Service
 - Statistical consultant (undergraduate and graduate) for various departments - (2006 - 2008)
 - Student group discussion leader, NAU Freshmen Summer Reading Program - (2007)
 - Judge, Northern Arizona Regional Science and Engineering Fair, Flagstaff, AZ - (2007)
 - Participant, Red Rock Great Teaching Retreat NAU Faculty Development Program, Springdale, UT - (2007)
 - Participant, NAU Colleague-to-Colleague Mentorship Program - (2006 - 2007)
 - Reader, College Board AP Statistics Exam, University of Nebraska, Lincoln, NE - (2006)
- University of Alaska - Anchorage, Department, College, and University Service
 - Participant, UAA Center for Advancing Faculty Excellence, Best Practices in Teaching - (2005)

PROFESSIONAL SOCIETIES

- American Statistical Association (ASA) - (2006 - present)
- International Statistical Institute (ISI) - (2020 - present)
- R Epidemics Consortium - (2020 - present)
- North American Biostatistics Chairs (NABC) - (2022 - 2024)

PROFESSIONAL RECOGNITION

- Commencement Faculty Marshal, UMMC, 2023
- Pinnacle Award Nominee, Atrium Health, 2020
- Outstanding Graduate Teaching Assistant Award, Department of Mathematical Sciences, Montana State University, 1998
- Abbott Diagnostic Division Entrepreneurial Science Award, Abbott Laboratories Inc., 1993

PERSONAL

- Languages: English (native), Mandarin Chinese (HSK 2 certification)