CURRICULUM VITAE

Name: Dejian Lai

Address: The University of Texas Health Science Center at Houston

School of Public Health

Department of Biostatistics and Data Sciences

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Houston, TX 77030 Tel: (713) 500-9270 Fax: (713) 500-9442

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Education:

9/89–8/94 **Ph.D.** in Statistics

Dissertation: Contributions to Nonlinear Time Series Analysis

University of Texas at Dallas

Richardson, TX

9/87–5/89 **M.S.** in Statistics

University of Texas at El Paso

El Paso, TX

3/87–7/87 **Diploma** in Demography

Munich Center for Advanced Training Commission of the European Communities

Munich, Germany

3/78–1/82 **B.S.** in Computational Mathematics

Jiangxi University Nanchang, China

Professional Positions:

9/04 Professor, Biostatistics and Data Science

School of Public Health

The University of Texas Heath Science Center

Houston, TX

Profession 9/06-8/08 8/16-6/22 8/96-8/00	
9/13-8/16	Chair-Elect of the Faculty (2013-2014) Chair of the Faculty (2014-2015) Immediate Past Chair of the Faculty (2015-2016) School of Public Health The University of Texas Heath Science Center Houston, TX
9/00-8/04	Associate Professor, Biostatistics (Tenured) International and Family Health Module School of Public Health The University of Texas Heath Science Center Houston, TX
8/94-8/00	Assistant Professor, Biometry (Tenure Track) International and Family Health Module School of Public Health The University of Texas Heath Science Center Houston, TX
6/94-7/94	Faculty Research Associate (Postdoc) Department of Statistical Science Southern Methodist University. Dallas, TX
9/89-8/94	Teaching Assistant Programs in Mathematical Sciences University of Texas at Dallas. Richardson, TX
9/87-5/89	Teaching Assistant Programs in Mathematical Sciences University of Texas at El Paso. El Paso, TX
1/82-8/87	Statistician Social Division, Population Division

Jiangxi Provincial Statistical Bureau. Nanchang, China

Honors:	
3/78-1/82	Undergraduate Scholarship
	Jiangxi University. Nanchang, China
3/87 - 7/87	Selected by the Chinese State Statistical Bureau and sponsored by the Com-
	mission of the European Communities for advanced training in demography
9/87 - 5/89	Graduate Scholarship
	University of Texas at El Paso. El Paso, TX
9/89-8/94	Graduate Scholarship
	University of Texas at Dallas. Richardson, TX
2001	Who's Who in America, 55th—Edition
2003	Travel award (ChunHui) for academic visit to Xian Jiaotong University
	Ministry of Education of China (Canceled due to SARS in China)
2006	Travel award (ChunHui) for academic visit to Xian Jiaotong University
	Ministry of Education of China
2004	Fellowship for one month academic visit to City University of Hong Kong
2004-2016	Travel award for academic visits to Faculty of Statistics
	Jiangxi University of Finance and Economics
2004	Travel grant from American Association of Medical Chronobiology and
	Chronotherapeutics to attend National Chronobiology Conference of China
2000	in Hainan, China.
2008	Travel grant from Mathematics Research Promotion Center
1007 0001	National Science Council, Taiwan
1997-2001	Peer Recognition for Outstanding Scholarship
1000 0000	UT Health Science Center, Houston, TX
1998-2006	Excellence in Research Incentive Award
2008-2023	Excellence in Research Incentive Award
1998-2009	Excellence in Scholarship Incentive Award
2010-2023	Excellence in Scholarship Incentive Award
2008	Dean's Excellence in Teaching Award
	UT School of Public Health, Houston, TX

Consultant Experience:

8/16 - 8/17	Cao Pharmaceutical
3/15 - 8/16	Cardinal Health
5/13-	University of Houston College of Pharmacy
9/11-8/15	Medical Technology and Practice Patterns Institute, Bethesda, MD
8/10-8/15	Institute of Zoology, Chinese Academy of Sciences, Beijing, China
5/06-8/15	Texas Heart Institute, Houston, Texas
1/06-12/06	International Pediatric Hypertension Association (IPHA)
1/06-12/16	Nanjing Medical University, Nanjing, China
	School of Public Health
1/06-1/08	University of Louisville, Louisville, Kentucky
•	Department of Pediatrics

Consultant	Experience:(Continued)
6/14-12/18	Xiamen University, Xiamen, China
	School of Public Health
5/03-12/18	Xian Jiao Tong University, Xian, China
	School of Public Health
10/05-9/09	Tianjin University, Tianjin, China
	College of Pharmaceuticals & Biotechnology
9/05-9/08	World Health Organization
0.107.10.100	Pan American Health Organization
8/05–12/06	Mayor's Task Force on the Health Effects of Air Pollution
07/09-08/10	(Houston) University of Hong Kong School of Public Health, Hong Kong
07/09-08/10	University of Hong Kong School of Public Health, Hong Kong, China
6/06-06/08	Huazhong University of Science and Technology, Wuhan, China
, ,	Tongji School of Public Health
3/03-12/04	Hong Kong University of Science and Technology
, ,	Department of Biology
6/04-12/16	Jiangxi University of Finance and Economics, Nanchang, China
	Faculty of Statistics
	School of Finance
6/04-8/17	Nanchang University, Nanchang, China
	School of Public Health
	College of Science
6/04 - 7/04	Jiangxi School of Statistics, Nanchang, China
10/00-1/03	National University of Singapore, Singapore
	Institute of Molecular and Cell Biology
12/01–10/09	Sun Yat-Sen University, Guangzhou, China
	School of Public Health, Department of Medical Statistics
0.100.0.11=	Lingnan College, Department of Finance
8/00-8/17	City University of Hong Kong, China
0.10.4	Department of Electrical and Computer Engineering
9/94-	Medical School, UT Health Science Center
	Department of Internal Medicine
	Department of Psychiatry and Behavioral Science
	Department of Radiology
	Harris County Psychiatric Center
	Department of Pediatrics
	Department of Surgery
	Division of Infectious Diseases Department of Obstatrics and Cymegology
5/01-8/08	Department of Obstetrics and Gynecology School of Nursing, UT Health Science Center
0/01-0/00	School of Nursing, UT Health Science Center Department of Target Population
	Department of Target Population

Consultant	Experience:(Continued)		
4/01-1/15	Baylor College of Medicine		
	Department of Medicine		
	Department of Neurology		
1/95-1/00	University of Houston		
	Department of Electrical and Computer Engineering		
1/96-1/16	MD Anderson Cancer Center, University of Texas		
	Department of Epidemiology		
	Department of Thoracic and Cardiovascular Surgery		
9/95-1/10	Medical Branch at Galveston, University of Texas		
	Department of Physiology and Biophysics		
	Department of Preventive Medicine and Community Health		
	Department of Internal Medicine		
1/03 - 8/10	Houston Advanced Research Center, Woodland, TX		
6/03-6/03	Reliant Energy, Houston, TX		
7/03-12/06	Texas Tech University, Lubbock, TX		
1/96-12/03	Shell Oil Company, Houston, TX		
	Corporate Medical Department		
8/03-12/06	Amgen Inc., Thousand Oaks, CA		
10/97 - 5/99	Visual Numerics (IMSL) Inc., Houston, TX		
2/94-2/95	Savitz (Marketing) Research Center Inc., Dallas, TX		
6/02-8/02	Houston Police Department, Houston, TX		

Professional and Other Organizations:

American Statistical Association (1990-)

Institute of Mathematical Statistics (1994-2000)

American Public Health Association (1994-2000)

Society for Clinical Trials (1995-1997)

International Biometric Society (1994-)

International Chinese Statistical Association (1995-1999)

Member of the Board of Directors of

(Houston) Chinese Association of Professionals in Science and Technology (2000-2002)

Peer Review Activities:

Editorial Boards: Contemporary Clinical Trials (2020–)

Journal of Probability and Statistics (2013-)

Fractal Geometry and Nonlinear Analysis in Medicine and Biology (2015–)

Clinical Gastroenterology and Hepatology (2012-2014)

Scientific Reports (2015-2017)

Advances and Applications in Statistics (2001-2018) Far East Journal of Theoretical Statistics (2004-2018)

JP Journal of Biostatistics (2007-2019)

Guest A. Editor: International Journal of Bifurcation and Chaos (2009)

Conferences: The Third International Workshop on Chaos-Fractals Theories and Appli-

cations (Kunming) (2010)

European Conference on Circuit Theory and Design ECCTD (2005)

The 34th IEEE Conference on Decision and Control (1997)

The International Conference on Communications, Circuits and Systems &

West Sino-Expo (2002)

Grants: Enhance and Advance Research, University of Houston (2002)

The U.S. Civilian Research & Development Foundation (2005)

The Portuguese Foundation for Science and Technology (FCT) (2012) National Natural Science Foundation of China-Key Projects (2015–2018)

UK Medical Research Council (2016)

Promotion/Tenure: Huazhong University of Science and Technology

School of Public Health (2013)

Texas Tech University

Department of Family and Community Medicine (2006)

UT Medical School

Department of Internal Medicine (2007, 2013)

Department of Pediatrics (2003)

UT School of Biomedical Information Sciences (2005, 2013–)

DSMB: UT TAAD-SCCOR (NHLBI) (2008-2011)

CLOTBUST-HF (NIND) (2010-2011)

Buproprion (CCTS) (2010-2011)

Ph.D. Examiner Annamalai University, India (2009)

Monash University, Australia (2012)

Award Reviewer Science Awards, Shaanxi Province, China (2009)

NIH Grant Reviewer Challenge Grants Panel 29 (2009)

NIAID, ZAI1-RRS-I-C1 (2010)

NHLBI, ZHL1 CSR-Q (J1) 1 (2022) NHLBI, ZHL1 CSR-Q (O2) 1 (2023) NHLBI, 2024/01 CLTR-D (JA) 2 (2023)

NHLBI, ZHL1 CSR-Q M1 1 (2025) NHLBI, ZRG1 RCCS-C(95) (2025)

Evaluator China Medical Board Distinguished Professorship (2010)

China Changjiang Professorship (2015, 2016)

Peer Review Activities (Continued):

Journals: ACS Sustainable Chemistry & Engineering (2017-)

Advances and Applications in Statistics (2001-)

African Journal of Agricultural Research (2011-)

American Journal of Epidemiology (1997–)

Annales de L' I. S. U. P. (2000–)

Annals of Applied Statistics (2012–)

Annals of Epidemiology (2006–)

Archives of Ophthalmology (2009-2013)

Asia-Pacific Journal of Public Health (2011-)

Bioinformatics (2017–)

Biomedicine (2025–)

Biometrics (2004–)

BMC Public Health (2004-)

BMC Environmental Health (2007-)

BMC Medical Research Methodology (2018-)

Bulletin of the World Health Organization (2004–)

Cancer Research (2020–)

Children Health and Human Development (2010–)

Chronobiology International (2000–)

Clinical Gastroenterology and Hepatology (2012–)

Communications in Statistics - Theory and Methods (1997–)

Communications in Statistics - Simulation and Computation (2007–)

Computers and Mathematics with Applications (2001–)

Contemporary Clinical Trials (2010–)

Control Theory & Applications (Chinese, 2011-)

Diabetes Technology & Therapeutics (2020–)

Discrete Dynamics in Nature and Society (2012–)

Ecology and Society (2004-)

Epidemiology and Infection (2019–)

Evaluation and Program Planning (2008-)

Expert Review of Pharmacoeconomics and Outcomes Research (2006–)

Far East Journal of Theoretical Statistics (2004-)

Fractal & Fractional (2021–)

Genetics (2003–)

Head and Neck (2016–)

Health Services Research (2018–)

IEEE Transactions on Circuits and Systems (1996–)

Infectious Disease Modeling (2020–)

Peer Review Activities (Continued):

Journals: Information Sciences (2000–)

International Journal for Numerical Methods in Engineering (2003–)

International Journal for Equity in Health Research (2008–)

International Journal for Equity in Health (2015–)

