

Qiang Wu, Ph.D., PStat®

Work: Department of Biostatistics, 2209 East Carolina Heart Institute, East Carolina University, Greenville, NC 27834

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Employment

Professor in biostatistics **July 2020 – present**

A position in Department of Biostatistics at College of Allied Health Sciences. Work load includes 40% teaching, 40% research, and 20% service. Report directly to the chair of Department of Biostatistics Paul Vos, Ph.D.

Associate professor in biostatistics **July 2014 – June 2020**

A position in Department of Biostatistics at College of Allied Health Sciences. Work load includes 40% teaching, 40% research, and 20% service. Report directly to the chair of Department of Biostatistics Paul Vos, Ph.D.

Assistant professor in biostatistics **September 2007 – June 2014**

A joint position between Department of Biostatistics at College of Allied Health Sciences (51% effort) and College of Nursing (49% effort). Work load included 30% teaching, 30% research, 30% statistical consulting, and 10% service. Report directly to the chair of Department of Biostatistics Paul Vos, Ph.D.

Graduate student researcher (statistician) **September 2003 – August 2007**

A graduate student researcher and statistician under the supervision of Allan R. Sampson, Ph.D. Provided statistical support to Conte Center for the Neuroscience of Mental Disorders in Department of Psychiatry at University of Pittsburgh.

Teaching fellow **June 2006 – August 2006**

An instructor of an introductory statistics course for students from multiple disciplines such as business, engineering, economics, and sports. Students were from multiple disciplines such as business, engineering, economics, and sports.

Teaching assistant **September 2002 – May 2007**

A teaching assistant in Department of Statistics at University of Pittsburgh to lead recitation sessions, grade homework, and support lab hours. led recitation sessions, graded homework, and supported lab hours.

Statistical consultant **September 2006 – December 2006**

A statistical consultant providing consulting services to researchers at University of Pittsburgh under the supervision of Allan R. Sampson, Ph.D.

Education

Ph.D. in statistics, University of Pittsburgh **August 2007**

Dissertation topic: Clustering Methodologies with Applications to Integrative Analysis of Post-Mortem Tissue Studies in Schizophrenia. Advisor: Allan R. Sampson, Ph.D.

M.A. in statistics, University of Pittsburgh **May 2007**

B.S. in finance, University of Science and Technology of China **August 2002**

Thesis topic: Pricing of Barrier Option. Advisor: Shuguang Zhang, Ph.D.

Teaching

East Carolina University

- Health Research Methods Spring 2018 and 2022 (Public Health Overload)
- Public Health Data Analytics Fall 2018, 2019 (Public Health Overload)
- Introduction to Biostatistics Fall 2010 and 2011, Spring and Fall 2013, Fall 2015 - 2021
- Biostatistics for health professionals I Fall 2012, Spring and Fall 2014
- Biostatistics for health professionals II Spring 2008 and 2009
- Applied Multivariate Analysis Fall 2008 and 2009

University of Pittsburgh

- Introduction to statistics Summer 2006

Statistical Consulting Experience

PStat® Accreditation Committee, American Statistical Association January 2015 – Present

Responsible for considering ways to increase the value of accreditation for accredited members, and ways to encourage more people to apply for accreditation. Review applications to PStat® and GStat®.

PStat® accredited member, American Statistical Association December 2013 - present

ASA accredited professional statistician.

Statistical consultant, East Carolina University September 2007 – present

Delivered an average of 160 hours per year of independent statistical consulting services to researchers at ECU, especially those from College of Allied Health Sciences, College of Nursing and Brody School of Medicine.

Statistical consultant, University of Pittsburgh September 2003 – July 2007

Delivered statistical support to the Conte Center of Neuroscience of Mental Disorders in the Department of Psychiatry at University of Pittsburgh under the supervision of Prof. Allan R. Sampson.

Publications

[1] Richman, A. R., Torres, E., Wu, Q., Eldridge, D., Lawson, L. (in press). HPV vaccine recommendation practices of current and future physicians in North Carolina: An exploratory study. *Health Education Research*.

[2] Tracy E. Hunley, Guillermo Hidalgo, Kar Hui Ng, Yoko Shirai, Kenichiro Miura, Hostensia M. Beng, Qiang Wu, Motoshi Hattori, William E. Smoyer (2022), Pioglitazone reduces proteinuria in complicated pediatric nephrotic syndrome, *Pediatric Nephrology*, May 2022, in press.

[3] Qiang Wu & Paul Vos (2022), Permutation confidence region for multiple regression and fidelity to asymptotic approximation, *Communications in Statistics - Theory and Methods*, DOI: 10.1080/03610926.2022.2076119

[4] Young Joo Kim, Damon L. Swift, Joseph A. Houmard, Qiang wu, Samuel Sears, and Alyssa M. Paul (2022), Gender, activity participation, education levels, and depressive symptoms predict activity participation levels at post-cardiac rehabilitation, *Physiotherapy Practice and Research*, vol. 1, no. Pre-press, pp. 1-9, 2022.

[5] Lei Xu, Wenhua Lu, Aimee West Smith, Qiang Wu, Victoria Chan, and Anjalee Hou (2022), Gender and Ethnicity Differences in Mental Health Status and COVID-19 Vaccine Intention among U.S. College Students during COVID-19 Pandemic, accepted April 2022, *Journal of American College Health*.

- [6] Young Joo Kim, Vicky Joshi, and Qiang Wu (2021), Subjective factors of depressive symptoms, ambulation, pain, and fatigue are associated with physical activity participation in cardiac arrest survivors with fatigue, *Resuscitation Plus*, 5 (2021) 10057. <https://doi.org/10.1016/j.resplu.2020.100057>
- [7] Pitts, Stephanie & Johnson, Nevin & Wu, Qiang & Firnhaber, Gina & Kaur, Archana & Obasohan, Justice. (2021). A meta-analysis of studies examining associations between resonance Raman spectroscopy-assessed skin carotenoids and plasma carotenoids among adults and children. *Nutrition reviews*. 80. 10.1093/nutrit/nuab016.
- [8] Xiangqun Ju, Gloria C. Mejia, Qiang Wu, Huabin Luo and Lisa M. Jamieson (2021), Use of oral health care services in the United States: unequal, inequitable – a cross-sectional study, *BMC Oral Health*, <https://doi.org/10.1186/s12903-021-01708-8>.
- [9] Paul Vos and Qiang Wu (2021), Letter to the Editor: Zhang, J. (2021), “The Mean Relative Entropy: An Invariant Measure of Estimation Error,” *The American Statistician*, 75, 117-123: comment by Vos and Wu, *The American Statistician*, Accepted Aug. 29 2021.
- [10] Stephanie B Jilcott Pitts, Nancy E Moran, Qiang Wu, Lisa Harnack, Neal E Hanchard, Ronny Bell, Stacey G Moe, Nevin Johnson, Justice Obasohan, Pamela L Carr-Manthe, and Melissa N Laska (2021), Pressure-Mediated Reflection Spectroscopy Criterion Validity as a Biomarker of Fruit and Vegetable Intake: A 2-Site Cross-Sectional Study of 4 Racial or Ethnic Groups, *The Journal of Nutrition*, nxab349, <https://doi.org/10.1093/jn/nxab349>.
- [11] Jennifer J. Chae-Kim, Gunjal Garg, Larisa Gavrilova-Jordan, Lindsay E. Blake, Tongil Kim, Qiang Wu, and Clifford C. Hayslip (2021), Outcomes of women treated with progestin and metformin for atypical endometrial hyperplasia and early endometrial cancer: a systematic review and meta-analysis, *Journal of Gynecological Cancer*, Accepted Sep. 27 2021.
- [12] Stephanie B. Jilcott Pitts, Qiang Wu, Kimberly P. Truesdale, Ann P. Rafferty, Lindsey Haynes-Maslow, Kathryn A. Boys, Jared T. McGuirt, Sheila Fleischhacker, Nevin Johnson, Archana P. Kaur, Ronny A. Bell, Alice S. Ammerman, Melissa N. Laska (2021), A four-year observational study to examine the dietary impact of the North Carolina Healthy Food Small Retailer Program, 2017–2020, *International Journal of Behavioral Nutrition and Physical Activity* volume 18, Article number: 44 (2021).
- [13] Young Joo Kim, Patricia Crane, Damon Swift, Joseph A Houmard, Qiang Wu (2021), Minor improvement in activity and participation and decline in physical activity motivation after cardiac rehabilitation discharge. *Journal of Cardiopulmonary Rehabilitation and Prevention*, 41(6), 419-425. doi: 10.1097/HCR.0000000000000586
- [14] Sarah Burkholder, Jocelyn Bayles, Qiang Wu, Stephanie Jilcott-Pitt, Virginia C. Stage (2020), Skin Carotenoid Levels Over Time and Differences by Age and Sex Among Head Start Children (3-5 years) Living in Eastern North Carolina, *Journal of Nutrition Education and Behavior*, Accepted Oct. 26 2020.
- [15] Jared T. McGuirt, Qiang Wu, Melissa N. Laska, Kimberly P. Truesdale, Ann P. Rafferty, Ronny A. Bell, Alice S. Ammerman, Stephanie B. Jilcott Pitts (2020), Associations between shopping patterns, dietary behaviors, and Geographic Information System-assessed store accessibility among small food store customers, *Public Health Nutrition*, Accepted Oct. 26 2020.
- [16] Torres, E., Richman, A., Wright, W., Wu Q. (2020), Assessing Dental Students’ HPV Health Literacy and Intention to Engage in HPV-Related Oropharyngeal Cancer Prevention. *J Cancer Educ* (2020). <https://doi.org/10.1007/s13187-020-01905-z>
- [17] Lei Xu, Mary Odum, Charles R. Rogers, Qiang Wu, Logan Wilmouth (2020), Association Between Family/Neighborhood Cancer Risk Factors and Adolescent Dietary Behaviors: A Parent-Adolescent Dyadic Analysis, *American Journal of Lifestyle Medicine*, August 2020, <https://doi.org/10.1177/1559827620949215>
- [18] Huabin Luo, Ronny A. Bell, Nancy L. Winterbauer, Lei Xu, Xiaoming Zeng, Qiang Wu, Ann P. Rafferty, Angie M. Watson (2020), Trends and Rural-Urban Differences in Participation in Diabetes Self-management Education Among Adults in North Carolina: 2012-2017, August 2020, *J Public Health Manag Pract*, doi: 10.1097/PHH.0000000000001226

