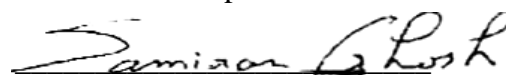


Date of Preparation: 01/03/2019



Signature

Samiran Ghosh, PhD
Research-Educator Track

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Office Fax Number: 313-577-2744

E-mail Address: sghos@med.wayne.edu**EDUCATION****DATES**

PhD , Statistics, University of Connecticut, USA	2002 – 2006
MS , Statistics, University of Maryland Baltimore County, USA	2000 – 2002
MCA , Computer Sc., Jadavpur University, India	1997 – 2000
BSc , Statistics, University of Calcutta, India	1994 – 1997

FACULTY APPOINTMENTS

Associate Professor (with Tenure), Department of Family Medicine & Public Health Sciences and Center of Molecular Medicine and Genetics (Joint Appointment in Research-Educator Track), Wayne State University School of Medicine, MI	8/2016 – present
Program leader and Co-director of Integrative Health Sciences Facility Core at CURES, a NIEHS-P30 center at Wayne State University	9/2014 – present
Director of Biostatistics at Biostatistics, Epidemiology and Research Design (BERD) at Translational Science and Clinical Research Program at WSU.	2017- present
Assistant Professor, Department of Family Medicine & Public Health Sciences and Center of Molecular Medicine and Genetics (Joint Appointment in Research-Educator Track), Wayne State University School of Medicine, MI	8/2012 - 07/ 2016
Adjunct Assistant Professor, Psychiatry and Behavioral Neurosciences Wayne State University School of Medicine, MI	10/2013 – present
Associate Professor (Research Track) and Sr. Biostatistician, Winthrop University Hospital, Mineola, NY and Stony Brook Univ. Medical Center, Stony Brook, NY	11/2011 - 07/ 2012

Assistant Professor of Biostatistics in Psychiatry, Weill Cornell Medical College, New York, NY	08/2010 - 10/ 2011
Assistant Professor at the Department of Mathematical Sciences, Indiana University-Purdue University, Indianapolis, IN (IUPUI)	08/2006 - 08/ 2010
Founding Director of the IUPUI Applied Statistical Consulting Center	2009 – 2010

MAJOR PROFESSIONAL SOCIETIES

American Statistical Association (ASA)	2001 – present
Mental Health Statistics (A section of ASA)	2012 – present
International Indian Statistical Association (IISA)	2017 – present
International Society for Bayesian Analysis (ISBA)	2012 – present
Institute of Mathematical Statistics	2006 – 2010

HONORS/AWARDS:

International Indian Statistical Association (IISA) Young Researcher/Investigator award in the “Applications” track for 2017, for exemplary contribution in Applied Statistics.	2017
Competitive travel award (\$2,500) for attending the Short Course in “System Genetics” from Jackson Laboratory, Bar Harbor, Maine	2012
Indiana University Overseas Conference travel award	2009
Doctoral Dissertation Fellowship from the University of Connecticut	2006
The Section on Bayesian Statistical Science (SBSS) Student Travel Award	2004
Certificate of Appreciation for the Best Annual Performance in “Statistical Inference” form University of Connecticut, Storrs, CT	2003 – 2004

SERVICE

Wayne State University School of Medicine, MI

Elected Member of Academic Senate at WSU	2018 – 2021
Research Committee Member of Academic Senate at WSU	2018 – 2021
Biostatistician, Clinical Research Services Center (CRSC)	2016 – 2017
School of Medicine Hearing Panel Committee, WSU	2016 – 2018

Served as an External Doctoral Thesis (in Statistics) examiner of Maiju Pesonen from University of Turku, Finland	2016
DFMPHS Education Committee (Committee to review of faculty Teaching and Service for the selective salary and Annual Review)	2013 – present
Education/Outreach committee in CMMG, WSU	2013 – present
Admission Committee member of the Masters in Public Health Program, WSU	2016 – 2017
Curriculum Committee member of the Masters in Public Health Program, WSU	2013 – 2016
CEPH Accreditation Committee for MPH program, WSU	2014 – present
Biostatistics subcommittee for MPH in Biostatistics program, WSU	2013 – 2017
Course Outcome Report subcommittee, WSU	2013 – 2014
Waller award subcommittee, DFMPHS, WSU	2013 – 2014
Epidemiology Faculty Search Committee at the DFMPHS, WSU	2012 - 2013, 2016 - 2017
<u><i>Winthrop University Hospital (affiliated to SUNY, Stony Brook)</i></u>	
Institutional Review Board	11/ 2011 - 08/2012
<u><i>Weill Cornell Medical College, NY</i></u>	
Biostatistics and Data Management Committee of ACISR (a NIH-P30) in the department of Psychiatry	2010-2011
<u><i>Indiana University-Purdue University, IN (IUPUI)</i></u>	
Statistics Faculty Search Committee	2008, 2010
Curriculum Committee of the Biostatistics PhD program	2008 - 2010
Honors and Awards Committee	2006 - 2008
Graduate Admission Committee for the Biostatistics PhD program	2009 - 2010
Applied Statistics Masters Qualifying Exam Committee	2006 - 2009
IUPUI Departmental Awards Committee	2007 - 2009
Consulting	
“The Church-Based Diabetes Prevention and Translation Study-2 (CBDPT-2)”, R18 from NIH. PI Davis-Smith, Mercer University School of Medicine, GA	2012 - 2014
Role: Biostatistician (Consultant)	

PACRAN Study: A Randomized trial of Cranberry (*Vaccinium macrocarpon*) Powder for the Prevention of Recurrent UTI in Women, India. 2006

Role: Consultant Biostatistician

Vyante Inc's SBIR Phase-I project, titled "Software to Aggregate, Correlate, Analyze and Trend data for Knowledge Management in Decision Making", Indianapolis, IN 2008

Indianapolis, IN

Role: Statistical Consultant

Scholarly Service

Grant Review Committees

National/International

CDMRP review panel member for **Psychological Health/TBI Research Program** 2018 - present

NIH review panel member for **Biobehavioral and Behavioral Processes IRG** 2017 - present

External Reviewer, Ecological Genomics Institutes' 2008 Seed Grant Competition, Kansas State University. 2008

Editorial Activity

Academic Editor of the journal **PLoS-One** 2017 - present

Academic Associate Editor of the journal **Sankhya (B)** 2017 - present

Member of special Biostatistics review panel for the journal **Lancet Psychiatry** 2015 - present

Associate Editor of Biostatistics for the *Journal of Neuropsychiatric Electrophysiology* 2014 - 2017

Member of the Editorial Board of the journal **PLoS-One** as a Statistical Advisor/Editor 2017 - present

Other Service

Data Safety and Monitoring Board (DSMB) member of the Alzheimer's Associations grant titled "Home-Delivered Intervention for Depression in Alzheimer's Disease", Weill Cornell, NY 2013 - 2015

Service to the Profession

Vice President Elect of Detroit Chapter of the American Statistical Association Section (ASA) 2019 - 2020

Elected to serve in the program committee of Eastern North American Region (ENAR) International Biometric Society conference, 2019 2018 - 2019

Elected as “Secretary/Treasurer” for Mental Health Statistics Section of the American Statistical Association (ASA)	2016 - 2019
Elected as “Community/Publication Outreach Chair” for the section Drug Information Agency (DIA) for Bayesian Statistics Work Group	2016 - 2018
Founding member of the “Statistics in Mental Health Research” (SMHR) and its’ Liaison Officer. (SMHR is now part of ASA as a section titled “Mental Health Statistics”)	2012 - 2013
Served in the program committee of Statistics in Mental Health Research in Joint Statistical Meeting, Boston, MA August 2-7 th , 2014. (served as a committee member)	2013 - 2014
ASA electoral candidate for the post of “Council of Sections Representative” for section Mental Health Statistics.	2015

