A.H.M. Mahbub Latif

CONTACT INFORMATION	Institute of Statistical Research and Training (ISRT) University of Dhaka Dhaka 1000, Bangladesh email: mlatif@isrt.ac.bd web: http://www.isrt.ac.bd/people/mlatif
CITIZENSHIP	Bangladeshi
RESEARCH INTERESTS	Design and analysis of experiments, medical statistics, public health, statistical computing

EDUCATION

University of Goettingen, Germany

Ph.D., Applied Statistics   October 2002 to November 2005
- Thesis topic: *"Efficiency and robustness issues in complex statistical designs for two-color microarray experiments"*
- Advisor: Dr. Edgar Brunner

University of British Columbia, Vancouver, BC, Canada

M.Sc., Statistics   September 1999 to November 2001
- Thesis topic : *"A comparison of the methods for multivariate familial responses"*
- Advisor : Dr. Harry Joe

University of Dhaka, Dhaka, Bangladesh

M.Sc., *Statistics* (thesis group)   August 1993 to August 1995
- Thesis topic: *"Extensions of multistate hazards models for transitions and reverse transitions"*
- Advisor : Dr. M. Ataharul Islam

B.Sc., *Statistics*   August 1988 to August 1993
- Minors: *Mathematics* and *Economics*

ACADEMIC EXPERIENCE

Institute of Statistical Research and Training, University of Dhaka, Bangladesh

Professor of Applied Statistics	November 2012 to present
Director of the Institute	January 2015 to August 2016
Associate Professor of Applied Statistics	December 2007 to November 2012
Assistant Professor of Applied Statistics	June 1999 to December 2007
Lecturer of Applied Statistics	May 1996 to June 1999

Graduate School of Public Health, St. Luke's International University, Tokyo, Japan

Professor of Biostatistics	August 2016 to May 2019

Department of Biostatistics, University of North Carolina at Chapel Hill, USA

Pranab K. Sen Visiting Professor	July 2013 to December 2013

Isaac Newton Institute of Mathematical Sciences, University of Cambridge, UK

Visiting Fellow	July 2011 to October 2011
Visiting Fellow	July 2008 to August 2008

Queen Mary University of London, London, United Kingdom

Postdoctoral Research Assistant   February 2008 to January 2010
- Advisor : Dr. Steven G. Gilmour, Professor, School of Mathematical Sciences

University of Goettingen, Germany

Research Assistant   October 2002 to September 2003
- Advisor : Dr. Edgar Brunner, Professor, Department of Medical Statistics

University of British Columbia, Vancouver, BC, Canada

Research Assistant   May 2000 to June 2002
- Advisor : Dr. Harry Joe, Professor, Department of Statistics

Teaching Assistant   September 1999 to April 2000
- Demonstrated computer labs for introductory statistics courses

RESEARCH PUBLICATIONS (SELECTED)

Chakraborty H, Hossain A, and Latif AHMM (2019). A three-state continuous time Markov chain model for HIV disease burden. **Journal of Applied Statistics** 46(9), 1671–1688. [DOI: 10.1080/02664763.2018.1508560]

Inan G, Latif AHMM, and Preisser JS (2019). A PRESS statistic for working correlation structure selection in generalized estimating equations. **Journal of Applied Statistics** 46(4), 621–637. [DOI: 10.1080/02664763.2018.1508560]

Bogacka B, Latif AHMM, Gilmour SG, and Youdim K (2017). *Optimum designs for nonlinear mixed effects models in the presence of covariates*. **Biometrics** 73(3), 927–937. [DOI: 10.1111/biom.12660]

Latif AHMM and Brunner E (2016). *A genetic algorithm for designing microarray experiments*. **Computational Statistics** 31(2), 409–424. [DOI: 10.1007/s00180-015-0618-2]

Jaman A, Latif AHMM, Bari W, and Wahed A (2016). *A determinant based criterion for working correlation structure selection in generalized estimating equations*. **Statistics in Medicine** 35(11), 1819–1833 [DOI: 10.1002/sim.6821]

Latif AHMM and Gilmour SG (2015). *Transform-both-sides nonlinear models for in vitro pharmacokinetic experiments*. **Statistical Methods in Medical Research**, 24(3), 306–324. [DOI:10.1177/0962280214544017]

Mahmood S, Zainab B, and Latif AHMM (2013). *Frailty modeling for clustered survival data: an application to birth interval in Bangladesh*. **Journal of Applied Statistics**, 40(12), 2670–2680. [DOI:10.1080/02664763.2013.825702]

Latif AHMM, Bretz F, and Brunner E (2009) *Robustness considerations in selecting efficient two-color microarray designs*. **Bioinformatics**, 25(18), 2355–2361. [DOI: 10.1093/bioinformatics/btp407]