- [19] Huabin Luo, Qiang Wu, Ronny A Bell, Wanda G Wright, Raul I Garcia, Sara A Quandt (2020), Trends in use of dental care provider types and services in the United States in 2000-2016: Rural-urban comparisons, *J Am Dent Assoc*, 2020 Aug; 151(8):596-606. doi: 10.1016/j.adaj.2020.04.026.
- [20] Joseph G. Maliakkal, John Hicks, Mini Michael, David T. Selewski, Katherine Twombly, Michelle N. Rheault, Meredith Seamon, Jason M. Misurac, Cheryl L. Tran, Loretta Reyes, Joseph T. Flynn, Ali M. Onder, Alexandru R. Constantinescu, Vaishali Singh, Cynthia Pan, Abiodun Omoloja, Qiang Wu, William E. Smoyer, Guillermo Hidalgo, and Scott E. Wenderfer (2020), Renal Survival in Children with Glomerulonephritis with Crescents: A Pediatric Nephrology Research Consortium Cohort Study, *J Clin Med*. 2020 Aug; 9(8): 2385.
- [21] Lei Xu, Charles R. Rogers, Tanya M. Halliday, Qiang Wu, Logan Wilmoth (2020), Correlates of Physical Activity, Psychosocial Factors, and Home Environment Exposure among U.S. Adolescents: Insights for Cancer Risk Reduction from the FLASHE Study, *Int. J. Environ. Res. Public Health* 2020, 17(16), 5753; <https://doi.org/10.3390/ijerph17165753>
- [22] Richman, A. R., Torres, E., Wu, Q., Kampschroeder, A. P. (2020). Evaluating a community-based breast cancer prevention program for rural underserved Latina and Black women. *Journal of Community Health*, 45: 1205-1210. PMID: 32529466
- [23] Huabin Luo, Qiang Wu, Ronny A Bell, Wanda Wright, Sara A Quandt, Rashmita Basu, Mark E Moss (2020), Rural-Urban Differences in Dental Service Utilization and Dental Service Procedures Received Among US Adults: Results From the 2016 Medical Expenditure Panel Survey, *J Rural Health*, 2020 Jul 22. doi: 10.1111/jrh.12500.
- [24] Karsli, T., Jain, V.G., Mhanna, M. et al. Assessment of adrenal function at birth using adrenal glucocorticoid precursor to product ratios to predict short-term neonatal outcomes. *Pediatr Res* 87, 767-772 (2020). <https://doi.org/10.1038/s41390-019-0629-8>.
- [25] Richman, A. R., Torres, E., Wu, Q., Carlston, L., O'Rorke, S., Moreno, C., Olsson, J. (2019). Text and email messaging for increasing Human Papillomavirus vaccine completion among uninsured or Medicaid-insured adolescents in rural eastern North Carolina. *Journal of Health Care for the Poor and Underserved*, 30(4):1499-1517.
- [26] Qiang Wu and Paul Vos (2019), Permutation inference distribution for linear regression and related models, *the Journal of Nonparametric Statistics* 31(3), 722-742.
- [27] Basem M Mishriky, James R Powell, Jennifer A Wittwer, Jennifer X Chu, Kerry A Sewell, Qiang Wu, and Doyle M Cummings (2019), Do GLP-1RA and SGLT-2i reduce cardiovascular events in black patients with type 2 diabetes? A systematic review and meta-analysis. *Diabetes, Obesity and Metabolism*, 2019; 1-10, DOI: 10.1111/dom.13805.
- [28] Luo H, Patil SP, Cummings DM, Bell RA, Wu Q, Adams AD (2019), Health Literacy, Self-management Activities, and Glycemic Control Among Adults With Type 2 Diabetes: A Path Analysis, *J Public Health Manag Pract*. 2019 Apr 5 doi: 10.1097/PHH.0000000000000984.
- [29] Stephanie Jilcott Pitts *, Qiang Wu, Kimberly Truesdale, Lindsey Haynes-Maslow, Jared McGuirt, Alice Ammerman, Ronny Bell, Melissa Laska (2018), One year follow-up examination of the impact of the North Carolina Healthy Food Small Retailer Program on healthy food availability, purchases, and consumption, *International Journal of Environmental Research and Public Health*, 2018, 15, 2681; doi:10.3390/ijerph15122681.
- [30] Jilcott Pitts SB, Wu Q, Gray W, Lyonais MJ. Examining changes within farmers' markets and in customers' farmers' market shopping frequency and fruit and vegetable purchase and consumption: Evaluation data from the Partnerships to Improve Community Health project, 2014-2017. *J of Hunger and Environmental Nutr*. DOI: [10.1080/19320248.2018.1512924](https://doi.org/10.1080/19320248.2018.1512924).
- [31] Huabin Luo, Shivajirao P. Patil, Qiang Wu, Ronny A. Bell, Doyle M. Cummings, Alyssa D. Adams, Bertha Hambidge, Kay Craven, Fei Gao (2018), Validation of a combined health literacy and numeracy instrument for patients with type 2 diabetes, *101* (2018) 1846-1851.

[32] Jill Steward, Connie Mullinix, Qiang Wu (2018), Written vs. Simulation-Based Evaluation Methods to Assess Competency and Confidence in the Use of Electronic Medical Records, *The Journal of Continuing Education in Nursing*, 49(6): 262-268.

[33] Stephanie Bell Jilcott Pitts, Lisa Jahns, Qiang Wu, Nancy E Moran, Ronny A Bell, Kimberly P Truesdale and Melissa N Laska (2018), A non-invasive assessment of skin carotenoid status through reflection spectroscopy is a feasible, reliable and potentially valid measure of fruit and vegetable consumption in a diverse community sample, *Public Health Nutrition*, doi:10.1017/S136898001700430X

[34] Stephanie Bell Jilcott Pitts, Qiang Wu, Jared T. McGuirt, Patricia A. Sharpe, Ann P. Rafferty (2018), Impact on Dietary Choices after Discount Supermarket Opens in Low-Income Community, *Journal of Nutrition Education and Behavior*, <https://doi.org/10.1016/j.jneb.2018.03.002>

[35] Huabin Luo, Ronny A. Bell, Wanda Wright, Qiang Wu, Bei Wu, (2018), Trends in annual dental visits among US dentate adults with and without self-reported diabetes and prediabetes, 2004-2014, the *Journal of American Dental Association*, DOI: <https://doi.org/10.1016/j.adaj.2018.01.008>

[36] Tijen Karsli, Diana Strickland, Qiang Wu, Maroun Mhanna, and Prem S Shekhawat (2017), Assessment of Neonatal Adrenal size using high resolution 2D ultrasound and it's correlation with birth demographics & clinical outcomes, *The Journal of Maternal-Fetal & Neonatal Medicine (IJMF)*, 2017 Sep 24:1-7. doi: 10.1080/14767058.2017.1378340.

[37] Stephanie B. Jilcott Pitts, Qiang Wu, Kimberly P. Truesdale, Melissa N. Laska, Taras Grinchak, Jared T. McGuirt, Lindsey Haynes-Maslow, Ronny A. Bell and Alice S. Ammerman (2017), Baseline Assessment of a Healthy Corner Store Initiative: Associations between Food Store Environments, Shopping Patterns, Customer Purchases, and Dietary Intake in Eastern North Carolina, *International Journal of Environmental Research and Public Health*, 14, 1189; doi:10.3390/ijerph14101189

[38] Lisa M. Kay, Qiang Wu, Elizabeth Wall-Bassett, Wan-Ju J. Yen & Kimberly B. Myers (2017): Cost Analysis of Calcium in Store Brand versus National Brand Grocery Products, *Journal of Food Products Marketing*, <http://dx.doi.org/10.1080/10454446.2017.1266547>

[39] Wall-Bassett E, Gearhart K, Crozier M, Bertrand B, Wu Q (2017), A Case Study to Assess Food Variety and Availability among Low-Income Mothers in Residential Substance Abuse Recovery. *EC Nutrition*, 7(2), 76-83.