Service for Peer-Reviewed Journals

Reviewer of Manuscripts

PLoS-One (As a Statistical Editor/Editor)	2012 - present
Biometrics	2006 - present
Bioinformatics	2006 - present
Applied Stochastic Models in Business and In	2006 - present
Journal of Computational and Graphical Statistics	2006 - present
Annals of Applied Statistics	2006 - present
Statistical Appl. in Genetics & Molecular Biology	2006 - present
Communication in Statistics	2006 - present
Statistical Methodology	2006 - present
Biostatistics	2006 - present
Sankhya	2006 - present
Journal of Clinical Psychiatry	2006 - present

TEACHING

Wayne State University

FPH 7150, Biostatistics I, 3 Credit course Designed and taught the core course for MPH students	Fall 2018
MGG 8010, Quantitative Data Analysis for Biological and Medical Sciences, Delivered a lecture on “Bayesian Statistics and Hierarchical Models”	Winter 2017
FPH 7020, Biostatistics II, 4 Credit course Designed and taught the core course for MPH students	Winter 2017
FPH 7150, Probability, Distribution Theory and Inference, 4 Credit course Designed and taught the core course for MPH Biostatistics track	Fall 2014, 2015

MBG 7999 Research Project Seminar in the Fall 2013 semester. Delivered three lectures titled “Introduction to Statistics”. Winter 2015

Teaching at other institutions (All done as an Independent Instructor)

Indiana University-Purdue University, Indianapolis

Undergraduate 2006-2009
Introduction to Statistics (six times)

Graduate Spring 2009,
Design and Analysis of Experiments 2010 (twice)
Spring 2008

Introduction to Statistical Computing

Introduction to Survival Analysis Fall 2009,
2007 (twice)
2010 (thrice)

Bayesian Data Analysis Spring 2007

University of Connecticut

Undergraduate Summer 2011
A First Course in Business Statistics

Statistics for the Engineers Fall 2004

A First Course in Business Statistics Summer 2003

Mentorship

Wayne State University

Dr. Erina Paul (area of research “Adaptive Clinical Trial”) 2018-2019

Dr. Shrabanti Chowdhury, Postdoctoral Trainee in Biostatistics (area of research “Adaptive Patient Centered Clinical Trial”) 2016-2018

Dr. Prithish Chatterjee, Postdoctoral Trainee in Biostatistics (area of research “Statistical Learning Methods for Big Data”) 2016-2017

Dr. Ravinder Sandhu, Postdoctoral Trainee in Biostatistics (area of research “Statistical Learning Methods for Big Data”) 2013-2014

Ravinder Sandhu : Research Advisor for MPH research final project (Now pursuing residency at Univ. of Kansas) 2013-2015

Dr. Santu Ghosh, Postdoctoral Trainee in Biostatistics (area of research “Adaptive Clinical Trial”) 2013-present
(Joined as tenure track Asst. Prof of Biostatistics in Georgia Regents Univ., Fall, 2015)

Academic Advisor of 25+ MPH students

Indiana University-Purdue University, Indianapolis 2008

Advised more than 20 graduate students at MS in Applied Statistics program 2010

PhD (IUPUI)

1. Liang Hong (Associate Advisor), now assistant professor at the Bradley University 2010

2. Qun Liu (Associate Advisor) now Senior Scientists at Eli Lilly, IN

Essays/Theses/Dissertations directed 2010

Zesus Japta, MS Thesis supervised: "A General Class of Skewed Link for Generalized Linear Model with Posterior Propriety"

Teaching at Professional Meeting

2008

"Clustering a Pervasive Multivariate Data Analytic Technique" at the workshop organized in the conference "Multivariate Stat. Methods in the 21st Century: The Legacy of Prof. S.N. Roy" held at Indian Statistical Institute, India.

GRANTS, CONTRACTS, AND OTHER FUNDING

Active National/International Grants and Contracts

Role: Principal-Investigator, Percent Effort: 35% 10/2015-
PCORI: ME-1409-21410 (Patient-Centered Outcomes Research Institute*) 01/2019
Title: "Developing Bayesian Methods for Non-Inferiority Trial in Comparative Effectiveness Research."

This proposal aims to develop, evaluate, and apply novel adaptive Bayesian statistical techniques applicable to Non-inferiority based RCTs for Comparative Effectiveness Research. We will focus on both two-arm and three-arm NI trial designs. We will focus primarily when the outcome variable is categorical. Funded on April 21st, 2015.

Total Costs: \$854K

Role: Co-Investigator, Percent Effort: 7% 02/2017-
R61/R33 MH111935 (PI: Rabinak) 01/2021

Title: "Effects of THC on Retention of Memory for Fear Extinction Learning in PTSD"

Source: NIMH

Total Costs: \$2.4M

- Role: Co-Investigator, Percent Effort: 5% 2018-2022
 NIEHS (PI: Rosenspire)
 Title: "Understanding the connection between exposure to mercury, auto-immunity and tolerance in B cells." (just funded)
 Provide statistical support for quantifying risk for adverse events for neonates, data analysis etc.
- Role: Co-Investigator, Percent Effort: 10% 07/2016–
 R01 HD089000 (PI: Tsilimingras) 06/2019
 Title: "Postdischarge Adverse Events among NICU Neonates."
 Source: NIH/NINDS
 8/2016-7/2019
 Total Direct Costs: \$1.5M
 Provide statistical support for quantifying risk for adverse events for neonates, data analysis etc.
- Role: Program Leader and Co-Investigator, Percent Effort: 10% 7/2017-
 P30 ES020957 (PI: Runge-Morris,) 6/2022
 Title: "Center for Urban Responses to Environmental Stressors (CURES)."
 Center intends to study of how exposures to stressors that are prevalent in the urban industrialized environment, both chemical and non-chemical, impact human health. I am also Co-director of the Integrative Health Sciences Facility Core (IHSFC) of Biostatistics
 Source: NIH/NIEHS
 Total Costs: \$4.5M
- Role: Co-Investigator, Percent Effort: 10% 10/2016-
 U19 HD089875 (MPI: Nar-King, WSU PI) 09/2021
 Title: "Scale it up: Effectiveness-implementation research to enhance HIV-related self-management among youth"
 This proposal offers a research program cooperative agreement to support the Adolescent Medicine Trials Network for HIV/AIDS Interventions (ATN). Towards this goal, Scale It Up has assembled research teams who will develop, test and bring to practice self-management interventions that positively impact youth HIV prevention and care. This large, multi-center project consists of 4 R01-level research projects, a management core, a scientific core, and an analytic core. I am to be supported by two of the research projects and the analytic core, as described below. Total costs requested: \$19,407,355
 • A SMART trial evaluating phased implementation of text messaging, cell phone support, and contingency management in youth non-adherent to antiretroviral medication. Research-Project-003 (458) (Belzer/MacDonell,co-PIs). Total costs requested: \$2,258,669 (\$2,088,252 direct).
 • Analytic Core. Analytic-Core-001 (228). (Li, PI). Role: Co-Investigator and Statistical support. Total costs requested: \$2,521,780 (\$2,298,179 direct)
 Total Costs: \$14.5M
- Role: Co-Investigator, Percent Effort: 10% 07/2018-
 DOD PR172190 09/2023
 Title: "Clinical Trial of Etanercept (TNF-Alpha Blocker) for Treatment of Blast-Induced Tinnitus"- Total project cost \$8.5M
 This is a multi-center randomized controlled trial to find the therapeutic effect of Etanercept on blast-induced tinnitus. The central hypothesis is by blocking TNF- α it can

reduce the severity of tinnitus for prolonged periods of time with minimal adverse side effects.

Role: WSU-PI (subcontract), Percent Effort: 7% 08/2018-
 NIH R01 HD095765 (MPI: Wang and Stanton) 03/2023
 Title: "National Implementation of FOYC+ CImPACT in The Bahamas: implementation strategies and improved outcomes." total project cost \$3.4M
 The aim of this project is to develop theory-driven implementation strategies to increase sustained teacher implementation fidelity, and thereby increase the general public health impact of evidence-based interventions in schools.

