

D. LEANN LONG

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Academic Position

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| University of Alabama at Birmingham, Birmingham, AL | |
| Associate Professor, Department of Biostatistics | 2020 – present |
| Assistant Professor, Department of Biostatistics | 2016 – 2020 |
| West Virginia University, Morgantown, WV | |
| Assistant Professor, Department of Biostatistics | 2013 – 2016 |

Education

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| PhD, Biostatistics | 2013 |
| University of North Carolina at Chapel Hill, Chapel Hill, NC | |
| Dissertation: Marginalized Zero-inflated Poisson Regression | |
| MS, Mathematics | 2006 |
| Tennessee Technological University, Cookeville, TN | |
| BS, Mathematics, <i>summa cum laude</i> , with Honors | 2004 |
| Tennessee Wesleyan College (now Tennessee Wesleyan University), Athens, TN | |

Research Experience and Training

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| Graduate Research Assistant | 2007 – 2012 |
| Department of Biostatistics, Gillings School of Global Public Health | |
| University of North Carolina at Chapel Hill, Chapel Hill, NC | |
| NIH Training Grant Recipient | |
| NIEHS T32 ES007018 | 2010 – 2012 |
| NICHD T32 HD007237 | 2006 – 2009 |

Current Grant Support

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| R01 HD095248 (Contact PI: D. Leann Long) | 09/01/18 – 06/30/23 |
| NIH/NICHD | |
| <i>Promoting Transportation Safety in Adolescence</i> | |
| Role: Contact Principal Investigator (Multiple PI) | |
| PCS-2017C3-9081 (Sub-PI: George Howard) | 02/01/19 – 01/31/23 |
| PCORI/Vanderbilt | |
| <i>Comparative Effectiveness Randomized Trial to Improve Stroke Care Delivery: C3FIT: Coordinated, Collaborative, Comprehensive, Family-based, Integrated, and Technology-enabled Care</i> | |
| Role: Co-Investigator, Deputy Director of Data Coordinating Center | |

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| U01 DP006302 (PI: April Carson) US DHHS/CDC <i>Prioritizing county-level social determinants that contribute to the greater burden of diabetes and hypertension in the US</i> Role: Co-Investigator | 09/30/17 –09/29/22 |
| U01 NS41588 (Contact PI: Suzanne Judd) NIH/NINDS/NIA <i>VCID and Stroke in Bi-racial National Cohort</i> Role: Co-Investigator, Lead Statistician | 09/01/01 –01/31/23 |
| R01 MD010441 (PI: Burel Goodin) NIH/NIMHHD <i>Racial and Socioeconomic Differences in Chronic Low Back Pain</i> Role: Biostatistician | 04/26/17 –01/31/22 |
| R01 CE003307 (PI: David Schwebel) US DHHS/CDC <i>ShootSafe: An interactive web platform to teach children hunting, shooting and firearms safety</i> Role: Co-Investigator | 09/30/20 –09/29/23 |

Past Grant Support

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| NIH/NICHHD R21 HD089887 (PI: David Schwebel) Preventing Youth Soccer Injury: A Randomized Cross-Over Trial Role: Biostatistician | 07/15/17-06/30/20 |
| NIH/NICHHD R03 HD082664 (PI: Jessica Mirman) Evaluating the Long-Term Effectiveness of the TeenDrivingPlan Role: Biostatistician | 04/01/15-03/31/17 |
| NIH/NICHHD R01 HD074594 (PI: Motao Zhu) Do cell phone laws reduce calling, texting, and crashes among young drivers? Role: Co-investigator | 07/08/13-12/31/15 |
| NIH/NIGMS U54 GM104942 (PI: Sally Hodder) West Virginia IDeA-CTR Role: Co-investigator | 07/08/13-07/26/16 |
| US DHHS/CDC R49 CE002109 (PI: Jeffrey Coben) West Virginia University Injury Control Research Center Role: Co-investigator | 07/08/13-07/26/16 |
| CDC CE002579-01 (PI: Jim Jeffries, Subcontract PI: Gurka) Prescription Drug Overdose: Boost for State Prevention Role: Co-investigator | 10/01/14-07/26/16 |

NIH WVCTSI Pilot Grant (PI: D. Leann Long) 08/01/14-07/31/15
Meta-Analysis Implementation and Other Advanced Statistical Methods for Alternating
Treatment SCD Data
Role: Principal Investigator

CDC/NIOSH Contract #254-2014-M-61128 (PI: D. Leann Long) 09/15/14-09/14/15
Statistical Consultation for Surveillance Research
Role: Principal Investigator

Publications, Refereed (* denotes student first-author)