[40] Stephanie Jilcott Pitts, Jedediah Hinkley, Qiang Wu, Jared McGuirt, Mary Jane Lyonnais, Ann P Rafferty, Olivia Whitt, Nancy Winterbauer, Lisa Phillips (2017), A possible dose-response association between distance to farmers' markets and roadside produce stands, frequency of shopping, fruit and vegetable consumption, and body mass index among customers in the Southern United States, *BMC Public Health*, 17(1): 17-65.

[41] Jilcott Pitts SB, Wu Q, Sharpe PA, Rafferty AP, Elbel B, Ammerman AS, Payne C, Hopping BN, McGuirt JT, Wall-Bassett E. (2016), Preferred healthy food nudges, food store environments, and customer dietary practices in two low-income Southern communities. *Journal of Nutrition Education and Behavior*, 48(10), 735-742.

[42] M. Wentz, C S. Berry-Caban, Q. Wu, and J D. Eldred (2016), Vitamin D correlation with testosterone concentration in male US soldiers and veterans, *Journal of Military and Veterans' Health*, 24(3), 17-23.

[43] Adam C Celio, Qiang Wu, Kevin R Kasten, Mark L Manwaring, Walter J Pories, Konstantinos Spaniolas (2017), Comparative effectiveness of Roux-en-Y gastric bypass and sleeve gastrectomy in super obese patients, *Surgical Endoscopy*, 31(1): 317-323.

[44] Stephanie B. Jilcott Pitts, Jared T. McGuirt, Qiang Wu, Jill Rushing, Daniella Uslan, Karen Stanley, Sally L. Bullock, Rachel K. Ward, Ann P. Rafferty, Alice S. Ammerman (2016), Assessing preliminary impact of the North Carolina Community Transformation Grant Project Farmers' Market Initiatives among rural residents, *Journal of Nutrition Education and Behavior*, 48, 343-349.

- [45] Qiang Wu, and Weixin Yao (2017), Relabel mixture models via modal clustering, *Communications in Statistics – Simulation and Computation*, 46(5), 3406-3418.
- [46] Bullock SL, Jilcott Pitts SB, Listenfelt B, McGuirt JT, Stanley K, Beth D, Kolbe MB, Rushing J, Qiang W, Ward RW, Mayo ML, Dortche CJM, Ammerman A. (2016), Availability of Farmers' Markets and Supplemental Nutrition Assistance Program/Electronic Benefit Transfer Systems and Associations with Rurality, Poverty, Race/Ethnicity, and Obesity among North Carolina Counties. *Journal of Hunger and Environmental Nutrition*, 11(1), 102-121.
- [47] Rachel Ward, Deborah Slawson, Qiang Wu, Stephanie Jilcott Pitts (2015), Associations Between Farmers Market Managers' Motivations and Market-Level Supplemental Nutrition Assistance Program Electronic Benefit Transfer (SNAP/EBT) Availability and Business Vitality, *Journal of Agriculture, Food Systems, and Community Development*, 6(1), 121-130.
- [48] Jilcott Pitts Stephanie, Acheson Mariel, Ward K Rachel, Wu Qiang, McGuirt T Jared, Bullock L Sally, Lancaster F Mandee, Raines Justin, Ammerman S Alice (2015), Disparities in healthy food zoning, farmers' market availability, and fruit and vegetable consumption among North Carolina residents, *Archives of Public Health*, 2015, 73(1): 35.
- [49] Stephanie B Jilcott Pitts, Qiang Wu, Chelsea L Demarest, Crystal E Dixon, Ciarra JM Dortche, Sally L Bullock, Jared McGuirt, Rachel Ward, and Alice S Ammerman (2015), Farmers' market shopping and dietary behaviors among supplemental nutrition assistance program participants, *public health nutrition*, 18(13), 2407-2414.
- [50] Paul Vos and Qiang Wu (2015), Maximum Likelihood Estimators Uniformly Minimize Distribution Variance among Distribution Unbiased Estimators in Exponential Families, *Bernoulli Journal*, 21(4), 2120-2138.
- [51] Qiang Wu, and Weixin Yao (2016), Mixtures of quantile regressions, *Computational Statistics and Data Analysis*, 93, 162-176.
- [52] Zhibin Huang, Kevin A. Yuh, Simon S. Lo, John C. Grecula, Steffen Sammet, Christina L. Sammet, Guang Jia, Michael V. Knopp, Qiang Wu, Norman J. Beauchamp III, William TC Yuh, Roy Wang, Nina A. Mayr (2014), Validation of Optimal DCE-MRI Perfusion Threshold to Classify At-risk Tumor Imaging Voxels in Heterogeneous Cervical Cancer for Outcome Prediction, *Magnetic Resonance Imaging*, 32(10), 1198-1205.
- [53] Christopher Duffrin, Natalie Jackson, Lauren Whetstone, Doyle Cummings, Ricky Watson, Qiang Wu (2013), Perceptions of Community Health Center Impact on Private Primary Care Physician Practice, *the Journal of Public Health Management and Practice*, 20(6), 626-631.
- [54] Ervin Davis, John Stockstill, and Qiang Wu (2014), Pain-related worry in patients with chronic orofacial pain, *The Journal of the American Dental Association*, 145(7), 722-730.
- [55] Stephanie B Jilcott Pitts, Alison Gustafson, Qiang Wu, Mariel Leah Mayo, Rachel K Ward, Jared T McGuirt, Ann P Rafferty, Mandee F Lancaster, Kelly R Evenson, Thomas C Keyserling, and Alice S Ammerman (2014), Farmers market use is associated with fruit and vegetable consumption in diverse southern rural communities, *Nutrition Journal* 2014, 13:1.
- [56] Marie Pokorny, Mary Ann Rose, Melvin Swanson, Frank Watkins, Mary K. Kirkpatrick, Qiang Wu (2014), The relationship between pressure ulcer prevalence, BMI, and Braden scales and subscales: a further analysis, *Advances in Skin & Wound Care*, 27(1), 26-30.
- [57] Molly Cashion, Stephanie Jilcott-Pitts, Doyle Cummings, Christopher Duffrin, John Jones, and Qiang Wu (2013), Access to primary care: comparing driving distance from health professional shortage area (HPSA) counties versus non-HPSA counties, *Frontiers in Public Health Services and Systems Research*, 2(4), article 2.
- [58] Stephanie Jilcott Pitts, Qiang Wu, Jared McGuirt, Thomas Crawford, Thomas Keyserling, and Alice Ammerman (2013), Associations between access to farmers' markets and supermarkets, shopping patterns, fruit

and vegetable consumption, and health indicators among women of reproductive age in eastern North Carolina. *Public Health Nutrition*, 24: 1-9.

[59] Hand, M. C., Rose, M. A., Pokorny, M. E., Castles, R., Watkins, F., Kirkpatrick, M. K., Swanson, M., Engelke, M., Moore, R., Wu, Q., Chen, K. (2013). Pilot testing the Augmentech Body Position Sensor on the morbidly obese patient. *Applied Nursing Research*, 26(2), 92-95.

[60] Gregory D. Kearney, C. Suzanne Lea, JoAnne Balanay, Qiang Wu, Jeffrey W. Bethel, Hayley Von Hollen, Kathy Sheppard, Robin Tutor-Marcom & Jennifer Defazio (2013), Assessment of Sun Safety Behavior among Farmers Attending a Regional Farm Show in North Carolina, *Journal of Agromedicine*, 18(1): 65-73.

[61] Heng Hong, Lin Mel, Jonathan Taylor, Qiang Wu, and Hugh Reeves (2012), Effects of robotic-assisted laparoscopic prostatectomy on surgical pathology specimens, *Diagnostic Pathology*, 7:24.

[62] Stephanie B. Jilcott, Jared T. McGuirt, Lucas J. Carr, Qiang Wu, and Thomas C. Keyserling (2012), Associations between body mass index, shopping behaviors, amenity density, and characteristics of the neighborhood food environment among female adult Supplemental Nutrition Assistance Program (SNAP) participants in eastern North Carolina, *the Ecology of Food and Nutrition*, 51(6): 526-541.

[63] Wu, Q. & Vos, P. (2012), Decomposition of Kullback-Leibler risk and unbiasedness for parameter-free estimators, *Journal of Statistical Planning and Inference*, 142(6): 1525-1536.

[64] Sun YP, Hewan-Lowe K, Wu Q, Yu J, Guo ZQ, Han YL, Fan YJ, Qin XF, Xu P, Bolatihan J, Hoshaerbai M, Yuan LP, and Hong H (corresponding author) (2011). HIV screening and awareness survey for pregnant women in a remote area in Xinjiang Uyghur Autonomous Region of China. *The Open AIDS Journal*, 5: 96-101.

[65] Jilcott SB, Wade S, McGuirt JT, Wu Q, Lazorick S, Moore JB. (2011) The association between the food environment and weight status among eastern North Carolina youth. *Public Health Nutrition*, 14(9): 1610-1617.

[66] Wu, Qiang and Sampson, A.R. (2012), Structured modeling for post-mortem brain tissue data, *Communications in Statistics*, 41: 1-20.

[67] Mazer, Mark A., Alligood, Chad M. and Wu, Qiang (2011), The infusion of opioids during terminal withdrawal of mechanical ventilation in the medical intensive care unit, *Journal of Pain and Symptom Management*, 42(1): 44-51.

