# CURRICULUM VITA

**Zhide Fang, PhD**
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**Current Titles:** Professor of Biostatistics
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## *Background*

EDUCATION

PhD in Statistics, 1999
University of Alberta, Canada

MS in Statistics, 1989
Huazhong Normal University, China

BS in Mathematics, 1986
Huazhong Normal University, China

ACADEMIC EXPERIENCE

Professor (with tenure), 07/2014 –
Associate Professor (with tenure), 08/2008 – 06/2014
Biostatistics Program, School of Public Health, LSUHSC – New Orleans.

Professor (conjoint), 07/2015 –
Department of Genetics, School of Medicine, LSUHSC – New Orleans.
Statistician, 08/2023 –
Department of Pediatrics, School of Medicine, LSUHSC and New Orleans Children's Hospital.
Statistician, 09/2023 –
Department of Otolaryngology, School of Medicine, LSUHSC and Our Lady of the Lake Regional Medical Center.

Associate Professor (with tenure), 08/2006 – 08/2008
Assistant Professor (tenure track), 08/2000 – 08/2006
Visiting Assistant Professor, 08/1999 – 06/2000
Department of Mathematics, University of New Orleans.

ADMINISTRATIVE AND EXECUTIVE EXPERIENCE

Program Director (Chair), 10/2013 – 09/2022
Biostatistics Program, School of Public Health, LSUHSC – New Orleans
Graduate Coordinator, 11/2008 – 07/2015
Biostatistics Program, School of Public Health, LSUHSC – New Orleans

Vice president, 2002 – 2003, Louisiana Chapter of American Statistical Association.
President, 2003 – 2004, Louisiana Chapter of American Statistical Association.
Secretary/Treasurer, 2004 – 2005, Louisiana Chapter of American Statistical Association.

MAJOR AREAS OF RESEARCH INTEREST

a. Biostatistics**/**Bioinformatics
   Cancer genomics, Statistical methods for Microarray gene expressions, Next-generation sequencing (RNA-seq, scRNA-seq) data, DNA mythelation, micro RNA, Nucleosome mapping, Gene Set / Pathway Analysis, DNA copy number variation, Metagenomics.
b. Variable selection algorithms
c. Big data algorithms
d. Designs of Experiments, Dose-response modelling, Wavelet modelling
e. (Multi-state) Reliability analysis, Survival analysis
f. The theory of canonical moments, continued fractions with applications in Statistics.

PROFESSIONAL MEMBERSHIPS

a. 1999 – 2006 Member, Statistical Society of Canada
b. 2009 – 2010 Member, International Chinese Statistical Association.
c. 2011 – 2012 Member, International Society for Computational Biology
d. 2002 – Member, American Statistical Association
e. 2002 – Member, LA Chapter of American Statistical Association

# *Scholarly and Creative Productivity*

## 1**. Publications**

### **A. Patents**

1) United States Patent 11009514. Methods of detecting, diagnosing, and treating carotid plaque vulnerability. Inventors: HA Bazan, Y Lu, S Hong, **Zhide Fang**, B Jun, TC Woods.

## B. Peer-reviewed publications

- **Methodology papers**

1) Y. Zhai, C Xing, **Zhide Fang*** (2023). Construction of optimal designs for quantile regression model via particle swamp optimization. *Journal of Korean Statistical Society*, Springer Link, 09/2023, Vol 52, Issue 4: 921 – 943. https://doi.org/10.1007/s42952-023-00228-1. (*Corresponding author)

2) Y. Zhai, C. Wang, H. Lin, **Zhide Fang*** (2023). D-optimal designs for two-variable logistic regression model with restricted design space. *Communications in Statistics –Theory and Methods, published online 19 Jan 2023*, https://doi.org/10.1080/03610926.2023.2167056. (*Corresponding author)

3) S. Yang, K. Zhang, **Zhide Fang*** (2022). Robust RNA-seq data analysis using an integrated method of ROC curve and Kolmogorov–Smirnov test. *Communications in Statistics – Simulation and Computation*, 12/2022, **51**(12): 7444 – 7457. PMID: 36583130, PMCID: PMC9793859. (*Corresponding author)

4) Z. Chen, **Zhide Fang**, V. Sheng, A. Edwards, K. Zhang (2021). CSRDA: Cost-sensitive Regularized Dual Averaging for Handling Imbalanced and High-dimensional Streaming Data. *The 12th IEEE International Conference on Big Knowledge*, Auckland, New Zealand, December 7 – 8, 2021. Page 164 - 173, ISBN: 978-1-6654-3858-2, doi: 10.1109/ICKG52313.2021.00031.