62. Nicoli, C*, Carson, AP, **Long, DL**, McClure, LA, Schulte, J, Judd, SE, Cushman, M. Pro-Neurotensin/Neuromedin N and Risk of Incident Metabolic Syndrome and Diabetes Mellitus: the REasons for Geographic and Racial Differences in Stroke cohort study. *Journal of Clinical Endocrinology & Metabolism*, in press.
61. Rouanet, A, Avila-Rieger, J, Dugravot, A, Lespinasse, J, Stuckwisch, R, Merrick, R, Anderson, E, **Long, L**, Helmer, C, Jacmin-Gadda, H, Dufouil, C, Judd, S, Manly, J, Sabia, S, Gross, A, Proust-Lima, C. Selection explains why association between sex/gender and cognitive decline is so inconsistent across cognitive aging cohorts. *American Journal of Epidemiology*, in press.
60. Madsen, TE, **Long, DL**, Carson, AP, Howard, G, Kleindorfer, DO, Furie, KL, Manson, JE, Liu, S, Howard, VJ. Sex and Race Differences in the Risk of Ischemic Stroke Associated with Fasting Blood Glucose in REGARDS. *Neurology*, in press.
59. Overstreet, DS*, Michl, AN, Penn, TM, Rumble, DD, Aroke, EN, Sims, AM, King, AL, Hasan, FN, Quinn, TL, **Long, DL**, Sorge, RE, Goodin, B. Temporal summation of mechanical pain prospectively predicts movement-evoked pain severity in adults with chronic low back pain. *BMC Musculoskeletal Disorders*, 22(1): 429 (2021) PMC8111750.
58. Giacobbi, P, Symons-Downs, D, Haggerty, T, Pidhorskyi, S, **Long, DL**, Clemmer, M, Olfert, M, Steinman, S, Staggs, H, Kinnamon, K, Rao, N, Hulsey, T, Adjeroh, D. Feasibility and Acceptability of Guided Imagery to Sequentially Address Multiple Health Behaviors during Pregnancy. *Journal of Midwifery & Women's Health*, in press.
57. Jackson, P*, Goodin, B, Sims, A, Penn, T, **Long, DL**, Quinn, T, Overstreet, D, Kempf, MC, Aroke, E. The Area Deprivation Index Corresponds Effectively With Other Measures of Objective Socioeconomic Status in Adults With Chronic Low Back Pain. *Journal of Nursing Management*, in press.
56. Cummings, DM, Patil, SP, **Long, DL**, Guo, B, Cherrington, A, Safford, MM, Judd, SE, Howard, VJ, Howard, G, Carson, AP. Does the Association between Hemoglobin A1c and Risk of Cardiovascular (CVD) Events vary by Residential Segregation? The Reasons for Geographic and Racial Differences in Stroke (REGARDS) Study. *Diabetes Care*, 44(5): 1151-1158 (2021) (DOI: 10.2337/dc20-1710).
55. Couch, C*, Brooks, MS, Shikany, JM, Howard, VJ, Howard, G, **Long, DL**, McClure, LA, Manly, JJ, Cushman, M, Zakai, NA, Pearson, KE, Levitan, EB, Judd, SE. Correlates of a southern diet pattern in a national cohort study of blacks and whites: the REGARDS study. *British Journal of Nutrition*, in press (DOI: 10.1017/S0007114521000696).

54. Sartin, EB*, **Long, DL**, McDonald, CC, Stavrinou, D, Clay, OJ, Mirman, JH. Evaluating disparities in child occupant protection using a proportion eliminated approach to mediation: A pilot study. *Traffic Injury Prevention*, 22(3): 252-255 (DOI: 10.1080/15389588.2021.1885652).
53. Schwebel, DC, **Long, DL**, Govey, M, Severson, J, He, Y, Trullinger, K. Study Protocol: Developing and Evaluating an Interactive Web Platform to Teach Children Hunting, Shooting and Firearms Safety; A Randomised Trial. *BMC Public Health*, 21(1): 308 (2021) PMC7866873.
52. Nicoli, CD*, Plante, TB, **Long DL**, Judd SE, McClure LA, Arora P, Cushman M. N-Terminal Pro-B-Type Natriuretic Peptide and Longitudinal Risk of Hypertension. *American Journal of Hypertension*, in press (DOI: 10.1093/ajh/hpaa224).
51. Plante, TB, **Long, DL**, Guo, B, Howard, G, Carson, AP, Howard, VJ, Judd, SE, Jenny, NS, Zakai, NA, Cushman, M. Elevated C-reactive protein and differences in hypertension incidence between black and white Americans: The REasons for Geographic And Racial Differences in Stroke (REGARDS) study. *American Journal of Hypertension*, in press (DOI: 10.1093/ajh/hpaa215).
50. Carson, AP, **Long, DL**, Cherrington, A, Dutton, GR, Howard, VJ, Brown, TM, Howard, G, Safford, MM, Cushman, M. Sex differences in factors contributing to the racial disparity in diabetes risk. *American Journal of Preventive Medicine*, 60(4): e169-e177 (2021) PMC7987785.
49. Hirsch, AG, Carson, AP, Lee, NL, McAlexander, T, Mercado, C, Siegel, K, Black, NC, Elbel, B, **Long, L**, Lopez, P, McClure, LA, Poulsen, MN, Schwartz, BS, Thorpe, LE. The Diabetes LEAD (Location, Environmental Attributes, and Disparities) Network: Rationale, Protocol, and Baseline Characteristics. *JMIR Research Protocols*, 9(10): e21377 (2020) PMC7605983.
48. Schwebel, DC, **Long, DL**, McClure, LA. Injuries on the Youth Soccer (Football) Field: Do Additional Referees Reduce Risk? A Randomized Crossover Trial. *Journal of Pediatric Psychology*, 45(7): 759-766 (2020) PMC7381189.
47. Dai, Z*, Abate, MA, **Long, DL**, Smith, GS, Halki, TM, Kraner, JC, Mock, AR. Quantifying enhanced risk from alcohol and other factors in polysubstance-related deaths. *Forensic Science International*, 313:110352 (2020) PMC7374018.
46. Petrov, ME, **Long, DL**, Grandner, MA, MacDonald, L, Cribbet, MR, Robbins, R, Cundiff, JM, Molano, JR, Hoffmann, C, Wang, X, Howard, G, Howard, VJ. Racial differences in sleep duration are modified by sex, socioeconomic status, and U.S. geographic region: The REGARDS study. *Sleep Health*, 6(4): 442-450 (2020) (DOI: 10.1016/j.sleh.2020.05.004).
45. Aroke, EN, Jackson, P, Overstreet, DS, Penn, TM, Rumble, DD, Kehrer, CV, Michl, AN, Sims, AM, Quinn, T, **Long, DL**, Goodin, BR. Race, social status, and depressive symptoms: a moderated-mediation analysis of chronic low back pain interference and severity. *The Clinical Journal of Pain*, 36(9): 658-666 (2020) PMC7725357.