Grants to be Funded Waiting for final Notice of Grant Award

Role: Co-I, Percent Effort: 15% 2019-2023
 NIH R01
 Title: "Improving Diabetes Health in Emerging Adulthood Through an Autonomy Supportive Intervention."
 Date of Submission: 01/2018. PI: Carcone, scored at 12th percentile. NIH issued the letter for R01DK116901, waiting for NOGA.

Role: Co-I, Percent Effort: 15% 2019-2024
 NIH R01
 Title: "Improving outcomes for patients with SDB and insufficient Sleep." (R01 resubmission)
 Date of Submission: 10/2018. PI: Badr, scored at 6th percentile, funding expected.

Active Other Grants and Contracts

Role: Co-Investigator, Percent Effort: None (In kind) 2015-2016
 OVPR: GRANTS BOOST program (PI: Stemmer and Pieper)
 Title: "Protein and Lipid Indicators of Advanced Venous Disease."
 Source: WSU OVPR
 04/2013-03/2017
 Total Costs: \$35,000

Role: Co-Investigator, Percent Effort: 2% 4/2014-
 TS130067 (PI: Dombkowski) 3/2016
 Title: "The Role of 5-hydroxymethylcytosine in Gene Dysregulation of Epileptogenic Tubers in Tuberous Sclerosis Complex Patients."
 Source: DOD (Department of Defense)/CDRM
 4/2014-3/2017
 Total Costs: \$149,942

Role: Co-Investigator, Percent Effort: 0.6% 2015-2016
 CURES Pilot Project Program (PI: Arnetz)
 Title: “The Interaction between Lead and Trauma on the Epigenome and Proteome in Refugees.”
 Source: CURES/NIEHS
 Total Costs: \$85,333

Pending National/International Grants and Contracts

In 2018 I was part of 22 Federal grants submission, 2 as PI, 3 as WSU site-PI and others as Co-I to NIH, DOD, NSF etc. Full list is available upon request

Grant Submission Prior to 2018

Role: PI, Percent Effort: 10% PCORI Title: “Impact of addition of a Clinical Pharmacist to standard methods on improving medication reconciliation and reducing medication errors in children with chronic medical conditions.” PI Kannikeswaran Date of Submission: 1/2018.	2018-2022
“From the womb to the classroom: longitudinal study of causes and consequences of poor sleep quality in low-resource minority children”, NIH-R21, PI Thomason, Co-I at 5% support.	2018-2020
“Clinical Trial of the Fit Families Multicomponent Obesity Intervention for African American Adolescents and Their Caregivers: Next Step from the ORBIT Initiative”, NIH R61/R33, Subcontract MUSC, Site-PI Ghosh, Co-I at 10% support.	2018-2023
“Epigenomic Mediators of Social Stress in Hypertensive African Americans”, NIH-R21, PI Brody, Co-I at 5% support.	2017-2020
“Web-based recruitment and mobile app RCT for alcohol and tobacco use in pregnancy”, NIH-R34, PI Ondersma, Co-I at 5% support. Scored at 12% (funding expected)	2018-2022
“The role of non-coding RNAs in epilepsy of tuberous sclerosis complex and focal cortical dysplasia type 2B.” NIH R01, PI Dombkowski, Co-I at 5% support.	2018-2023
“Clinical Trial of Etanercept (TNF-alpha Blocker) for Treatment of Blast-Induced Tinnitus”, DOD, PI Zhang, Co-I at 10% support. First grant submitted as BERD activity	2018-2023
“National implementation of FOYC+CImPACT in the Bahamas: implementation strategies and improved outcomes.” Subcontract UMMS, Site-PI Ghosh, 5% support.	2018-2022

“Understanding the connection between exposure to mercury-immunity and tolerance in B cells”, NIH R01, PI Rosenspire, Co-I at 5% support.	2018-2022
“Implementation and outcomes from a pharmacist-managed direct oral anticoagulant service”, PI Korkis, Cardiology PRN Seed Grant, Co-I at 3% support, part of BERD activity.	2018-2019
“An Intelligent, Electronic-Medical-Record-Based Alert System for Continuous Monitoring and Early Detection of Clinical Deterioration in Hospitalized Sepsis Patients”, Dr. Ralph and Marian Falk Programs Catalyst Award, PI: Sherwin, Role: Co-I, 10% support.	2018-2020
“Fetal and Child Neurological and Contextual Factors Contributing to Sleep Deficiencies Among Black American Youth”, NIH-R21, PI Thomason, Co-I at 5% support.	2018-2020
“Scaling up: A multi-site trial of e-SBI for alcohol use in Pregnancy”, NIH-R01, PI Ondersma, Co-I at 5% support.	2018-2022
“Discrete choice experiment (DCE) analysis of patient-centered outcome preferences”, PCORI invited submission, PI Greenwald, Co-I at 10% support. Scored at 30%. (resubmission in 2018)	2018-2021
“Enhancing Safety, Health, and Professionalism in Law Enforcement Officers During Stress”, NIJ, Subcontract MSU, Site-PI Lumley, Co-I at 10% support.	2018-2022
“Reducing Cancer Risk Through mHealth Treatment of Preschool Obesity in Primary Care Settings”, NIH R21, PI Towner, Co-I at 5% support.	2018-2020
“Unified Precision Prevention (UPP) To Improve Cancer-related Health Behaviors Among Young Adults in Primary Care”, NIH R21, PI Nar-King, Co-I at 2% support.	2018-2020
“Developing an Adaptive Intervention to Increase Engagement in Preschool Obesity Intervention for Families Enrolled in WIC.” NIH R21, PI Towner, Co-I at 5% support.	2018-2020

Previously Funded Grants and Contracts (last 7 years)

Role: Co-Investigator, Percent Effort: 5%	7/2016-
UG30D023285 (MPI: Ruden, WSU PI)	6/2023
Title: “Environmental influences on Child Health Outcomes (ECHO): Prenatal Exposures and Child Health Outcomes: A Statewide Study”	
Source: NICHD/NIEHS	
Total Costs: \$4.8M	

<p>Role: Co-Investigator, Percent Effort: 5% NIH R21HS024750 (PI: Sherwin) Title: "Enhancing an EMR-Based Real-Time Sepsis Alert System Performance through Machine Learning". Source: AHRQ Total Costs: \$750K</p>	<p>9/2016- 8/2018</p>
<p>Role: Co-Investigator, Percent Effort: 2% TS130067 (PI: Dombkowski) Title: "The Role of 5-hydroxymethylcytosine in Gene Dysregulation of Epileptogenic Tubers in Tuberous Sclerosis Complex Patients." Source: DOD (Department of Defense)/CDRM 4/2014-3/2017 Total Costs: \$149,942</p>	<p>4/2014- 3/2016</p>
<p>Role: Co-Investigator, Percent Effort: 0.6% CURES Pilot Project Program (PI: Arnetz) Title: "The Interaction between Lead and Trauma on the Epigenome and Proteome in Refugees." Source: CURES/NIEHS Total Costs: \$85,333</p>	<p>2015-2016</p>
<p>Role: Co-Investigator, Percent Effort: 2.5% R01 NS079429 (PI: Dombkowski) Title: "The Role of microRNAs in Epilepsy of Tuberous Sclerosis Complex." The goal of this application is to ascertain the role of microRNA regulation in the pathology of cortical tubers in Tuberous Sclerosis Complex (TSC) and in epileptogenesis using whole-genome microRNA expression profiling and positron emission tomography (PET) imaging of tryptophan metabolism in resected brain tissue from children with intractable epilepsy. Source: NIH/NINDS 4/2014-3/2017 Total Direct Costs: \$1.7M</p>	<p>4/2014- 3/2017</p>
<p>"The Church-Based Diabetes Prevention and Translation Study-2 (CBDPT-2)", R18 DK081326 from NIH. PI Davis-Smith, Mercer University School of Medicine, Role: Biostatistician consultant.</p>	<p>2011-2014</p>
<p>Role: Statistical Mentor, Percent Effort: None (In kind) K12 DA000357 (PI: Hulvershorn) Title: "Neural Correlates of Emotion Dysregulation in Youth at Risk for Substance Abuse." Source: NIH/NIDA 04/2010-03/2015 Total Costs: None</p>	<p>2010-2015</p>