[68] C. Ervin Davis, Jessica D. Hauf, Qiang Wu, Erik Everhart (2011), Brain function with complex decision making using electroencephalography, *International Journal of Psychophysiology*, 79(2): 175-183.

[69] Vos, Paul and Wu, Qiang (2012), Estimators for the Binomial Distribution that Dominate the MLE in terms of Kullback-Leibler Risk, *the Annals of the Institute of Statistical Mathematics*, 64: 359-371.

[70] Loury, Sharon, Jesse Elizabeth & Wu, Qiang (2011), Binge Drinking Among Male Mexican Immigrants in Rural North Carolina, *Journal of Immigrant and Minority Health*, 13(4): 664-70.

[71] Mayne, Linda and Wu, Qiang (2011), Creating and Measuring Social Presence in Online Graduate Nursing Courses, *Nursing Education Perspectives*, 32(2): 110-4.

[72] Wu, Qiang and Sampson, R.R. (2009), Mixture modeling with applications in schizophrenia research, *Computational Statistics and Data Analysis*, 53(7): 2563-2572.

[73] Hashimoto, T., Bazmi, H.H., Mirnics, K., Wu, Q., Sampson, A.R., Lewis, D.A. (2008), Conserved regional patterns of GABA-related transcript expression in the neocortex of subjects with Schizophrenia, *the American Journal of Physiology*, 165: 479 - 489.

[74] Dorph-Petersen, K., Pierri, J.N., Wu, Q., Sampson, A.R., Lewis, D.A. (2007), Primary visual cortex volume and total neuron number are reduced in schizophrenia, *The Journal of Comparative Neurology*, 501(2), 290-301.

- [75] Konopaske, G.T., Dorph-Petersen, K., Pierri, J.N., Wu, Q., Sampson, A.R. and Lewis, D.A. (2006), Effect of chronic exposure to antipsychotic medication on cell numbers in the parietal cortex of macaque monkeys, *Neuropsychopharmacology* (2007) 32: 1216-1223.
- [76] Maldonado-Avilés, J.G., Wu, Q., Sampson, A.R. and Lewis, D.A. (2006), Somal Size of Immunolabeled Pyramidal cells in the Prefrontal Cortex of Subjects with Schizophrenia, *Biological Psychiatry*, 60(3): 226-234.
- [77] Konopaske, G.T., Sweet, R.A., Wu, Q., Sampson, A.R. and Lewis, D.A. (2006), Regional Specificity of Chandelier Neuron Axon Terminal Alterations in Schizophrenia, *Neuroscience*, 138(1): 189-196.
- [78] Hill, J., Kolluri, N., Hashimoto, T., Wu, Q., Sampson, A.R., Monteggia, L. and Lewis, D.A. (2005), Analysis of Pyramidal Neuron Morphology in an Inducible Knockout of Brain Derived Neurotrophic Factor, *Biological Psychiatry*, 57(8): 932-934.
- [79] Roy, K., Kuznicki, K., Wu, Q., Sun Z., Bock, D., Schutz, G., Vranich, N. and Monaghan, A.P. (2004), The *Tlx* Gene Regulates the Timing of Neurogenesis in the Cortex, *The Journal of Neuroscience*, 24: 8333-8345.

Book Chapter

- [1] Paul Vos and Qiang Wu (2018), Probability Essentials in Computational Analysis and Understanding of Natural Languages: Principles, Methods and Applications (1st Edition) (pp. 75 - 109), Ed. Venkat Gudivada and C.R. Rao, Volume 38 in Handbook of Statistics (pp. 2 - 512). North Holland, 2018.
- [2] Qiang Wu and Paul Vos (2018), Inference and Prediction in Computational Analysis and Understanding of Natural Languages: Principles, Methods and Applications (1st Edition) (pp. 111 - 172), Ed. Venkat Gudivada and C.R. Rao, Volume 38 in Handbook of Statistics (pp. 2 - 512). North Holland, 2018.

Presentations

- [1] Wu, Qiang and Vos, Paul (2019), Permutation Inference for Linear Regression and a Diagnostic Tool for CLT, IMS China 2019, Dalian, China, July 6 - 10, 2019.
- [2] Wu, Qiang and Vos, Paul (2018), Permutation Inference for Linear Regression and a Diagnostic Tool for CLT, ICSA 2018, QingDao, China, July 2 - 5, 2018.
- [3] Wu, Qiang and Vos, Paul (2017), Permutation Confidence Region for Regression Slopes and a Diagnostic Tool for the Central Limit Theorem, JSM 2017 meeting, Baltimore, MD, July 29 - August 3 2017.
- [4] Wu, Qiang and Vos, Paul (2016), Permutation inference distribution for linear regression and related models, International Chinese Statistical Association 2016 Symposium, Atlanta, GA.
- [5] Wu, Qiang and Yao, Weixin (2014), Relabeling mixture models via modal clustering, 2014 WNAR meeting, University of Hawaii, Honolulu, HI.
- [6] Wu, Qiang and Yao, Weixin (2013), Mixtures of quantile regressions, 2013 IMS-China meeting, Chengdu, China, June 30 - July 4.
- [7] Wu, Qiang and Vos, Paul (2012), Improving Distribution Estimators Under Kullback-Leibler Loss, 2012 JSM meeting, San Diego, USA
- [8] Wu, Qiang and Vos, Paul (2011), Decomposition of Kullback-Leibler risk and unbiasedness for parameter-free estimators, 2011 IMS-China Meeting, Xi'an, China.
- [9] Wu, Qiang and Vos, Paul (2010), Decomposition of Kullback-Leibler risk with applications to exponential families, 2010 Joint Statistical Meeting, Vancouver, Canada.

[10] Wu, Qiang and Vos, Paul (2010), Kullback-Leibler Risk of Estimators for Univariate Discrete Distributions in the Exponential Family, ENAR 2010 Spring Meetings, March 21-24, Hilton New Orleans Riverside, New Orleans, LA. (Travel grant awarded)

[11] Wu, Qiang and Sampson, Allan R. (2008), Clustering methodologies with applications to integrative analysis of post-mortem tissue studies in schizophrenia, The 17th annual International Chinese Statistical Association Applied Statistics Symposium 2008, June 4-7th, 2008, at the Embassy Suites Hotel in Piscataway, New Jersey, USA.

[12] Wu, Qiang and Sampson, Allan R. (2008), Mixture modeling with applications to integrative analysis of post-mortem tissue studies in schizophrenia, IMS-China International Conference on Statistics and Probability 2008, June 11-13, 2008, Hangzhou, China.

[13] Wu, Qiang and Sampson, Allan R. (2008), Mixture modeling in schizophrenia research, Eleventh Meeting of New Researchers in Statistics and Probability 2008, July 29 - August 2, 2008, University of Colorado, Boulder, CO and NCAR. (Travel grant awarded)

Abstract submissions

[1] Kim, Y. J., Keith, M., Dickerson, A., Wu, Q., & Murphy, L. (2022, March). Forming new habits: An intervention to decrease sedentary behavior in medically stable older adults. 2022 American Occupational Therapy Association Annual Conference. San Antonio, TX.

[2] King, S., Collie, J., Grant, F., Beasley, N., Moss, M., Anderson, C., Wu, Q, and Gillone, A.. (2022, February). Teledentistry in the Management of Oral Lesion Consultations in a Rural Setting. Celebration of Research and Scholarship, February 2022, Greenville, NC, and SCDA 2022. Greenville, NC. National SCDA.

[3] Romer, S., Dickerson, A., & Wu, Q. (2022, April). Effects of Music on Driving Performance of Experienced Drivers With & Without Autism Spectrum Disorder. American Occupational Therapy Association Annual Conference. San Antonio.

[4] Jilcott Pitts SB, Moran NE, Wu Q, Harnack L, Craft NE, Hanchard N, Moe S, Johnson N, Obasohan J, Carr-Manthe P, Bell RA, Laska MN. Pressure-mediated reflection spectroscopy demonstrates strong criterion validity as a biomarker of fruit and vegetable intake compared to plasma carotenoid concentrations: A US multi-center cross-sectional study across four racial/ethnic groups. Virtual International Carotenoid Conference, June 2021.

[5] Hieu M. Nguyen, Acela A. Martinez Luna, Stevan Thompson, Gerard A. Camargo, Chandler Conner, Will Grine, Dino JS Salvanera, Dominick Glavich, Qiang Wu, David W. Paquette, Alex Gillone. Prescription of opioids, and non-steroidal anti-inflammatory drugs at a U. S. Dental School. The 2021 IADR/AADR/CADR General Session, July 22, 2021.

[6] Luo, H, Wu, Q., Wright, W, Bell, R. A., Garcia, R. I, and Quandt, S. A. (2020), Trends of Dental Services and Provider Types in the US in 2000-2016: Urban/rural comparisons, the 2020 IADR/AADR/CADR General Session & Exhibition, Washington, D.C., USA.

[7] Richman, A. R., Torres, E., Wu, Q., Eldridge, D., Lawson, L., Thompson, C. (2019). An assessment of HPV health literacy and HPV vaccine recommendation best practices among physicians in North Carolina [Poster presented at the American Association of Public Health Annual Meeting and Exposition, Philadelphia, PA].

