

BIOGRAPHICAL SKETCH

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| | | | |
|---|---------------------------------------|---------|----------------|
| NAME Mekibib Altaye, Ph.D. | POSITION TITLE Assistant Professor | | |
| eRA COMMONS USER NAME MEKALTAYE | | | |
| EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i> | | | |
| INSTITUTION AND LOCATION | DEGREE <i>(if applicable)</i> | YEAR(s) | FIELD OF STUDY |
| Addis Ababa University, Addis Ababa, Ethiopia | BS | 1983 | Statistics |
| Oklahoma State University, Stillwater, OK | MS | 1991 | Statistics |
| University of Western Ontario, London, Canada | PhD | 1998 | Biostatistics |
| University of Western Ontario, London, Canada | Post Doc | 1999 | Biostatistics |

A. Positions and Honors.

- 1983-1986 Assistant Statistician - Central Statistical Authority; Addis Ababa, Ethiopia
 1986-1989 Statistician - Central Statistical Authority; Addis Ababa, Ethiopia
 1996-1998 Statistical consultant, research and teaching assistant - University of Western Ontario, Department of Epidemiology and Biostatistics; London, Ontario
 1998-1999 Postdoctoral Fellow - University of Western Ontario, Department of Epidemiology and Biostatistics; London, Ontario
 1999-2001 Assistant Professor - Center for Pediatric Research, Eastern Virginia Medical School; Norfolk, VA
 10/2001- Assistant Professor - Department of Pediatrics, University of Cincinnati College of Medicine and the Center for Epidemiology & Biostatistics, Children's Hospital Medical Center, Cincinnati, OH.

Honors: Fellowship for graduate study in the USA, Food and Agricultural Organization of the United Nations, 1989 to 1991; Special University Scholarship, The University of Western Ontario, 1995 to 1997; Postdoctoral Fellowship in the Department of Epidemiology and Biostatistics, Faculty of Medicine and Dentistry, The University of Western Ontario, 1998; Travel award to attend the Junior researchers workshop, International Biometric Society:ENAR, 2004. Travel award to attend a workshop on statistical analysis of neuronal data SAND, 2006.

B. Selected peer-reviewed publications (in chronological order).

- Morrow AL, Crews RC, Carretta HJ, Altaye M, Finch AB, Sinn JS. Effect of method of defining the active patient population on measured immunization rates in predominantly Medicaid and non-Medicaid practices. *Pediatrics* (2000) 106: 171-176. Cited in Pub Med: PMID: 10888688
- Altaye M, Donner A, Eliasziw M. A general goodness of fit approach for inference procedures concerning the kappa statistic. *Statistics in Medicine* (2001) 16: 2479-2488. Cited in Pub Med: PMID: 11512137
- Altaye M, Donner A, Klar N. Inference procedures for assessing interobserver agreement among multiple raters. *Biometrics* (2001) 57: 584-588. Cited in Pub Med: PMID: 11414588
- Chaturvedi P, Warren CD, Altaye M, Morrow AL, Ruiz-Palacios GM, Pickering LK, Newburg DS. Fucosylated human milk oligosaccharides vary between individuals and over the course of lactation. *Glycobiology* (2001) 11: 365-372. Cited in Pub Med: PMID: 11425797
- Dearden K, Altaye M, Maza I, Oliva M, Jimenez MS, Morrow AL, Burkhalter BR. Determinants of optimal breast-feeding in peri-urban Guatemala City, Guatemala. *Pan American Journal of Public Health* (2002). 12: 185-192. Cited in Pub Med: PMID: 12396637