- “Ecosystem Focused Therapy in Post Stroke Depression”, R01 MH096685, Alexopoulos (PI), Time: 2012-2017 Role: Biostatistician. I did the sample size and power analysis and wrote the relevant statistical analysis section when the grant is submitted as a Co-Investigator. Grant was funded but I do not have any current support. 2012-2017
- “Cornell ACISR for Late-Life Depression”, P30 MH085943, Alexopoulos (PI), Time: 8/26/09-4/30/14 Role: Biostatistician (8% effort). Served as a biostatistician, contributed in many pilot grants that stemmed out of this P30. No current support. 2009-2014
- “Personalized Antidepressant Adherence Strategies for Depressed Elders” R01 MH087562, Sirey (PI), Time: 8/10/10-7/31/15, Role: Served as principal biostatistician (10% effort) for the period 2010-2012. No current support. 2010-2015
- “Differentiating Bipolar and Unipolar Depression in Young Adults”, R01 from NIMH. PI Anand, Indiana University School of Medicine, and Time: 8/5/11 - 8/31/16, Role: Co-Investigator at 10% effort for 5 years. I wrote the sample size, study design, power analysis and other relevant statistics sections as a Co-Investigator. Grant is funded but I do not have any current support. 2010-2015
- Treating Older Patients with Major Depression and Severe COPD”, R01 MH076829, Alexopoulos (PI), Role: Biostatistician (Co-I). 2010-2012
- “Shared Decision-Making for Elderly Depressed Primary Care Patients”, R01 MH084872, Raue (PI), Role: Biostatistician (Co-I). 2010-2012
- “Case Management and PST for Depressed, Homebound, Low-Income Elders”, R01 MH079414, Alexopoulos (PI), Role: Biostatistician (Co-I). 2010-2012
- “ERPs, Cognitive Dysfunction, and Treatment Response of Geriatric Depression”, R01 MH075897, Alexopoulos (PI), Role: Biostatistician (Co-I). 2010-2012
- “Spatiotemporal statistical modeling of WIM data for better resource allocation and traffic management”- Indiana Department of Transportation. Role PI, amount funded \$65,550 for 2010-2011. (Activity: - Two graduate student support through research assistantship and conduct research). 2009-2010
- “Post Liver Transplant (Post-LTX) return to Satisfying Productive Lifestyles (SPL)”- \$18,000 summer grant, from Transplant Foundation Board, Miami, Florida. Served as a Biostatistician with two months summer salary support. 2008
- “Bayesian Hierarchical Models for Estimating Trends in LTRMP (Upper Mississippi River's Long Term Resource Monitoring Program) Survey Data” small grant from UPPER Midwest Environmental Sciences Center. (an USGS center) Order number 6-2282-00759. 2006-2008

Previously submitted, not funded Grants and Contracts

Role: Co-Investigator, Percent Effort: 5% 2015-2019
 U01 for 4 years, (PI: Runge-Morris and Cote)
 Title: "Early Life Susceptibility to Environmental Determinants of Breast Cancer."
 Source: NIH/NCI/NIEHS
 Date of Submission: 2/22/2015.

Role: Co-Investigator, Percent Effort: 10% 2015-2018
 R01 for 4 years (PI: Arnetz)
 Title: "Imagery Training, Trauma Targets Engagement and Mental Disorders in Police Officer."
 Source: NIH/NIOSH
 Date of Submission: 2/20/2015.

Role: Co-Investigator, Percent Effort: 5% 2015-2018
 R21 for 3 years (PI: Lobelia)
 Title: "Role of Environmental Stressors on Chromatin Modification in Sarcoidosis."
 Source: NIH
 Date of Submission: 2/19/2015.

Role: Co-Investigator, Percent Effort: 15% 2015-2018
 R21 for 3 years, (PI: Dixon)
 Title: "Increasing capacity for the study and treatment of neurodevelopmental disorders in Ghana."
 Source: NIH
 Date of Submission: 12/19/2014.

Role: Co-Investigator, Percent Effort: 5% 2015
 Title: "Prenatal Origins of Autism Spectrum Disorders: Using the Placenta to Achieve Universal Newborn Screening."
 Source: DMC foundation
 Date of Submission: 10/22/2014.

"Detroit Coalition to Reduce Environmental Asthma Triggers in Vulnerable Residents."- submitted as a P50 to NIH. PI Arnetz, Role Co-Investigator at 3% effort for 5 years. Submitted 1/22/2014. Scored at 38%. 2015-2019

"Validating genome instability as a biomarker of GWI" PI:- Henry Heng, 2015-2018
 Submitted to DOD, Role:- Co-Investigator at 5% effort, submitted 7/1/2014.

"DNA methylation and risk of PTSD in a prospective cohort of African Americans"- submitted as R01 to NIMH. PI Uddin, Role Co-Investigator at 10% effort for 5 years. 2015-2020

Novel Computational Algorithms for Modeling Survival Data"- submitted to NSF. PI Karrem, Role Co-PI at 15% support with 20% credit split. Scored at the category "Good". 2014-2017

"Prenatal Villous Branching and Risk of Autism Spectrum Disorder"- 2015
 submitted as SBIR. PI Misra, Role Co-I at 5% effort for 1 year.

- “Imagery Training, Trauma Targets Engagement and Mental Disorders in Police Officers”- submitted as R01 to NIMH. PI Bengt, Role Co-I at 15% effort for 5 years. Scored at 31%, revision is submitted. 2014-2019
- “DNA methylation and risk of PTSD in a prospective cohort of African Americans”- submitted as R01 to NIMH. PI Uddin, Role Co-Investigator at 5% effort for 5 years. Scored at 32%, revision is submitted. 2013-2018
- “Developing Bayesian Methods for Non-inferiority Trial in Comparative Effectiveness Research”- submitted to PCORI, November, 2013 in the section *Improving Methods for Conducting Patient-Centered Outcomes Research*. (PCORI) Role: PI (40% support). Scored at 44%, revision submitted. 2014-2017
- “Prenatal Origins of Autism: Placental Predictors in a Population Based Cohort” - submitted as R01 to NICHD. PI Misra, Role Co-I at 10% effort for 4 years. Scored at 53%, revision is planned to be submitted soon. 2014-2018
- “Strategies to Identify and Reduce Causes for High Rate of Attrition in a clinical trial involving Psychotic Depression”- submitted to Brain & Behavior Research Foundation (formerly NARSAD) for Young Investigator Award as PI. 2013
- “Stress mediated genome heterogeneity as a common mechanism of ME/CFS”- submitted as R01 to NIH. PI Heng, Role Co-Investigator at 10% effort for 5 years. 2013-2018
- “Developing a Biological Marker for Responsiveness to Anti-Convulsants in Panic Patients”- submitted as R21 to NIMH. NARSAD/NATL ALLIANCE FOR RES. ON SCHIZOPHRENIA & DEPRESSION. PI: - Boutros, Role: - Co-Investigator at 5% effort. 2013-2016
- “Genomic Biomarkers of Infantile Spasms”- submitted as R01 to NINDS. PI Huq & Sundaram, Role Co-Investigator at 10% effort for 5 years. 2013
- “Robust Analysis of Attrition and Remission for Psychotic Depression Data”- submitted as NIH/NIMH R03 grant. Role PI. 2012
- “Novel approaches to target biomarkers for infection-associated preterm birth”, pursued as R01 in NIH/NICHD. PI Hannah, R01, Role Co-Investigator at 8% effort for 5 years. 2012
- “Novel use of gene profiles to predict non-healing chronic venous ulcers”, pursued as R01 in NIH/NINR. PI Brem, Role Co-Investigator at 6% effort for 5 years. 2012
- “Effects of Impaired Vitamin D Metabolism on Diabetic Retinopathy and Cognition”, pursued as R21 in NIDDK. PI Patrick, Role Co-Investigator at 15% effort for 3 years. Scored at 36%. 2012
- “Functional connectivity in geriatric depression and in antidepressant response”, pursued as R01 in NIMH. PI Alexopoulos, Weill Cornell Medical College, Role Biostatistician at 8% effort for 5 year. 2011

“Biomarkers of SSRI Response: Conflict Network Functions in Geriatric Depression”, Submitted as R01 in NIMH. PI Gunning-Dixon, Weill Cornell Medical College, Role Biostatistician at 10% effort for 5 years.