International Journal of Environmental Research and Public Health (2013–)

International Journal of Bifurcation and Chaos (1996–)

International Journal of Health Geographics (2007–)

International Journal of Public Health (2016–)

The Journal of the American Medical Association (JAMA) (2020–)

JAMA Ophthalmology (2013–)

Journal of Acquired Immune Deficiency Syndrome (2009–)

Journal of Aging and Health (2010–)

Journal of Applied Mathematics (2014–)

Journal of Applied Statistics (2008–)

Journal of Biopharmaceutical Statistics (2017–)

Journal of Cardiology and Vascular Medicine (2014–)

Journal of Comparative Effectiveness Research (2019–)

Journal of Environmental Management (2008–)

Journal of Happiness Studies (2007–)

Journal of Population Research (2010–)

Journal of Pharmacological & Biomedical Analysis (2013–)

Mathematical and Computer Modelling (1996–)

Mathematical Problems in Engineering (2014–)

Measurement (2020–)

Model Assisted Statistics and Applications (2012–)

Physics Letter A (2004–)

Nature Cardiovascular Research (2023–)

Nature Communications (2024–)

Neurology (2018–)

Pharmaceutical Statistics (2012-)

Paediatric and Perinatal Epidemiology (2018–)

Population Studies (2007–)

Risk Analysis (2003–)

Scandinavian Journal of Public Health (2017–)

Southern Medical Journal (2008–)

SpringerPlus (2016–)

Statistical Papers (2011–)

Statistics and Computing (2002–)

Statistics in Biopharmaceutical Research (2015–)

Urban Ecosystems (2013–)

Water Research (2008–)

Current and Prior Research:

Funded Research:

PI NIH funded project (1U24HL148316-01A1): "The Allogenic Hu-

man Mesenchymal Stem Cell (MSCs) Injection in Patients with Hypoplastic Left Heart Syndrome: A Phase IIB Clinical Trial (ELPIS)" UT School of Public Health, Houston, TX. (10% FTE,

09/20-08/26, \$1,853,979).

PI DOD funded project (W81XWH-20-10272): "A Phase IIB, Ran-

domized, Placebo-controlled, Multicenter Study of the Comparative Efficacy and Safety of Transendocardial Injection of Allogeneic Mesenchymal Stem Cells Versus Placebo in Patients with Non-ischemic Dilated Cardiomyopathy(DCMII)." UT School of Public Health, Houston, TX. (15% FTE, 05/20-

08/27, \$2,786,189).

PI Marcus Foundation funded project (Child): "Autologous Car-

diac Stem Cell Injection in Patients with Hypoplastic Left Heart

Syndrome" (10% FTE, 8/21-8/24).

PI (Statistics Core) Weatherhead Foundation (UT Medical School, Dr. Gould)

funded project: "Century Health Study." (40% FTE, 3/13-,

\$1,007,480).

PI (Statistics Core) Fetal Center, UT Medical School, funded projects. (20% FTE,

3/22-).

Co-investigator NIH funded project (R01AR083471): "Technique for Restoring

Stability, Minimizing Complications, and Improving Long-term Outcomes, Particularly for Young Athletes Prone to ACJ Injuries." PI: Payam Zandiyeh, UT Medical School, Houston, TX.

(3% FTE, 04/25-08/29, \$3,000,000)

Co-investigator NIH funded project (R01AR083471): "Cryopreserved Human

Umbilical Cord as a Meningeal Patch in Fetoscopic Spina Bifida Repair." PI: PI: Reshema Papanna, UT Medical School,

Houston, TX. (5% FTE, 09/25-08/30, \$3,000,000)

Co-investigator CPRIT Project "Texas Spatial-Temporal Data Science, In-

formatics and Modeling Core (TEX-SIM)" PI: Cici Bauer, UT School of Public Health, Houston, TX. (5%, 9/25-8/29,

\$3,000,000).

Co-investigator NIH funded project (1R01ES031063): "Study of Cleaners in San

Antonio: Immunologic and Inflammatory Responses to Total Volatile Organic Compound (VOC) Exposure." PI: Inkyu Han, UT School of Public Health, Houston, TX. (5% FTE, 03/21-

08/25, \$3,500,000

Co-investigator NIH funded project (R01 HD105173-01): "Human Umbilical

Cord as a Regenerative Meningeal Patch to Prevent Tethering and Improve Neurological Function Following In-Utero Spina Bifida Repair." PI: Reshema Papanna, UT Medical School, Hous-

ton, TX. (5% FTE, 04/21-08/26, \$485,913)

Co-investigator NIH funded project (R44): "Pocket Ark Phase II." PI: William

Perkison, UT School of Public Health, Houston, TX. (2.5%

FTE, 04/22-08/25, \$)

Co-investigator CPRIT Project "Data Science and Informatics Core for Cancer

Research" PI: Wenjin Zheng, UT School of Biomedical Infor-

matics, Houston, TX. (5\%, 9/17-8/22, \$5,846,383).

PI (Statistics Core) NIH funded project "Preparing for Human Genome Editing

Technologies (P-GET)" (10% FTE, 9/21-5/24).

Co-investigator NIH funded project (U01): "Cardiovascular Cell Therapy Re-

search Network Coordinating Center (II)" PI: Barry R. Davis, UT School of Public Health, Houston, TX. (25% FTE, 02/12-

02/21, \$16,000,000).

Co-investigator NIEHS Supplement "Sustainable Solutions to Metal Air Pollution in Disadvantaged Neighborhoods" PI: Elaine Symanski, UT School of Public Health, Houston, TX. (10%, 2/19–12/19, \$191,458).

Co-investigator Sanofi-Aventis funded Project "FLuctuATion reduction with in-SUlin and Glp-1 Added together (FLAT-SUGAR)" PI: Barry Davis, UT School of Public Health, Houston, TX. (10%, 10/11– 10/15, \$902,117).

Co-investigator NIH funded project (N01): "Post-trial Follow-up of ALLHAT Participants" PI: Barry Davis, UT School of Public Health, Houston, TX. (10%, 1/13–6/16, \$3,000,000).

Co-investigator NIH funded project (R21): "Tracking Air Pollutants and Newborn Health in Houston, Texas" PI: Elaine Symanski, UT School of Public Health, TX (15% FTE, 12/09–12/11, \$500,000).

Co-investigator EPA funded project: "Analytical Strategies for Assessing Cumulative Effects of Chemical and Nonchemical Stressors." PI: Stephen H. Linder, UT School of Public Health, TX (10% FTE, 09/10–10/12, \$537,030).

Co-investigator NIH funded project (U01): "Cardiovascular Cell Therapy Research Network Coordinating Center" PI: Lemual A. Moye, UT School of Public Health, Houston, TX. (30% FTE, 01/07-02/12, \$17,882,096).

PI, Herman Foundation (UT Medical School, Dr. Smalling) funded project: "Data Coordinating Center for PATCAR/STEMI Registry." (10% FTE, 9/08-12/10, \$240,000).

Co-investigator NIH funded project (Supplementary to U01): "A hybrid method in combining effects from matched and unmatched studies" PI: Robert J. Hardy, UT School of Public Health, Houston, TX. (30% FTE, 09/09-09/10, \$290,035, proposal writer).

Co-investigator NIH funded project (UL1): "Center for Clinical and Translational Sciences (CCTS)" PI: McPherson, UT Health Science Center at Houston (10% FTE, 3/09-8/09, \$4,428,094).

Co-investigator NIH funded project (R01): "Bovine lactoferrin for prevention of diarrhea in children" PI: Tom Cleary, UT School of Public Health (10% FTE, 1/08–12/12, \$1,246,771).

Co-investigator NIH funded project (R03): "Hazardous Air Pollutants and Lymphohematopietic Cancer Incidence in Houston" PI: Elaine Symanski, UT School of Public Health, TX (3.5% FTE, 12/07–12/10, \$148,500).

Co-investigator NIH funded project (R01): "An HB Vaccine Model For HIV Vac-

cine Trials in Drug Users." PI: Lu-yu Hwang, UT School of Public Health, Houston, TX. (10% FTE, 9/06–2/08, \$3,397,721).

Co-investigator US Army grant: "Texas Training & Technology Against Trauma

and Terrorism." PI: S.Ward Casscells, UT Medical School,

Houston, TX. (15% FTE, 11/06–9/07, \$16,227,648).

Co-investigator Leland Center funded project: "Association between Exposures

to Oxygenated Air Toxics and Asthma: An Exposure and Health Effects Study of Houston Area School Children." PI: George L. Delclos, UT School of Public Health, Houston, TX. (5% FTE,

9/01-2/06, \$320,871).

Co-investigator NIOSH funded project (R01): "A Validated Asthma Question-

naire for Healthcare Workers." PI: George L. Delclos, UT School of Public Health, Houston, TX. (5% FTE, 10/01–10/05,

\$495,915).

Co-investigator NIH funded project (R03): "Blood Pressure and Stimulant Med-

ication in Children." PI: Jonathan Sorof, UT Medical School,

Houston, TX. (10% FTE, 01/02–01/04, \$100,000).

Co-investigator NIH funded project (K23): "End-Organ Injury in Hypertensive

Children." PI: Jonathan Sorof, UT Medical School, Houston,

TX. (10% FTE, 01/01–12/05, \$706,309).

Consultant McDonald Foundation funded project: "Use of Body Temper-

ature Decrease in CHF Hamsters as a Predictor for Timing of Additional Medical Intervention" PI: Amany H. Ahmed , Texas

Heart Institute, TX. (05/08–05/09)

Consultant Division of Immunology and Organ Transplantation, Depart-

ment of Surgery, UT Medical School. PI: Barry D. Kahan. (25%

FTE, 10/01-05/03).

Consultant Texas Heart Institute, Department of Cardiology. PI: James

Michael Wilson. (10% FTE, 3/08-12/08).

Co-investigator NIH funded project (R01): "Oxygen Saturation Monitoring in

Neonates." PI: Shyang Yun Pamela Koong Shiao, Department of Target Populations, UT School of Nursing, Houston, TX. (2%

FTE, 9/01-1/03, \$1,739,703).

Co-investigator NIH funded project (R01): "Magnetic Resonance of Multi-

ple Sclerosis." PI: Ponnada Narayana, Department of Radiology, UT Medical School, Houston, TX. (10% FTE, 4/97–3/02,

\$1,812,404).

PI, Visual Numerics (IMSL) funded project: "Nonlinear Time Series

(GARCH) Modeling." (20% FTE, 2/98–1/99, \$17,544).

Co-investigator, NIH funded project (R01): "Serial Magnetic Resonance in Mul-

tiple Sclerosis." PI: Ponnada Narayana, Department of Radiology, UT Medical School, Houston, TX. (10% FTE, 4/96–3/97).

Training Grant:

Co-investigator NIH (FIC) Training grant: "Center for International Training

and Research (CITAR)" PI: Palmer Beasley (0% FTE, 9/06-

8/11, \$1,415,075).

Co-investigator NIH (NIGMS) Training grant: "Training Program in Biostatis-

tics" PI: Barry R. Davis (0% FTE, 9/06-8/11, \$2,200,000).

Other Projects:

PI Texas Heart Institute funded project: "Statistical Analysis of

Body Temperature and Survival of TO-2 Hamster" (0% FTE,

12/07-12/08)

PI WHO/PAHO funded project: "Statistical Analysis of US-

Mexico Border Diabetes Survey" (0% FTE, 9/05-12/07)

Co-PI (Mentor) National Science Foundation of China (NSFC): "Spatial Statis-

tical Analysis of Maternal and Child Health in Western China" PI: Yuxue Bi, Xian Jiaotong University, China (0% FTE, 1/08-

12/10).

Co-investigator National Science Foundation of China (NSFC): "Multiscale

Causal Inference" PI: Haiyun Xu, Jiangxi University of Finance

and Economics, China (0% FTE, 9/11-12/14).

Co-investigator Ministry of Education of China: "Multiscale Co-integration of

Stock Markets" PI: Wenrong Pan, Jiangxi University of Finance

and Economics, China (0% FTE, 9/11-12/14).

