

Subhash Aryal Ph.D.

3500 Camp Bowie Blvd, EAD # 709-C
Fort Worth, TX 76107

(817) 735-2076
subhash.aryal@unthsc.edu

Education

- **University of Illinois at Chicago** Chicago, IL
Ph.D. in Public Health Sciences Aug.2008
Small Sample Tests and Sample Size Determination for Hierarchical Mixed-Effects Model
(Advisor:Prof. Dulal K. Bhaumik)
- **University of Illinois at Chicago** Chicago, IL
M.S. in Biostatistics Aug.2002-May 2004
- **University of South Alabama** Mobile, AL
B.S. in Mathematics & Statistics Aug.1999-Dec.2001
- **Tribhuvan University** Kathmandu, Nepal
B.A. in Mathematics & Statistics Aug.1995-May 1997

Professional Experience

- **University of North Texas Health Science Center** Fort Worth, TX
Associate Professor Aug. 2014 -
- **University of North Texas Health Science Center** Fort Worth, TX
Senior Fellow, Institute of Patient Safety May 2017 -
- **University of Illinois at Chicago** Chicago, IL
Adjunct Assistant Professor Jan 2012 -
- **University of Kwa-Zulu Natal** Durban, South-Africa
Adjunct Assistant Professor Jan 2012 - Dec 2015
- **Center for Public Health Consulting, UNT Health Science Ctr** Fort Worth, TX
Director March 2012 - November 2016
- **Osteopathic Research Center, UNT Health Science Ctr** Fort Worth, TX
Director of Biostatistics March 2012 -
- **University of North Texas Health Science Center** Fort Worth, TX
Assistant Professor Aug. 2008 -Aug.2014
- **University of Illinois at Chicago** Chicago, IL
Teaching Assistant Aug. 2002-Dec 2007
- **University of Illinois at Chicago** Chicago, IL
Instructor Biostatistics Review Session Feb. 2007 - May 2008

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- **University of Illinois at Chicago** Chicago, IL
Graduate Research Assistant Aug. 2002 - Aug. 2004, Jan 2006-July 2008
 - **University of South Alabama** Mobile, AL
Research Assistant May 2000 - Aug. 2000

Teaching Experience and Curriculum Development

- BIOS 6400 Advanced Biostatistics for Clinical Sciences Summer 2016 - Summer 2017
- BIOS 6391 Advanced Topics in Biostatistics Fall 2009 - Fall 2013
- BIOS 6314 Applied Categorical Data Analysis Spring 2012 - Fall 2018
- BIOS 6720 Applied Methods of Survey Sampling Spring 2009
- BIOS 6312 Applied Methods of Survey Sampling Spring 2011
- BIOS 6320 Biostatistics Research and Consulting Spring 2010
- BIOS 5300 Biostatistics for Public Health 1 Summer 2011 - Fall 2015 (Online section is Quality Matters certified)
- BIOS 5310 Biostatistics for Public Health 2 Summer 2010
- BIOS 6910 Doctoral Independent Study in Biostatistics Spring 2009
- BIOS 5399 Independent Study in Biostatistics Fall 2010 - Summer 2011, Summer 2017, Fall 2017
- BIOS 5410 Intermediate Biostatistics for Clinical Sciences Spring 2016 - Spring 2017
- BIOS 5400 Introduction to Biostatistics for Clinical Sciences Fall 2015 - Fall 2016
- BIOS 5314 Intro to Statistical Packages Spring 2012 - Spring 2013
- BIOS 6322 Longitudinal Data Analysis Spring 2015 - Spring 2017
- BMSC 5200 Biostatistics for Biomedical Science Summer 2009 - Summer 2009
- BMSC 5400 Biostatistics for Biomedical Sci Summer 2010 - Fall 2013
- BMSC 5390 Special Problems Summer 2013