PUBLICATIONS

Peer-Reviewed Publications

Reports of Original Work (*Student or Post-Doc Trainee mentored by S. Ghosh)

1. Chowdhury S.,* Tiwari R. and Ghosh S., Approaches for Testing Non-inferiority in Two-arm Trial with Risk Ratio and Odds Ratio. Accepted for publication in Journal of Biopharmaceutical Statistics. Published online: 11 Feb 2019.
Role: - Statistical methodology development, simulations, real data applications, and manuscript writing. I am the corresponding and senior author; my previous post-doc is the first author.
2. Marusak H., Ghosh S., Rabinak C. Et al. "Effects of acute Δ^9 -tetrahydrocannabinol on next-day extinction recall is mediated by post-extinction resting-state brain dynamics. Accepted for publication in Neuropharmacology.
Role: - Data Analysis and Statistical modelling.
3. Belzer M., MacDonell K., Ghosh S., Naar S., et al. Adaptive Antiretroviral Therapy (ART) Adherence Interventions for Youth Living with Human Immunodeficiency Virus (HIV) through Text Messaging (SMS) and Cell Phone Support (CPS): Sequential Multiple Assignment Randomized Trial (SMART) Design. Accepted for publication in JMIR Research Protocols.
Role: - Data Analysis and Statistical modelling.
4. Chowdhury S.,* Tiwari R. and Ghosh S. Non-inferiority Testing for Risk Ratio, Odds Ratio and Number Needed to Treat in Three-arm Trial. Accepted for publication in Computational Statistics and Data Analysis. Available online first 15 September 2018.
Role: - Statistical methodology development, simulations, real data applications, and manuscript writing. I am the corresponding and senior author; my previous post-doc is the first author.
5. Chowdhury S.,* Tiwari R. and Ghosh S., Bayesian Approach of Assessing Non-inferiority in Three-arm Trials for Risk Ratio and Odds Ratio. Accepted for publication in Statistics in Biopharmaceutical Research. DOI: 10.1080/10543406.2019.1572616.
Role: - Statistical methodology development, simulations, real data applications, and manuscript writing. I am the corresponding and senior author; my previous post-doc is the first author.
6. Banerjee P.,* and Ghosh S., On the Estimation of the Incidence and Prevalence in Two-Phase Longitudinal Sampling Design. Accepted for publication in Biostatistics.
Role: - Statistical methodology development, simulations, real data applications, and

manuscript writing. I am the corresponding and senior author; my previous post-doc is the first author. *Biostatistics* is one of the premier journal in our field.

7. Ghosh S.,* Tiwari R. and Ghosh S., Bayesian approach for assessing non-inferiority in a three-arm trial with Binary endpoint. Accepted in *Pharmaceutical Statistics*. DOI: 10.1002/pst.1851.
Role: - Statistical methodology development, simulations, real data applications, and manuscript writing. I am the corresponding and senior author; my previous post-doc is the second author.
8. El Masari D.,* Ghosh S., and Jaber L., Safety and efficacy of sodium-glucose cotransporter 2 (SGLT2) inhibitors in type 1 diabetes: A systematic review and meta-analysis. Accepted for publication in *Diabetes Research and Clinical Practice*. Forthcoming in Volume 137, March 2018, Pages 83-92.
Role: - Data Analysis and Statistical modelling.
9. Tsilimingras D., Ghosh S., Duke A., Zhang L. Carretta H. and Schnipper J. The Association of Post-Discharge Adverse Events with Timely Follow-up Visits after Hospital Discharge. Accepted in *PLoS-One*.
Role: - Data Analysis and Statistical modelling.
10. Sandhu R. S.*, Ghosh S., and Dellenbaugh T. Association between Dysthymic Disorder and Disability, with Religiosity as Moderator. Published in *Activitas Nervosa Superior*, 58(1-2), 13-19, 2016.
Role: - Advised MPH students masters project.
11. Straughen J., Mishra D., Ernst M., Charles A., Vanhorn S., Ghosh S., Divine G. and Salafia C. Methods to decrease variability in histologic scoring in placentas from a cohort of preterm infants. Accepted in *BMJ Open* access journal.
Role: - Data Analysis and Statistical modelling.
12. Ghosh S.*, Chatterjee A., and Ghosh S. Non-inferiority Test Based on Transformations for Non-normal Distributions. Accepted in *Computational Statistics and Data Analysis*.
Role: - Statistical methodology development, simulations, real data applications, and manuscript writing. I am the corresponding, my previous post-doc is first author.
13. Rathinam, R., Ghosh S., Neuman, L. and Jamesdaniel, S. Cisplatin-induced apoptosis in auditory, renal, and neuronal cells is associated with nitration and downregulation of LMO4. Published online November 9th, 2015 in *Cell Death Discovery*.
Role: - Data Analysis and Statistical modelling.
14. Aldhalimi A., Sen A., Wright M.A., Arnetz J., Hill E., Hikmet J., Ghosh S., Stemmer P.M., Park S.K., Morishita M., Ruden D., and Arnetz B.B. Lead Enhances the Effect of Trauma on HPA Axis-Associated Gene Expression. *Psychosomatic Medicine*, 77(3), 2015.

15. *Ghosh S.*, Ghosh S.* and Tiwari R. Bayesian approach for assessing non-inferiority in a three-arm trial with pre-specified margin. Published in *Statistics in Medicine* 2016 Feb 28;35 (5):695-708.. DOI: 10.1002/sim.6746.
Role: - Statistical methodology development, simulations, real data applications, and manuscript writing. I am the corresponding and first author, my previous post-doc is the second author. (Impact Factor 2013: 2.037)

16. Talwar H., Rosati R., Li J., Kissner D., *Ghosh S.*, Fernández F. and Samavati L. Development of a T7 Phage Display Library to Detect Sarcoidosis and Tuberculosis by a Panel of Novel Antigens. Accepted for publication in *EBioMedicine* published online 22nd March, 2015.
Role: - Data Analysis and Statistical modelling.

17. *Ghosh S.* and Townsend J. P. H-CLAP: Hierarchical Clustering within a Linear Array with an application in Genetics. Published in *Statistical Applications in Genetics and Molecular Biology*, Volume 14, Issue 2 (Apr 2015).
Role: - First author. (IMPACT FACTOR 2013: 1.055, SCImago Journal Rank (SJR): 0.875, Source Normalized Impact per Paper (SNIP): 0.540)

18. *Ghosh S.* and Wang Y. Feature Import Vector Machine: A General Classifier with Flexible Feature Selection. Published in *Statistical Analysis and Data Mining*, Volume 8, Issue 1, 2015.
Role: - First author. This is a Journal from American Statistical Association (ASA) which is the highest professional society for the Statistician worldwide.

19. Senturk D., *Ghosh S.* and Nguyen D. V. Exploratory time varying lagged regression: Modeling association of cognitive and functional trajectories with expected clinic visits in older adults. Published in *Computational Statistics and Data Analysis*. May 1, 2014; 73:1-15.
Role: - As a second author I wrote relevant section and developed statistical theory. (IMPACT FACTOR 2013: 1.151, SCImago Journal Rank (SJR): 1.399, Source Normalized Impact per Paper (SNIP): 1.46)

20. Boutros N., *Ghosh S.*, Khan A., Bowyer S. and Galloway M. Anticonvulsant medications for panic disorder: A review and synthesis of the evidence. Published in *International Journal of Psychiatry in Clinical Practice*. 2014 Jan; 18(1):2-10.
Role: - Performed data analysis and write statistical section of the article. (IMPACT FACTOR 2013: 1.313)

21. Bengt A. B., Broadbridge C. L., and *Ghosh S.* Longitudinal Determinants of Energy Levels in Knowledge Workers. Published in *Journal of Occupational and Environmental Medicine*. 2014 Jan; 56(1):79-85
Role: - Statistical analysis, reporting and manuscript writing. (IMPACT FACTOR 2015: 1.8)

22. Sirey A. J., Franklin A. J., McKenzie S., *Ghosh S.* and Raue P. Race, Race, stigma, and mental health referrals among clients of aging services who screened positive for depression. Published in *Psychiatric Services*, 2014 Apr; 65(4):537-40.