[8] Paquette, D.W., Swift, C, Gillone, A., Martinez Luna, A., Gay, I., Camargo, G.A., Wu, Q., Bell, R., Keene, K.L., Moss, M., Periodontal Health Disparities among Adults in Rural North Carolina (2019), The 2019 IADR/AADR/CADR General Session & Exhibition in Vancouver, June 2019.

- [9] Diana Dai, Heng Hong, Qiang Wu (2019), The Value of Peritoneal Washing Cytology in Staging of Ovarian Tumor: A 16-Year Institutional Experience, 2019 USCAP Annual Meeting, National Harbor, Maryland, March 16 – 21, 2019.
- [10] Richman, A. R., Torres, E., Wu, Q., Mangan, S. (2018). Physician HPV health literacy: A review of medical school curricula for HPV-related content. [Poster presented at the International Conference on Communication in Healthcare, Porto, Portugal].
- [11] Huabin Luo, Shiv Patil, Qiang Wu, Ronny Bell, Doyle Cummings, PharmD, Alyssa Adams, Bertha Hambidge, Kay Craven and Fei Gao (2018), Validation of a new health literacy test for patients with Type 2 diabetes, American Public Health Association's 2018 Annual Meeting & Expo (Nov. 10 – Nov. 14) (Epidemiology).
- [12] Pitts S, Wu Q, Lyonnais MJ, Gray W. Preliminary impact of the Partnership to Improve Community Health farmers' market initiatives in rural eastern North Carolina. *2017 Annual Meeting of the American Public Health Association*. 2017.
- [13] Pitts S, Jahns L, Wu Q, Bell R, Laska MN. Feasibility, reliability, and validity of a noninvasive assessment of skin carotenoid status as a measure of dietary carotenoid consumption in a diverse community sample. *2017 Annual Meeting of the American Public Health Association*. 2017.
- [14] Howell, C., Jilcott Pitts, S. B., Wu, Q., Payne, C., Blitstein, J., Ng, SW. (2016-2017). *Associations Between Ego Depletion, Pester Power, Habit Strength, and Fruit, Vegetable, and Sugary Beverage Consumption in Online versus Brick-and-Mortar Grocery Shopping*. ECU Research and Creative Achievement, Greenville, North Carolina.
- [15] Lyonnais, M., Jilcott Pitts, S. B., Wu, Q., & Gray, W. (2016-2017). *Associations between farmers' market characteristics, customer shopping frequency and fruit and vegetable consumption*. ECU Research and Creative Achievement, Greenville, North Carolina.
- [16] Richman, A. R., Torres, E. T., Wu, Q., Carlston, L., & O'Rorke, S. (n.d.). *A randomized longitudinal intervention study to assess whether electronic messaging can increase HPV vaccine completion and knowledge among adolescents in eastern North Carolina*. *American Public Health Association Annual Meeting*. Atlanta, GA.
- [17] Torres, E. T., Richman, A. R., & Wu, Q. (2017, September). Communication about HPV: Shared knowledge and HPV vaccine uptake among parents and adolescents in rural eastern North Carolina. 10th American Association for Cancer Research Conference on The Science of Cancer Health Disparities. Atlanta, GA.
- [18] Luo, H., Bell, R. A., Wright, W. G., & Wu, Q. (n.d.). Dental and other health care visits among adults with diabetes in North Carolina. Oral Presentation. North Carolina Public Health Association Fall Education Conference, September 28th, 2017, Asheville, NC.
- [19] Pitts, Stephanie Bell Jilcott, Lyonnais, Mary Jane, Whitt, Olivia Rachel, Rafferty, Ann Patricia, Wu, Qiang, Winterbauer, Nancy, Lisa Phillips, McGuirt, Jared Thomas (2016), What characteristics of farmers' markets promote greater fruit and vegetable purchase and consumption? The APHA 2016 Annual Meeting & Expo (Oct. 29 – Nov. 2), Denver, CO.
- [20] Konstantinos Spaniolas, Qiang Wu (2016), Comparative effectiveness of Roux-en-y gastric bypass and sleeve gastrectomy in super obese patients, the Scientific Session of the SAGES 2016 Annual Meeting, Boston, MA.
- [21] Shivajirao Patil, Robert J. Tanenberg, Sandra Hardee, Niti Armistead, Qiang Wu, Meredith Hollinger (2016), A Multidisciplinary Intervention Reduced Inpatient Hypoglycemia, the American Diabetes Association's 76th Scientific Sessions, June 10-14, 2016 in New Orleans, Louisiana.

- [22] Stephanie B Jilcott Pitts, Mariel Acheson, Rachel Ward, Qiang Wu, Jared McGuirt, Alice Ammerman, Zoning to support farmers' markets in rural and urban communities, the Food and Nutrition program of the 143th APHA Annual Meeting and Exposition (October 31 – November, 2015), Chicago, IL.
- [23] Brandon N. Kyle, Claude E. Davis, Jacob Thorp, Qiang Wu, Juan Fimhaber (2014), Relation of Battery for Health Improvement 2 Scores and Spinal Cord Stimulator Surgery, 2015 SBM Annual Meeting.
- [24] Laurel M. Wentz, Qiang Wu, Jerad D. Eldred, Peter C. Chambers, Cristóbal S. Berry-Cabán (2014), Correlation of Vitamin D with Testosterone Levels in Special Operations Personnel, the Womack Research Symposium, Fort Bragg, NC, May 14, 2014.
- [25] C. Ervin Davis, Brandon N. Kyle, Jacob Thorp, Qiang Wu (2014), Prediction of Spinal Cord Stimulator Trial for Patients with Chronic Low Back Pain, 35th Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine, Philadelphia, PA.
- [26] Tijen Karsli, Jeffrey Livingston, Samuel H Pepkowitz, Qiang Wu, and Prem S Shekhawat (2014), Assessment Of Adrenal Function By Profiling Adrenal Glucocorticoid Precursors and their ratios Using Tandem Mass Spectrometry, 2014 PAS/ASPR Joint Meeting, Vancouver, CA.
- [27] Tijen Karsli, Diana M Strickland, Jeffrey Livingston, Qiang Wu, and Prem S Shekhawat (2014), Assessment of Adrenal Size Using High Resolution 2D Ultrasound Imaging And It's Correlation With Birth Demographics And Clinical Outcomes, 2014 PAS/ASPR Joint Meeting, Vancouver, CA.
- [28] Mary Kirkpatrick, Sylvia Brown, Elaine Scott, Qiang Wu (2014), Assessing and Improving Organizational Climate, Culture and Civility, Drexel University Nursing Education Institute 2014, Philadelphia, PA.
- [29] Zarana Bayona, MD. Robert J. Tanenberg, MD. Jennifer A. Sutter, MD. Qiang Wu, PhD. (2013), The Effect of Type I Diabetes Mellitus on Final Adult Height, the American Dental Association Conference, June 21 - 25, 2013, McCormick Place Convention Center (West Building), Chicago, IL.
- [30] Yaseen Mohiuddin, Heng Hong, Qiang Wu, and Ming Yin (2013), Immunohistochemical Study of The Epithelial-to-Mesenchymal Transition Phenotype in Renal Tumors, 2013 United States & Canadian Academy of Pathology Annual Meeting or 2013 Society for Pediatric Pathology Spring Meeting.
- [31] Ervin Davis, Hannah Fisher, Lora Smith, Jacob Thorp, Brandon Kyle, Wu, Qiang (2013), Comparison of pain, disability, and psychological distress in patients with chronic low back pain being evaluated for spinal cord stimulator implant or behavioral pain management, poster presentation at the 34th Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine, March 20-23, 2013, San Francisco, CA.
- [32] Hannah Fisher, Lora Smith, Jacob Thorp, C Ervin Davis, Brandon Kyle, Qiang Wu (2012), Comparison of patient characteristics referred for different treatments in patients with chronic low back pain, 2012 NCPTA Fall Poster Presentations.
- [33] Rongqin Ren, Miriam Wildeman, Ming Yin, Qiang Wu, and Heng Hong (2013), The Role of Peritoneal Washing Cytology in Pathologic Evaluation of Ovarian Tumors, 2013 United States & Canadian Academy of Pathology Annual Meeting or 2013 Society for Pediatric Pathology Spring Meeting.
- [34] Heng Hong and Qiang Wu (2012), Analysis of Risk Factors For Positive Surgical Margins in Prostatectomy for the Treatment of Prostate Cancer by Using a Logistic Regression Model, The Pathologists' Meeting CAP 2012, September 9-12.
- [35] Hong H, Hewan-Lowe K, Sun Y, Wu Q et al: Universal HIV screening for pregnant women in a remote area in Xinjiang Uyghur Autonomous Region of China. CAP Annual Meeting, Chicago, IL, 2010.
- [36] Heng Hong, Lin Mel, Jonathan Taylor, Qiang Wu, Hugh Reeves and Amanda Allan (2010), Effect Of Robotic-Assisted Laparoscopic Prostatectomy On Surgical Pathology Specimens, United States and Canadian Academy of Pathology.