Awards

- **Faculty Achievement Award**
UNT Health Science Center 2018

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- **Outstanding Faculty in on Campus Teaching**
Public Health Student Government Association 2017
 - **President's Award for Educational Excellence**
UNT Health Science Center 2011
 - **Haenszel Award for Excellence in Research**
University of Illinois at Chicago, School of Public Health 2008
 - **Pre-Doctoral Fellowship**
University of Illinois at Chicago, Department of Psychiatry Aug 2004- July 2008
 - **Sushila Dubey Mishra Scholarship in Mathematics and Statistics**
University of South Alabama 2001

Active Grants and Contracts

- The Osteopathic Difference in Treating Patients with Low Back Pain
PI: Licciardone, J. C.
Role: Biostatistician
Funding Agency: American Osteopathic Association
- The Osteopathic Approach to Chronic Pain Management: Assessing its Biopsychosocial Processes and Relationships to Clinical Outcomes
PI: Licciardone, J. C.
Role: Biostatistician
Funding Agency: American Osteopathic Association

Completed Grants and Contracts

- Texas Center for Minority Health Education, Research and Outreach - Research Core, Project 1, 1 P20 MD006882-01(RN 0076)
PI: Ghorpade, A.
Role: Biostatistician
Funding Agency: NIMHD: Natl Institute on Minority Health
- CDC Early Hearing Detection and Intervention (EHDI) Program
PI: Terese Finitzo, OZ Systems, Arlington Texas
Role: Biostatistician (Sub-contract from OZ Systems)
Funding Agency: Centers for Disease Control and Prevention
- Health Navigation Incentives for Dual Diagnosis Patients (RF 9989)
PI: Walters, S. T
Role: Biostatistician
Funding Agency: CMS 1115 Waiver

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- Osteopathic Manipulative Treatment of Somatic Dysfunction and Chronic Low Back Pain in Patients with Type 2 Diabetes Mellitus
PI: Licciardone, J. C.
Role: Biostatistician
Funding Agency: American Osteopathic Association

Publications

Book

- Gibbons, R. D., Bhaumik, D. K. and **Aryal, S.** *Statistical Methods for GroundWater Monitoring*, 2nd edition. John Wiley & Sons. Hoboken, 2009.

Book Chapters

- Mulekar, M. S, Boone, J. M and **Aryal, S.** Estimation of Sampling Distributions of the Overlapping Coefficient and Other Similarity Measures. Zaven A. Karian and Edward J. Dudewicz Eds. *Handbook of Fitting Statistical Distributions with R.* 2010 : 1039-1090.
- Gibbons, R. D., Bhaumik, D. K. and **Aryal, S.** Ground water monitoring, detection and compliance. Abdel H. El-Shaarawi, Walter W. Piegorsch Eds. *Encyclopedia of Environmetrics*, 2nd edition. November, 2012.
- Gibbons, R. D., Bhaumik, D. K. and **Aryal, S.** Ground water monitoring, detection and compliance. Abdel H. El-Shaarawi, Walter W. Piegorsch Eds. *Encyclopedia of Environmetrics*, 2nd edition. Updated Chapter, 2016.

Peer Reviewed Articles

- Pavuluri, M., Schenkel, L., **Aryal, S.**, Harral, E., Herbener, E., Hill, S. and Sweeney, J. (2006). Neurocognitive Function in Unmedicated Manic and Medicated Euthymic Pediatric Bipolar Patients. *American Journal of Psychiatry*, 163, 286-293.
- Roy, A., Bhaumik, D. K., **Aryal, S.** and Gibbons, R. D. (2007). Sample size Determination for Hierarchical Longitudinal Designs with Differential Attrition Rates. *Biometrics*, 63, 699-707. DOI:10.1111/j.1541-0420.2007.00769.x.
- Hossain, M. A., Islam, N., **Aryal, S.** and Madanes, A. (2007). The Prevalence of Circulating Anti Sperm Antibody (ASA) in Infertile Population Representing of all Etiologies. *Middle East Fertility Society Journal*, 12 (1), 27-30.
- **Aryal, S.**, Bhaumik, D. K., Mathew, T. and Gibbons, R. D. (2008). Approximate Tolerance Limits and Prediction Limits for the Gamma Distribution. *Journal of Applied Statistical Science*, 16 (2), 253-262.
- Mulekar, M. S., Gonzales, S. and **Aryal, S.** (2008). Bias and Variance Estimates for the Overlap of Two Exponential Distributions. *American Journal of Mathematical and Management Sciences*, 28, 61-79.