Research Positions:

Research Associate, "Statistical Techniques Related to Modeling Global Cli-

mate Change." Department of Statistical Science, Southern

Methodist University. Dallas, TX 6/94-7/94.

Research Associate, "Statistical Techniques Related to Detecting Underground Nu-

clear Explosions." Department of Statistical Science, Southern

Methodist University. Dallas, TX 6/94-7/94.

Other Research:

Co-PI "Population Projections of Jiangxi Province." Jiangxi Provincial

Statistical Bureau. Nanchang, China. 1983-1987.

Co-PI "County Level Life Tables." Jiangxi Provincial Statistical Bu-

reau. Nanchang, China. 1984-1986.

Participant, "World Fertility Survey (China)." State Statistical Bureau of

China and International Statistical Institute. 1985-1986.

Participant, "1982 Population Census of China." State Statistical Bureau of

China. 1982-1987.

Other Activities:

The University of Texas Health Science Center at Houston

Member of Tenure and Promotion Committee (2014-2015)

Member of Inter-Faculty Council (2013-2016)

Member of the Committee for Computational Biomedicine Initiative (2000-2001)

Member of Center for Computational Biomedicine (2001–)

The University of Texas School of Public Health

Advisor and Committee Member for Master and Doctoral Students

Member (1994-)/Coordinator (1999-2000) of the International and Family Health Admissions Committee

Member of the Peer Review Committee (1996, 2000, 2010)

Member (1997-)/Coordinator (2001-2003, 2005, 2015-) of the Biostatistics Admissions Committee

Member of the Search Committee for five Biometry Faculty Positions (1998-2004)

Member of the Search Committee for the Biostatistics Director (2006-2008)

Member of the Search Committee for Demography Faculty (2005-2006)

Member of Faculty Council (2004-2006, 2009-2016, alternative 2016-)

Member of Academic Council (2006-2008)

Member of Global Health Studies Task Force (2004-)

Member of Six Year Review Committee (2004, 2011, 2021)

Member of Committee on Faculty Diversity (2011–2014)

Member of the Search Committee for the Director of Student and Alumni Affairs (2001)

Member of the Student Research Funds Review Committee (2002-2004)

Member of the Excellence of Teaching Committee (2011-)

The UTHealth, Center for Clinical and Translational Sciences

Member of Data and Safety Monitoring Boards (2009-2010)

The UTHealth, School of Nursing

Member of the Scientific Committee, Center for Real-time Bio-physiologic Responses in Health and Illness (2000-2001)

Member of the Search Committee for a Biostatistician (2000-2001).

UTHealth, School of Biomedical Information Sciences

Member of the Search Committee for two Computational Biomedicine Faculty Positions (2001)

Member of the Tenure and Promotion Committee (2014–)

UTHealth, Medical School

Interviewer of Search Committee for Pediatrics Faculty (2003)

Other Activities (Continued):

City University of Hong Kong

Associate Member, Centre for Chaos Control and Synchronization (2000-)

American Joint Statistical Meetings, 2003, San Francisco

Session (#300) Chair

First International Conference on Frontiers in Biomedical and Environmental Health Sciences: from Molecular and Systems Biology to Human Diseases, 2006, Wuhan, China

Member of Organizing Committee

2010 International Workshop on Chaos-Fractal Theory and its Applications, Kunming, China Member of Program Committee

Panelist, Texas and China Business Summit, Houston, Texas (2010)

Computer Skills:

Working knowledge of Windows, UNIX; S-Plus/R, SAS/SUDAAN, MATLAB, EXCEL STATA and FORTRAN, C, PASCAL, BASIC. IMSL developer (1998-1999)

Computer Software:

- Lai D: IMSL Subroutines for Generalized Autoregressive Conditional Heteroskedastic (GARCH) Models. The subroutines and the documentation are released in C and Fortran version of the IMSL library (3/99), in JMSL (IMSL Technology for JAVA Programmers) (3/02), PV-WAVE (Visual Data Analysis) (6/04) and TS-WAVE (Advanced Time Series Analysis) (6/04) and RogueWave (IMSL Library for Python) (2020).
- **Lai D**: Statistical Programs for Marketing Research. These programs were written for the Savitz (Marketing) Research Center (3/94).

Short Courses	Taught:
January 2004	Data, Models and Decisions at Lingnan College, Sun Yat-Sen University, Guangzhou, China.
June 2004	Statistics and Its Applications at Faculty of Statistics, Jiangxi University of Finance and Economics, Nanchang, China.
December 2004	Introduction to Categorical Data Analysis at Faculty of Statistics, Jiangxi University of Finance and Economics, Nanchang, China.
June 2005	Spatial Statistics at Faculty of Statistics, Jiangxi University of Finance and Economics, Nanchang, China.
June 2006	Spatial Statistics at School of Public Health, Xian Jiaotong University, Xian, China.
June 2006	Nonparametric Statistics at Faculty of Statistics, Jiangxi University of Finance and Economics, Nanchang, China.
April 2007	Introduction to Biostatistics, Jiangxi University of Finance and Economics, Nanchang, China.
August 2007	Introduction to Biostatistics, HIV/AIDS Prevention Workshop, Ho Chi-Minh City, Vietnam.
June 2008	Sampling Techniques at Faculty of Statistics, Jiangxi University of Finance and Economics, Nanchang, China.
November 2009	Introduction to Time Series Analysis, Jiangxi University of Finance and Economics, Nanchang, China.
April 2010	Nonparametric Statistics at Faculty of Statistics, Jiangxi University of Finance and Economics, Nanchang, China.
June 2011	Statistical Methods at Faculty of Statistics, Jiangxi University of Finance and Economics, Nanchang, China.
June 2012	Statistical Methods at Faculty of Statistics, Jiangxi University of Finance and Economics, Nanchang, China.
June 2013	Spatial Statistics at Faculty of Statistics, Jiangxi University of Finance and Economics, Nanchang, China.

Spring 2012 PH1998 C

Spring 2012	PH1998, Current Issues in Biostatistics (Seminar), 100% responsibility
Fall 2011	PH1998, Current Issues in Biostatistics (Seminar), 100% responsibility
Spring 2010	PH1998, Current Issues in Biostatistics (Seminar), 100% responsibility
Spring 2008	PH1998, Current Issues in Biostatistics (Seminar), 100% responsibility
Fall 2007	PH1998, Current Issues in Biostatistics (Seminar), 100% responsibility
Spring 2006	PH1998, Current Issues in Biostatistics (Seminar), 80% responsibility
Fall 2005	PH1998, Current Issues in Biostatistics (Seminar), 60% responsibility
Spring 2004	PH1998, Current Issues in Biometry (Seminar), 100% responsibility
Fall 2003	PH1998, Current Issues in Biometry (Seminar), 30% responsibility
Spring 2003	PH1998, Current Issues in Biometry (Seminar), 10% responsibility
Fall 2002	PH1998, Current Issues in Biometry (Seminar), 10% responsibility
Spring 2002	PH1998, Current Issues in Biometry (Seminar), 100% responsibility
Fall 2001	PH1998, Current Issues in Biometry (Seminar), 10% responsibility
Spring 2000	PH1998, Current Issues in Biometry (Seminar), 100% responsibility
Fall 1999	PH1998, Current Issues in Biometry (Seminar), 50% responsibility
Spring 1999	PH1998, Current Issues in Biometry (Seminar), 50% responsibility
Fall 1998	PH1998, Current Issues in Biometry (Seminar), 50% responsibility

Courses Ta	ught:	
Fall 2024	PH1915	Linear Models, 100% responsibility
Spring 2024	PH1885	Distribution-Free Methods, 100% responsibility
Fall 2022	PH1915	Linear Models, 100% responsibility
Fall 2021	PH1915	Linear Models, 100% responsibility
Fall 2020	PH1915	Linear Models, 100% responsibility
Fall 2019	PH1915	Linear Models, 100% responsibility
Fall 2018	PH1915	Linear Models, 100% responsibility
Fall 2017	PH1885	Distribution-Free Methods, 100% responsibility
Fall 2016	PH1998	Introduction to Spatial Statistics, 100% responsibility
Fall 2015	PH1855	Distribution Free Methods, 100% responsibility
Fall 2014	PH1960	Time Series Analysis, 100% responsibility
Fall 2013	PH1998	Spatial Statistics, 100% responsibility
Spring 2013	PH1855	Distribution-Free Methods, 100% responsibility
Fall 2012	PH1915	Linear Models, 100% responsibility
Spring 2012	PH1831	Survival Analysis, 100% responsibility
Fall 2011	PH1915	Linear Models, 100% responsibility
Spring 2011	PH1998	Spatial Statistics, 100% responsibility
Fall 2010	PH1915	Linear Models, 100% responsibility
Spring 2010	PH1855	Distribution-Free Methods, 100% responsibility
Spring 2010	PH1998	Introduction to Computational Systems Biology, 25% responsibility
Fall 2009	PH1960	Time Series Analysis, 100% responsibility
Spring 2009	PH1998	Applied Multivariate Analysis, 100% responsibility
Fall 2008	PH1885	Distribution-Free Methods, 100% responsibility
Spring 2008	PH1745	Sampling Techniques, 100% responsibility
Spring 2008	PH1998	Introduction to Computational Systems Biology, 30% responsibility
Fall 2007	PH1960	Time Series Analysis, 100% responsibility
Spring 2007	PH1911	Statistical Theory of Biostatistics II, 100% responsibility
Spring 2007	PH1831	Survival Analysis, 25% responsibility (Primary Instructor)
Fall 2006	PH1910	Statistical Theory of Biostatistics I, 100% responsibility
Spring 2006	PH1885	Distribution-Free Methods, 100% responsibility
Spring 2006	PH1998	Introduction to Computational Systems Biology, 25% responsibility
Fall 2005	PH1960	Time Series Analysis, 100% responsibility
Spring 2005	PH1998	Introduction to Spatial Statistics, 100% responsibility
Fall 2004	PH1920	Categorical Data Analysis, 100% responsibility
Spring 2004	PH1855	Distribution-Free Statistical Methods, 100% responsibility
Fall 2003	PH1960	Time Series Analysis, 100% responsibility
Spring 2003	Ph1998	Introduction to Spatial Statistics, 100% responsibility
Fall 2002	PH1920	Categorical Data Analysis, 90% responsibility
Spring 2002	PH1855	Distribution-Free Statistical Methods, 100% responsibility

${\bf Courses} \ {\bf Taught} ({\tt Continued}):$

Fall 2001	PH1960	Time Series Analysis, 100% responsibility
Spring 2001	PH1821	Applied Statistical Methods II, 100% responsibility
Fall 2000	PH1998	Introduction to Spatial Statistics, 100% responsibility
Spring 2000	PH1855	Distribution-Free Statistical Methods, 100% responsibility
Fall 1999	PH1960	Time Series Analysis, 100% responsibility
Spring 1999	PH1998	Design of Experiments, 100% responsibility
Fall 1998	PH1725	Intermediate Biometrical Methods I, 50% responsibility
Fall 1998	PH1960	Time Series Analysis, 100% responsibility
Spring 1998	PH1855	Distribution-Free Statistical Methods, 100% responsibility
Fall 1997	PH1998	Design of Experiments, 80% responsibility
Spring 1997	PH1960	Time Series Analysis, 100% responsibility
Fall 1996	PH1998	Design of Experiments, 50% responsibility
Spring 1996	PH1726	Intermediate Biometrical Methods II, 100% responsibility
Spring 1996	PH1855	Distribution-Free Statistical Methods, 50% responsibility
Fall 1995	PH1725	Intermediate Biometrical Methods I, 50% responsibility
Fall 1995	PH1915	Linear Models I, 50% responsibility
Spring 1995	PH1911	Statistical Theory of Biometry II, 50% responsibility
Spring 1995	PH1726	Intermediate Biometrical Methods II, 50% responsibility
Fall 1994	PH1910	Statistical Theory of Biometry I, 50% responsibility
Fall 1994	PH1725	Intermediate Biometrical Methods I, 50% responsibility
(UT Dallas)	Stat2322/4397	Statistical Decision Making, 100% responsibility