- [37] Mark Mazer, Thomson Pancoast, Charles Bangley, and Qiang Wu (2010), A Simple Method to Enhance Use of Lower Tidal Volume Mechanical Ventilation, SCCM's 40th Critical Care Congress, January 15-19, 2011.
- [38] Davis, C. Ervin, Everhart, D. Erik, Hauf, Jessica D., Wu, Qiang and Highsmith, Jonathan (2010), EEG spectral changes with complex decision making and correlations with decision making behavioral performance and executive functioning, Society for Psychophysiological Research, 50th Annual Meeting, Portland, Oregon.
- [39] Mazer, Mark A., Alligood, Chad M., and Wu, Qiang (2009), The infusion of morphine during terminal withdrawal of mechanical ventilation in the medical intensive care unit, SCCM's 39th Critical Care Congress, January 9-12, 2009.
- [40] Mazer, Mark A., Barber, Laura, and Wu, Qiang (2009), Effect of head of bed angle on ventilator weaning parameters of mechanically ventilated patients, SCCM's 39th Critical Care Congress, January 9-12, 2009.
- [41] Mayne, Linda, Wu, Qiang and Bond, Diana (2008), Creating & Measuring Social Presence in Online Graduate Nursing Courses, the Council for the Advancement of Nursing Science (CANS) 2008 State of the Science Conference in Nursing Research October 2-4, 2008, Washington D C. (funded by 2007 NLN Nursing Research Education Grant)
- [42] Sweet, R.A., Henteleff, R.A., Wu, Q., Sampson, A.R., Lewis, D.A. (2007), Evidence of Reduced Dendritic Spine Density in Auditory Cortex of Subjects with Schizophrenia, for *the Society of Biological Psychiatry* annual meeting 2007.
- [43] Hashimoto, T., Bazmi, H.H., Mirnics, K., Wu, Q., Sampson, A.R., and Lewis, D.A. (2007), Regional survey of GABA-related gene expression in the neocortex of subjects with schizophrenia, for *the ICOSR* meeting 2007.
- [44] Hashimoto, T., Bazmi, H.H., Mirnics, K., Wu, Q., Sampson, A.R. and Lewis, D.A. (2006), Expression of GABA-Related Transcripts Across Cortical Regions in Subjects with Schizophrenia, for *the Society for Neuroscience* annual meeting 2006.

Participation in expert panels

Data Analytics at ENC, 2018 Big Data at Eastern North Carolina (ENC) Symposium, College of Business, East Carolina University, April 18, 2018

Grant activities

Awarded Grants in eTracs, 2007 – Present.

Ramses Award Number	Award Title	Award Amount	Award Project PI	Sponsor	Project begin date	Project end date	Prime Sponsor
21-0018	Exploring vaccine confidence and uptake of potential COVID-19 vaccines among a cross-section of US healthcare providers and key at-risk subgroups in the rural south	\$283,877	Richman, Alice	Merck Sharp & Dohme	11/01/2020	10/31/2022	
21-0019	The role of dentists in HPV vaccination: Building the infrastructure between co-located dental practices and federally qualified health centers to facilitate HPV vaccination uptake	\$312,148	Torres, Essie	Merck Sharp & Dohme	11/01/2020	10/31/2022	

21-0035	Soft and Hard Tissue Changes Around Implants Using Customized CAD/CAM Healing Abutments	\$24,949	Martinez Luna, Acela	American Academy of Implant Dentistry Foundation	01/01/2021	12/31/2022	
20-1025	Dr. Mark Moss' DentaQuest Partnership Proposal	\$52,078.71	Moss, Mark	DentaQuest Partnership for Oral Health Advancement, LLC	07/01/2020	06/30/2021	
A19-0361-001	Examining Validity and Sensitivity of Pressure-Mediated Reflection Spectroscopy as a measure of fruit and vegetable consumption in a diverse populations	\$699,369.00	Pitts, Stephanie	NIH National Heart, Lung, and Blood Institute (NHLBI)	06/01/2019	05/31/2023	
A19-0208-001	Examining the impact of North Carolina's Statewide Healthy Food Small Retailer Policy on diet-related outcomes in rural food deserts	\$250,000.00	Pitts, Stephanie	Robert Wood Johnson Foundation (RWJF)	12/15/2018	12/14/2020	
A19-0019-001	Rural Urban Disparities and Determinants of Dental Services and Provider Mix	\$139,760.00	Luo, Huabin	NIH National Institute of Dental and Craniofacial Research (NIDCR)	7/1/2018	6/30/2020	
A18-0239-001	Feasibility of an enhanced educational curriculum for medical students aimed at increasing HPV health literacy and skills in providing primary HPV-related cancer prevention	\$250,000.00	Richman, Alice	Merck Research Laboratories	9/1/2017	8/31/2020	
A16-0041-001	Pirates for HEALTH: Healthy Eating, Active Living Through Hybrid Interventions	\$39,992.00	Das, Bhibha	University of North Carolina at Chapel Hill (UNC-CH)	7/1/2015	6/30/2016	
A15-0192-006	Partners in Community Health Evaluation-ARHS	\$32,973.00	Pitts, Stephanie	Albemarle Regional Health Services	9/30/2014	6/30/2017	Centers for Disease Control and Prevention (CDC)
A15-0192-004	Partners in Community Health Evaluation-ARHS	\$51,780.00	Pitts, Stephanie	Albemarle Regional Health Services	9/30/2014	6/30/2017	Centers for Disease Control and Prevention (CDC)
A15-0192-002	Partners in Community Health Evaluation-ARHS	\$52,924.00	Pitts, Stephanie	Albemarle Regional Health Services	9/30/2014	6/30/2017	Centers for Disease Control and Prevention (CDC)
A14-0234-001	The effectiveness of the Interactive Metronome with Healthy Aging Adult: a Longitudinal Study	\$59,175.00	Trujillo, Leonard	Interactive Metronome, Inc.	5/1/2014	4/30/2016	
A13-0098-006	NC CTG Farmer's Market Evaluation	\$14,841.00	Pitts, Stephanie	University of North Carolina at Chapel Hill (UNC-CH)	12/1/2012	9/30/2016	NCDHHS Division of Public Health (DPH)
A12-0130-001	Cell-Cell Junction Proteins as Biomarker Cluster for Prostate Cancer	\$250,000.00	Lu, Qun	N.C. Biotechnology Center	1/15/2012	8/31/2014	

A11-0007-001	Development and Validation of Pavement Deterioration Models and Analysis of Weig	\$114,416.00	Wang, Yuhong	North Carolina Department of Transportation	8/16/2010	8/15/2012	NC Department of Transportation
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Rejected or Pending Grants in eTracs, 2007 - Present.

Proposal Number	Title	PI	Sponsor	Project Start Date	Project End Date	Total Funds
22-0759	SARS-CoV-2 research & Transformative Engagement to Enhance community Representation in biomedical research.	Murata, Ramiro	NIH/National Institute of Dental and Craniofacial Research (NIDCR)	05/01/2023	04/30/2028	\$7,623,928
22-0742	Integrating Screening, Brief Intervention, and Referral to Treatment (SBIRT) for Opioid Use Disorder into an Academic Dental Practice Network.	Egan, Kathleen L	NIH/National Institute of Dental and Craniofacial Research (NIDCR)	01/01/2023	12/31/2028	\$4,073,641
22-0641	Leveraging cancer bioenergetics to counteract treatment resistance in acute myeloid leukemia	Fisher-Wellman, Kelsey H	ACS - American Cancer Society	01/01/2023	12/31/2026	\$792,000
22-0236	Person-Centered Long-Term Care and Positive Outcomes for People Living with Dementia	Basu, Rashmita	NIH/National Institute on Aging (NIA)	07/01/2022	06/30/2024	\$188,750
22-0120	Oral Microbiome in Older Adults with Periodontitis Recruited from Diverse Rural Communities	Paquette, David	NIH/National Institute of Dental and Craniofacial Research (NIDCR)	07/01/2022	06/30/2024	\$415,250
22-0070	Leveraging cancer specific OXPPOS regulation to predict/combat chemotherapy resistance in acute myeloid leukemia	Fisher-Wellman, Kelsey	Department of the Army (ARMY)	06/01/2022	05/31/2026	\$1,784,454
22-0063	Impact of implantoplasty on surface roughness and fracture resistance of yttria-stabilized zirconia (ceramic) and titanium-zirconia alloy implants.	Gillone, Alex	International Team for Implantology	04/01/2022	03/31/2023	\$109,639
21-0925	The effects of a dyadic versus caregiver targeted music therapy program on quality of life and emotional well-being of persons with dementia and their caregivers	Basu, Rashmita	Retirement Research Foundation	01/01/2022	12/31/2023	\$174,550
21-0488	Oral Microbiome and Immune Responses among African Americans and Hispanic/Latinos with Periodontitis from Rural Communities	Paquette, David W	National Institutes of Health (NIH)	04/01/2022	03/31/2024	\$420,380
21-0697	Elucidating potential targets for chemoprevention of oral cancer	Flores, Andres	NIH/National Institute of Dental and Craniofacial Research (NIDCR)	04/01/2022	03/31/2024	\$302,682
21-0543	Hypertension Related Engagement Support Technology (H-REST): A community-based healthy lifestyle support system for engaging and empowering young adults at risk for high blood pressure	Asagbra, Oghale E	Agency for Healthcare Research and Quality (AHRQ)	09/01/2021	08/31/2023	\$299,999
21-0503	Investigating DSMES completion barriers and facilitators to improve diabetes care in Medicaid recipients	Luo, Huabin	National Institutes of Health (NIH)	09/01/2021	08/31/2023	\$442,789
21-0262	Understanding the role of personal networks of US-born and foreign-born adults in cancer screening adherence	Cofie, Leslie E	National Institutes of Health (NIH)	07/01/2021	06/30/2023	\$151,000
21-0193	Age-Related Differences in the Oral Microbiome and Immune Responses in Patients with Periodontitis	Paquette, David W	National Institutes of Health (NIH)	07/01/2021	06/30/2023	\$422,900