Role: - Data cleaning, statistical analysis, reporting and manuscript writing. (IMPACT FACTOR 2014: 1.98)

23. Alexopoulos G.S., Kiosses D.N., Sirey J.A., Kanellopoulos D., Seirup J.K., Novitch R.S., *Ghosh S.*, Banerjee S., Raue P. Untangling Therapeutic Ingredients of a Personalized Intervention for Patients with Depression and Severe COPD (PID-C). Published in American Journal of Geriatric Psychiatry. 2014 Nov; 22(11):1316-24. (PMID: 23954038)

Role: - Study design, data cleaning, statistical analysis, reporting and manuscript writing. (5-Year Impact Factor: 4.097, SCImago Journal Rank (SJR): 1.81, Source Normalized Impact per Paper (SNIP): 1.54)

24. Yolonda R. P., *Ghosh S.*, Rohs A., Kennedy G.J., Bruce M. L., and Lyness J. M. Healthcare Use Among Older Primary Care Patients With Minor Depression. Published in American Journal of Geriatric Psychiatry. 2014 Feb; 22(2):207-10. PMID: PMC3714375

Role: - Study design, statistical method development, data preparation, statistical analysis, reporting and manuscript writing. (5-Year Impact Factor: 4.097, SCImago Journal Rank (SJR): 1.81, Source Normalized Impact per Paper (SNIP): 1.54)

25. Shirazian S., Schanler M., Shastry S., Dwivedi S., Kumar M., Rice K., Miyawaki N., *Ghosh S.*, Fishbane S. The Effect of Ergocalciferol on Uremic Pruritus severity: A Randomized controlled Trial. Published in Journal of Renal Nutrition. 2013 Jul; 23(4):308-14.

Role: - Clinical trial design, data preparation, statistical analysis, reporting and manuscript writing. (5-Year Impact Factor: 2.031, SCImago Journal Rank (SJR): 0.99, Source Normalized Impact per Paper (SNIP): 0.927)

26. Alexopoulos G. S., Kiossies D.S., Sirey J., Kanellopoulos D., Novitch N., *Ghosh, S.* and Raue P. J. Personalised intervention for people with depression and severe COPD. Published in British Journal of Psychiatry. Mar 2013; 202(3): 235–236.

Role: - Data cleaning, statistical analysis, reporting and manuscript writing. (IMPACT FACTOR 2014: 7.34)

27. Boutros N., Galloway M., *Ghosh S.*, Gjini K. and Bowyer S. Abnormal Coherence Imaging in Panic Disorder: an MEG Investigation. Published in NeuroReport Jun 19, 2013; 24(9):487-91.

Role: - Data analysis, reporting and manuscript writing. (IMPACT FACTOR 2013: 1.644)

28. Halmi K.A., Bellace D., Berthod S., *Ghosh S.*, Berrettini W., Thornton L., Treasure J., Woodside D.B., and Strober, M. An Examination of Early Childhood Perfectionism across Anorexia Nervosa Subtypes. Published in International Journal of Eating Disorders, 2012 Sep; 45(6):800-7.

Role: - Data analysis, reporting and manuscript writing. (IMPACT FACTOR 2014: 3.033)

29. Weissman J., Flint A., *Ghosh S.*, Myers B.S., Mulsant B., Rothschild A.J. and Whyte E.M. Factors associated with non-completion in a double-blind randomized controlled trial of olanzapine plus sertraline versus olanzapine plus placebo for psychotic

depression. Published in *Psychiatry Research* Volume 197, Issue 3, 30 May 2012, Pages 221–226.

Role: - Data analysis, reporting and manuscript writing. (5 year IMPACT FACTOR: 3.186)

30. Alexopoulos G., Wilkins V., Marino P., Kanellopoulos D., Reding M., Sirey J., Raue P., Ghosh S. and Kiosses D. Ecosystem Focused Therapy in post Stroke Depression: A Preliminary Study. Published in *International Journal of Geriatric Psychiatry* 27(10), October 2012.

Role: - Data cleaning, data analysis, reporting and manuscript writing. (5 year IMPACT FACTOR: 3.086)

31. Anand A., Karne H., Gunn A., Tanner R., Nurnberger J. and Ghosh S. Memantine Augmentation of Lamotrigine Inadequate Response in Bipolar Depression: A Double Blind Placebo Controlled Trial. Published in *Bipolar Disorders* Volume 14, Issue 1, pages 64–70, February 2012.

Role: - Last and lead author, study design, data cleaning, data analysis, reporting and manuscript writing. (Journal has an impact factor 5.221 and a ranking of 10th out of 126 peer-reviewed psychiatric journals)

32. Ghosh S. On the Grouped Variable Selection and Model Complexity of the Adaptive Elastic Net. Published in *Statistics and Computing*. 2011 Volume 21, Number 3, Pages 451-462.

Role: - Developed statistical methods, simulation, data analysis and writing as a sole author. (IMPACT FACTOR 2013: 1.746, Ranked 10th in Probability and Statistics Journals (out of 72). Note that Statistical Methods journal tends to have lower impact factor compared to applied clinical journals)

33. Sengupta, K., Alluri, K.V., Golakoti, T., Gottumukkala, G.V., Raavi, J., Kotchrlakota, L., Sigalan, S.C., Dey, D., Ghosh, S., Chatterjee, A. (2011). A randomized, double blind, controlled, dose dependent clinical trial to evaluate the efficacy of a proanthocyanidin standardized whole cranberry (*Vaccinium macrocarpon*) powder on infections of the urinary tract. Published in *Current Bioactive Compounds*, 2011, vol. 7 (1) , pp. 39-46.

34. *Adams, E. W., Ghosh, S. Extreme Events: Examining the " Tails" of a Distribution. Published in *ASHRAE Transactions*, (2011), vol. 117(1).

Role: - Guided the student in writing the manuscript under my supervision.

35. Weissman J, Meyers B.S., Ghosh S., Bruce M.L. Demographic, clinical, and functional factors associated with antidepressant use in the home healthcare elderly. *American Journal of Geriatric Psychiatry*. 2011 Dec; 19(12):1042-5.

Role: - Study design, statistical method development, data preparation, statistical analysis, reporting and manuscript writing. (5-Year Impact Factor: 4.097, SCImago Journal Rank (SJR): 1.81, Source Normalized Impact per Paper (SNIP): 1.54)

36. Weissman J, Meyers B. S., Ghosh S. and Bruce M.L. Socio-demographic and clinical factors associated with antidepressant type in a national sample of the home health care elderly. *Gen Hosp Psychiatry*. 2011 Nov; 33(6):587-93. Epub 2011 Sep 13.