44. Sartin, E*, McDonald, CC, **Long, DL**, Stavrinou, D, Mirman, JH. Variations in booster seat use by child characteristics. *Journal of Safety Research*, 74: 89-95 (2020) (DOI: 10.1016/j.jsr.2020.04.014).
43. Uddin, J, Alharbi, N, Uddin, H, Hossain, MD, Hatipoğlu, S, **Long, DL**, Carson, A. Parenting stress and family resilience affect the association of adverse childhood experiences with children's mental health and attention-deficit/hyperactivity disorder. *Journal of Affective Disorders*, 272: 104-109 (2020) (DOI: 10.1016/j.jad.2020.03.132).
42. Penn, TM*, Overstreet, DS, Aroke, EN, Rumble, DD, Sims, AM, Kehrer, CV, Michl, AN, Hasan, FN, Quinn, TL, **Long, DL**, Trost, Z, Morris, MC, Goodin, BR. Perceived injustice helps explain the association between chronic pain stigma and movement-evoked pain in adults with non-specific chronic low back pain. *Pain Medicine*, 21(11): 3161-3171 (2020) PMC7685690.
41. Tajeu, GS, Safford, MM, Howard, G, Howard, VJ, Chen, L, **Long, DL**, Tanner, RM, Muntner, P. Racial differences in cardiovascular disease mortality: a prospective study of the REasons for Geographic and Racial Differences in Stroke (REGARDS) cohort. *American Journal of Public Health*, 110(5): 696-703 (2020) PMC7144446.
40. Malla, G*, **Long, DL**, Judd, SE, Irvin, MR, Kissela, BM, Lackland, DT, Safford, MM, Levine, DA, Howard, VJ, Howard, G, Rhodes, JD, Voeks, JH, Kleindorfer, DO, Moy, CS, Anderson, A, Meschia, JF, Carson, AP. Does the association of diabetes with stroke risk differ by age, race and sex? Results from the REasons for Geographic and Racial Differences in Stroke (REGARDS) study. *Diabetes Care*, 42(10): 1966-1972 (2019) PMC7011202.
39. Evans, C, **Long, DL**, Howard, G, McClure, L, Zakai, N, Jenny, N, Kissela, B, Safford, M, Howard, V, Cushman, M. C-reactive protein and stroke risk in blacks and whites: the REasons for Geographic and Racial Differences in Stroke. *American Heart Journal*, 217: 94-100 (2019) PMC6861684.
38. Jordon, K*, **Long, DL**, McGwin, G, Childers, NK. Average area under the curve: An alternative method for quantifying the dental caries experience in longitudinal studies. *Community Dentistry and Oral Epidemiology*, 47(5): 441-447 (2019) (DOI: 10.1111/cdoe.12482).
37. Jaeger, BC, **Long, DL**, Long, DM, Sims, M, Szychowski, JM, Min, YI, McClure, LA, Howard, G, Simon, N. Oblique random survival forests. *Annals of Applied Statistics*, 13(3): 1847-1883 (2019) (DOI: 10.1214/19-AOAS1261).
36. Akinyemiju, T, Moore, JX, Dibaba, D, Pisu, M, Goodman, M, Howard, VJ, Safford, M, Gilchrist, SC, Cushman, M, **Long, L**, Judd, SE. Association of baseline inflammatory biomarkers with cancer mortality in the REGARDS cohort. *Oncotarget*, 10(47): 4857-4867 (2019) PMC6690671.
35. **Long, DL**, Howard, G, Long, DM, Judd, S, Manly, J, McClure, LA, Wadley, V, Safford, MM, Katz, R, Glymour, MM. An investigation of selection bias in estimating racial disparity in stroke risk factors: The REasons for Geographic And Racial Differences in Stroke (REGARDS) study. *American Journal of Epidemiology*, 188(3): 587-597 (2019) PMC6395161.