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- Bhaumik, D. K., Santra, S., **Aryal, S.** and Gibbons, R. D. (2008). One-sided Simultaneous Prediction Limits for Left-Censored Normal Random Variables. *Sankhya*, Series B, 70, 248-266.
 - Bhaumik, D. K., Roy, A., **Aryal, S.**, Hur, K., Duan, N., Normand, S-L T., Brown, C. H. and Gibbons, R. D. (2008). Sample Size Determination for Studies with Repeated Continuous Outcomes. *Psychiatric Annals*, 38, 765-771.
 - **Aryal, S.**, Bhaumik, D. K., Santra, S. and Gibbons, R. D. (2009). Confidence Interval for Random-Effects Calibration Curves with Left-Censored Data. *Environmetrics*, 20, 181-189. DOI:10.1002/env.920
 - Bhaumik, D. K., Roy, A., Lazar, N., Kapur, K., **Aryal, S.**, Sweeney, J., Patterson, D. and Gibbons, R. D. (2009). Hypothesis Testing, Power and Sample Size Determination for Between Group Comparisons in fMRI Experiments. *Statistical Methodology*, 6, 139-146. DOI:10.1016/j.stamet.2008.05.003
 - Kapur, K., Roy, A., Bhaumik, D. K., Gibbons, R.D., Lazar, N., Sweeney, J., **Aryal, S.** and Patterson, D. (2009). Estimation and Classification of BOLD Responses Over Multiple Trials. *Communications in Statistics, Theory and Methods*, 38, 3099-3113.
 - Hossain, A., **Aryal, S.**, Osuampke, C. and Phelps, J. (2010). Human Sperm Bioassay for Reprotoxicity Testing in Embryo Culture Media: Some Practical Considerations in Reducing the Assay Time. *Advances in Urology*, doi:10.1155/2010/136898.
 - Stein, M.A., Waldman, I. D., Charney, E., **Aryal, S.**, Sable, C., Gruber, R. and Newcorn, J.H. (2011). Dose Effects and Comparative Effectiveness of Extended Release Dexmethylphenidate and Mixed Amphetamine Salts. *Journal of Child and Adolescent Psychopharmacology*, 21, 581-588.
 - Bhaumik, D. K., **Aryal, S.**, Amatya, A., Kapur, K. and Gibbons, R. D. (2013). Sample Size Determination for Between Group Comparisons in Mixed-Effects Logistic Regression Models for Analysis of Longitudinal Data. *Journal of Applied Statistical Sciences*, 19, 11-22.
 - Brooks, C., Vickers, A. M. and **Aryal, S.** (2013). Comparison of Lipid and Calorie Loss from Donor Human Milk among Three Methods of Simulated Gavage Feeding: One-hour, Two- hour, and Intermittent Gravity Feedings. *Advances in Neonatal Care*, 13: 131-138.
 - Licciardone, J. C. and **Aryal, S.** (2013). Prevention of Progressive Back-Specific Dysfunction during Pregnancy: An Assessment of Osteopathic Manual Treatment Based on Cochrane Back Review Group Criteria. *Journal of American Osteopathic Association*, 113 (10):728-736.
 - **Aryal, S.** and Bhaumik, D. and Mathew, T. and Gibbons, R. D. (2014). An Optimal Test for Variance Components of Multivariate Mixed-Effects Linear Models. *Journal of Multivariate Analysis*, 124, 166-178.
 - Licciardone, J. C. and Kearns, C. M. and King, H. H. and Seffinger, M.A. and Crow, W. T. and Zajac, P and Devine, W. H. and Abu-Sbaih, R. Y. and Miller, S. J. and Berkowitz, M. R. and Dyer, R. and Heath, D. M. and Treffer, K. D. and Nevins, N. A. and **Aryal, S.** (2014). Somatic Dysfunction and Use of Osteopathic Manual Treatment Techniques during Ambulatory Medical Care Visits: A CONCORD-PBRN Study. *The Journal of the American Osteopathic Association*, 114 (5): 344-354.