Role: - Study design, statistical method development, data preparation, statistical analysis, reporting and manuscript writing. (5-Year Impact Factor: 3.475)

37. *Ghosh S.* An Imputation Based Approach for Parameter Estimation in the Presence of Ambiguous Censoring with Application in Industrial Supply Chain. Published in *Annals of Applied Statistics* 2010, Vol. 4, No. 4, pg 1976-1999.
Role: - Developed statistical methods, simulation, data analysis and writing as a sole author. (IMPACT FACTOR 2010: 2.570, One of top journal in Statistical methods development. Note that Statistical Methods journal tends to have lower impact factor compared to applied clinical journals)
38. Kumaresan S., Ramaswamy R., *Ghosh S.*, Tahir B., Akisik F., Saxena R., and Kwo P. Diffusion-weighted MRI of the Transplanted Liver. Published in *Clinical Radiology* 2011 Sep, 66(9):820-5.
Role: - Study design, data preparation, statistical analysis, reporting and manuscript writing. (5-Year Impact Factor: 1.87)
39. Vidyarthi, P. R., Anand, S., Liden, R. C., Erdogan, B. and *Ghosh, S.* “Where Do I Stand? Examining the Effects of Leader-Member Exchange Social Comparison on Employee Work Behaviors”, published in *Journal of Applied Psychology* as a feature article, volume 95, Issue 5, Pages 849-861.
Role: - Statistical analysis, reporting and manuscript writing. (Impact Factor 2013: 4.367)
40. *Ghosh S.*, and Dey D. K. A Unified Modeling Framework for Metabonomic Profile Development and Covariate Selection for Acute Trauma Subjects. Published in *Statistics in Medicine* 2008, Vol. 27, pg. 3776-3788.
Role: - Statistical methodology development, simulations, real data applications, and manuscript writing. I am the corresponding author. (Impact Factor 2013: 2.037)
41. *Ghosh S.*, Hill D. W., Grant F. D. and Dey D. K. A Semi-parametric Modeling Approach for the Development of Metabonomic Profile and Bio-Marker Discovery. Published in *BMC Bioinformatics* 2008, 9:38.
Role: - Statistical methodology development, simulations, real data applications, and manuscript writing. I am the corresponding author. (Impact Factor 2014: 2.67)
42. Kazmi A. S., *Ghosh S.*, Shin D-G., Hill D. W. and Grant F. D. Alignment of high resolution mass spectra: Development of a heuristic approach for metabolomics. Published in *METABOLOMICS* 2006, Vol. 2, Number 2, pg 75-83.
Role: - Computational methodology development, simulations, real data applications, and manuscript writing. (Official Journal of the Metabolomics Society. 2013 Impact Factor: 3.965)
43. *Ghosh S.*, Hill D. W., Nathan M. P., Russell B. M., Belinda L., Grant F. D. and Dey D. K. Statistical Approach to Metabonomic Analysis of Acute Trauma. Published in *Journal of Chemometrics* 2004, Volume 20, Issue 3-4, pg 87-98.
Role: - Statistical methodology development, real data applications, and manuscript writing. I am the corresponding author. (2013 Impact Factor: 1.803)
44. Kargupta H. and *Ghosh S.* Towards Machine Learning using Genetic Code-like Transformations. Published in *Genetic Programming and Evolvable Machines*, Issue 3, September 2002.

Role: - Computational methodology development, simulations, real data applications, and manuscript writing. (Official Journal of the Metabolomics Society. 2013 Impact Factor: 1.065)

45. Kargupta H., Ayyagari R. and *Ghosh S.* Learning Functions Using Randomized Expansions: Probabilistic Properties and Experimentations. Published in IEEE Transactions on Knowledge and Data Engineering (TKDE), Volume 16, Number 8, pages 894-908. (Also presented in Discrete Math Workshop of 2nd SIAM International Conference on Data Mining, Washington DC 2002)

Role: - Computational methodology development, simulations, real data applications, and manuscript writing. (Official Journal of the Metabolomics Society. 2013 Impact Factor: 1.815)

Peer Reviewed Edited Volumes and Book Chapters

1. *Ghosh S.* and Dey D. K. Bayesian Model Based Penalized Clustering for Multivariate Data, Published in "Multivariate Statistical Methods", Edited by A. SenGupta, 2009, World Scientific.
2. Patra K., Dey D. K. and *Ghosh S.* Bayesian Analysis of Mixtures of Improper Survival Distributions, Published in "Advances in Ranking and Selection, Multiple Comparisons, and Reliability Methodology and Applications", Edited by N. Balakrishnan, N. Kannan, N. H. Nagaraja, 2004, Birkhauser.
3. Kargupta H., Sivakumar K. and *Ghosh S.* Dependency Detection in MobiMine and Random Matrices. Proceedings of the 6th European Conference on Principles and Practice of Knowledge Discovery in Databases, 2002, pp. 250-262.

Book Authorships, Editorships, and Chapters

1. "Bayesian Modeling in Bioinformatics", edited by Dipak K. Dey (Editor), Samiran Ghosh (Editor), Bani K. Mallick (Editor), CRC Press, ISBN: 978-1-4200701-7-0, 2010.

Published Abstracts (Note: Abstracts in my primary research area of are not highly valued)

1. Aldhalimi, A. Sen, A., Wright, A. M., Arnetz, J., Hill, E., Jamil, H., Ghosh, S., Stemmer, P.M., Park, P.M., Motishita, M., Ruden, D., & Arnetz, B.B. Lead Enhances the Effect of Trauma on HPA Axis-Associated Gene Expression. American Psychosomatic Society Conference: 73rd Annual Scientific Meeting, Savannah, GA (March, 2015).
2. Scott, P., A. Krause, S. Ghosh, T. Taber, and J. Fridell. "Pancreas Transplantation: Personal Factors Associated with Good and Poor Post-Transplant Adaptive Response." In AMERICAN JOURNAL OF TRANSPLANTATION, vol. 13, pp. 542-542. 111 RIVER ST, HOBOKEN 07030-5774, NJ USA: WILEY-BLACKWELL, 2013.

Non-Peer Reviewed Publications

1. Kargupta H., Sivakumar K. and Ghosh S. A Random Matrix-Based Approach for Dependency Detection from Data Streams. Proceedings of the 7th Workshop on Research Issues in Data Mining and Knowledge Discovery, ACM SIGMOD 2002. Pages 18-23.
2. Ayyagari, R., Kargupta, H. and Ghosh, S. (2001). Towards Optimal Codebooks for Learning Functions through Genetic Code-like Transformations. UMBC Technical Report TR-CS-01-16.

PRESENTATIONS

Invited Lectures/Presentations (All podium)

International/National

Use of Historical Information via Bayesian Approach in Non-Inferiority Trial: With Application, International Conference in Statistics and Probability. January 2-4, 2018 Kolkata India.

“Non-Inferiority Design in Comparative Effectiveness Research: Should We be Bayesian for a While?” Presented at the Department Colloquium of Applied Statistics Unit, of Indian Statistical Institute, Kolkata, February 2019.

“Some aspects of SMART design: methodological developments and an application in mHealth intervention”, Invited talk presented at Workshop on Design of mHealth Intervention Studies organized by National University of Singapore and IMS, February 2019.

Organized a Roundtable “Role of Bayesian Methods for Design and Analysis of Non-Inferiority Trial” at ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop. (jointly with Dr. Ram Tiwari) September 2018.

“Non-Inferiority Design in Comparative Effectiveness Research: Should We be Bayesian for a While?” Presented at the department of Mathematical Sc. colloquium at NJIT, September 2018.

“Design and analysis of non-inferiority trials: some Frequentist and Bayesian perspective”, Invited webinar Presented at the Bayesian KOL lecture series organized by DIA's Adaptive Design Scientific Working Group, March 2018.

“Mathematical Modeling on HIV Transmission Risk”, Presented in The Adolescent Medicine Trials Network for HIV/AIDS Interventions (ATN) monthly Webinar series, February 2018.

A Comparative Study of Variable Selection in the Presence of Missing Data after Multiple Imputation, Invited talk at IISA 2017 on December 27-30, 2017 Hyderabad India.

“Use of Historical Information via Bayesian Approach in Non-Inferiority Trial: With Applications”, Presented in International Conference in Statistics and Probability. January 2-4, 2018 Kolkata India.

Use of Historical Information via Bayesian Approach in Non-Inferiority Trial. FACM 2017, NJIT, Invited talk.

Statistical Issues in Clinical Psychiatry: Some Historical Developments to The Current Trend, presented at the workshop on Quantitative Methods for Public Health Researchers of the SAARC Countries, December 28-30, 2016 Kolkata India.