34. Jaeger, BC, Anstey, DE, Bress, AP, Booth, JN, Butler, M, Clark, D, Howard, G, Kalinowski, J, **Long, DL**, Ogedegbe, G, Plante, TB, Shimbo, D, Sims, M, Supiano, MA, Whelton, PK, Muntner, P. Cardiovascular disease and mortality in adults aged ≥ 60 years according to recommendations by the American College of Cardiology/American Heart Association and American College of Physicians/American Academy of Family Physicians. *Hypertension*, 73: 327-334 (2019) PMC6392064.
33. Penson, P, **Long, DL**, Howard, G, Howard, VJ, Jones, SR, Martin, SS, Mikhailidis, DP, Muntner, P, Rizzo, M, Rader, DJ, Safford, MM, Sahebkar, A, Toth, PP, Banach, M. Associations between cardiovascular disease, cancer and very low HDL cholesterol in the REasons for Geographical And Racial Differences in Stroke (REGARDS) study. *Cardiovascular Research*, 115(1): 204-212 (2019) PMC6302258.
32. Howard, G, Cushman, M, Moy, CS, Oparil, S, Muntner, P, Lackland, DT, Manly, JJ, Flaherty, ML, Judd, SE, Wadley, VG, **Long, DL**, Howard, VJ. Association of clinical and social factors with excess hypertension risk in black compared with white US adults. *Journal of the American Medical Association*, 320(13): 1338-1348 (2018) PMC6233849.
31. Penson, P, **Long, DL**, Howard, G, Toth, PP, Muntner, P, Howard, VJ, Safford, MM, Jones, SR, Martin, SS, Mazidi, M, Catapano, AL, Banach, M. Associations between very low concentrations of LDL-cholesterol, hs-CRP and health outcomes in the Reasons for Geographical and Racial Differences in Stroke (REGARDS) study. *European Heart Journal*, 39(40): 3641-3653 (2018) PMC6195947.
30. Vishnu, A, Choo, J, Kadota, A, Barinas-Mitchell, E, Fujiyoshi, A, **Long, DL**, Hisamatsu, T, Ahuja, V, Nakamura, Y, Evans, R, Miura, K, Masaki, K, Shin, C, Ueshima, H, Sekikawa, A. Comparison of carotid plaque burden among healthy middle-aged men living in the US, Japan, and South Korea. *International Journal of Cardiology*, 266: 245-249 (2018) PMC5998331.
29. Akinyemiju, TF, Moore, JX, Judd, S, Pisu, M, Goodman, M, Howard, VJ, **Long, L**, Safford, M, Gilchrist, SC, Cushman, M. Pre-diagnostic biomarkers of metabolic dysregulation and cancer mortality. *Oncotarget*, 9(22): 16099-16109 (2018) PMC5882320.
28. Mirman, JH, Curry, AE, Elliott, MR, **Long, DL**, Pfeiffer, M. Can adolescent drivers' motor vehicle crash risk be reduced by pre-licensure intervention? *Journal of Adolescent Health*, 62(3): 341-348 (2018) PMC5818292.
27. Stabler, ME*, Giacobbi, PR, Chertok, IRA, **Long, DL**, Cottrell, L, Yossuck, P. Comparison of biologic screening and diagnostic indicators to detect in utero opiate and cocaine exposure among mother-infant dyads. *Therapeutic Drug Monitoring*, 39(6): 640-647 (2017) (DOI:10.1097/FTD.0000000000000447).
26. Howard, G, Kleindorfer, D, Cushman, M, **Long, L**, Jasne, A, Judd, S, Higginbotham, J, Howard, V. Contributors to the excess stroke mortality in rural areas in the United States. *Stroke*, 48(7): 1773-1778 (2017) PMC5502731.
25. Howard, G, McClure, L, Moy, C, Howard, V, Judd, S, Yuan, Y, **Long, L**, Muntner, P, Safford, M, Kleindorfer, D. Self-reported stroke risk stratification: the REasons for

Geographic And Racial Differences in Stroke (REGARDS) study. *Stroke*, 48(7): 1737-1743 (2017) PMC5493147.

24. Preisser, JS, **Long, DL**, Stamm, JW. Matching the statistical model to the research question for dental caries indices with many zero counts. *Caries Research*, 51(3): 198-208 (2017) PMC5464970.
23. Farewell, V, **Long, L**, Tom, B, Yiu, S, Su, L. Two-part and related regression models for longitudinal data. *Annual Review of Statistics and its Application*, 4: 283-315 (2017) PMC5590716.
22. Stabler, ME*, **Long, DL**, Chertok, IRA, Pilkerton, C, Lander, LR, Giacobbi, PR. Neonatal abstinence syndrome in West Virginia sub-state regions. 2007-2013 *The Journal of Rural Health*, 33(1): 92-101 (2017) PMC4987270.
21. Rudisill, TM*, Zhu, M, Abate MA, Davidov, D, Delagarza, V, **Long, DL**, Sambamoorthi, U, Thornton, JD. The characterization of drug and alcohol use among senior drivers fatally injured in U.S. motor vehicle collisions, 2008-2012. *Traffic Injury Prevention*, 17(8): 788-795 (2016) PMC5039044.
20. Zhu, M, Zhao, S, **Long, DL**. The association of graduated driver licensing with nondriver transport-related injuries among adolescents. *Epidemiology*, 27(5): 620-623 (2016) PMC4969054.
19. Aliaga, S, Zhang, J, **Long, DL**, Herring, AH, Laughon, M, Boggess, K, Reddy, UM, Grantz, KL. Center variation in the delivery of non-spontaneous late preterm births. *American Journal of Perinatology*, 33(10): 1008-1016 (2016) PMC4972671.
18. Tanny, L, Komabayashi, T, **Long, DL**, Yahata, Y, Moffat, S, Tane, T, The effect of education on oral health students' attitudes in Australia and New Zealand. *European Journal of Dentistry*, 10: 491-495 (2016) PMC5166305.
17. Sorg, MH, **Long, DL**, Abate, M, Kaplan, JA, Kraner, JC, Mock, AR, Greenwald, M, Andrew, TA, Shapiro, S, Wren, JA. Additive effects of co-intoxicants in single opioid-induced deaths. *Academic Forensic Pathology*, 6(3): 532-542 (2016) PMC5794021.
16. Zhu, M, Zhao, S, **Long, DL**, Curry, AE. Association of graduated driver licensing with driver, non-driver and total fatalities among adolescents. *American Journal of Preventive Medicine*, 51(1): 63-70 (2016) PMC4914472.
15. Rudisill, TM*, Zhu, M, Davidov, D, **Long, DL**, Sambamoorthi, U, Abate, MA, Delagarza, V. Medication use and the risk of motor vehicle collision in West Virginia drivers 65 years of age and older: A case-crossover study. *BMC Research Notes*, 9(1): 166-176 (2016) PMC4791935.
14. Preisser JS, Das K, **Long DL**, Divaris, K. Marginalized zero-inflated negative binomial regression with application to dental caries. *Statistics in Medicine*, 35(10): 1722-1735 (2016) PMC4826785.