Publications:

A. Papers in Refereed Journals:

- Kaushal S, Hare JM, Mahle WT, Khan A, Ohye RG, Slesnick TC, Chai PJ, Shashidharan S, Robinson JD, Jone PN, Doman T, Si MS, Lu JC, Bacallao K, Nettina AE, Lamazares R, Saltzman RG, Simpson LM, Li R, Bettencourt JE, Mansoor K, Davis BR, Deatrick KB, Yang J, Rachana M, Everett AD, Lai D, Davis ME: Phase I Randomized Study of Cardiac Stem Cells in Patients with Hypoplastic Left Heart Syndrome: CHILD Trial. JACC: Heart Failure, 2025, in press.
- 2. Mann LK, Pandiri S, Agarwal N, Northrup N, Au KS, Grundberg E, Bergh EP, Austin MT, Patel R, Miller B, Zhu S, Feinberg JS, **Lai D**, Tsao K, Fletcher SA, Papanna R: Morphometric Analysis of Spina Bifida after Fetal Repair Shows New Subtypes with Associated Outcomes *Ultrasound in Obstetrics and Gynecology*, 2025, https://doi.org/10.1002/uog.70035.
- 3. Agarwal N, Hernandez-Andrede E, Gerulewicz D, Papanna R, **Lai D**, Soto E, Mehl S, Kassir E, Amro F, Sibai F, Blackwell SC: The Number of Previous Cesarean Deliveries and Severity of Placenta Accreta Spectrum: A Referral Center Experience. *Gynecologic and Obstetric Investigation*, 2025, Aug 8:1-7. doi: 10.1159/000547755.
- 4. Gould KL, Johnson NP, Roby AE, Kirkeeide R, Haynie M, Nguyen T, Bui L, Patel MB, Patel MB, Kitkungvan D, Mendoza PM, **Lai D**, Li R, Sdringola S, Narula J, McPherson D: Optimal Medical Care and Coronary Flow Capacity-guided Myocardial Revascularization vs Usual Care for Chronic Coronary Artery Disease: the CENTURY Trial. *European Heart Journal*, 2025, 6(33):3273-3286.
- 5. Li Y, **Lai D**, Li R, Chen H, Huang X, Ning J: A Biomarker Signature-guided Clinical Trial Design for Precision Medicine. *Statistics in Medicine*. 2025, in press.
- 6. Xia L, Chen B, **Lai D**: Bayesian Estimation of Drift Fractional Brownian Motion at Discrete Observations. *Fractals*. 2025, in press.
- 7. Agarwal N, Papanna R, Sibai BM, Garcia A, **Lai D**, Soto Torres, EE, Amro, FH, Blackwell SC and Hernandez-Andrade E: Evaluation of Fetal Growth and Birth Weight in Pregnancies with Placenta Previa with and without Placenta Accreta Spectrum. *Journal of Perinatal Medicine*. 2024, Vol. 53, 9-14
- 8. Agarwal N, Hernandez-Andrade E, Sibai BM, Amro F, Coselli JO, Bartal M, Lai D, Soto Torres EE, Backley S, Johson A, Espinoza J, Bergh EP, Zhu S, Salazar A, Blackwell SC, Papanna R: Quantifiying Placenta Accreta Spectrum Severity and Its Associated Blood Loss: A Novel Transvaginal Ultrasound Scoring System. *The American Journal of Obstetrics & Gynecology Maternal-Fetal Medicine*. 2024, Vol. 6:101451. doi: 10.1016/j.ajogmf.2024.101451.

- 9. Zheng WJ, Zhu HJ, Gould KL, **Lai D**: Comparing Heart PET Scans: An Adjustment of Komogorov-Smirnov Test under Spatial Autocorrelation. *Journal of Applied Statistics*. 2024, Vol. 52, 253-269.
- Perkison WB, Nabeel I, Lai D, Upadhyay S, Yalavarthy G, Guerro R, Rios J, Mehta R, McLaughlin J, Shegog R Development of System-based Digital Decision Support (Pocket Ark) for Post-flood Enhanced Response Coordination and Worker Safety: An Intervention Mapping Approach. Frontiers in Environmental Health. 2024, https://doi.org/10.3389/fenvh.2024.1368077.
- 11. Ye JB, **Lai D**: Covariate Adjusted Nonparametric Methods under Propensity Analysis. Frontiers in Applied Mathematics and Statistics. 2024, https://doi.org/10.3389/fams.2024.1357816.
- 12. Xia L, Chen B, **Lai D**: Group Sequential Tests by Boundary Crossing via Drift Fractional Brownian Motion: Bayesian Estimation. *Communications in Statistics Simulation and Computation*. 2024,2020-2028,https://doi.org/10.1080/03610918.2024.2306547
- 13. Zhu HJ, Yu J, Wang Q, Lai D, Wang L, Zhong S: Adaptive Seamless Phase II/III Design with Sequential Estimation-adjusted Urn Model. *Communications in Statistics Simulation and Computation*. 2024, Vol. 53, https://doi.org/10.1080/03610918.2024.2381077
- 14. Xia L, Chen B, **Lai D**: Sequential Monitoring Clinical Trial by Conditional Power under Drift Fractional Brownian Motion. *Communications in Statistics Simulation and Computation*. 2024, Vol. 53, 4676-4684.
- 15. Gould KL, Johnson NP, Roby AE, Bui L, Kitkungvan D, Patel MB, Nguyen T, Kirkeeide R, Haynie M, Arain SA, Charitakis K, Dhoble A, Smalling R, Nascimbene A, Jumean M, Kumar S, Kar B, Sdringola S, Estrera A, Gregoricm I, Lai D, Li R, McPherson D, Narula J: Predicted and Observed Survival Probability Based on Coronary Flow Capacity with and without Virtual Ideal and Actual Revascularization: Physiologic Basis of Improvement in Survival Probability after Revascularization in Individual Patients. European Heart Journal, 2024, Vol. 45(3): 181-194.
- 16. Hoffman JR, Park HJ, Bheri S, Platt MO, Hare JM, Kaushal S,Bettencourt JL, **Lai D**, Slesnick TC, Mahle WT, Davis ME: Statistical Modeling of Extracellular Vesicle Cargo to Predict Clinical Trial Outcomes for Hypoplastic Left Heart Syndrome. *ISCIENCE*, doi: https://doi.org/10.1016/j.isci.2023.107980. 2023.
- 17. Zhu HJ, Yu J, Lai D, Wang L: Seamless Clinical Trials with Doubly Adaptive Biased Coin Designs. New England Journal of Statistics in Data Science. 2023, Vol. 1, 314-322.

- 18. Gould KJ, Nguyen T, Kirkeeide R, Roby AE, Bui L, Kitkungvan D, Patel MB, Madjid M, Haynie M, Lai D, Li R, Narula J, Johnson NP: Subendocardial and Transmural Myocardial Ischemia Clinical Characteristics, Prevalence, and Outcomes With and Without Revascularization. *JACC: Cardiovascular Imaging.* 2023, Vol. 16, 78-94.
- Zheng WJ, Lai D, Gould KL: A Simulation Study of a Class of Nonparametric Test Statistics: A Close Look of Kolmogorov-Smirnov Test. Communications in Statistics Simulation and Computation. 2023, Vol. 52, 1133-1148. https://doi.org/10.1080/03610918.2021.1874987.
- 20. Ye JB, Lai D, Moye LA, Davis BR: Applications of Covariate Adjusted Nonparametric Methods to CCTRN Clinical Trials. *Communications in Statistics Case Studies, Data Analysis and Applications.* 2022, Vol. 8, 728-737.
- 21. Yang Y, Zhu H, **Lai D**: Estimation of Hurst Exponent for Sequential Monitoring of Clinical Trials with Covariate Adaptive Randomization. *Contemporary Clinical Trials.* 2022, Vol. 120, 106887.
- 22. Ye JB, Lai D: Emprical Power and Type I Error of Covariate Adjusted Nonparametric Methods. *Mathematics and Statistics*. 2022, Vol. 10, 1050-1074.
- 23. Kaushal S, Hare JM, Shah AM, Pietris NP, Bettencourt JL, Piller LB, Khan A, Snyder A, Boyd RM, Abdullah M, Mishra R, Sharma S, Slesnick TC, Si SM, Chai PJ, Davis BR, Lai D, Davis ME, Mahle WT: Autologous Cardiac Stem Cell Injection in Patients with Hypoplastic Left Heart Syndrome (CHILD Study). *Pediatric Cardiology*. 2022, Vol. 43, 1481-1493. https://doi.org/10.1007/s00246-022-02872-6.
- 24. Chen J, de la Rosa A, Lai D, Revere L, Lairson D, Wermuth P, Hui D: A National Survey of Palliative Care Team Compositions. *Journal of Palliative Care*. 2022, Vol. 37, 142-151.
- 25. Mann LK, Won JH, Patel R, Bergh EP, Garnett J, Bhattacharjee MB, Narayana PA, Jain R, Fletcher RA, **Lai D**, Papanna R: Allografts for Skin Closure during In-Utero Spina Bifida Repair in a Sheep Model. *Journal of Clinical Medicine*. 2021, Vol. 10 (21), 4928.
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- 28. Bolli R, Mitrani RD, Hare JM, Pepine CJ, Perin EC, Willerson JT, Traverse JH, Henry TD, Yang PC, Murphy MP, March KL, Schulman IH, Ikram S, Lee DP, OBrien C, Lima JA, Ostovaneh MR, Ambale-Venkatesh B, Lewis G, Khan A, Bacallao K, Valasaki K, Longsomboon B, Gee AP, Richman S, Taylor DA, Lai D, Sayre SL, Bettencourt J, Vojvodic RW, Cohen ML, Simpson L, Aguilar D, Loghin C, Moye L, Ebert RF, Davis BR, Simari RD for the Cardiovascular Cell Therapy Research Network (CCTRN): A Phase II Study of Autologous Mesenchymal Stromal Cells and c-kit+ Cardiac Progenitor Cells, Alone or in Combination, in Patients with Ischemic Heart Failure: The CCTRN CONCERT-HF Trial. European Journal of Heart Failure. 2021, Vol. 23, 661-674.
- 29. Kitkungvan D, Johnson NP, Kirkeeide R, Haynie M, Carter C, Patel MP, Bui L, Madjid M, Mendoza P, Roby AE, Hood S, Zhu H, **Lai D**, Sdringola S, Gould KL: Design and Rationale of The Randomized Trial of Comprehensive Life Style Modification, Optimal Pharmacological Treatment and Utilizing PET Imaging for Quantifying and Managing Stable CoronaRy ArterY Disease (The CENTURY Study). *American Heart Journal*. 2021, Vol. 237, 135-146.
- 30. Chen J, de la Rosa A, Lai D, Revere L, Lairson D, Wermuth P, Hui D: Cancer Center Executives Attitudes towards Palliative Care Integration in the United States. *BMJ Supportive & Palliative Care*. 2021, Vol. 23, 661-674.
- 31. Gould KL, Kitkungvan D, Johnson N, Nguyen T, Kirkeeide R, Bui L, Patel M, Roby A, Madjid M, Zhu HJ, **Lai D**: Mortality Prediction by Quantitative PET Perfusion Expressed as Coronary Flow Capacity With and Without Revascularization. *JACC: Cardiovascular Imaging.* 2021, Vol. 14, 1020-1034. https://doi.org/10.1080/03610918.2021.1874987.
- 32. Yu J, **Lai D**: Interim Monitoring of Sequential Estimation-adjusted Urn Model with Sample Size Re-estimation. *The Canadian Journal of Statistics*. 2021, Vol. 49, 1075-1092. https://doi.org/10.1002/cjs.11609
- 33. Attipoe-Dorcoo S, Delgado R, Lai D, Gupta A, Linder S: Analysis of Annual Costs of Mobile Clinics in the Southern United States. *Journal of Primary Care and Community Health.* 2020, Vol. 11, DOI:10.1177/2150132720980623
- 34. Zheng WJ, Lai D, Wang Z, Johnson NP, Gould KL: An Application of Spatially Adjusted Kolmogorov-Smirnov Test in Comparing Heart PET Scans. *Italy Journal of Applied Statistics*. 2020, Vol. 3, 249-267, DOI: https://doi.org/10.26398/IJAS.0032-014.

