

## 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.
- **Warasi, M.**, McMahan, C., Tebbs, J., and Bilder, C. (2017). Group testing regression models with dilution submodels. *Statistics in Medicine*, 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.**, 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, Summer 2017	184
STAT 301	Spring 2017, Fall 2017	45
STAT 302	Summer 2017	7
STAT 420	Fall 2017 (online)	15

- **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
- Curriculum Committee, 2017 – present
- Scholarship Committee, 2016 – 2017

**JOURNAL REFEREE**

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

**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)