13. **Long, DL**, Preisser, JP, Herring, AH, Golin, CE. A marginalized zero-inflated Poisson regression model with random effects. *Journal of the Royal Statistical Society: Series C (Applied Statistics)*, 64(5): 815-830 (2015) PMC4664481.
12. Varghese, EM, Abate, MA, Hu, L, Kaplan, JA, Kraner, JC, **Long, DL**, Sorg, M, Mock, A, Greenwald, M, Andrew, T. Characterization of diphenhydramine-related accidental overdose deaths. *Academic Forensic Pathology*, 5(1): 105-115 (2015) (DOI:10.23907/2015.011).
11. Fields, RC, Abate, MA, Hu, L, **Long, DL**, Blommel, ML, Haikal, NA, Kraner, JC. Unintentional opioid overdose: An analysis of parent and metabolite opioid drug concentrations in deaths involving opioid and benzodiazepine combinations. *Journal of Forensic Sciences*, 60(4): 950-956 (2015) PMC4944848.
10. Wiener, RC, **Long, DL**, Jurevic, RJ. Blood levels of the heavy metal, lead, and caries in children ages 24-72 months: NHANES III. *Caries Research*, 49:26-33 (2015) PMC4323869.
9. Wiener, RC, Shockey, AT, **Long, DL**. Dental hygiene students' perceptions of older adults. *Journal of Dental Education*, 78(12): 1623-8 (2014) PMC4422979.
8. Komabayashi, T, **Long, L**, Ahn, C, Spears, R, Zhu, Q, Eberhart, RC. Influence of powder composition and morphology on penetration of gray and white ProRoot mineral trioxide aggregate and calcium hydroxide into dentin tubules. *Journal of Oral Science*, 56(4):287-293 (2014) PMC4320410.
7. **Long, DL**, Preisser, JP, Herring, AH, Golin, CE. Marginalized zero-inflated Poisson regression model with overall exposure effects. *Statistics in Medicine*, 33(29): 5151-5165 (2014) PMC4227945.
6. Evans-Hoeker, E, Pritchard, DA, **Long, DL**, Herring, AH, Stanford, J, Steiner, AZ. Cervical mucus monitoring prevalence and associated fecundability in women trying to conceive. *Fertility & Sterility*, 100(4): 1033-1038 (2013) PMC3787999.
5. Steiner, AZ, **Long, DL**, Herring, AH, Kesner, JS, Meadows, JW, Baird, DD. Urinary follicle-stimulating hormone as a measure of natural fertility in a community cohort. *Reproductive Sciences*, 20(5): 549-56 (2013) PMC3635071.
4. Preisser, JP, Stamm, JW, **Long, DL**, Kincade, ME. Review and recommendations for zero-inflated count regression modeling of dental caries indices in epidemiological studies. *Caries Research*, 46(4): 413-423 (2012) PMC3424072.
3. Steiner, AZ, **Long, DL**, Tanner, C, Herring, AH. Effect of vaginal lubricants on natural fertility. *Obstetrics & Gynecology*, 120(1): 44-51 (2012) PMC3427535.
2. Gelesko, S, **Long, L**, Faulk, J, Phillips, C, Dicus, C, White RP. Cryotherapy and topical minocycline as adjunctive measures to control pain after third molar surgery: An exploratory study. *Journal of Oral and Maxillofacial Surgery*, 69(11): e324-32 (2011) PMC3589520.

1. Woodham, PC, Brittain, JE, Baker, AM, **Long, DL**, Haeri, S, Camargo Jr, CA, Boggess, KA, Stuebe, AM. Midgestation maternal serum 25-hydroxyvitamin D level and soluble fms-like tyrosine kinase 1/placental growth factor ratio as predictors of severe preeclampsia. *Hypertension*, 58(6): 1120-5 (2011) PMC3600867.

Publications, Unrefereed

Howard, G, **Long, DL**, Commentary: 'Trending' statistical methods. *Research and Practice in Thrombosis and Haemostasis*, 2(2): 186-187 (2018) PMC6055502.

Preisser JS, Das K, **Long DL**, Stamm JW. A marginalized zero-inflated negative binomial regression model with overall exposure effects. The University of North Carolina at Chapel Hill Department of Biostatistics Technical Report Series. Working Paper 43. <http://biostats.bepress.com/uncbiostat/papers/art43> (2014).

Long, DL, Preisser, JP, Stamm, JW. Letter: Statistical analysis of dental caries: Different methods for different outcomes. *Caries Research*, 46(4): 424-426 (2012).

Presentations at Conferences, Invited (* denotes student first-author)

Long, DL, Jaeger, BC, Guo, B. Sampling design considerations for nested biomarker studies. International Biometric Society: Eastern North American Region (ENAR) Spring Meeting, March 2021

Malla, G*, **Long, DL**, Black, N, Cherrington, A, Dutton, G, Safford, M, Cummings, D, Judd, S, Levitan, E, Carson, A. Community-level social determinants and the burden of diabetes in the southeastern US. Invited Special Session: Diabetes LEAD (Location, Environmental Attributes, and Disparities) Network: Studying the impact of modifiable community factors on geographic disparities in diabetes nationwide. American Public Health Association Annual Meeting, November 2018

Long, DL, Preisser, JP, Herring, AH, Zhu, M. The changing landscape of zero-inflated models with random effects for count data. Invited Session: Two-part models for the analysis of correlated count and semi-continuous data with excess zeros. XXVIIIth International Biometric Conference, July 2016

Presentations at External Seminars, Invited

Long, DL, Howard, G, Long, DM, Judd, S, Manly, J, McClure, LA, Wadley, V, Safford, MM, Katz, R, Glymour, MM. An investigation of selection bias in estimating racial disparity in stroke risk factors: The REasons for Geographic And Racial Differences in Stroke (REGARDS) study. Icahn School of Medicine at Mount Sinai Department of Population Health Science and Policy Grand Rounds Seminar, April 2019

Presentations at Internal Seminars, Invited

Long, DL. Using inverse probability weights to address study attrition: An introduction and example from the REGARDS study. University of Alabama at Birmingham Minority Health & Health Disparities Research Center: Research Methods and Secondary Data Analysis Seminar Series, September 2020.