- 35. Bolli R, Perin EC, Willerson JT, Yang PC, Traverse JH, Henry TD, Pepine CJ, Mitrani RD, Hare JM, Murphy MP, March KL, Ikram S, Lee DP, OBrien C, Durand JB, Miller K, Lima JA, Ostovaneh MR, Ambale-Venkatesh B, Gee AP, Richman S, Taylor DA, Sayre SL, Bettencourt J, Vojvodic RW, Cohen ML, Simpson LM, Lai D, Aguilar D, Loghin C, Moye L, Ebert RF, Davis BR, Simari RD, for the Cardiovascular Cell Therapy Research Network (CCTRN): Allogeneic Mesenchymal Cell Therapy in Anthracycline-Induced Cardiomyopathy Heart Failure Patients: The CCTRN SENECA Trial. *JACC: CardioOncology.* 2020, Vol. 2, 581-595.
- 36. Follis JL, **Lai D**: Variability Analysis of Epileptic EEG Using the Maximal Overlap Discrete Wavelet Transform. *Health Information Science and Systems*. 2020, 8(1), 1-12, DOI:10.1007/s13755-020-00118-4.
- 37. Miao HY, Gao QM, Feng H, Zhong CX, Zhu PW, Wu L, Swartz MD, Luo X, Desantis SM, Lai D, Bauer CX, Perez A, Rong LB, Lairson DR: Mathematical Modeling of Business Reopening When Facing SARS- CoV-2 Pandemic: Protection, Cost and Risk. Frontiers in Applied Mathematics and Statistics. 2020, Vol. 6, No. 35; doi:10.3389/farm.2020.00035.
- 38. Attipoe-Dorcoo S, Delgado R, Lai D, Gupta A, Linder S: Geographical Influence of Mobile Clinics in the Southern United States. *Applied Spatial Analysis and Policy* . 2020, Vol. 14, 81-87.
- 39. Follis JL, **Lai D**: Modeling Volatility Characteristics of Epileptic EEGs Using GARCH Models. Signals. 2020, Vol. 1, No. 3; doi:10.3390/signals1010003
- 40. Brock CO, Bergh E, Moise Jr KJ, Johnson A, Hernandez-Andrade E, **Lai D**, Blackwell SC, Sibai BM, Papanna R: Middle Cerebral Artery Doppler Velocimetry for the Diagnosis of Twin Anemia Polycythemia Syndrome: A Systematic Review. *Journal of Clinical Medicine*. 2020, Vol. 9, No. 1735; doi:10.3390/jcm9061735
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- 42. Ye JB, Lai D: Estimations of Treatment Effects Based on Covariate Adjusted Nonparametric Methods. *Cogent Mathematics and Statistics*. 2020, Vol. 7, No. 1750878.

- 43. Rashid T, Haghighi F, Hasan I, Basseres E, Alam MJ, Sharma S, **Lai D**, Dupont H, Garey K: Activity of Hospital Disinfectants against Vegetative Cells and Spores of Clostridioides difficile Embedded in Biofilms. *Antimicrobial Agents and Chemotherapy*. 2019, Vol. 64, e01031-19.
- 44. Yu J, **Lai D**: Sequential Monitoring of Covariate-adaptive Randomized Clinical Trials with Sample Size Re-estimation. *Contemporary Clinical Trials*. 2019, Vol. 87, No. 105874.
- 45. Huang VV, **Lai D**: Interim Analysis of Clinical Trials: Simulation Studies of Conditional Power under Fractional Brownian Motion. *Fractals*. 2019, Vol. 27, No. 08. 1950133.
- 46. Bi Y, Lai D, Yan H: The impacts of a UNICEF health promotion project on primary health care in Western China: A comprehensive evaluation at provincial level. *International Journal of Child Health and Human Development*. 2019, Vol. 12, 171-181.
- 47. Mungi C, **Lai D**, Du XL: Spatial Analysis of Industrial Benzene Emissions and Cancer Incidence Rates in Texas. *International Journal of Environment Research and Public Health.* 2019, Vol. 16, 2627.
- 48. Wei Q, **Lai D**: Test for Homogeneity of Odds Ratios Using U-Statistics. *Open Journal of Statistics*. 2019, Vol. 9, 347-360.
- 49. Pan WR, Lai D, Song Y, Follis J. Time Series Analysis of Energy Intensity, Value Added Tax and Corporate Tax: A Case Study of Non-ferrous Metal Industry in Jiangxi Province, China. *Journal of Data Analysis and Information Processing.* 2019, Vol. 7, 108-117.
- 50. Wang YF, **Lai D**: Assessing Logistic Regression by Bootstrapping and Monte Carlo Simulation. *JP Journal of Biostatistics*. 2019, Vol. 16, 12-30.
- 51. Lai D, Arif AA, Xu HY, and Delclos GL: A Comparative Study of Three Classification Procedures: Asthma of Healthcare Professionals in Texas. *International Journal of Clinical Biostatistics and Biometrics*. 2019, Vol. 5: 021.
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- 53. Benjamin RH, Mitchell LE, Canfield MA, Hoyt AT, **Lai D**, Ramadhani TA, Carmichael SA, Case AP, Waller DK for the National Birth Defects Prevention Study: Fish Consumption Prior to Pregnancy and Pregnancy outcomes in the National Birth Defects Prevention Study, 1997-2011. *Public Health Nutrition*. 2019, Vol. 22, 336-343.

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- 196. Lai D, Chen G: Distribution of Controlled Lyapunov Exponents: A Statistical Simulation Study. *Computational Statistics and Data Analysis*. 2000, Vol. 33, 69-77.

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- 198. Lai D: Asymptotic Distribution of the Estimated BDS Statistic and Residual Analysis of AR Models on the Canadian Lynx Data. *Journal of Biological Systems*. 2000, Vol. 8, 95-114.
- 199. Lai D, Wang SJ, Hsi BP: Saddlepoint Methods in Testing the Difference Between Two Binomial Proportions: A Comparative Study. Far East Journal of Theoretical Statistics. 1999, Vol. 3, 239-263.
- 200. Lai D, Chen G, Hasler M: Distribution of the Lyapunov Exponent of the Chaotic Skew Tent Map. *International Journal of Bifurcation and Chaos.* 1999, Vol. 9, 2059-2067.
- 201. Lai D, Hardy RJ: Potential Gains in Life Expectancy or Years of Potential Life Lost: Impact of Competing Risks of Death. *International Journal of Epidemiology*. 1999, Vol. 28, 894-898. PMID: 10597988.
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- 207. Lai D, Chen G: On Statistical Analysis of Lyapunov Exponents from Time Series: A Jacobian Estimation Approach. Mathematical and Computer Modelling. 1998, Vol. 27, 1-9.
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- 216. Lai D, Chan W: A Note on Asymptotic Distribution of Permutation Statistics from Mixing Processes. Communications in Statistics-Theory and Methods. 1996, Vol. 25, 2395-2401.
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B. Invited Articles:

- 1. Lai D: Z-test. Invited entry for International Encyclopedia of the Social Sciences, 2nd Edition. 2008, Vol. 9, 181-183.
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- 3. Lai D: White Noise. Invited entry for International Encyclopedia of the Social Sciences, 2nd Edition. 2008, Vol. 9, 82-83.
- 4. Zhang JX, Lai D, Zheng YD: Time Series Analysis and Its Applications in Medical Sciences. In: Advanced Medical Statistics. Editors: Fang JQ and Lu Y., World Scientific Publishing Company, Singapore (English version, 2003. 333-377) and People's Medical Publishing House (Chinese version, 2002. 219-266. The book wins the (sole) first prize of excellent statistical books at the Seventh (2004) National Statistical Research Awards of China).

C. Other Communications in Journals:

- 1. Agarwal N, Hernandez-Andrade E, Sibai BM, Amro FH, Coselli JO, Bartal MF, Lai D, Soto Torres EE, Backley S, Johnson A, Espinoza J, Eric P Bergh EP, Zhu S, Salazar A, Blackwell SC, Papanna R: Reply to letter to editor regarding "Quantifying Placenta Accreta Spectrum Severity and Its Associated Blood Loss: A Novel Transvaginal Ultrasound Scoring System." Am J Obstet Gynecol MFM. 2025 Apr;7(4):101644. doi: 10.1016/j.ajogmf.2025.101644.
- 2. Backley S, Agarwal N, Weitzel L, **Lai D**, Bergh EP, Johnson A, Espinoza J, Papanna R: Does Fetoscopic Laser Ablation (FLA) Improve Perinatal Outcomes in Types II and III Vasa Previa? *American Journal of Obstetrics and Gynecology.* 2024, Vol. 230, S214-S215.
- 3. Agarwal N, Bartal MF, Coselli J, Soto Torres EE, Hernandez Andrade E, **Lai D**, Salazar A, Backley S, Amro FH, Johnson A, Espinoza J, Bergh EP, Guerra R, Maroufy V, Sibai BM, Blackwell SC, Papanna R: Transvaginal/Transvesical Ultrasound (TVUS) to Diagnose Placenta Accreta Spectrum (PAS), Its Severity to Predict Blood Loss. *American Journal of Obstetrics and Gynecology*. 2024, Vol. 230, S444-S445.
- 4. Agarwal N, Hernandez-Andrade E, **Lai D**, Backley S, Bergh E, Espinoza J, Salazar A, Soto E, Sibai BM, Papanna R: Patients with placenta accreta spectrum have increasedestimated fetal and birthweight. *Ultrasound in Obstetrics & Gynecology*. 2023, Vol. 62, S60.
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- 8. Symanski E, Lewis PGT, Chen TY, Chan WY, Lai D, Ma XM: Place matters: Residential levels of hazardous air pollutants and increased risk of early childhood acute lymphocytic leukemia. Cancer Epidemiology, Biomarkers & Prevention, 2018, Vol 27, 29-29.
- 9. Bhatnagar A, Bolli R, Johnstone BH, Traverse JH, Henry TD, Pepine CJ, Willerson JT, Perin EC, Ellis SG, Zhao DXM, Lai D, Cooke JP, Schutt RC, Trachtenberg BH, Resende M, Ebert RF, Sayre SL, Cohen M, Simari RD, Moy L, Cogle CR, Taylor DA for the Cardiovascular Cell Therapy Research Network (CCTRN). Bone Marrow Cell Characteristics Associated with Patient Characteristics and Cardiac Performance Outcomes in the LateTIME Trial. *Circulation*, 2014, Vol. 130, No. suppl-2, A16663.
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- 13. Ahmed A, Gondi S, Cox C, Munir SM, Shankar KJ, Stupin IV, Sobash E, **Lai D**, Brewer A, Wilson JM, Casscells SW: The Usefulness of Body Temperature Circadian Rhythm Variation as an Early Predictor of Decompensation in Cardiomyopathic Hamsters. *Journal of the American College of Cardiology*. 2009, Vol. 53: A148-A148, Suppl. 1.
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- 16. Gondi AAS, Ahmed A, Munir M, Cox C, Shankar KJ, Stupin I, Sobash ED, Engel S, Asopa S, **Lai DJ**, Brewer A, Wilson J, Casscells SW: Utility of Continuous Body Temperature Monitoring in Predicting Prognosis in Cardiomyopathic Hamsters. *Journal of Cardiac Failure*. 2008, Vol. 14: S20-S20, Suppl.
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- 18. Ahmed A, Aboshady I, Munir MS, Brewer AM, **Lai D**, Shaik NA, Shankar KJ, Deswal A, Casscells SW. Usefulness of Falling Body Temperature for Prediction of Adverse Outcomes in Congestive Heart Failure *American Journal of Cardiology*. 2007, Vol. 100 (Suppl. 8A): 174L
- 19. Ahmed A, Aboshady I, Munir SM, Brewer A, **Lai D**, Shankar K, Shaik NA, Deswal A, Casscells SW: Body Temperature Fall Predicts Increased Mortality and Rehospitalization in Patients with Congestive Heart Failure *American Journal of Cardiology*. 2006, Vol. 98 (8A): 87M-87M Suppl. S.
- 20. Silver SR, Rinsky RA, Cooper SP, Hornung RW, **Lai D**: RE: Effect of Follow-Up Time on Risk Estimates: A Longitudinal Examination of the Relative Risks of Leukemia and Multiple Myeloma in a Rubber Hydrochloride Cohort. (Letter to the Editor). *American Journal of Industrial Medicine*. 2004, Vol. 45(2):224-225.

