

Professional Affiliation

Department of Public Health Sciences
College of Health and Social Services
New Mexico State University
PO Box 3001
Las Cruces, NM 88003
Ph: (954) 330-7776
email: aamatya@nmsu.edu

Education

- 2011 Ph.D., Biostatistics, University of Illinois at Chicago, Chicago, IL
Dissertation: Meta-analysis of Binary Rare Events. (Paper published in JASA)
- 2007 M.S., Biostatistics, University of Illinois at Chicago, Chicago, IL
- 2004 M.S., Electrical Engineering, University of Texas at Dallas, Richardson, TX
- 2001 B.S., Computer Engineering, University of South Alabama, Mobile, AL

Honors and Awards

- 2008–2011 Pre-Doctoral Fellowship, University of Illinois at Chicago
- 2011 Haenszel Award for Excellence in Research, School of Public Health, University of Illinois at Chicago

Professional Experiences

- 2016 Associate Professor of Biostatistics, New Mexico State University, College of Health and Social Services, Department of Public Health Sciences
- 2011 Assistant Professor of Biostatistics, New Mexico State University, College of Health and Social Services, Department of Public Health Sciences
- 2005 Graduate Research Assistant/statistician, University of Illinois at Chicago, Departments of Biostatistics, Psychiatry, and Pathology
- 2005 Pharmacoepidemiology intern, The Degge Group, Arlington, VA

A. Grants and Subcontracts

- 2012 **Anup Amatya (Subcontract)**: Antidepressant Treatment and Suicidality: Biostatistical/Methodological Solutions (5R01MH080122-05 PI: Robert Gibbons, University of Chicago).
Amatya: \$7,100.00.

- 2013 **Anup Amatya (Co-Principal Investigator)**: Clinical and transitional research infrastructure network: IDeA-CTR. 9/15/2013 to 06/30/2018 (1U54GM104944-01A1 PI: Robert D. Langer, The University of Nevada Las Vegas) Amatya: \$197,372 (\$37,926/year for 5 years).
- 2014 **Anup Amatya (Biostatistician)**: National Cancer Institute, NIH, Partnership for the advancement of cancer research: NMSU/FHCRC. 9/01/2014 to 8/31/2016. (5U54CA132383, PI: Mary O’Connell). Amatya: \$5040.35/year.
- 2014 **Anup Amatya (Biostatistician/Co-PI)**: National Cancer Institute, NIH, Administrative Supplements to Support Assessment of Community Outreach Activities of the Community Networks Program Centers (CNPC) and Comprehensive Partnerships to Advance Cancer Health Equity (CPACHE) Programs. 9/01/2014 to 8/31/2015. PI: Mary O’Connell Co-PI: Palacios. \$99,996 (Amatya: \$9,999.6 [10%]).
- 2014 **Anup Amatya (Co-Principal Investigator)**: Sample size requirements and power in randomized clinical study with screening misclassification (NIH/NIGMS 5U54GM104944-02 Subaward No: 15-746Q-UMT-BS1-00 PI: Solomon Harrar, 07/01/14 to 06/30/15) \$22,000.
- 2017 **Anup Amatya (Co-Principal Investigator)**: Linked Dataset Analysis of Disparities in Cesarean Delivery Rates on the U.S. - Mexican Border. (Health Resources and Services Administration, HRSA R40MC30756 PI: Jill McDonald, 04/01/2017 to 03/31/2018) \$100,000.00

B. Research and Creative Activity

I. Books

1. Gibbons, R. D. and **Amatya, A.** (2015). Statistical methods for drug safety. Chapman & Hall.

II. Software Development

1. R package BinNor (2012): <http://cran.r-project.org/web/packages/BinNor/index.html>
2. R package OrdNor (2013): <http://cran.r-project.org/web/packages/OrdNor/index.html>
3. R package MultiOrd (2014): <http://cran.r-project.org/web/packages/MultiOrd/index.html>
4. R package PoisNor (2014): <http://cran.r-project.org/web/packages/PoisNor/index.html>

III. Peer reviewed articles

1. **Amatya, A.**, Bhaumik, D. (2017). Sample size determination for multilevel hierarchical designs using generalized linear mixed models. *Biometrics*. (Accepted for publication)
2. Gaire, S., OConnell, M., Holguin, O, **Amatya, A.**, Bundy, S., and Romero, A. (2017). Insecticidal properties of essential oils and some of their constituents on the turkestan cockroach. *Journal of Economic Entomology*; 110(2), 584–592.

