

## 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*, **44**, 918-931.
- **Warasi, M.**, McMahan, C., Tebbs, J., and Bilder, C. (2017). Group testing regression models with dilution submodels. *Statistics in Medicine*, **36**, 4860-4872.

### 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)*, **23**, 182-191.

### MANUSCRIPTS IN REVIEW/PREPARATION

- **Warasi, M.**, Tebbs, J., McMahan, C., and Bilder, C. (2018+). Using hierarchical group testing to estimate the prevalence of multiple diseases. In preparation.
- **Warasi, M.** and Tebbs, J. (2018+). Measurement error models for group testing data. In preparation.

## FUNDED GRANTS (INTERNAL)

- Radford University, SEED Grant Program (May 2017 – May 2018). Group testing regression models in the presence of dilution effects. Total award: \$5,000. Role: PI.
- Radford University, ACSAT Faculty Research Program (Nov 2017 – Dec 2018). Using Hierarchical Group Testing to Estimate the Prevalence of Multiple Diseases. Total award: \$6,700. Role: PI.

## TEACHING

### • Radford University

<u>Course</u>	<u>Semester</u>	<u>Cum. # of Students</u>
STAT 200	Fall 2016, Spring 2017, Summer 2017	240
STAT 301	Spring 2017, Fall 2017 Spring 2018	120
STAT 302	Summer 2017	37
STAT 330	Spring 2018	15
STAT 420	Fall 2017 (online)	15
STAT 421	Spring 2018	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)

## RESEARCH PRESENTATIONS

- Measurement error models for group testing data. ENAR Spring Meetings, Atlanta, Georgia, March 2018. Oral presentation by **Md S. Warasi**.
- 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.