- 21. Kahan BD, Podbielski J, **Lai D**, Van Buren C: Substitution of Sirolimus (SRL) for Steroids in Long-term Renal Transplant Recipients Treated with Cyclosporine (CSA). *American Journal of Transplantation*. 2003, Vol. 3(s5):352.
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- 23. Kahan BD, **Lai D**, Schoenberg L, Knight R, Katz S, Van Buren C: Impact of Cycloporine (CSA) Exposure in Combination with Sirolimus (SRL) on Renal Allograft Outcomes at One Year. *American Journal of Transplantation*. 2003, Vol. 3(s5):358.
- 24. Kahan BD, **Lai D**, Schoenberg L, Knight R, Katz S, Van Buren C: Outcome of 1008 Renal Allograft Recipients Treated with Sirolimus (SRL)/Cyclosporine (CSA) and Followed for 1-10 Years. *American Journal of Transplantation*. 2003, Vol. 3(s5):459.
- 25. Sorof JM, Alexandrov AV, Garami Z, **Lai D**, Portman RJ: Increased Carotid Artery Intimal-medial Thickness in Hypertensive Children *American Journal of Hypertension*. 2003, Vol. 16(5):OR79 Part 2.
- 26. Narayana PA, Abbe R, Lai D, Bilgen M: Prognostic value of MRI in Spinal Cord Injury. Proceedings of the 9th ISMRM Scientific Meeting in Glasgow, Scotland. 2001. pp. 1623.
- 27. Sorof JM, Eissa MA, Lai D, Franco K, Poffenbarger T, Portman RJ: Multiple Clinic Measurements Do Not Improve the Relative Agreement between Clinic and Daytime Ambulatory BP in Children (Poster). *American Journal of Hypertension*. 2001, Vol. 14, Supplement 1, A235.
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D. Book Chapters:

 Grimes RM, Sadeque A, Lai D and Visnegarwala F: Antiretroviral Medication Adherence in Anemic Patients with HIV/AIDS. In: Extended Versions of Abstracts from the 13th World AIDS Conference. Bologna, Italy. Monduzzi Editore. 2002. 241-246.

E. Papers in Conference Proceedings:

- 1. Bickel DR, Lai D: Asymptotic Distribution of Time-series Intermittency Estimates: Applications to Economic and Clinical Data. *The Proceedings of the 2000 Joint Meetings of the American Statistical Association*, Business and Economic Statistics Section, 91-96.
- 2. Chen G, Lai D, Anticontrol of Chaos via Feedback. The Proceedings of the 36th IEEE Conference on Decision and Control. (Refereed, invited paper), 1997, 367-372.
- 3. Lai D: A Randomly Weighted Spatial Pattern Test. The Proceedings of the 1995 Joint Meetings of the American Statistical Association, Epidemiology Section, 54-59.

F. Research Reports:

- 1. Delclos GL, Morandi MT, Stock T, **Lai D**, Abramson SL, Sockrider MT, Hanania N, Lusk C, Burau K, Afshar M, Maberti S, and Tee GP: Oxygenated Urban Air Toxics and Asthma Variability in Middle School Children: A Panel Study. Mickey Leland National Urban Air Toxics Research Center. Number 11, 2007. 123 page.
- 2. Kahan BD and investigators (Statistician: Lai D): Impact of Simultaneous Versus Spaced Dosing of Cyclosporine and Sirolimus. Wyeth-Ayerst Pharmaceuticals. October 2002. 24 pages.
- 3. Kahan BD and investigators (Statistician: **Lai D**): Substitution of Sirolimus (Rapamune) for Everolimus (RAD) in Stable Renal Transplant Recipients Wyeth-Ayerst Pharmaceuticals. January 2003. 12 pages.
- 4. Lai D: Report and Documentation for the IMSL Subroutines on GARCH Models. (The report is accompanied with the software). Visual Numerics, Houston, Texas. September 1998. 28 pages.
- 5. Lai D: Contributions to Nonlinear Time Series Analysis. *Ph.D. Dissertation*. The University of Texas at Dallas. August, 1994. 127 pages.
- 6. Lai D: Report and Documentation for Statistical Programs on Marketing Research. (The report is accompanied with the software). Savitz (Marketing) Research Center, Dallas, Texas. May 1994. 31 pages
- 7. Lai D, Wang X, Wiorkowski JJ: Local Asymptotic Normality for Multivariate Nonlinear AR Processes. *Technical Report # 002*, Center for Engineering Mathematics, University of Texas at Dallas. September, 1993. 26 pages.

G. Other Articles:

- 1. Wan LJ, Zhou LQ, **Lai D**: Geostatistical Analysis of the Average Income of Chinese Rural Residents (In Chinese, referred). *Journal of Anhui Agricultural Sciences*, 2008, Vol. 31, 827-829.
- 2. Bai AF, Wei HQ, **Lai D**: The Day of the Week Effect of Shenzhen Stock Market: GARCH Model Approach (In Chinese, referred). *Statistical Education*. 2007, No. 7, 14-15.
- 3. Lai D, Xiong TY: A Spatial Statistical Analysis on Chinese Population Growth and Economic Development (In Chinese, referred). *Statistics and Decision*. 2006, No. 12, 72-73.
- 4. Gui HF, Lai D: IPO and Firm Performance Change: Theoretical Analysis and Empirical Study. *Contemporary Finance* (In Chinese, referred). 2005, No.2, 39-41, 63.
- 5. Lai D, Chen G: Distribution of Controlled Lyapunov Exponents: A Statistical Simulation Study. *InterStat* (A statistical journal on the Internet). November, 1996. 17 pages. The final version was published in *Computational Statistics and Data Analysis*.
- 6. Lai D, Huang W (translators, from English to Chinese): Social and Demographic Statistics in Hungary. *Jiangxi Statistics*. 1986, No. 5, 38-39.
- 7. Lai D: The Economic Activity of the Population: A Comparative Study Between Jiangxi Province and Jiangsu Province. The Proceedings of the National Symposium on the 1982 Population Census of China. (In Chinese). November 1985, 8 pages.
- 8. Lai D: Life Tables and Their Applications. *Jiangxi Statistics*. (In Chinese). 1984, No. 6, 46-51.

Manuscripts Submitted for Publication:

- 1. Rashid T, Hasan I, Basseres E, Begum K, Alam MJ, Sharma SV, **Lai D**, DuPont HL, Garey KW: Common household disinfectants act as germinating factors for Clostridioides difficile spores. Submitted to *Anaerobe*. 6/19.
- 2. Rashid T, Haghighi F, Hasan I, Basseres E, Alam MJ, Sharma SV, **Lai D**, DuPont HL, Garey KW: Organic material, spore concentrations, and contact time reduces the effectiveness of hospital disinfectants against C. difficile spores regardless of PCR-ribotype. Submitted to *Journal of Hospital Infection*. 10/19.
- 3. Gould KL, Kitkungvan D, Johnson N, Nguyen T, Kirkeeide R, Bui L, Patel M, Roby A, Madjid M, Zhu HJ, **Lai D**: Core New Insights From Translational Research In Clinical Coronary Pathophysiology: Basis For Coronary Flow Capacity. Submitted to *JACC: Cardiovascular Imaging*. 3/20.
- 4. Shen F, Li L, **Lai D**: Survival Analysis for Censored Time To Event Via Multiple Imputation Using Multiple Longitudinal Auxiliary Variables. Submitted to *Statistical Methods in Medical Research*. 4/21.
- 5. Gould KL et al: Quantitative Myocardial Perfusion and Clinical Coronary Pathophysiology. Submitted to *JACC Physiology Review*. 8/22.
- 6. K Gould, Nils Johnson ... Dejian Lai, Ruosha Li Understanding Non-Invasive and Invasive Clinical Coronary Pathophysiology- Coronary Flow Capacity, Coronary Pressure, Mortality and Revascularization. Submitted to *JACC Image*. 1/23.
- 7. Gould KL, Johnson NP, Kitkungvan D, Kirkeeide RL, Haynie MP, Roby AE, Tung T, Bui L, Patel M, Mendoza P, **Lai D**, Li RS, McPherson DD, Narula J: Comprehensive Lifestyle-Medical-PET guided management of chronic CAD. Submitted to *EHJ*. 3/25.
- 8. Gerulewicz Vannini, Donatella; Hernandez Andrade, Edgar; Lai, Dejian; Papanna, Ramesha; Bergh, Eric; Espinoza, Jimmy; Lagos, Gustavo Vilchez; Backley, Sami; LEMOINE, Felicia; Harting, Matthew; Ebanks, Ashley H.; Johnson, Anthony: Mediastinal shift angle (MSA) and its association with neonatal mortality in fetuses with isolated left congenital diaphragmatic hernia. Subnitted to Ultrasound in Obstetrics & Gynecology. 2/25.

Manuscripts in Preparation:

- Ramesha Papanna, Stephen A. Fletcher, Lovepreet K. Mann1, Eric P. Bergh1, Mary T. Austin, Sen Zhu, Neha Agarwal, Ashley Salazar, Dejian Lai, Jonathan S. Feinberg, Jimmy Espinoza, Jerrie S. Refuerzo, Anthony Johnson, KuoJen Tsao: Feasibility and Infant Outcomes after Laparotomy-Assisted Fetoscopic Spina Bifida Repair with Human Umbilical Cord Patch.
- 2. Kaushal, S.1, Hare, J.M., Mahle, W.T., Khan, A., Ohye, R.G.4 Slesnick, T.C., Chai, P.J., Shashidharan, S., Robinson, J.D., Jone, P., Doman, T., Si, M., Lu, J., Bacallao, K., Nettina, A.E., Lamazares, R., Saltzman, R.G., Simpson, L.M., Li, R., Bettencourt, J.E., Mansoor, K., Davis, B.R., Deatrick, K.B., Yung, J., Everett, A.D., Lai, D., Davis, M.E.: Phase I Randomized Study of Cardiac Stem Cells in Patients with Hypoplastic Left Heart Syndrome: CHILD Trial.
- 3. Neha AGARWAL, Edgar HERNANDEZ-ANRADE, Baha M. SIBAI, Farah H. AMRO, Jennie O. COSELLI, Michal F. BARTAL, Deijan LAI, Eleazar E. SOTO TORRES, Sami BACKLEY, Anthony JOHNSON, Jimmy ESPINOZA, Eric. P. BERGH, Ashley SALAZAR, Sean C. BLACKWELL, Ramesha PAPANNA: A Transvaginal Ultrasound Score to Diagnose Placenta Accreta Spectrum, its severity and association with blood Loss.