3. Harrar, S., **Amatya, A.**, Kalachev, L. (2016). Assessing treatment efficacy in the presence of diagnostic errors. *Statistics in Medicine*; 35(29):5338–5355.
4. **Amatya, A.**, Demirtas, H. (2016). Concurrent generation of multivariate mixed data with variables of dissimilar types. *Journal of Statistical Computation and Simulation*; 86(18): 3595–3607.
5. Bajracharya, P., Summers, L., **Amatya, A.**, DeBlicke, C. (2016). Implementation of depression screening protocol and tools to improve screening for depression in patients with diabetes in the primary care setting. *Journal for Nurse Practitioners*; 12 (10) 690–696.
6. **Amatya, A.**, Demirtas, H. (2015). PoisNor: An R Package for simultaneous generation of multivariate data with Poisson and normal marginals. *Communications in Statistics - Simulation and Computation* (Accepted for publication)
7. McDonald, J., Argotsinger, B., Mojarro, O., Roachat, R., **Amatya, A.** (2015). First trimester initiation of prenatal care in the US-Mexico border region. *Medical Care*; 53(8): 700-707.
8. **Amatya, A.**, Demirtas, H. (2015). OrdNor: An R Package for concurrent generation of correlated ordinal and normal data. *Journal of Statistical Software*; 68(1):1-14.
9. **Amatya, A.**, Dulal, B., Normand, S.L., Greenhouse, J., Kaizar, E., Neelon, B., Gibbons, R. D. (2015). Likelihood-based random effect meta-analysis of binary events. *Journal of Biopharmaceutical Statistics*;25(5):984-1004.
10. Kratzke, C., **Amatya, A.**, Vilchis, H. (2015). Breast cancer prevention knowledge, beliefs, and information sources between non-hispanic and hispanic college women for risk reduction focus. *Journal of Community Health*; 40(1), 124–130, PMID: 24989348. Available at: <http://link.springer.com/article/10.1007/s10900-014-9908-9>.
11. **Amatya, A.**, Demirtas, H. (2015). Simultaneous generation of multivariate mixed data with Poisson and Normal marginal. *Journal of Statistical Computation and Simulation*; 85 (15): 3129-3139
12. **Amatya, A.**, Demirtas, H.(2014). MultiOrd: An R package for generating correlated ordinal data. *Communications in Statistics - Simulation and Computation*; 44(7), 1683–1691.
13. Demirtas, H., **Amatya, A.**, and Doganay, B. (2014). BinNor: An R package for concurrent generation of binary and normal data. *Communications in Statistic-Simulation and Computation*; 43(3), 569579.
14. Kratzke, C., **Amatya, A.**, Vilchis, H. (2014). Differences among college women for breast cancer prevention acquired information-seeking, desired apps and texts, and daughter-initiated information to mothers. *Journal of Community Health*; 39(2), 291-300.
15. **Amatya, A.**, Bhaumik, D., Gibbons, R.D. (2013). Sample size determination for clustered count data. *Statistics in Medicine*; 17, 4162–4179.
16. Gann, P., Deaton, R., **Amatya, A.**, Mohnani, M., Rueter, E., Yang, Y., Ananthanarayanan, V. (2013). Development of a nuclear morphometric signature for prostate cancer risk in benign biopsies. *PLoS ONE* 8(7):1-9.
17. Kratzke, C., Vilchis, H., **Amatya, A.** (2013). Breast cancer prevention knowledge, attitudes, and behaviors among college women and mother-daughter communication. *Journal of Community Health*; 38(3):560-8.