21-0173	Technology Transfer Initiative for Detection of COVID using Breath Samples (T2 ID COVID Breath)	Moss, Mark E	National Institutes of Health (NIH)	12/01/2020	11/30/2022	\$1,800,318
21-0064	Dr. Flores Elsa U Pardee Foundation Proposal	Flores, Andres	Elsa U Pardee Foundation	01/01/2021	12/31/2021	\$140,769
21-0050	Early Detection of COVID-19 in the Underserved Dental Care Setting	Roper, Rachel L	National Institutes of Health (NIH)	11/01/2020	10/31/2025	\$3,512,083
20-1790	Investigating DSME completion barriers and facilitators to improve diabetes care in Medicaid recipients	Luo, Huabin	National Institutes of Health (NIH)	07/01/2021	06/30/2023	\$437,153
20-1570	Impact of implantoplasty on surface roughness and fracture resistance of yttria-stabilized zirconia (ceramic) and titanium-zirconia alloy implants	Gillone, Alex	Straumann	07/01/2020	06/30/2021	\$25,444
20-1032	Hypertension Related Engagement Support Technology (H-REST): A community-based decision support system for engaging young adults at risk for high blood pressure in their communities	Asagbra, Oghale E	Agency for Healthcare Research and Quality (AHRQ)	10/01/2020	09/30/2022	\$300,000
19-0662	Telepractice versus in-person delivery of dysphagia therapy for rural stroke survivors	Rangarathnam, Balaji	National Institutes of Health (NIH)	12/1/2019	11/30/2021	\$389,169.00
19-0347	Targeting cisplatin neuropathy in a syngeneic tumor mouse model	Lu, Qun	National Institutes of Health (NIH)	7/1/2019	6/30/2024	\$1,828,971.80
19-0322	Investigating the role of social determinants on participation in Diabetes Self-Management Education and Support, (DSME/S), Self-efficacy, diabetes self-management behaviors, outcomes, and costs	Luo, Huabin	National Institutes of Health (NIH)	7/1/2019	6/30/2022	\$439,037.00
19-0258	Rural and poverty stressors as modifiers of epigenomes and human health	Keene, Keith	National Institutes of Health (NIH)	7/1/2019	6/30/2024	\$3,629,882.25
19-0170	Heavy Metal Elements in Extracted and Exfoliated Teeth - ECU Tooth Fairy Project	Spuches, Anne	NCSU Center for Human Health and the Environment	11/15/2018	11/14/2019	\$34,568.00
19-0017	Examining Validity and Sensitivity of Pressure-Mediated Reflection Spectroscopy as a measure of fruit and vegetable consumption in a diverse populations	Pitts, Stephanie	NIH National Heart, Lung, and Blood Institute (NHLBI)	7/1/2019	6/30/2023	\$2,679,173.00
18-0792	Periodontal Disease, Prediabetes and Incident Type 2 Diabetes in Adults Seeking Dental Care in Rural North Carolina and Wisconsin	Paquette, David	National Institutes of Health (NIH)	4/1/2019	3/31/2024	\$3,095,758.00
18-0762	Interactive Survivorship Care Plans to Support Breast Cancer Survivors using a Personalized Web-Based Educational and Self-Management Tool	Kapoor, Akshat	National Institutes of Health (NIH)	4/1/2019	3/31/2021	\$419,645.00
18-0747	Evaluating the efficacy of web-based autism genetics training modules for parents of children with autism spectrum disorder	Xu, Lei	National Institutes of Health (NIH)	5/16/2019	5/15/2021	\$405,625.00
18-0664	Examining Validity and Sensitivity of Pressure-Mediated Reflection Spectroscopy as a measure of fruit and vegetable consumption in a diverse community	Pitts, Stephanie	National Institutes of Health (NIH)	12/1/2018	11/30/2022	\$2,728,688.00
18-0508	Legislation to improve small store food environments: Examining the impact of North Carolina's Statewide Healthy Food Small Retailer Program on obesity-related dietary outcomes	Pitts, Stephanie	National Institutes of Health (NIH)	9/1/2018	8/31/2023	\$3,701,471.00
18-0439	Examining the impact of a text-messaging intervention with linkages to local food and physical activity opportunities on	Pitts, Stephanie	DHHS Health Resources and Services	7/1/2018	6/30/2021	\$898,769.00

	obesity prevention behaviors among low-income, rural women and their children		Administration (HIRSA)			
18-0233	Evaluating the efficacy of an enhanced training curricula for dental students to increase HPV-related oropharyngeal cancer knowledge and intention to engage in primary and secondary prevention	Torres, Essie	National Institutes of Health (NIH)	7/1/2018	6/30/2021	\$442,500.00
18-0223	The Impact of Blood Based Testing for Genomic Mutations in Patients with Non-Small Lung Cancer in a Thoracic Oncology Program	Bowling, Mark	UNC-CH Lineberger Comprehensive Cancer Center	1/1/2018	12/31/2018	\$50,000.00
17-0912	Legislation to improve small store food environments: Evaluation of North Carolina's Healthy Food Small Retailer Program (House Bill 1030 Section 13.4)	Pitts, Stephanie	National Institutes of Health (NIH)	12/1/2017	11/30/2022	\$3,266,172.10
17-0762	Application of Novel Modeling Approaches to Identify Key Indicators of Bone Stress and Design Safe Return to Play Workloads	Mearndon, Stacey	General Electric (GE)	8/1/2017	7/31/2020	\$300,000.00
17-0626	Feasibility of an enhanced educational curriculum for dental students aimed at increasing their role in primary and secondary HPV-related oropharyngeal cancer prevention	Torres, Essie	National Institutes of Health (NIH)	9/1/2017	8/31/2020	\$442,500.00
17-0585	Rural Urban Disparities and Determinants of Dental Services and Provider Mix	Luo, Huabin	NIH National Institute of Dental and Craniofacial Research (NIDCR)	7/1/2017	6/30/2019	\$147,235.00
17-0547	Evaluating impact of state and federal healthy food retail legislation on rural economies, diabetogenic community characteristics and diet (Component A)	Pitts, Stephanie	University of North Carolina at Chapel Hill (UNC-CH)	9/30/2017	9/29/2022	\$1,562,774.00
17-0546	Examining validity of a non-invasive biomarker of carotenoid consumption in a diverse community sample	Pitts, Stephanie	International Life Sciences Institute (ILSI)	6/1/2017	5/31/2018	\$49,946.89
17-0527	Healthy Steps to Weight Loss	Carels, Robert	National Institutes of Health (NIH)	8/1/2017	7/31/2020	\$428,502.70
17-0515	Examining Validity and Sensitivity of Pressure-Mediated Reflection Spectroscopy as a measure of carotenoid-containing fruit and vegetable consumption in a diverse community sample	Pitts, Stephanie	National Institutes of Health (NIH)	7/1/2018	6/30/2022	\$2,652,432.00
17-0384	Naltrexone for Symptoms of Gulf War Illness: Determinants of Response versus Non-Response	Meggs, William	Department of Defense (DOD)	7/3/2017	6/30/2020	\$857,450.00
17-0309	Evaluation of North Carolina's Healthy Food Small Retailer Program (House Bill 1030, Section 13.4)	Pitts, Stephanie	National Institutes of Health (NIH)	4/1/2017	3/31/2021	\$2,693,907.00
16-0841	Examining the impact of online shopping and healthy primes to reduce unhealthy impulse purchases among low-income caregivers	Pitts, Stephanie	Robert Wood Johnson Foundation (RWJF)	11/15/2016	5/14/2018	\$181,917.12
16-0836	Healthy Steps to Weight Loss	Carels, Robert	NIH National Heart, Lung, and Blood Institute (NHLBI)	1/1/2017	12/31/2019	\$427,869.05
16-0610	Reactance to smoking and HIV disparities communication among sexual and gender minority adults	Lee, Joseph	National Institutes of Health (NIH)	7/1/2017	6/30/2019	\$420,693.60
16-0120	A stepped-care approach to treating obesity	Carels, Robert	NIH National Heart, Lung, and Blood Institute (NHLBI)	8/1/2016	7/31/2019	\$428,880.65
16-0106	Rural Urban Disparities and Determinants of Dental Services and Provider Mix	Mejia Delgado, Gloria	National Institutes of Health (NIH)	10/1/2016	9/30/2018	\$147,500.00