Presentations:

- 1. "Spatial Analysis of Industrial Benzene Emissions and Cancer Incidence Rates in Texas" **Invited presentation** at UT School of Biomedical Informatics, Houston, Texas. 4/22.
- 2. "Spatially Adjusted Kolmogorov Smirnov Test" **Invited presentation** at Jiangxi University of Finance and Economics, Nanchang, China. 5/19.
- 3. "A Method of Combining Matched and Unmatched Studies for Clinical Trials" **Invited** presentation at Jiangxi University of Finance and Economics, Nanchang, China. 11/17.
- 4. "Graduate Programs in Biostatistics at The University of Texas School of Public Health." Recruitment Presentation at University of St. Thomas, Houston, Texas. 11/15.
- 5. "Conditional moving linear regression: Modeling the recruitment process for ALLHAT" **Invited presentation** at Jiangxi University of Finance and Economics, Nanchang, China. 6/15.
- 6. "Introduction to Biostatistics and Its Applications in Public Health" **Invited presentation** at Xian Jiaotong University, Xian, China. 6/14.
- 7. "Box-Cox Transformation for Spatial Linear Models: A Study on Lattice Data." **Invited** presentation at Xian Jiaotong University, Xian, China. 6/14.
- 8. "Introduction to Biostatistics and Its Applications in Public Health" **Invited presentation** at Xiamen University, Xiamen, China. 7/14.
- 9. "Introduction to Spatial Statistics" **Invited presentation** at Xiamen University, Xiamen, China. 7/14.
- 10. "Introduction to Biostatistics and Its Applications in Public Health" **Invited presentation** at Annual Statistical Education Conference of Jiangxi Statistical Association, Nanchang, China. 7/14.
- 11. "Statistical Degree Programs in the US." **Invited presentation** at Jiangxi University of Finance and Economics, Nanchang, China. 6/13.
- 12. "Sample size Re-estimation and Optimal Allocation" **Invited presentation** at University of St. Thomas, Houston, Texas. 10/12.
- 13. "Sample size Re-estimation and Optimal Allocation" Presented at the Biostatistics Seminar, UT School of Public Health, Houston, Texas. 9/12.
- 14. "Monitoring the SARS Epidemic in China: A Time Series Analysis." **Invited presentation** at Nanchang University, Nanchang, China. 6/12
- 15. "Graduate Programs in Biostatistics at The University of Texas School of Public Health." Recruitment Presentation at University of St. Thomas, Houston, Texas. 10/11.

- 16. "Writing and Submitting Papers." **Invited presentation** at Jiangxi University of Finance and Economics, Nanchang, China. 6/11.
- 17. "Brownian Motion and Surveillance Modeling." **Invited presentation** at the Institute of Zoology, Chinese Academic of Sciences. Beijing, China. 12/10.
- 18. "Brownian Motion, Fractional Brownian Motion for Decision Making." Presented at the Biostatistics Seminar, UT School of Public Health, Houston, Texas. 12/10.
- 19. "Biostatistics in the United States: A Close Look at UT School of Public Health." **Invited** presentation at Jiangxi University of Finance and Economics, Nanchang, China. 4/10.
- 20. "A Hybrid Method for Combining Matched and Unmatched Studies" Presented at the Biostatistics Seminar, UT School of Public Health, Houston, Texas. 4/10.
- 21. "Combining Dichotomous and Continuous Data in a U-statistic: Design and Sample Size Implications for Cell Therapy Research" **Invited Presentation** at the 18th International Chinese Statistical Association Applied Statistics Symposium, San Francisco, California. 6/09.
- 22. "Handicap-free Life Expectancy in China (1987 and 2006)" Presented at the Global Health Seminar, UT School of Public Health, Houston, Texas. 2/09.
- 23. "HIV/AIDS Testing at Ports of Entry in China" **Invited presentation** at The CITAR Seminar, UT School of Public Health, Houston, Texas. 2/09.
- 24. "Handicap-free Life Expectancy in China (1987 and 2006)" Presented at the Biostatistics Seminar, UT School of Public Health, Houston, Texas. 9/08.
- 25. "Statistical Properties of Generalized Gini Coefficient with Application to Health Inequality Measurement." **Invited presentation** at Department of Applied Mathematics, I-Shou University, Kaohsiung, Taiwan, 6/08.
- 26. "Box-Cox Transformation for Spatial Linear Models: A Study on Lattice Data." **Invited presentation** at Department of Economics, Fo Guang University, Yilan, Taiwan. 6/08.
- 27. "Biostatistics in the United States: A Personal Perspective." **Invited presentation** at the Department of Statistics & Information Science, Fu Jen Catholic University, Taipei, Taiwan. 6/08.
- 28. "Box-Cox Transformation for Spatial Linear Models: A Study on Lattice Data." Presented at the Biostatistics Seminar, UT School of Public Health, Houston, Texas. 3/08.

- 29. "Statistical Properties of Generalized Gini Coefficient with Application to Health Inequality Measurement." Presented at the Biostatistics Seminar, UT School of Public Health, Houston, Texas. 9/07.
- 30. "Group Sequential Tests under Fractional Brownian Motion in Monitoring Clinical Trials." **Keynote Speech** at International Conference on Econometrics and Applied Statistics, Nanchang, China, 4/07.
- 31. "Group Sequential Tests under Fractional Brownian Motion in Monitoring Clinical Trials." Presented at the Biostatistics Seminar, UT School of Public Health, Houston, Texas. 11/06.
- 32. "Some Statistical Methods in Toxicology." **Invited presentation** at The First International Conference on Frontiers in Biomedical and Environmental Health Sciences: From Molecular and Systems Biology to Human Diseases, Wuhan, China. 6/06.
- 33. "Brownian Motion, Fractional Brownian Motion and Their Applications in Monitoring Clinical Trials." **Invited presentation** at Zhejiang University, College of Medicine, Hangzhou, China. 6/06.
- 34. "A Systems Biology Course at the University of Texas School of Public Health." **Invited** presentation at Shanghai University, Systems Biology Center, Shanghai, China. 6/06.
- 35. "The US-Mexico Border Diabetes Survey: Design Based Analysis." **Invited presentation** at CDC Diabetes Program Conference, El Paso, Texas. 4/06.
- 36. "Conditional Power and Fractional Brownian Motion." Presented at the Biostatistics Seminar, UT School of Public Health, Houston, Texas. 4/06.
- 37. "The US-Mexico Border Diabetes Survey: Design Based Analysis." **Invited presentation** at WHO Field Office in El Paso, El Paso, Texas 3/06.
- 38. "Monitoring the SARS Epidemic in China: A Time Series Analysis." Presented at the Biostatistics Seminar, UT School of Public Health, Houston, Texas. 11/05.
- 39. "Spatial Statistics for Public Health." **Invited presentation** at the Department of Public Health, Xian Jiaotong University, Xian, China. 6/05.
- 40. "Biostatistics in the United States: A Personal Perspective." **Invited presentation** at the Department of Public Health, Xian Jiaotong University, Xian, China. 6/05
- 41. "Statistics and Its Applications." **Invited presentation** at the Department of Management Science and Engineering, Nanchang University, Nanchang China. 6/05.

- 42. "Biostatistics in the United States: A Personal Perspective." **Invited presentation** at the Applied Statistics Center, Renmin University, Beijing, China. 5/05.
- 43. "Test Spatial Randomness Based on Empirical Distribution Function: A Study on Lattice Data." Presented at the Biostatistics Seminar, UT School of Public Health, Houston, Texas. 1/05.
- 44. "Modeling Chronobiological Data: An Introduction to Time Series Analysis." **Invited presentation** at the International Conference of Chronobiology, Haikou, China. 12/04 (Proceedings of the Chinese National Conference of Chronobiology, page 14).
- 45. "Measuring Health: A Biostatistics Perspective." **Invited presentation** at School of Public Health, Jiangxi Medical College. Nanchang, China. 6/04.
- 46. "My Experience in Statistics." **Invited presentation** at Jiangxi School of Statistics. Nanchang, China. 6/04.
- 47. "Empirical Distribution Function and Its Applications in Testing Randomness." Presented at the biometry seminar, UT School of Public Health, Houston, Texas. 11/03.
- 48. "Measuring the Impact of HIV/AIDS on Life Expectancy in the United States from 1987 to 1999." Presented at the Joint Statistical Meetings, San Francisco, California. 8/03.
- 49. "Measuring the Impact of HIV/AIDS on Life Expectancy in the United States from 1987 to 1999." Presented at the international and family health seminar, UT School of Public Health, Houston, Texas. 4/03.
- 50. "Measuring the Impact of HIV/AIDS, Diseases of Heart and Malignant Neoplasms on Life Expectancy in the United States from 1987 to 1999." Presented at the biometry seminar, UT School of Public Health, Houston, Texas. 2/03.
- 51. "Measuring the Impact of HIV/AIDS on Life Expectancy in the United States from 1987 to 1999." Presented at the Ninth Biennial Symposium on Statistical Methods. Center for Disease Control and Prevention. Atlanta, Georgia. 1/03.
- 52. "Noisy Chaotic Time Series: An Introduction." Presented at the biometry seminar, UT School of Public Health, Houston, Texas. 9/02.
- 53. "Biostatistics: An Introduction." **Invited presentation**, UT School of Health Information Sciences, Houston, Texas. 4/02.

- 54. "Mathematics, Statistics and Biostatistics: Personal Experience of Statistical Work in China and the United States." **Invited presentation**, Department of Statistics, Sun Yat-Sen University, Guangzhou, China. 6/01.
- 55. "Making a Discrete Dynamical System Chaotic: Theoretical Results and Numerical Simulations." Presented at the computational biomedicine seminar, UT School of Health Information Sciences, Houston, Texas. 3/01.
- 56. "U-Statistics and Some Applications." Presented at the biometry seminar, UT School of Public Health, Houston, Texas. 2/00.
- 57. "Measuring Health: Life Expectancy, Human Development Index and Statistical Analysis." Presented at the biometry seminar, UT School of Public Health, Houston, Texas. 10/99.
- 58. "Measuring Health: Life Expectancy, Human Development Index and Statistical Analysis." Presented at the monthly seminar of the Houston Area Chapter, American Statistical Association (HACASA), Houston, Texas. 10/99.
- 59. "Standardized Mortality Ratio and Life Expectancy: A Comparative Study of the Chinese Mortality." Presented at the Joint Statistical Meetings, Baltimore, Maryland. 8/99.
- 60. "Measuring Health: A Biometric Perspective." Plenary Presentation at the Fifth Faculty Research Symposium. UT School of Public Health, Houston, Texas. 11/98.
- 61. "Finding Research Topics: A Random Walk." Biometry seminar presentation. UT School of Public Health, Houston, Texas. 10/98.
- 62. "Potential Gains in Life Expectancy or Years of Potential Life Lost: Impact of Competing Risks of Death." Presented at the Joint Statistical Meetings, Dallas, Texas. 8/98.
- 63. "GARCH Models." **Invited presentation**, Visual Numerics (IMSL), Houston, Texas. 4/98.
- 64. "Computing Potential Gains in Life Expectancy and Estimating Lyapunov Exponents."

 Invited presentation for the Ellis B. Stouffer Colloquium, Department of Mathematics,
 University of Kansas, Lawrence, Kansas. 12/97.
- 65. "National Account Statistics in the United States and China." **Invited presentation** to senior officials in the Ganzhou Regional Statistical Bureau, Jiangxi, China. 5/97.
- 66. "The Higher Education System in the United States." **Invited presentation** at Southern Institute of Metallurgy. Jiangxi, China. 5/97.