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- Licciardone, J. C. and **Aryal, S.** (2014). Clinical Response and Relapse in Patients with Chronic Low Back Pain Following Osteopathic Manual Treatment: Results from the OSTEOPATHIC Trial Manual Therapy. *Manual Therapy*. 19 (6): 541-8.
 - Rossheim, M.E., Thombs, D.L., Wagenaar, A.C., Xuan, Z., and **Aryal, S.** (2015). High Alcohol Concentration Products Associated with Poverty and State Alcohol Policies. *American Journal of Public Health*. 105 (9) : 1886-92.
 - Garrison, J. C., Bothwell, J. M., Wolf, G., **Aryal, S.** and Thigpen, C. A. (2015). Y Balance Test Anterior Reach Symmetry At Three Months is Related to Single Leg Functional Performance at Time of Return to Sports Following Anterior Cruciate Ligament Reconstruction. *The International Journal of Sports Physical Therapy*. 10(5): 602-611.
 - Higgs, G., Sterling, D. A., **Aryal, S.**, Vemulapalli, A., Priftis, K. N. and Sifakis, N. I. (2015). Aerosol Optical Depth As a Measure of Particulate Exposure Using Imputed Censored Data, and Relationship with Childhood Asthma Hospital Admissions for 2004 in Athens, Greece. *Environmental Health Insights*, 9(1): 27-33.
 - Gracia, A., Cheirif, J., Veliz, J., Reyna, M., Vecchio, M. and **Aryal, S.**(2016). Harnessing Data to Assess Equity of Care by Race, Ethnicity and Language. *International Journal of Environmental Research and Public Health*. 13 (1), 45. doi:10.3390/ijerph13010045.
 - Licciardone, J., Gatchel, R. and **Aryal, S.**(2016) Targeting patient subgroups with chronic low back pain for osteopathic manipulative treatment: responder analyses from a randomized controlled trial. *The Journal of the American Osteopathic Association*. 116, 156-168.
 - Licciardone, J., Gatchel, R. and **Aryal, S.** (2016). Recovery from chronic low back pain following osteopathic manipulative treatment: a randomized controlled trial. *Journal of the American Osteopathic Association*. 116,144-155.
 - Lee, B. J., Garrison J. C., Conway, J. E., Pollard, K. and **Aryal, S.**(2016). The Relationship Between Humeral Retrotorsion and Shoulder Range of Motion in Baseball Players With an Ulnar Collateral Ligament Tear. *Orthopedic Journal of Sports Medicine*, 4(10):2325967116667497, doi: 10.1177/2325967116667497.
 - Gandhi, S., Faramawi, M.F, **Aryal, S.**, Evans, E. and Felini, M. (2016). Total and Cardiovascular Mortality Risk Associated with Allergic Rhinitis and Allergic Asthma: A Retrospective Cohort Study. *Journal of Clinical Medicine and Therapeutics*. 1:1.
 - Nejtek, V. A., **Aryal, S.**, Talari, D., Wang, H. and O'Neill, L. (2017). A Pilot Mobile Integrated Healthcare Program for Frequent Utilizers of Emergency Department Services. *American Journal of Emergency Medicine*. 35 (11), 1702-1705. <https://doi.org/10.1016/j.ajem.2017.04.061>.
 - Lopez. N. N., Patel, G. C., Raychaudhuri, U., **Aryal, S.**, Phan, T. N., Clark, A. F. and Millar, J. C. (2017). Anterior chamber perfusion versus posterior chamber perfusion does not influence measurement of aqueous outflow facility in living mice by constant flow infusion. *Experimental Eye Research*. 164, 95-108. <http://dx.doi.org/10.1016/j.exer.2017.08.011>.