16-0020	Evaluating the impact of a new supermarket in a low-income Southern community	Pitts, Stephanie	Robert Wood Johnson Foundation (RWJF)	12/15/2015	6/14/2017	\$189,611.52
15-0882	AHA-innovative Research Grant	Pitts, Stephanie	American Heart Association (AHA)	1/1/2016	12/31/2017	\$150,000.40
15-0868	Healthy Steps Feasibility Project	Carels, Robert	UNC-CH Center for Diabetes Translation Research (CDTR)	9/1/2015	8/31/2016	\$40,000.00
15-0859	AHA-EIA [placeholder]	Pitts, Stephanie	American Heart Association (AHA)	1/1/2016	12/31/2020	\$399,998.50
15-0679	Evaluating the impact of a new supermarket on residents' diets in a low-income, Southern community	Pitts, Stephanie	National Institutes of Health (NIH)	8/1/2015	7/31/2019	\$2,986,396.50
15-0399	Conquering Diabetes through Smart Students and Smart Phones	Pitts, Stephanie	NIH National Center on Minority Health and Health Disparities (NCMHD)	7/1/2015	6/30/2018	\$437,536.63
15-0020	Local Strides for Community Health (LSCH) Evaluation	Pitts, Stephanie	Pitt County Health Department	9/30/2014	9/29/2017	\$457,602.53
14-0295	Associations between land use policy, physical activity and nutrition resources, and diabetes control in rural North Carolinians	Pitts, Stephanie	University of North Carolina at Chapel Hill (UNC-CH)	4/1/2014	3/31/2015	\$31,931.00
14-0123	A supermarket intervention to improve healthy food choices in rural North Carolina	Pitts, Stephanie	University of North Carolina at Chapel Hill (UNC-CH)	2/1/2014	7/31/2016	\$49,396.00
13-0727	Examining the health impact of farmers' markets	Pitts, Stephanie	NIH National Cancer Institute (NCI)	4/1/2014	3/31/2019	\$3,100,299.00
13-0695	Associations between healthy food zoning and healthy eating among rural and urban United States residents	Pitts, Stephanie	Robert Wood Johnson Foundation (RWJF)	11/1/2013	4/30/2015	\$169,268.84
13-0685	Nutritional intervention for the treatment and prevention of mild traumatic brain injury	Wentz, Laurel	Department of Defense (DOD)	10/1/2014	9/30/2017	\$3,000,000.00
13-0131	Examining the health impact of farmers' markets	Pitts, Stephanie	NIH National Cancer Institute (NCI)	7/1/2013	6/30/2018	\$3,251,061.95
13-0130	Evaluation of Obesity Prevention Policies	Pitts, Stephanie	NIH National Cancer Institute (NCI)	7/1/2013	6/30/2018	\$3,594,618.00
12-0419	Type 2 Diabetes Reversal after Roux-en-Y Gastric Bypass: Can addition of Liraglutide and/or Orlistat to Gastric Bypass Achieve Similar Success?	Dar, Moahad	National Institutes of Health (NIH)	12/3/2012	12/4/2017	\$842,452.20
11-1107	Breathing Retraining for Chronic Low Back Pain	Davis, Claude	National Institutes of Health (NIH)	4/1/2012	4/1/2015	\$721,611.00
11-0796	Identification of Phonological Categories in Infant Vocal Development	Ramsdell, Heather	National Institutes of Health (NIH)	12/1/2011	11/30/2014	\$430,500.00
11-0715	Statistics Core - Mid-Atlantic Center for Agricultural Safety and Health	Vos, Paul	National Institute of Occupational Safety and Health, Center for Disease Control	9/30/2011	9/29/2016	\$183,183.00
11-0288	Delta-Catenin: A Potential Lung Cancer Biomarker	Lu, Qun	National Cancer Institute (NIH)	8/1/2011	7/31/2012	\$390,381.58
11-0256	Delta-Catenin: A Viable Prostate Cancer Biomarker	Lu, Qun	National Cancer Institute (NIH)	7/1/2011	6/30/2013	\$390,381.58
10-0333	Vocational Vital Signs for Adults with Substance Abuse Issues	Toriello, Paul	U.S. Department of Energy	7/1/2010	6/30/2013	\$587,890.00

Institutional services

Providing statistical support to researchers at ECU

2007 – present

- Delivered an average 160 hours per year of statistical support to researchers at ECU, especially those in College of Allied Health Sciences, College of Nursing and Brody School of Medicine.
- The services have resulted in numerous joint journal publications, funded grants, and abstract submissions.

Graduate student's thesis and dissertation committee

- Alec Ducharme, Occupational Therapy 2022-2023
- Meagan Denny, Occupational Therapy 2022-2023
- Juliette Lucia Leonardo, Thesis, Occupational Therapy 2019-2021
- Melissa Rae Dale, Thesis, Occupational Therapy 2019-2021
- Sarah Burkholder, Thesis, Nutrition Science 2018-2019
- Sharon Smith, Dissertation, Biology 2011-2017
- Steven Weber, Dissertation, Education 2012-2016
- Joshua Thigen, Thesis, Biology 2014-2016
- Fuliang Xie, Dissertation, Biology 2012-2014
- Kylie Gearhart, Nutrition Science 2012-2013
- Matthew Butler, Biology 2011-2013
- Jonnie Corinne Seay, Rehabilitation Studies 2011
- William Leigh Atherton, Rehabilitation Studies 2011
- Skye Lewis, Communication Sciences and Disorders 2010
- Helen Houston, Occupational Therapy 2010
- Kristal Mills, thesis, Communication Sciences and Disorders 2009
- John Mohan, thesis, Biology 2008
- Doctoral competency exam for Kristal Mills, Communication Sciences and Disorders 2009 – 2010
- Doctoral competency exam Christina Figueroa, Communication Sciences and Disorders 2008 – 2009
- Doctoral competency exam Janel Cosby, Communication Sciences and Disorders 2008 – 2009

Workshops at ECU Center for Faculty Excellence, Department of Biostatistics and others

- T-test and ANOVA 2022
- Contingency table and logistic regression 2022
- Statistical Comparisons of Groups of Data 2019
- SAS Intro 2019
- Measurement and descriptive statistics 2018
- Regression and correlation 2018
- Introduction to SPSS 2018
- Poisson and negative binomial regression 2017
- Regression and correlation 2017
- Introduction to SAS 2017
- Bivariate Analysis 2016
- Bayesian Analysis 2016
- Factor, Cluster, and Discriminant Analysis 2015
- Introduction to SAS 2015, 2016
- Sampling Distributions and Inference 2014
- Modeling and Advanced Topic in R 2014
- Using Excel 2013
- Introduction to JMP 2013
- Sampling Distributions and Inference 2013
- Logistic and ordinal regression 2012
- Bootstrap and resampling 2012

- Working with missing data 2010, 2011
- Statistical inference using SAS 2010, 2011, 2012
- Nonparametric tests 2009, 2010
- Linear and logistic regression 2009
- Exploring data and making comparisons in SAS 2009
- A SAS workshop series of Department of Biostatistics 2009
- Pathology Grand Rounds at Department of Pathology and Laboratory Medicine 2009

Institutional committee member

- University and Medical Center IRB alternate member 2019 - present
- Faculty council member in College of Allied Health Sciences 2010 - 2013, 2019-2022
- Diversity Committee in College of Allied Health Sciences 2008 - 2010, 2015 - 2019
- Alternate hearing and appeal committee in College of Allied Health Sciences 2009

Professional services

- A guest reviewer for Journal of Computational and Graphical Statistics 2022
- A guest reviewer for Communications in Statistics 2019
- A guest reviewer for Electronic Journal of Statistics 2017
- A guest reviewer for BMC Public Health 2016
- A guest reviewer for BMC Pediatrics 2016
- A guest reviewer for Dependence Modeling 2015
- A guest reviewer for Journal of Immigrant and Minority Health 2015
- A guest reviewer for a text by WHFreeman 2015
- A guest reviewer for a text by Macmillan - the Practice of Statistics in the Life Sciences 2017
- A guest reviewer for Entropy 2014
- A guest reviewer for the American Statistician 2012, 2013, 2014
- A guest reviewer for the R journal 2010
- An editorial board member for the Journal of Occupational Therapy in Health Care 2010 - present

Miscellaneous

Continuing education

- Writing your own R package from scratch, The 2019 ASA Conference on Statistical Practices February, 2019
- Successful data mining in practice, The 2019 ASA Conference on Statistical Practices February, 2019
- Innovation in online instruction in statistics: engaging and challenging e-learners, an USCOTS pre-conference workshop, Cary, NC May, 2013
- Computationally intensive methods in teaching introductory statistics, a USCOTS pre-conference workshop funded by NSF grants, SAS Institute Inc. May, 2011
- Analysis of ordinal categorical data, JSM 2010 August, 2010
- Analysis of clinical trials: theory and applications, JSM 2008 August, 2008
- The Annual Jean Mills Symposium, ECU February, 2010, 2011, 2012

Professional memberships

- American Statistical Association 2004 - present
- Institute of Mathematical Statistics 2004 - present
- International Biometric Society - ENAR 2007 - present

Meeting travel awards

[1] Eleventh Meeting of New Researchers in Statistics and Probability 2008, July 29 - August 2, 2008, University of Colorado, Boulder, CO and NCAR.

[2] ENAR Workshop for Junior Biostatisticians in Health Research 2010, March 10 -20, Hilton New Orleans Riverside, New Orleans, LA.