18. Dulal, B., **Amatya, A.**, Normand, S.L., Greenhouse, J., Kaizar, E., Neelon, B., Gibbons, R. D. (2012). Meta-Analysis of rare binary adverse event data. *Journal of American Statistical Association*; 107(498), 555–567.
19. Wilson, SL, Gallivan, A., Kratzke, C., **Amatya, A.** (2012). Nutritional status and socio-ecological factors associated with overweight/obesity at a rural-serving US-Mexico border university. *The Journal of Rural and Remote Health*; 12(4):2228.
20. Ananthanarayanan, V., Deaton, R. **Amatya, A.**, Macias, V., Luther, E., Kajdacsy-Balla, A., Gann, P. (2011). Subcellular localization of p27 and prostate cancer recurrence: automated digital microscopy analysis of tissue microarrays. *Human Pathology*; 42(6):873-81.
21. Bhaumik, D., Aryal, S., **Amatya, A.**, Kapur, K., Gibbons, R. (2011). Sample size determination for between group comparisons in mixed-effects logistic regression models for analysis of longitudinal data. *Journal of Applied Statistical Sciences*; 19(1):11–22.
22. Gibbons, R., **Amatya, A.**, Brown, H., Hur, K., Marcus, S, Bhaumik, D., Mann, J.J. (2010) Post-approval drug safety surveillance. *The Annual Review of Public Health*. 31:1.1-1.19
23. Amatya, A., Florman, S., Paramesh, A., **Amatya, A.**, McGee, J., Killackey, M., Alper, B., Heneghan, J., Simon, E., Sullivan, K., Douglas Slakey and Rubin Zhang (2010). HLA-matched Kidney Transplantation in the Era of Modern immunosuppressive Therapy. *Dialysis and Transplantation*; 39(5):193–198.
24. Demirtas, H., **Amatya, A.**, Pugach, O., Cursio, J., Shi, F., Morton, D. Doganay, B. (2009) Accuracy versus convenience: a simulation-based comparison of two continuous imputation models for incomplete ordinal longitudinal clinical trials data. *Statistics and Its Interface*; 2(4): 449-456.
25. Gonzalez, R., Jacobus, J., **Amatya, A.**, Quartana, P. Q., Vassileva, J., and Martin, E.M. (2008). Deficits in complex motor functions, despite no evidence of procedural learning deficits, among HIV+ individuals with history of substance dependence. *Neuropsychology*; 22(6):776–786
26. Gibbons, R., Segawa, E., Karabatsos, G. **Amatya, A.**, et al.(2008).Random-effect poisson regression analysis of adverse event reports: the relationship between antidepressants and suicide. *Statistics in medicine*; 11:1814–1833.
27. Bell, C.C., Bhana, A., Petersen, I., McKay, M., Gibbons, R., Bannon, W., **Amatya, A.** (2008). Building protective factors to offset sexually risky behaviors among black south african youth: a randomized control trial. *Journal of National Medical Association*;100(8): 936–943.

IV. Oral Presentations At International Conferences (Presenter: Amatya)

1. Sample size determination for clustered count data. International Biometric Society: Eastern North American Regional Meetings, Miami, FL, March 2011.
2. Meta-analysis of rare binary event data. International Biometric Society: Eastern North American Regional Meetings, Washington, DC, April 2012.
3. Multiord: An R package for generating correlated ordinal Data. Joint Statistical Meeting, Montreal, Canada, August 2013.

4. Sample size determination for three-level generalized linear mixed-models. Joint Statistical Meeting, Boston, MA, August 2014.

V. Statistical Consultations/Poster Presentation

1. Statistical consultant for several grant applications
2. Stewart A. *et. al.*, (2006). *Does physical anhedonia play a role in depression? A 20-year longitudinal study.* Journal of Affective Disorders,120(1), Pages 170–176. Role: Statistical analysis.
3. Rao S, **Amatya A**, Patel P. (2010). *Predictors of computed tomography scan use in CAD patients in emergency departments in United States.* Value in Health. 13(3). Role: Statistical analysis.
4. Kittleson, Mark J., Wilson, S., Kratzke, C., **Amatya A**, and Pilley, A. *Domestic Violence among College Students in a Minority Serving Institution.* American Association of Health Education (AAHE), Charlotte, NC 2013. Role: Statistical analysis.
5. Olsen, L., Pena De La Cruz, A., Pena De La Cruz, G., Anchalee, D., Nattaya, P., and **Amatya A**. *Fat Phobias held by HS students in Mexico and Thailand.* Abstract for the AAHPERD National Convention and Exposition. 2014. Role: Statistical analysis.
6. Olsen, L., Duvall, A., Pena De La Cruz, A., and **Amatya A**. *Fat Phobias of Thai High School Youth.* Poster Session at SOPHE 66th Annual Meeting, Portland, Oregon. 2015. Role: Statistical analysis.

Computer Skills

- **Advanced SAS Certified Programmer**
- Programming Languages: FORTRAN, C, C++, JAVA
- Software: MATLAB, SAS, WINBUG, R, SPSS