- Deng, X., Finitzo, T., and **Aryal, S.** (2018). Measuring Early Hearing Detection and Intervention (EHDI) Quality across the Continuum of Care. *eGEMs: The Journal of Electronic Health Data and Methods*. 6(1):18. DOI: <http://doi.org/10.5334/egems.239>
- *Garcia, E., **Aryal, S.**, Spence-Almaguer, E., Rohr, D. and Walters, S. T. (2018). Use of IRT model to validate test items from technology assisted health coaching program. *Open Journal of Statistics*. 8, 519-532. DOI: 10.4236/ojs.2018.83034. (First author is Dr. Aryal's student)
- Holmes, E. J., Yang, L., **Aryal, S.** and Walters, S. T. (2018). Influence of Lifestyle Behaviors and Social Support on Depressive Symptoms. *Health Behavior and Policy Review*. Manuscript Accepted for publication
- Licciardone, J., Gatchel, R. and **Aryal, S.** (2018). Effects of Opioids and Nonsteroidal Anti-Inflammatory Drugs on Chronic Low Back Pain and Related Measures: Results from the PRECISION Pain Research Registry. *Texas Medicine*. Manuscript Accepted for publication
- Licciardone, J., Gatchel, R., Phillips, N. and **Aryal, S.** (2018). The Pain Registry for Epidemiological, Clinical, and Interventional Studies and Innovation (PRECISION): registry overview and protocol for a propensity-score matched study of opioid prescribing in patients with low back pain. *Journal of Pain Research*. Manuscript Accepted for publication
- Kelly, P. A., Classen, K. A., Crandall, C. G., Crenshaw, J. T. Schaefer, S.A., Wade, D. A., Cramer, M.N., **Aryal, S.**, Fossee, K. R. (2018) Effect of Timing of the First Bath on a Healthy Newborns Temperature. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*. Manuscript Accepted for publication

Abstracts/Posters

- Pavuluri, M., O'Connor, M. M., **Aryal, S.**, Harral, E. and Sweeney, J. A. (2005). *fMRI Study of the Interface between Affective and Cognitive Circuitry in Euthymic Unmedicated Pediatric Bipolar Patients*, *Neuropsychopharmacology*, 30, 1, S 225.
- O'Connor, M. M., Pavuluri, M., **Aryal, S.**, Harral, E., Herbener, E. and Sweeney, J. A. (2006). *An fMRI Study of the Interface Between Affective and Cognitive Circuitry in Pediatric Bipolar Disorder*, *Biological Psychiatry*, 59:1S-264S.
- Ramati, A., **Aryal, S.**, Barch, B., Kapur, K., Bhaumik, D.K., Gibbons, R.D. and Sweeney, J. A. (2006). *Reliability Estimation of a New Approach to Analyzing Event Related fMRI Data*. Neuropsychological Society Annual Meeting, Boston.
- Stein, M.A., Charney, E., Maul, L., **Aryal, S.**, Waldman, I., Gruber, R., & Newcorn, J. Extended Release Dexmethylphenidate vs. Mixed Amphetamine Salts: Dose Response and Drug Effects. *American Academy of Child and Adolescent Psychiatry Annual Meeting*, Honolulu, HI, October, 2009.