Presentations, Contributed

8. **Long, DL**, Long, DM, Preisser, JS. Sample size estimation for marginalized zero-inflated count regression models. International Biometric Society: Eastern North American Region (ENAR) Spring Meeting, March 2018 (oral).
7. **Long, DL**, Howard, G, Judd, S, Manly, J, McClure, L, Safford, M, Glymour, MM, Katz, R. Racial disparities in cardiovascular outcomes in REGARDS persist after using inverse probability weighting to account for missing data. American Heart Association EPI/Lifestyle Conference, March 2017 (poster).
6. **Long, DL**, Bruckner, MJ, Carroll, RA, Kelley, GA. Effect size measures and meta-analysis for alternating treatment single case design data. Joint Statistical Meetings, August 2015 (poster).
5. **Long, DL**, Bruckner, MJ, Carroll, RA, Kelley, GA. Effect size measures and meta-analysis for alternating treatment single case design data. International Biometric Society: Eastern North American Region (ENAR) Spring Meeting, March 2015 (poster).
4. **Long, DL**, Preisser, JP, Herring, AH, Golin, CE. A marginalized zero-inflated Poisson regression model with random effects. Joint Statistical Meetings, August 2014. (poster)
3. **Long, DL**, Wiener, RC. Transformations to the zero-inflated negative binomial model for overall exposure effects: An analysis of blood lead and dental caries in a complex survey. International Biometric Society: Eastern North American Region (ENAR) Spring Meeting, March 2014 (poster).
2. **Long, DL**, Preisser, JP, Herring, AH, Golin, CE. A marginalized zero-inflated Poisson regression model with overall exposure effects. Joint Statistical Meetings, August 2013.(oral)
1. **Long, DL**, Preisser, JP, Herring, AH, Golin, CE. A marginalized zero-inflated Poisson regression model with overall exposure effects. International Biometric Society: Eastern North American Region (ENAR) Spring Meeting, March 2013 (oral).

Recent Collaborative Abstracts and Presentations (* denotes student first-author)

Kamin Mukaz, D, **Long, DL**, Plante, TB, Judd, SE, McClure, LA, Wolberg, AS, Zakai, NA, Carson, AP, Guo, B, Cushman, M. D-dimer and the Risk of Diabetes in Women and Men: The REasons for Geographic and Racial Differences in Stroke (REGARDS). XXIX Congress of the International Society on Thrombosis and Haemostasis, July 2021 (virtual poster).

Kamin Mukaz, D, Koh, I, Carson, AP, Joseph, J, **Long, DL**, Plante, TB, Cushman, M. Leukocyte Count, Adiposity and Diabetes Mellitus in a Biracial Cohort. American Heart Association EPI/Lifestyle Conference, May 2021 (virtual poster).

Short, SA*, Wilkinson, K, **Long, DL**, Judd, SE, Schulte, J, Kissela, BM, Howard, G, Cushman, M. Plasma Pro-Enkephalin a and Ischemic Stroke Risk in the REGARDS Cohort. International Stroke Conference, March 2021 (virtual poster).

Penn, TM*, Overstreet, DS, Sims, AM, Aroke, EN, Rumble, DD, **Long, DL**, Quinn, TL, Goodin, BR. Perceived Injustice Mediates the Relationship between Socioeconomic Status and Physical Function among Individuals with Chronic Low Back Pain. U.S. Association for the Study of Pain Meeting, December 2020 (virtual poster).

Nicoli, C*, Carson, AP, Plante, TB, **Long, DL**, McClure, LA, Schulte, J, Cushman, M. Pro-Neurotensin/Neuromedin N is Associated With Incident Metabolic Syndrome. American Heart Association, Annual Scientific Sessions, November 2020 (virtual poster).

Malla, G*, **Long, DL**, Goyal, P, Judd, SE, Safford, MM, Cummings, DM, Hidalgo, B, Cherrington, A, Levitan, EB, Carson, AP. Heart Failure Risk due to Diabetes is Higher Among Adults ≤ 65 years than Adults >65 years: The REasons for Geographic and Racial Differences in Stroke (REGARDS) Study. American Heart Association, Annual Scientific Sessions, November 2020 (virtual poster).

McAlexander, TP, **Long, DL**, De Silva, SA, Meeker, MA, McClure, LA. Comparison of PM_{2.5} exposure estimates in the REGARDS cohort: understanding differences by community type and exposure assignment choices. 32nd Annual Conference of the International Society for Environmental Epidemiology, August 2020 (virtual poster).

Aroke, EN, Jackson, P, Overstreet, DS, Penn, TM, Quinn, T, Sims, AM, **Long, DL**, Goodin, BR. Depression Mediate the Relationship Between Social Status and Chronic Pain for Whites, but Not Blacks. 31st International Nursing Research Congress, July 2020 (virtual poster).

Malla, G*, **Long, DL**, Cherrington, A, Safford, MM, Cummings, DM, McAlexander, T, De Silva, S, Judd, SE, Hidalgo, B, Levitan, EB, Carson, AP. Urbanicity and Risk of Coronary Heart Disease among Adults with Diabetes: the REGARDS Study. American Diabetes Association, Annual Scientific Sessions, June 2019 (moderated poster).

Uddin, J, Malla, G, **Long, L**, Zhu, S, Keith, V, Carson, AP. Sex differences in educational inequality in diabetes prevalence in the United States (2001-2016). 41st Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine, April 2020 (virtual poster).

De Silva, S*, Meeker, M, Algur, Y, Ryan, V, **Long, L**, Black, N, McClure, LA. Development of a spatial composite neighborhood SES measure. International Biometric Society: Eastern North American Region (ENAR) Spring Meeting, March 2020 (virtual poster).

Ampah, SB*, Edwards, LJ, **Long, DL**, Jaeger, BC, Yi, N. Marginalized Zero-Inflated Negative Binomial Regression Model with Random Effects: Estimating Overall Treatment Effect on Lesion Counts among Multiple Sclerosis Patients (CombiRx Trial) International Biometric Society: Eastern North American Region (ENAR) Spring Meeting, March 2020 (virtual poster).