Latif AHMM, Hossain MZ, and Islam MA (2008) *Model selection using modified Akaike's Information Criterion: An application to maternal morbidity data*. **Austrian Journal of Statistics**, 37(2), 175–184. [DOI: 10.17713/ajs.v37i2.298]

Joe H and Latif AHMM (2005) *Computations for the familial analysis of binary traits*. **Computational Statistics**, 20(3), 439–448. [DOI:10.1007/BF02741307]

TALKS	"Maternal and child anemia: Evidence from Bangladesh demographic health survey 2011", Department of Mathematics and Statistics, NUI Galway, Ireland, February 12, 2019
	"Use of transformed response in assessing the impact of fortified biscuits on micronutrient deficiencies", St. Luke's University Research Meeting, Tokyo, Japan, March 26, 2018
	"Optimum designs for nonlinear models in the presence of multiple covariates", Joint Statistical Meeting (JSM), Baltimore, USA, July 31, 2017
	"Comparing risks of developing diabetic complications among Japanese adults", St. Luke's Academia, January 28, 2017
	"Blood glucose level and diabetes complications". Center for Clinical Epidemiology, St. Luke's International University, Tokyo, Japan, September 27, 2016
	"Transform-both-sides Michaelis-Menten models for pharmacokinetic experiments", East West University, Dhaka, Bangladesh, April 8, 2015.
	"A gentle introduction to survival analysis", icddrb, Dhaka, Bangladesh, June 27, 2014.
	"Transform-both-sides Michaelis-Menten models for pharmacokinetic experiments", Department of Biostatistics, University of North Carolina at Chapel Hill, USA, September 13, 2013.
	"Optimum designs for transform-both-sides nonlinear mixed effects models in the presence of covariates", Isaac Newton Institute of Mathematical Sciences, University of Cambridge, UK, August 11, 2011.
	"Design and analysis of transform-both-sides nonlinear models", Queen Mary University of London, UK, January 28, 2010.
	"Designing biological kinetics", Queen Mary University of London, UK, December 2, 2009.
	"Analysis of transform-both-sides nonlinear regression models", Spring Research conference, Vancouver, Canada, May 27, 2009.
	"Analysis of transform-both-sides Michaelis-Menten model", Queen Mary University of London, January 15, 2009.
	"Selection of good two-color microarray designs using genetic algorithms", Isaac Newton Institute of Mathematical Sciences, University of Cambridge, UK, August 12, 2008.
	"Robustness considerations in selecting two-color efficient microarray designs", University of Dhaka, March 4, 2006.
	"Robustness considerations in selecting two-color microarray designs", Biometric conference of the German region, Halle (Saale), March 22, 2005.
SCHOLARSHIPS, AWARDS	Faculty grant (of amount USD 7,000) from St. Luke's International University, Tokyo, Japan (April 2017 – March 2019)
	A fellowship (of amount £6500) from the Isaac Newton Institute of Mathematical Sciences, University of Cambridge, UK to attend the Design of Experiment program, which was held between July 18 – December 21, 2011.
	A fellowship (of amount £1352) from the Isaac Newton Institute of Mathematical Sciences, University of Cambridge, UK to attend the Design of Experiment program, which was held between July 21 – August 15, 2008.

Georg-Christoph-Lichtenberg Scholarships, University of Goettingen, Germany, 2003–05

Graduate studies scholarships, University of British Columbia, Canada, 1999–2002.

University of Dhaka "Book Prize" for securing the first position (in first class) in BSc (honors) examination in Statistics, 1993

University of Dhaka "Merit Scholarship" for the performance in BSc (honors) examination in Statistics, 1993–95

Rajshahi Educational Board "Merit Scholarship" for the performance in the Secondary Certificate Examination, 1985–87

COURSES TAUGHT   <u>Graduate courses</u> : survival analysis, multivariate methods, microarray data analysis, computational statistics

<u>Undergraduate courses</u>: elements of probability, design and analysis of experiments, biostatistics, epidemiology, regression analysis, programming with Fortran and C, basic statistics, research methodology

THESIS SUPERVISION   So far I have supervised 20 students for their MS thesis in Applied Statistics at the University of Dhaka. My research students mainly work in the topics of survival analysis (e.g. frailty models, competing risks, etc.) and optimal design and analysis of experiments (e.g., pharmacokinetic experiments).

JOURNAL REFEREEING

- Journal of Royal Statistical Society, series C (JRSSC)
- Journal of Statistical Planning and Inference (JSPI)
- Statistics and Computing
- Journal of Applied Statistics
- Communications in Statistics: Theory and Methods
- Journal of Biosocial Science (JBS)
- Pakistan Journal of Statistics
- Journal of Statistical Research (JSR)
- BMC Public Health
- BMC International Health and Human Rights

PROFESSIONAL MEMBERSHIPS

- Life member, Bangladesh Statistical Association (BSA)
- Member, American Statistical Association (ASA) [2016–present]
- Fellow, Royal Statistical Society (RSS) [2009–2016]