

MD SHAMIM SARKER (WARASI*)

*Md Shamim Sarker is currently publishing under Md S. Warasi.

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EDUCATION

2016	Ph.D. in Statistics Advisor: Joshua M. Tebbs	University of South Carolina, Columbia, SC
2011	M.S. in Mathematics Advisor: Kumer Pial Das	Lamar University, Beaumont, TX
2005	B.S. in Mathematics	Jahangirnagar University, Bangladesh

PROFESSIONAL EXPERIENCE

2016 – present	Assistant Professor, Department of Mathematics and Statistics, Radford University
2011 – 2016	Teaching Assistant, Department of Statistics, University of South Carolina
2008 – 2011	Teaching/Research Assistant, Department of Mathematics, Lamar University

CURRENT RESEARCH INTERESTS

Group testing (pool testing), measurement error models, latent model misspecification, statistical computing, applications in biology, epidemiology, and public health.

REFEREED PUBLICATIONS

- **Warasi, M.**, Tebbs, J., McMahan, C., and Bilder, C. (2016). Estimating the prevalence of multiple diseases from two-stage hierarchical pooling. *Statistics in Medicine*, **35**, 3851-3864.
- Huang, X. and **Warasi, M.** (2017). Maximum likelihood estimators in regression models for error-prone group testing data. *Scandinavian Journal of Statistics*, in press.

OTHER PUBLICATIONS

- Das, K. and **Sarker, S.** (2009). A review of Panjer's recursion for evaluation of compound negative binomial distribution using R. *JSM Proceedings*, Statistical Computing Section. Alexandria, VA: American Statistical Association, 1121-1131.
- Das, K., **Sarker, S.**, and Diawara, N. (2011). Further review of Panjer's recursion for evaluation of compound negative binomial distribution using R. *Missouri J. Math. Sci. (MJMS)*, Vol 23, Issue 2, 182-191.

MANUSCRIPTS IN REVIEW/PREPARATION

- **Warasi, M.**, McMahan, C., Tebbs, J., and Bilder, C. (2017+). Group testing regression models with dilution submodels. *Statistics in Medicine*, in revision.
- **Warasi, M.**, Tebbs, J., McMahan, C., and Bilder, C. (2017+). Using hierarchical group testing to estimate the prevalence of multiple diseases. In preparation.
- **Warasi, M.**, Hanson, T., and Tebbs, J. (2017+). Bayesian regression models for group testing in the presence of dilution effects. In preparation.

FUNDED GRANTS (INTERNAL)

Radford University, SEED Grant Program (Summer 2017). Group testing regression models in the presence of dilution effects. Total award: \$5,000. Role: PI.

RESEARCH PRESENTATIONS

- Bayesian regression models for group testing in the presence of dilution effects. Joint Statistical Meetings, Baltimore, August 2017. Oral presentation by **Md S. Warasi**.
- Using hierarchical group testing to estimate the prevalence of multiple diseases. ENAR Spring Meetings, Washington DC, March 2017. Poster presentation by **Md S. Warasi**.
- Group testing regression models with dilution submodels. Latent Variables 2016, University of South Carolina, Columbia, October 2016. Poster presentation by **Md S. Warasi**.
- Group testing regression with dilution submodels. Joint Statistical Meetings, Seattle, August 2015. Oral presentation by **Md S. Warasi**.
- Estimating the prevalence of multiple diseases via two-stage hierarchical pooling. ENAR Spring Meetings, Miami, March 2015. Oral presentation by **Md S. Warasi**.
- Group testing regression with dilution submodels. South Carolina Chapter of the American Statistical Association Meeting, Columbia, March 2015. Oral presentation by **Md S. Warasi**.
- Estimating the prevalence of multiple diseases via two-stage hierarchical pooling. South Carolina Chapter of the American Statistical Association Meeting, Clemson, November 2014. Poster presentation by **Md S. Warasi**.
- Bayesian inference on prevalence and diagnostic test accuracy with group testing data for multiple infections. Department of Statistics, University of South Carolina, November 2013. Oral presentation by **Md S. Warasi**.
- Maximum likelihood estimators in regression models for error-prone group testing data. Department of Statistics, University of South Carolina, April 2013. Oral presentation by **Md S. Warasi**.
- Further review of Panjer's recursion for evaluation of compound negative binomial distribution using R. Conference of Texas Statisticians, College Station, March 2011. Poster presentation by **Md S. Warasi**.
- A review of Panjer's recursion for evaluation of compound negative binomial distribution using R. South Regional Council on Statistics, Virginia, June 2010. Poster presentation by **Md S. Warasi**.
- A review of Panjer's recursion for evaluation of compound negative binomial distribution using R. Joint Statistical Meetings, Washington, D.C., August 2009. Oral presentation by Kumer P. Das.

TEACHING

• Radford University

<u>Course</u>	<u>Semester</u>	<u>Cum. # of Students</u>
STAT 200	Fall 2016, Spring 2017	175
STAT 301	Spring 2017	20

• University of South Carolina

<u>Course</u>	<u>Semester</u>	<u>Cum. # of Students</u>
STAT 516	Summer 2016	11
MATH/STAT 511	Summer 2015	9
STAT 509	Summer 2014, Spring 2015	70
STAT 201	Fall 2012, Spring 2013, Fall 2013, Spring 2014, Fall 2014, Fall 2015, Spring 2016	384

DEPARTMENTAL SERVICE

- Statistics Committee, 2016 – present
- Scholarship Committee, 2016 – present

JOURNAL REFEREE

- Metrika
- Physica A
- REVSTAT (2)
- Journal of Statistics Education

HONORS AND AWARDS

- Travel Grant, NSF and University of South Carolina, 2016
- Citizenship Award, Department of Statistics, University of South Carolina, 2015
- Travel Grant, Department of Statistics, University of South Carolina, 2015
- Travel Grant, Graduate School, University of South Carolina, 2015
- Travel Grant, Department of Statistics, University of South Carolina, 2014
- Citizenship Award, Department of Statistics, University of South Carolina, 2014
- Dean's List of Scholarship for M.S. in Mathematics, Lamar University, 2008
- Swedish Bangladesh Trust Fund Travel Grant, 2008

CONSULTING EXPERIENCE

Summer 2013, Stat Lab, University of South Carolina

PROFESSIONAL ORGANIZATIONS

- American Statistical Association (ASA)
- International Biometric Society (ENAR)