Malla, G*, **Long, DL**, Black, NC, Zhu, S, Uddin, J, Cherrington, A, Dutton, GR, Safford, MM, Cummings, DM, Judd, SE, Levitan, EB, Carson, AP. Index of concentration at the extremes and diabetes prevalence: the Reasons for Geographic and Racial Differences in Stroke (REGARDS) study. American Heart Association EPI/Lifestyle Conference, March 2020 (poster).

Peper, K*, Guo, B, **Long, DL**, Howard, G, Carson, AP, Howard, VJ, Judd, SE, Zakai, NA, Cherrington, A, Cushman, M, Plante, TB. C-reactive protein and racial differences in type 2 diabetes incidence: REasons for Geographic And Racial Differences in Stroke (REGARDS). American Heart Association EPI/Lifestyle Conference, March 2020 (poster).

Madsen, TE, **Long, DL**, Carson, AP, Howard, G, Kleindorfer, DO, Furie, K, Manson, JE, Howard, VJ. Sex and race differences in diabetes and risk of ischemic stroke: Role of fasting blood glucose. International Stroke Conference, February 2020 (oral).

Kamin Mukaz, D, **Long, L**, Judd, SE, Plante, TB, McClure, LA, Wolberg, AS, Zakai, NA, Howard, G, Koh, I, Cushman, M. D-dimer and the risk of hypertension in black and white Americans. International Stroke Conference, February 2020 (poster).

De Silva, S*, McClure, LA, Meeker, M, Ryan, V, Algur, Y, **Long, DL**, Black, N. Development of a spatial composite neighborhood SES measure. American Public Health Association Annual Meeting, November 2019 (oral).

Giacobbi, P, Haggerty, T, Pidhorskyi, S, Symons-Downs, D, **Long, L**, Volker, D, Clemmer, M, Olfert, M, Steinmann, S, Rao, N, Staggs, H, Kinnamon, K, Hulsey, T, Adjeroh, D. Evaluation of guided imagery delivered through a mobile health application to address multiple health behaviors with pregnant women. American Public Health Association Annual Meeting, November 2019 (oral).

Abate, M, Dai, Z, Smith, G, Otago, CB, **Long, DL**. Quantifying the association of alcohol and other factors on opioid related deaths. American Public Health Association Annual Meeting, November 2019 (poster).

Michl, A*, Overstreet, M, Penn, T, Quinn, T, Hasan, F, Kehrer, C, **Long, DL**, Goodin, B. Endogenous Pain Facilitation Prospectively Predicts Movement Evoked Pain in a Sample of Individuals with Chronic Low Back Pain. 2019 Annual Biomedical Research Conference for Minority Students, November 2019 (poster).

Aroke, EN, Overstreet, DS, Penn, TM, Quinn, T, **Long, DL**, Hasan, F, Kehrer, C, Michl, A, Huang, T, Goodin, BR. Sex Differences in Chronic Low Back Pain. American Association of Nurse Anesthetists Annual Congress, August 2019 (poster).

Cummings DM, Patil SP, **Long L**, Carson AP, Cherrington A, Safford M, Judd SE, Howard VJ, Howard G; Residential segregation, hemoglobin A1c and risk of cardiovascular (CVD) events: The Reasons for Geographic and Racial Differences in Stroke (REGARDS) Study. American Diabetes Association, Annual Scientific Sessions, June 2019 (moderated poster).

Judd, SE, Couch, C, Cushman, M, Zakai, NA, Gutierrez, O, **Long, L**, Shikany, JM, Howard, VJ, Manly, JJ, Levitan, EB, Howard, G. Predictors of Southern Dietary Pattern in the REGARDS Study. American Heart Association EPI/Lifestyle Conference, March 2019 (poster).

Howard, G, Cushman, M, Banach, M, Kissela, BM, Kleindorfer, DO, Soliman, EZ, Judd, SE, Jaeger, BC, **Long, DL**, Howard, VJ. Differential impact of stroke risk factors across the age spectrum: the Reasons for Geographic and Racial Differences in Stroke (REGARDS) cohort. International Stroke Conference, February 2019 (poster).

Honors and Awards

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|---|-----------|
| Graduate Dean's Award for Excellence in Mentorship, University of Alabama at Birmingham | 2021 |
| Elected Faculty Membership, Delta Omega Honorary Society in Public Health, Gamma Mu Chapter | 2016 |
| Best Contributed Poster Award, ASA Section on Statistical Consulting, JSM | 2015 |
| Young Investigator Award, ASA Section on Statistics in Epidemiology | 2013 |
| Delta Omega Recognition of Service Award, University of North Carolina, Chapel Hill | 2009 |
| Stanley Dolzycki Memorial Scholarship, Tennessee Technological University | 2006 |
| Graduate Teaching Assistantship, Tennessee Technological University | 2004-2006 |
| Athens Area Chamber of Commerce Award (Graduate with Highest GPA), Tennessee Wesleyan College | 2004 |
| Sliger's Jewelers Award (Graduate with Highest GPA), Tennessee Wesleyan College | 2004 |
| L&M Motors Mathematics Award, Tennessee Wesleyan College | 2004 |
| Harriet Reeves Neff Scholar (Full Academic Scholarship), Tennessee Wesleyan College | 2000-2004 |

Teaching Experience, Courses (Enrollment)

University of Alabama at Birmingham

BST 655: Categorical Data Analysis

- Fall 2020 (15)
- Fall 2019 (14)
- Fall 2018 (6)
- Fall 2017 (13)

West Virginia University

BIOS 621: Categorical Data Analysis for the Health Sciences

- Spring 2016 (4)
- Spring 2015 (15)
- Spring 2014 (8)