- 67. "Schools of Public Health in the United States: A Close Look at the UT School of Public Health." **Invited presentation** to the visiting officials from the Ministry of Public Health of the People's Republic of China, Houston, Texas. 4/97.
- 68. "Impact of AIDS on Life Expectancy in the United States." Presented at the Joint Statistical Meetings. Chicago, Illinois. 8/96. This presentation was selected by the American Statistical Association for **press release**.
- 69. "Impact of AIDS on Life Expectancy in the United States." UT School of Public Health Colloquium presentation (with Robert J. Hardy). Houston, Texas. 5/96.
- 70. "AIDS and Life Expectancy." **Invited seminar presentation** at the Department of Statistics, Texas A & M University, College Station, Texas. 2/96.
- 71. "Estimating the Lyapunov Exponent from Time Series." Presented at the Ninth Annual Texas Systems Day Conference. Houston, Texas. 10/95.
- 72. "Application of a Randomly Weighted Spatial Pattern Test in Health Data." Presented at the Joint Statistical Meetings. Orlando, Florida. 8/95.
- 73. "My education and working experience." Interviews with the Asian Development Bank. Manila, Philippines. 5/95.
- 74. "Residual Analysis of AR Models on the Canadian Lynx Data." Presented at the Fourth International Conference on Mathematical Population Dynamics. Houston, Texas. 5/95.
- 75. "Nonlinear Time Series Analysis." Invited presentation at the School of Public Health, University of Texas. Houston, Texas. 5/94.
- 76. "Teaching Statistics in Public Health." Invited presentation at the El Paso Satellite, School of Public Health, University of Texas. El Paso, Texas. 5/94.
- 77. "The Economic Activity of the Population: A Comparative Study between Jiangxi Province and Jiangsu Province." Presented at the National Symposium on the 1982 Population Census of China. Chongqing, China. 11/85.
- 78. "On the Accuracy of Population Census." Presented at the Annual Meeting of the Jiangxi Statistical Association. Nanchang, China. 3/85.
- 79. "On the Convergence and Stability of a Numerical Algorithm for Population Projection." Presented at the Annual Meeting of the Jiangxi Population Association. Nanchang, China. 1/83.

Selected Presentations/Abstrcts Given by Co-authors:

- 1. "Patients with placenta accreta spectrum have increased estimated fetal and birthweight." Presented by Co-author Neha Agarwal at the 33rd World Congress on Ultrasound in Obstetrics and Gynecology. Seoul, S. Korean. 10/2023.
- 2. "Prediction of fetal complications in monochorionic-diamniotic twins using sonographic characteristics." Poster Presentation. Presented by Co-author Clifton O. Brock at Society for Maternal Fetal Medicine Annual Clinical Meeting, Kissimmee FL. 2022.
- 3. "Sequential monitoring of covariate adaptive randomized clinical trials with sample size re-estimation." Presented by co-author Jun Yu at the Joint Statistical Meetings, Philadelphia, Pennsylvania. 8/2020.
- 4. "Neighborhood Matters: Residential levels of air toxics and increased risk of early child-hood acute lymphocytic leukemia", Presented by co-author Elaine Symanski at the American Association of Cancer Research Conference, Charlotte, NC, 6/2019.
- 5. "Geographical Influence of Rural Mobile Clinics in the Southern United States" Presented by co-author Sharon Attipoe-Dorcoo at the Academic Health in Washington DC, 6/2019.
- 6. "Geographical Influence of Rural Mobile Clinics in the Southern United States" Presented by co-author Sharon Attipoe-Dorcoo at the National Rural Health Associations 42nd Annual Conference in Atlanta, GA, 5/2019.
- 7. "Recurrent Events Analysis Using Landmark Andersen-Gill Model with Time-Varying Covariates." Presented by co-author Zheyu Liu at the Joint Statistical Meetings in Vancouver, Canada, 8/18.
- 8. "Box-Cox Transformed Linear Mixed Model with AR(1) Correlation Structures in the Analysis of Neurosurgical Patient Blood Glucose Measurements." Presented by co-author Zheyu Liu at the Spring meeting of The International Biometric Society Eastern North American Region (ENAR) in Washington DC, 2/17.
- 9. "Glucose variability in type 2 diabetes: The initial results of the FLAT-SUGAR Trial." Presented by co-author IB Hirsch at American Diabetes Association 75th Scientific Sessions. Boston, Massachusetts, 6/15.
- 10. "Electromechanical Assessment of Myocardial Function is Associated With Improvement in Ejection Fraction in Patients Treated With Autologous Stem Cell Therapy for Ischemic Cardiomyopathy." Presented by co-author Ki Park at the American Heart Association in Dallas, 11/13.
- 11. "Modeling Volatility Characteristics of Epileptic EEGs Using GARCH Model." Presented by co-author Jack Follis at the Joint Meetings of the American Statistical Association in Montreal, Canada, 8/13.

- 12. "Clustered Drug and Sexual HIV Risk among a Sample of Older Injection Drug Users, Houston, Texas." Presented by co-author Syed W. Noor at The 139th American Public Health Association Meetings in San Francisco, 10/12.
- 13. "Effect of Transendocardial Autologous Bone Marrow Mononuclear Cell Delivery on Functional Capacity, Left Ventricular Function and Perfusion in Chronic Ischemic Heart Failure: The FOCUS Randomized Trial" Presented by co-author (PI) Emerson C. Perin at The Annual Conference of American College of Cardiology (Late-Breaking Session, Statisticians: Lemeual Moye, Dejian Lai), Chicago, 3/12.
- 14. "Knowledge of HIV serostatus and risk behaviors: Positive HIV serostatus is associated with reduced drug and sexual HIV risk among injection drug users." Presented by coauthor Syed W. Noor at The 139th American Public Health Association Meetings in Washington, DC, 11/11.
- 15. "A Hybrid Method for Combining Matched and Unmatched Studies." Presented by coauthor Jinyoung Byun at the Joint Statistical Meetings in Vancouver, Canada, 8/10.
- 16. "The Usefulness of Body Temperature Circadian Rhythm Variation as an Early Predictor of Decompensation in Cardiomyopathic Hamsters." Presented by co-author Amany H. Ahmed at the Annual American College of Cardiology, Orlando, Florida, 03/09.
- 17. "Interspike Intervals: Relation to Epilepsy Syndrome." Presented by co-author Giridhar Kalamangalam at the Annual Meeting of the American Epilepsy Society, Seattle, 12/08.
- 18. "The Effect of External Environment on the Predictivity of Body Temperature in Cardiomyopathic Hamster." Presented by co-author Amany H. Ahmed at the Annual Transcatheter Cardiovascular Therapeutics Washington DC, 10/08.
- 19. "Utility of Continuous Body Temperature Monitoring in Predicting Prognosis in Cardiomyopathic Hamsters." Presented by co-author S. Gondi at the 12th Annual Scientific meeting of the Heart Failure Society of America, Toronto, ON, Canada, 9/08.
- 20. "Usefulness of Falling Body Temperature for prediction of adverse outcomes in Congestive Heart Failure." Presented by co-author Amany H. Ahmed at 2007 Transcatheter Cardiovascular Therapeutics, Washington DC, 10/07.
- 21. "Routine Laboratory Variables May Be Used to Predict Imminent Hospitalization in Congestive Heart Failure (CHF) Patients." Presented by co-author Muhammad S. Munir at the XIX World Congress of the ISHR, Bologna, Italy. 6/07.
- 22. "A Score Method for Comparison of Partial Genomic Regions in Their Representatives of Full-length Genome of Hepatitis E Virus for Genotyping." Presented by co-author Pengcheng Xun at the The Ninth Japan-China Symposium on Statistics, Sapporo, Japan, 09/07.

- 23. "Predictors of Impulsivity and Reward Seeking Behavior with Dopamine Agonists." Presented by co-author William G. Ondo at The 10th International Congress of Parkinson's Disease and Movement Disorders. Kyoto, Japan. 10/06.
- 24. "Body Temperature Fall Predicts Increased Mortality and Re-hospitalization in Patients with Congrestive Heart Failure." Presented by co-author Amany Ahmed at Transcatheter Cardiovascular Therapeutics, Washington DC, 10/06.
- 25. "Predictors of Microalbuminura (MA) in Children with Diabetes Mellitus (DM)." Presented by co-author Ronald Portman at The 2006 Pediatric Academic Societies' Annual Meetings, San Francisco, California. 4/06.
- 26. "Prevalence of Microalbuminuria (MA) in Children and Adolescents with Diabetes Mellitus (DM) and Rate of Spontaneous Remission (SR)." Presented by co-author Ronald Portman at The 2006 Pediatric Academic Societies' Annual Meetings, San Francisco, California. 4/06.
- 27. "The Association Between Restless Legs Syndrome and Essential Tremor." Presented by co-author William G. Ondo at The Movement Disorder Society's 9th International Congress of Parkinson's Disease and Movement Disorders, New Orleans, Louisiana. 3/05.
- 28. "Outcomes of 894 renal allograft recipients treated de novo with a sirolimus-cyclosporine combination and followed for 18 years." Presented by co-author Barry D. Kahan at the XX International Congress of the Transplantation Society, Vienna, Austria. 9/04.
- 29. "And I hate to sound pessimistic, but THIS IS REALITY: Paradoxical perspectives of low-income elderly women in Medicare." Presented by co-author Dolly A. John at the 131st annual meeting of the American Public Health Association. San Francisco, California. 11/03.
- 30. "And I hate to sound pessimistic, but THIS IS REALITY: Paradoxical perspectives of low-income elderly women in Medicare." Presented by co-author Dolly A. John at the 4th Annual Health Services and Outcomes Research Conference. Houston, Texas. 11/03.
- 31. "An Innovative Method to Evaluate Health Inequality." Presented by co-author Jin Huang at the 4th Annual Health Services and Outcomes Research Conference. Houston, Texas. 11/03.
- 32. "Capturing the Perceptions and Experiences of Low-Income Elderly Women in Medicare: Lessons." Presented by co-author Dolly A. John Academy Health Conference, Houston, Texas, 6/03.

- 33. "A Simple Method for Evaluating Sample Size in the Houston ATAC (Air Toxics and Asthma in Children) Study." Presented by co-author S. Maberti at the NIOSH NORA Symposium. Washington DC, 6/03.
- 34. "Reliability and Validity of an Asthma Questionnaire for Healthcare Workers." Presented by co-author G. Delclos at the NIOSH NORA Symposium. Washington DC, 6/03.
- 35. "Outcomes of 1008 Renal Allograft Recipients Treated with Sirolimus (SRL)/Cyclosporine (CSA) and Followed for 1-10 Years." Presented by co-author Barry D. Kahan at the American Transplant Congress. Washington DC, 6/03.
- 36. "Substitution of Sirolimus (SRL) for Steroids in Long-term Renal Transplant Recipients Treated with Cyclosporine (CSA)." Presented by co-author Barry D. Kahan at the American Transplant Congress. Washington DC, 6/03.
- 37. "Improved Outcomes of Renal Transplantation in 122 African-Americans Treated with A Sirolimus-Cyclosporine Regime: Comparison to a Cyclosporine-Prednisone Regimen and to Caucasians. Presented by co-author Hemangshu Podder at the American Transplant Congress. Washington DC, 6/03.
- 38. "Choice of Follow-Up Time and Risk Estimates for Leukemia and Multiple Myeloma in a Rubber Hydrochloride Cohort." Presented by co-author Sharon Silver at the International Conference of Occupational Health. Iguassu Falls, Brazil. 2/03.
- 39. "Health Behaviors of Low-Income Elderly Women in Medicare." Presented by co-author Dolly Jones at Health Services & Outcomes Conference, Houston, Texas. 11/02.
- 40. "Anti-Retroviral Medication Adherence in Anemic Patients with HIV/AIDS." Presented by co-author Abul Sadeque at International AIDS Conference in Barcelona, Spain. 07/02.
- 41. "Investigating the effects of income inequality, population density and spatial autocorrelation on the all-cause and cancer mortality: A comparison of the State of Texas and Taiwan, 1995-1998." Poster presented by co-author Chiehwen Hsu, a Ph.D. student, at the sixth annual student symposium, UT School of Public Health, Houston, Texas. 4/01.
- 42. "Prognostic Value of MRI in Spinal Cord Injury." Presented by co-author Pan Narayana at the Annual Meeting of International Society of Magnetic Resonance in Medicine. Glasgow, Scotland, 04/01.

- 43. "Asymptotic Distribution of Time-Series Intermittency Estimates." Presented by coauthor David Bickle at the Joint Statistical Meetings, Indianapolis, Indiana. 8/00.
- 44. "Feedback Control of the Lyapunov Exponents for Discrete Time Dynamic Systems." Posted at the Dynamics Days Texas. Houston, Texas. 1/96.
- 45. "Estimating the Lyapunov Exponent from Time Series." Presented at the Ninth Annual Texas Systems Day Conference. Houston, Texas. 10/95.