- Wiebe, S., Gruber, R., Charney, E., **Aryal, S.**, Waldman, I., Newcorn, J. and Stein, M. Sleep and emotional reactivity to extended release dexamethylphenidate versus mixed amphetamine salts: a double-blind, placebo controlled study. *European Child & Adolescent Psychiatry*. 2010; 19. (1): S8
- Stein, M.A., Charney, E., Maul, L., Waldman, I., **Aryal, S.**, Gruber, R., Sable, C. & Newcorn, J. Sleep and Tolerability (SAT) Study of Extended Release Dexamethylphenidate and Mixed Amphetamine Salts: I. Dose Response and Differential Effects. *Pediatric Academic Society Meeting*, Vancouver, Ca., May 2010.
- Sable, C., Charney, E., **Aryal, S.**, Maul, L., Shalen, J., Waldman, I., and Stein, M. A. Sleep and Tolerability (SAT) Study of Extended Release Dexamethylphenidate and Mixed Amphetamine Salts: II. Cardiovascular Effects. *Pediatric Academic Society Meeting*, Vancouver, Ca., May 2010.
- Hossain, A., Velamasetti, S., **Aryal, S.** and Phelps, J. Spermatozoa With Normal and Abnormal Head Morphology Exhibit Different Staining Pattern. AAB's Annual Meeting and Educational Conference and CRB Symposium. May, 2012
- Chitwood, D'Arcie., **Aryal, S.** , Moss, A. and Acharya, R. Impact of Transfer forms on hospital readmissions from a skilled nursing facility (SNF). *American College of Osteopathic Internists Convention and Scientific Sessions*. 2012 October.
- Berk, M., Sundstrom, G., Rush, D., Harper, J., Miller, K. and **Aryal, S.** Factors Associated with an Increase in 30-Day Readmission Rate for Congestive Heart Failure. *Journal of Cardiac Failure*. 2013 August; 19. (8): S84
- Sundstrom, G. , Rush, D. , Harper, J. , Miller, K., **Aryal, S.** and Berk, M. R. Factors Associated with an Increase in 30-Day Readmission Rate for Congestive Heart Failure. *Annual Scientific meeting of the Heart Failure Society of America*. 2013 September
- Montoya, M. F., Thombs, D., **Aryal, S.**, and Spence-Almaguer, E. Association between health literacy and diabetes outcomes and self-management behaviors among older US adults. *141st APHA Annual Meeting and Expo*. 2013 November
- Licciardone, J . C. and **Aryal, S.** Manual therapy, exercise, and education for low back pain and pelvic pain during pregnancy. *American Journal of Obstetrics and Gynecology*. 2014 March; 210. (6): 592-93.
- Arora, S. and **Aryal, S.** Comparison of Frequentist and Bayesian Tolerance Intervals via Simulation. *Research Appreciation Day*, Fort Worth, 2014.
- Anne, S., Vemulapalli, A. and **Aryal, S.** Sample Size Determination in Mixed-Effects Zero Inflated Poisson Longitudinal Data. *Research Appreciation Day*, Fort Worth, 2014.
- Bangara, S., Felini, M. J., **Aryal, S.**, Sterling, D. and Johnson, E. S. Risk of hematopoietic cancer associated mortality among workers in the poultry slaughtering and processing industries. *Clinical Cancer Research*, doi: 10.1158/1557-3265.HEMMAL14-A27. 2015 September; 21: A27.
- Petrovich, J., Gonzalez-Pons, K., Spence-Almaguer, E., **Aryal, S.** and Hunt, J. Medical and emergency medical service use by people experiencing homelessness before and after placement in supportive housing. *143rd APHA Annual Meeting*. November, 2015.