Adaptive Bayesian Design for Comparative Effectiveness Research with Binary Outcome, Platinum Jubilee International Conference on “Applications of Statistics” on December 21-23, 2016 Kolkata India.

Adaptive Bayesian Design for Comparative Effectiveness Research with Binary Outcome, Special Invited presentation at the Fifth Annual Thomas R. Ten Have Symposium on Statistics in Mental Health, UPENN, 2016. (Selected Competitively)

“Feature Import Vector Machine: A General Classifier with Flexible Feature Selection”. Presented at the session titled “Best of Statistical Analysis and Data Mining Journal” as an invited speaker at Interface Data Science Conference, June 2015, Morgantown, WV.

“Bayesian Non-Inferiority Trial Design with Application in Comparative Effectiveness Research”. Presented as invited speaker at Novartis Healthcare Pvt. Ltd., January 2015, Hyderabad, India.

“Recent advances in Bayesian Non-inferiority Clinical Trial”, Presented as invited speaker at IASSL, December 2014, Colombo, Sri Lanka.

“H-CLAP: Hierarchical Clustering within a Linear Array Data with Application in Genetics”, Presented as invited speaker at IMBIC MSAST, December 2014, Kolkata, India.

Bayesian Non-Inferiority Trial Design with Application in Comparative Effectiveness Research, Invited presentation at the IISA Conference. Riverside, CA, July 11-13, 2014.

Bayesian Non-Inferiority Trial Design with Application in Depression Trial, Special Invited presentation at the Third Annual Thomas R. Ten Have Symposium on Statistics in Mental Health, Yale University, 2014. (Selected Competitively)

Efficient Longitudinal Estimation of Incidence and Prevalence rate of Major Depressive Disorder in Home Healthcare study, Invited presentation at the memorial session of Dr. Andrew Leon, ENAR, 2012.

Some Statistical Issues Related to Missing Data and Attrition, presented at Cornell Cross-Campus Collaborative Colloquium, December 2011.

Simultaneous Estimation of the Incidence and Prevalence rate in a Two-Phase Longitudinal Sampling Design with Application in Home-Healthcare Study, presented at Weill Cornell Medical College division of Biostatistics, November 2011.

Simultaneous Estimation of the Incidence and Prevalence rate in a Two-Phase Longitudinal Sampling Design with Application in Home-Healthcare Study, presented at Columbia University department of Psychiatry, October 2011.

Simultaneous Estimation of the Incidence and Prevalence rate in a Two-Phase Longitudinal Sampling Design, presented at JSM 2011.

Simultaneous Estimation of the Incidence and Prevalence rate in a Two-Phase Longitudinal Sampling Design with Application in Home-Healthcare Study, presented at New England Statistical Symposium 2010.

Dimension Augmenting Vector Machine (DAVM): A New General Classifier with Flexible Feature Selection in High Dimension, presented at JSM 2009.

An Imputation Based Approach for Parameter Estimation in the Presence of Ambiguous Censoring, presented at Quality & Productivity Research Conference, June, 2009.

An Imputation Based Approach for Parameter Estimation in the Presence of Ambiguous Censoring, presented at Department of Statistics, Texas A&M University, November, 2008.

An Imputation Based Approach for Parameter Estimation in the Presence of Ambiguous Censoring, presented at Department of Statistics, Purdue University, October, 2008.

H-CLAP: Hierarchical Constrained Clustering in Linear Array with Applications in Genetics, presented at Department of Bio-Statistics, Georgetown University, October, 2008.

A Semi-parametric Modeling Approach for the Development of Metabonomic Profile and Bio-Marker Discovery, presented at FACM, NJIT 2008.

H-CLAP: Hierarchical Constrained Clustering in Linear Array with an Application in Genetics, presented at JSM 2008.

Adaptive Elastic Net: A Doubly Regularized method and its Oracle Properties. Invited presentation at ENAR, 2008.

Statistical Principles and the Role of a Statistician at the Dawn of the Omics Era: Who Should You Look for-A User or a Developer? Presented at the Open House Celebrating the Establishment of Mathematical Biosciences Signature Center, 07.

Scalable Regularized K-Means Clustering with Probabilistic Support for High Dimensional Data. Tenth Meeting of New Researchers in Statistics and Probability at Salt Lake City, 2007.

Dimension Augmenting Vector Machine (DAVM): A new General Classifier System for Large p Small n problem, presented at ICSA, 2007.

Dimension Augmenting Vector Machine (DAVM): A new General Classifier System for Large p Small n problem, presented at Conference on the Occasion of the Retirement of Mir Masoom Ali, Ball State University, May, 2007.

Scalable Regularized K-Means Clustering with Probabilistic Support for High Dimensional Data. Presented at Central Connecticut University, May, 2007.

Dimension Augmenting Vector Machine (DAVM): A new General Classifier System for Large p Small n problem, presented at Department of Bio-Statistics, Indiana University, March, 2007.

Statistical Learning Theory & Its Application in Bioinformatics, presented at Indiana Univ. Bioinformatics Retreat, 2007.

Constrained Hierarchical Clustering in Linear Array with Applications in Biology. Joint Statistical Meeting and International. Conference on Statistics, Probability and Related Areas, organized by IISA, Cochin (India), 2007.

Scalable Regularized K-Means Clustering with Probabilistic Support for High Dimensional Data. Presented at Eli Lilly and Company Biostatistics group, October, 2006.

Scalable Regularized Clustering with Probabilistic Support for Multivariate Data. Presented at JSM, Seattle 2006.

Evaluating the Sample Invariance Property of the Standard Error of Measurement. Presented in JSM, Minneapolis 2005.

Statistical Approach to Metabonomic Analysis of Acute Trauma. Poster presented at Frontiers in Applied and Computational Mathematics (FACM), NJIT 2005.

Statistical Approach to Metabonomic Analysis of Acute Trauma. Presented in IWCSBA, Banaras, India 2004.

Optimality of Median Probability Model in Generalized Linear Model. Presented in JSM, Toronto 2004.

Local/regional

Chaired a contributed session titled “New Approaches for Mental Health Research” in Joint Statistical Meeting, Boston, August, 2014.

Organized and chaired a topic contributed session titled “Attrition in Mental Health Studies, an Eternal Problem with Multiple Implications: Some Recent Issues and Solutions” in Joint Statistical Meeting, Montreal, August, 2013. (selected competitively)

Invited Seminars and Grand Rounds

“On the Estimation of the Incidence and Prevalence Rate in a Two-Phase Longitudinal Sampling Design”. Invited seminar at the Department of Mathematics, IIT, Mumbai, India, January, 2017.

“Non-inferiority Intervention/Clinical Trial Design: Challenges, Solutions and Some Open Problems”. Invited seminar at the Division of Mathematics and Statistics at University of Maryland Baltimore County, November, 2016.

“Non-inferiority Intervention/Clinical Trial Design: Challenges, Solutions and Some Open Problems”. Invited seminar at the Division of Statistics at Northern Illinois University, January, 2016.

“Some Aspects of the Bayesian Three-arm Non-Inferiority Trial Design”. Invited seminar at the Department of Statistics at University of Akron, April, 2014.

“Recent advances in Bayesian Non-inferiority Trial for Comparative Effectiveness Research”. Invited seminar at the Department of Math and Statistics at Oakland University, November, 2014.

“Bayesian Non-Inferiority Trial”, Wayne State University & Henry Ford Hospital Joint Biostatistics Journal Club, April, 2013.

“Statistics in Clinical Trials: 3 W’s: Why? What? & When?”, Grand Rounds talk at the Department of Otolaryngology, Wayne State University, February, 2013.

On the Estimation of the Incidence and Prevalence rate in a Two-Phase Longitudinal sampling Design. Invited seminar at the Department of Psychiatry (BRAIN meeting), Wayne State University, January, 2013.

“Longitudinal Estimation of Incidence and Prevalence rate of Major Depressive Disorder in Home Healthcare study”. Invited seminar at the Division of Biostatistics at UCSF, San Francisco, January, 2013.