6. Dearden K, Altaye M, Maza ID, Oliva MD, Stone-Jimenez M, Morrow AL, Burkhalter BR. The impact of mother-to-mother support on optimal breastfeeding: a controlled community intervention trial in Peri-Urban Guatemala city, Guatemala. *Pan American Journal of Public Health* (2002) 12: 193-201. Cited in Pub Med: PMID: 12396638
7. Altaye M and Donner A. The effect of dichotomizing a polytomous data in interobserver agreement studies. 2003 Proceedings of American Statistical Association [CD-ROM], Biometric Section, Alexandria, VA : American Statistical Association (2003): 384-386.
8. Huang P, Farkas T, Marionneau S, Zhong W, Ruvoën-Clouet N, Morrow AL, Altaye M, Pickering LK, Newburg DS, LePendu J, Jiang X. Noraviruses bind to ABO, Lewis and secretor histo-blood group antigens: Identification of 4 distinct strain-specific patterns. *The Journal of Infectious Diseases* (2003) 188 (1) 19-31. Cited in Pub Med: PMID: 12825167
9. Farkas T, Thornton SA, Wilton N, Zhong W, Altaye M, Jiang X. Homologous Vs heterologous immune responses to Norwalk-like viruses among crewmembers following acute gastroenteritis outbreaks on two US Navy Vessels. *Journal of Infectious Diseases* (2003) 187 (2): 187-193. Cited in Pub Med: PMID: 12552443
10. Altaye M. Optimal design for interobserver agreement studies, 2004 Proceedings of American Statistical Association [CD-ROM], Biometric Section, Alexandria VA: American Statistical Association (2004) 261-265
11. Morrow AL, Ruiz-Palacios GM, Altaye M, Jiang X, Guerrero ML, Meinzen-Derr JK, Farkas T, Chaturvedi P, Pickering LK, Newburg DS. Human milk oligosaccharides are associated with protection against diarrhea in breast-fed infants. *Journal of Pediatrics* (2004) 145(3) 297-303. Cited in Pub Med: PMID: 15343178
12. Newburg DS, Ruiz-Palacios GM, Altaye M, Chaturvedi P, Guerrero ML, Meinzen-Derr JK, Morrow AL. Human milk alpha 1, 2linked fucosylated oligosaccharides decrease risk of diarrhea due to stable toxin of *E. coli* in breastfed infants. *Advances in experimental medicine and biology* (2004) 554: 457-461. Cited in Pub Med: PMID: 15384624
13. Newburg DS, Ruiz-Palacios GM, Altaye M, Charurvedi P, Meinzen-Derr J, Guerrero ML, Morrow A. Innate protection conferred by fucosylated oligosaccharides of human milk against diarrhea in breastfed infants. *Glycobiology* (2004) 14: 253-263. Cited in Pub Med: PMID: 14638628
14. Morrow AL, Ruiz-Palacios GM, Altaye M, Jizng X, Guerrero ML, Meinzen-Derr JK, Farkas T, Chaturvedi P, Pickering LK, Newburg DS. Human milk oligosaccharide blood group epitopes and innate immune protection against campylobacter and clostridium diarrhea in breastfed infants. *Advances in experimental medicine and biology* (2004) 554: 443-446. Cited in Pub Med: PMID: 15384621
15. Meinzen-Derr JK, Guerrero ML, Altaye M, Ruiz-Palacios GM, Morrow AL. Duration of exclusive breastfeeding and risk of anemia in a cohort of Mexican infants. *Advances in experimental medicine and biology* (2004) 554: 395-398.
16. Mari G, Abuhamad AZ, Cosmi E, Segata M, Altaye M, Akiyama M. Middle cerebral artery peak systolic velocity: Technique and variability. *The Journal of Ultrasound in Medicine* (2005) 24(4) 425-430
17. Meinzen-Derr JK, Guerrero ML, Altaye M, Oretaga-Gallegos H, Ruiz-Palacios GM, Morrow AL. Duration of exclusive breastfeeding and increased risk of anemia at 9 months in a cohort of Mexican infants. *Journal of Nutrition* (2006) 136(2) 452-458. Cited in Pub Med: PMID: 15384609
18. Molloy CA, Morrow AL, Meinzen-Derr J, Schleifer K, Dienger K, Manning-Courtney P, Altaye M, Wills-Karp M. Elevated cytokine levels in children with autism spectrum disorder. *Journal of Neuroimmunology* 2006 Mar;172(1-2):198-205. Cited in Pub Med: PMID: 16360218
19. Szaflarski JP, Schmithorst VJ, Altaye M, Byars AW, Rett J, Plante E, Holland SK. A longitudinal fMRI study of language development in children age 5-11. *Annals of Neurology* (2006) 59(5): 796-807. Cited in Pub Med: PMID: 16498622
20. Martin LJ, Woo JG, Geraghty SR, Altaye M, Davidson BS, Banach W, Dolan LM, Ruiz-Palacios GM, Morrow AL. Adiponectin is in human milk and is associated with maternal factors. *American Journal of Clinical Nutrition*. 2006 May;83(5):1106-11. Cited in Pub Med: PMID: 16685053
21. Yuan W, Holland SK, Cecil KM, Dietrich KN, Wessel SD, Altaye M, Hornung RW, Ris MD, Egelhoff JC, Lanphear BP. The impact of early childhood lead exposure of brain organization: a functional magnetic