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- Garcia, E. A., **Aryal, S.**, and Walters, S. T. Using Item Response Theory (IRT) to Describe at-Risk Patients Participating in a Health Coaching Program. *Texas Health Disparities Conference*, Fort Worth, May 2015.
 - Shenoy, S., Ghorpade, A., **Aryal, S.**, and Nejtek, V. Health Disparities and Novel Biomarkers for HIV-1 Disease Progression. *Texas Health Disparities Conference*, Fort Worth, May 2015.
 - Rudraraju, H., Raiyani, C., Yang, M., Spohr, S. A. and **Aryal, S.** The Association of Low-Income and Food Insecurity on Chronic Disease: NHANES 2005-2012, *Research Appreciation Day*, Fort Worth, 2016.
 - Obinwa, U. C. and Morrissey, K., Li, F, Mandapati, S. R., **Aryal, S** and Robledo, C. Exploring the Relationship between Socioeconomic status and C-Reactive protein levels in the US population using NHANES Survey Data *Research Appreciation Day*, Fort Worth, 2016.
 - Garcia, E. A., **Aryal, S.**, Spence-Almaguer, E., Hill, W., Rohr, D. and Walters, S. T. Using Item Response Theory (IRT) to Describe at-Risk Patients Participating in a Health Coaching Program. *37th Annual Meeting of the Society of Behavioral Medicine*, Washington, D. C., April 2016.
 - Mollenhauer, W., Walters, S. T., **Aryal, S.**, and Holmes, E. Changes in both Diet and Exercise improve Depression Symptoms among Permanent Supportive Housing Residents. *38th Annual Meeting of the Society of Behavioral Medicine*, San Diego, April 2017.
 - Mallampati, R., Rendon, A., Agravat, D., Villarreal, G. G., Qureshi, I. and **Aryal, S.**, . Cooking Dinner at Home: Analysis of the National Health and Nutrition Examination Survey (NHANES) 2009-2010. *Research Appreciation Day*, Fort Worth, April 2017.
 - Tan, Z., Orimoloye, H. T., Chaturvedula, A. and **Aryal, S.**, . Association Between Infant Breastfeeding and Early Childhood Caries in the United States. *Research Appreciation Day*, Fort Worth, April 2018.
 - Uche, U. I., Moore, J., Huang, Y. and **Aryal, S.**, . Age and sex differences in childhood and adulthood obesity association with phthalates: Analyses of NHANES 2011-2014. *Research Appreciation Day*, Fort Worth, April 2018.
 - Swanta, N. K., Borgmann, K. R., **Aryal, S.**, Stacy, S., Shenoy, S. and Ghorpade, A. Plasma Biomarkers as Potential Indicators for HIV-associated Neurocognitive Disorders. *Research Appreciation Day*, Fort Worth, April 2018.
 - Holmes, E. J., Patel, K., and Allsopp, L. and **Aryal, S.**. Association of Omega-3 Poly-unsaturated Fatty Acids and Depressive Symptoms. *39th Annual Meeting of the Society of Behavioral Medicine*, New Orleans, April 2018.

Acknowledgements of Statistical Support

- Harris, M. *et. al.*, (2006). *Longitudinal Studies of Anti-Saccades in Antipsychotic-naive First Episode Schizophrenia*. *Psychological Medicine*, 36, 485-494.

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- Grossman, L. S. *et. al.*, (2006). *Sex Differences in Outcome and Recovery for Schizophrenia and Other Psychotic and Nonpsychotic Disorders*. *Psychiatric Services*, 57, 844-850.
 - Donoval, B. A. *et. al.*, (2006). *HIV-1 Target Cells in Foreskins of African Men With Varying Histories of Sexually Transmitted Infections*. *American Journal of Clinical Pathology*, 125, 386-391.
 - Bhowmick, S. K. *et. al.*, (2007) *The Prevalence of Elevated Serum Thyroid- Stimulating Hormone in Childhood/Adolescent Obesity and of Autoimmune Thyroid Diseases in a Subgroup*. *Journal of the National Medical Association*, 99, 773-776.
 - Chronis-Tuscano, A. *et. al.*, (2008) *Efficacy of OROS methylphenidate for mothers with ADHD: Preliminary effects on ADHD symptoms and parenting*. *Journal of Clinical Psychiatry*, 69,1938-1947.
 - Ryou, M-G. *et. al.*, (2010) *Pyruvate-Enriched Cardioplegia Suppresses Cardiopulmonary Bypass-Induced Myocardial Inflammation*. *Annals of Thoracic Surgery*, 90, 1529-1536. (UNTHSC Student)
 - Bhat, N. U. , *Study of Obesity in Survivors of Childhood Acute Lymphoblastic Leukemia (All)*. Fort Worth, TX: University of North Texas Health Science Center; (2013). (UNTHSC Student)
 - Omiwade, O. , *Efficacy of Alcohol-Impregnated Port Protectors on Central Line - Associated Blood Stream Infections in Intensive Care Units*. Fort Worth, TX: University of North Texas Health Science Center; (2013). (UNTHSC Student)
 - Reyes, M. C. , *Use of Social Media and its Potential for Subject Recruitment in Clinical Trials*. Fort Worth, TX: University of North Texas Health Science Center; (2014). (UNTHSC Student)