BIOS 610: Intermediate Biostatistics

- Fall 2015 (6)

BIOS 611: Data Management and Reporting

- Fall 2014 (12)

Teaching Experience, Guest Lectures

University of Alabama at Birmingham

- EPI 710: Analysis of Case-Control Studies (1 lecture/year) Spring 2020,2021
- BST 691: Professional Development Seminar (1 lecture) Summer 2019
- BST 691: Professional Development Seminar (1 lecture) Summer 2018
- BST 655: Categorical Data Analysis (1 lecture) Fall 2016

West Virginia University

- PUBH 659: Foundations of Public Health (1 lecture) Spring 2016
- BIOS 604: Applied Biostatistics III (3 3-hour lectures) Fall 2015
- WVCTSI: Stats at Stonewall Short Course (2 lectures) Fall 2014
- BIOS 621: Categorical Data Analysis for the Health Sciences (1 lecture) Spring 2013

Student Mentoring, MS and MSPH Committee Chair

Jinhong Cui: MS, Biostatistics

expected: Summer 2021

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|--------------------------------|-------------|
| Andrew Sims: MS, Biostatistics | Summer 2020 |
| May Zhang: MS, Biostatistics | Fall 2018 |
| Yue Zhang: MS, Biostatistics | Spring 2018 |

Student Mentoring, Committee Member (Active)

Boyi Guo: PhD, Biostatistics
 Gargya Malla: PhD, Epidemiology
 Demario Overstreet: PhD, Psychology
 Terence Penn: PhD, Psychology
 Marissa Swanson: PhD, Psychology
 Stephanie Tison: DrPH, Biostatistics

Student Mentoring, Committee Member (Complete)

University of Alabama at Birmingham

School of Public Health

| | |
|---------------------------------------|-------------|
| Steve Ampah: PhD, Biostatistics | Fall 2020 |
| Melissa Gazi: MS, Biostatistics | Summer 2020 |
| D. Nichole Pompey: MS, Biostatistics | Summer 2020 |
| Amanda Pendegraft: PhD, Biostatistics | Summer 2019 |
| Kelsey Jordan: PhD, Epidemiology | Fall 2017 |

College of Arts and Sciences

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|--------------------------------------|-------------|
| Emma Sartin Goodman: PhD, Psychology | Summer 2019 |
| Marissa Swanson: MA, Psychology | Summer 2019 |

West Virginia University School of Public Health

| | |
|---|-------------|
| Meagan Stabler: PhD, Public Health Sciences, Epidemiology | Fall 2015 |
| Toni Rudisill: PhD, Public Health Sciences, Epidemiology | Spring 2015 |

University Service

University of Alabama at Birmingham

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|-----------------------------------|----------------|
| Commission on the Status of Women | 2020 – present |
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School of Public Health

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|---|-------------|
| Dean Search Committee | 2017 – 2018 |
| Marshal, December Graduate Commencement | 2018 |

Department of Biostatistics

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|-----------------------------------|----------------|
| Department Chair Search Committee | 2019 – 2020 |
| Janet L. Norwood Award Committee | 2018 – 2020 |
| Graduate Programs Committee | 2017 – 2020 |
| Admissions Committee | |
| Chair | 2017 – 2020 |
| Member | 2016 – present |

West Virginia University

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|---|-------------|
| Health Sciences Center Women in Sciences and Health Committee | 2014 – 2016 |
| School of Public Health Evaluation Committee | 2014 – 2016 |
| Department of Biostatistics Admissions Committee | 2014 – 2016 |
| Department of Biostatistics Chair Search Committee | 2015 – 2016 |
| Department of Biostatistics Instructor Search Committee Chair | 2015 |

Professional Service

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| Chair, MELODEM Meeting, Causality Session | 2020 |
| Caucus for Women in Statistics, Nomination Committee | 2018 – 2020 |
| Judge, ENAR Meeting Regional Advisory Board Poster Award Competition | 2016; 2019 |
| Chair, JSM Contributed Session #141: Methods in Financial Risk Assessment | 2015 |
| Parent Representative, Stakeholder Advisory Board, Greenlight Plus Study (PCORI-funded multi-site clinical trial) | 2019 – present |

Grant and Journal Reviews

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| Statistical Reviewer: | |
| NASA Human Exploration Research Opportunities Panel | 2020 |
| NASA Space Radiation - Integrated CNS Panel | 2019 |
| Ad-Hoc Reviewer: | |
| NIH CSR F Awards Study Section | 2018 |
| Ad-hoc Reviewer for: | |
| <i>American Journal of Epidemiology</i> | |
| <i>Annals of Epidemiology</i> | |
| <i>Biometrics</i> | |
| <i>BMJ Open</i> | |
| <i>Computational Statistics</i> | |
| <i>Computational Statistics and Data Analysis</i> | |
| <i>Environmental and Ecological Statistics</i> | |
| <i>Journal of Agricultural, Biological, and Environmental Statistics</i> | |
| <i>Journal of Applied Statistics</i> | |
| <i>Journal of Educational and Behavioral Statistics</i> | |
| <i>Journal of Prosthodontics</i> | |
| <i>Journal of Statistical Distributions and Applications</i> | |
| <i>Paediatric and Perinatal Epidemiology</i> | |
| <i>Scientific Reports</i> | |
| <i>South African Statistical Journal</i> | |
| <i>Statistical Methods in Medical Research</i> | |
| <i>Statistics in Medicine</i> | |
| <i>Transportation Research Record</i> | |

Professional Memberships

| | |
|---|----------------|
| American Statistical Association | 2008 – present |
| International Biometric Society (Eastern North American Region) | 2010 – present |
| Caucus for Women in Statistics | 2014 – present |
| American Heart Association | 2016 – present |
| American Public Health Association | 2018 – 2019 |