- resonance imaging study of language function. *Pediatrics* 2006 Sep;118(3):971-7. Cited in Pub Med: PMID: 16950987
22. Ammerman RT, Stevent J, Putnam FW, Altaye M, Hulsmann JE, Lehmkuhl HD, Monroe JC, Gannon TA, Van Ginkle JB. Predictors of early disengagement in home visitation. *Journal of Family Violence* (2006) 21(2) 105-115.
 23. Eghtesdy P, Michelfelder E, Altaye M, Ballard E, Hirsh R, Beekman RH. Revisiting animal models of aortic stenosis in the early gestation fetus. *Annals of Thoracic Surgery* (2007) 83(2):631-639. Cited in Pub Med: PMID: 17257999
 24. Donovan EF, Ammerman RT, Besl J, Atherton H, Khoury JC, Altaye M, Putnam FW, Van Ginkel JB. Intensive home visiting is associated with decreased risk of infant death. *Pediatrics*. 2007 119(6):1145-51. Cited in Pub Med: PMID: 17545382
 25. Difrancesco MW, Holland SK, Ris MD, Adler CM, Nelson S, Delbello MP, Altaye M, Brunner HI. Functional magnetic resonance imaging assessment of cognitive function in childhood-onset systemic lupus erythematosus: A pilot study. *Arthritis Rheum.* (2007) 56(12): 4151-63.
 26. Karumanayaka PR, Holland SK, Yuan W, Altaye M, Jones BV, Michaud LJ, Walz NC, Wade SL. Neural substrate differences in language networks and associated language behavioral impairments in children with TBI: A preliminary fMRI investigation. *Neuro Rehabilitation* (2007) 22: 355-369.
 27. Langberg, J.M., Epstein, J.N., Altaye, M., Molina, B., Arnold, E., & Vietiello, B. The transition to middle school is associated with changes in the developmental trajectory of ADHD symptomatology in young adolescents with ADHD. *Journal of Clinical Child and Adolescent Psychology* (in press).
 28. Byars AW, Lisa Jacola, MA; Vincent J. Schmithorst, Mekibib Altaye, Mark B. Schapiro, Jerzy Szaflarski, Elena Plante, Scott K. Holland. Handedness and the development of language lateralization. *Neuroimage* (in press)

C. Research Support

Active Grants

P01 HD 13021(Morrow)

06/1/03 – 03/31/08

NIH

Role of Human Milk in Infant Nutrition and Health

The overall hypothesis of this program project is that diarrheal disease is prevented in breastfed infants through innate and adaptive immunologic factors expressed in human milk.

Role: Co-investigator

R01 DC007186 (Holland)

12/1/04 – 11/30/09

NIH

fMRI, Genes And Outcome For Cochlear Implants In Infants

The major goal is to evaluate auditory response to sound using fMRI to determine which infants would be most likely to respond to cochlear implantation.

Role: Collaborator

R01 HD038578 (Holland)

08/0/06 – 06/30/11

NIH

fMRI of Normal Language Development in Children

The major goal is to evaluate auditory response to sound using fMRI to determine normal language development in children.

Role: Collaborator

R40 MC06632 (Ammerman)

01/1/06 – 12/31/09

NIH

Increasing Retention in Home Visitation

Principal Investigator/Program Director (Last, First, Middle):

The major goal is to conduct a clinical trial of motivational interviewing as an adjunct to home visitation in order to increase retention and adherence to prevention protocols.

Role: Biostatistician

R01 MH074770 (**Epstein**)

06/01/06 – 03/21/10

NIH

Response Variability in Children with ADHD

The major goal is to examine response variability in children with ADHD using a variety of neuropsychological paradigms and advanced measurement strategies.

Role: Biostatistician

(Dawodu)

01/01/08 - 12/31/11

Thrasher Foundation

Vitamin D levels in infants and children in the UAE

The major goal is to examine response variability in mothers and children with vitamin D supplements to reduce the cases of rickets within the UAE.

Role: Biostatistician