Invited Presentations & Workshop

- *Two-day Workshop on Applied Multilevel Modeling*. Association of Maternal and Child Health Programs Annual Meeting, San Antonio, Texas. December, 2010.
- *Two-day Workshop on Statistical Methods for Environmental Monitoring*. National Ground Water Association (NGWA). Denver, Colorado, August, 2012
- *Hypothesis Testing and Sample Size Calculation for Hierarchical Data*. Baylor Institute for Immunology Research. Dallas, Texas, November, 2014
- *Two-day Workshop on Statistical Methods for Environmental Monitoring*. National Ground Water Association (NGWA). Westerville, Ohio, April, 2016
- *What do biostatisticians do*. UNTHSC School of Health Professions, Fort Worth, November, 2016
- *Approximate Small and Large Sample Tolerance Limits for the Gamma Distribution*. UT School of Public Health, Dallas, November, 2016

Review and Editorial Experience

- Editorial Board Member, International Journal of Food Safety, Nutrition and Public Health, 2014-Current
- BMJ Open, Peer Reviewer
- Statistics in Medicine, Peer Reviewer
- Journal of Multivariate Analysis, Peer Reviewer
- Environmental Science and Technology, Peer Reviewer
- Journal of Statistical Software, Peer Reviewer
- Psychological Medicine, Peer Reviewer
- Sankhya, Peer Reviewer
- Ocular Pharmacology and Therapeutics, Peer Reviewer

Administrative/Committee Work

- School of Public Health (SPH) Executive Council, 2016-Current
- Data Safety Monitoring Board (DSMB), Education by community health worker vs cell phone text messages, Sinai Urban Health Institute, 2016-Current
- Faculty Grievance and Appeals Committee, 2015-Current
- SPH Promotion and Tenure Committee, 2014-Current
- Faculty Senate, 2014-Current
- Chair, SPH Biostatistics and Epidemiology-Search Committee (Assistant Professor), 2012-Current
- Member, SPH Biostatistics and Epidemiology-Search Committee (Associate/Full Professor), 2012
- Member, SPH DrPH Committee, 2015
- Member, SPH Practice Committee, 2014

Dissertation Committee

- Member, DrPH in biostatistics committee, UNTHSC. Student: Ngozi Okoro, 2009

- Member, PhD dissertation committee, UNT. Student: Olivia Loza, 2013
- Member, PhD dissertation committee, UNTHSC. Student: Subi Gandhi, 2014
- Member, PhD dissertation committee, UNTHSC. Student: Saritha Bangara, 2014
- Member, PhD dissertation committee, UNTHSC. Student: Maria F. Montoya, 2015
- Member, PhD dissertation committee, UNTHSC. Student: Shlesma Chhetri, 2018
- Member, PhD dissertation committee, UNTHSC. Student: Leslie Allsopp, 2018

Professional Memberships

- American Statistical Association
- Texas Public Health Association

Research Interests and Technical Skills

Statistics: Environmental Monitoring, Hierarchical Linear and Non-Linear Mixed-Effects Modeling, Multivariate Analysis, Sample Size Determination and Power Analysis.

Computing Platforms: UNIX, WINDOWS.

Programming Languages: SAS, Minitab, Splus, SPSS, R

Text formatting and Office Computing: MS-Office, LaTeX.