5) HY. Lin, PY. Huang, CH. Cheng, HY. Tung, **Zhide Fang**… JY. Park (2021). KLK3 SNP-SNO interactions for prediction of prostate cancer aggressiveness. *Scientific Reports* **11**: 9221. PMID: 33927218, PMCID: PMC8084951. doi: https://doi.org/10.1038/s41598-021-85169-7.

6) Z. Chen, **Zhide Fang**, V. Sheng, J. Zhao, W. Fan, A. Edwards, K. Zhang (2021). Adaptive robust local online density estimation for streaming data. *International Journal of Machine Learning & Cybernetics,* 06/2021, 12(6): 1803 – 1824. PMID: 34149955, PMCID: PMC8210923.
DOI: https://doi.org/10.1007/s13042-021-01275-y.

7) H. Lin, C.Y. Callan, **Zhide Fang**, H.Y. Tung, J.Y. Park (2019). Interactions of PVT1 and CASC11 on Prostate Cancer Risk in African Americans. *Cancer Epidemiology, Biomarkers & Prevention, June 1, 2019, 28(6): 1067 – 1075.* DOI: 10.1158/1055-9965.EPI-18-1092. PMID: 30914434.

8) Z. Chen, **Zhide Fang**, J. Zhao, W. Fan, A. Edwards, K. Zhang (2018). Online Density Estimation over Streaming Data: A Local Adaptive Solution. 2018 IEEE

International Conference on Big Data, DOI: 10.1109/BigData.2018.8621923. (Conference location: Seattle, USA, Dec. 10-13. *Accepted regular paper (18.9% accepted rate).*

9) R. Du, L. An, **Zhide Fang*** (2018). Performance evaluation of normalization approaches for metagenomic compositional data on differential abundance analysis. In: Frontiers of Biostatistics and Bioinformatics (eds: Y. Zhang and D.G. Chen), 329 – 344. Springer. (*Corresponding author)

10) Y. Zhai, **Zhide Fang*** (2018). Locally Optimal Designs for Some Binary Dose-Response Models. *Canadian Journal of Statistics*, **46**(2): 336-354. PMID: 30287980; PMCID: PMC6167062. (*corresponding author)

11) R. Du, **Zhide Fang*** (2018). Statistical correction for functional metagenomic profiling of a microbial community with short NGS reads. *Journal of Applied Statistics,* 45(14): 2521 - 2535*.* PMID: 30505061; PMCID: PMC6261491. (*corresponding author)

12) Y. Zhai, **Zhide Fang*** (2018). Locally Optimal Designs for Some Dose Response Models with Continuous Endpoints. *Communications in Statistics – Theory and Methods*, **47**(16): 3803-3819. PMID: 30250356; PMCID: PMC6150483 (*corresponding author)

13) Z. Chen, **Zhide Fang**, W. Fan, A. Edwards, K. Zhang (2017). CSTG: An Effective Framework for Cost-sensitive Sparse Online Learning. *SIAM Rev Soc Ind Appl Math. 2017 Apr; 2017:* 759 – 767. PMID: 29861512; PMCID: PMC5978435.

14) J. Maronge, Y. Zhai, D. Wiens, **Zhide Fang*** (2017). Optimal Designs for Spline Wavelet Regression Models. *Journal of Statistical Planning and Inference*, 184: 94 - 104. PMID: 29033492; PMCID: PMC5638501. (*Corresponding author)

15) S. Yang, **Zhide Fang*** (2017). Beta approximation of ratio distribution and its application to next generation sequencing read counts. *Journal of Applied Statistics*, **44**(1): 57 - 70. PMID: 29456282; PMCID: PMC5812702. (*Corresponding author)

16) H. Lin, D. Chen, ..., **Zhide Fang**, ..., J. Park (2017). SNP Interaction Pattern Identifier (SIPI): An Intensive Search for SNP-SNP Interaction Patterns. *Bioinformatics*, **33**(6): 822 - 833. PubMed PMID: 28039167; PubMed Central PMCID: PMC5860469.

17) S. Yang, D. Mercante, K. Zhang, **Zhide Fang*** (2016). An Integrated Approach for RNA-seq Data Normalization. *Cancer Informatics*, *15: 129 – 141*. PMID: 27385909; PMCID: PMC4924883. (*Corresponding author)

18) W. Zhang, A. Edwards, **Zhide Fang**, E. Flemington, K. Zhang (2016). Integrative Genomics and Transcriptomics Analysis Reveals Potential Mechanisms for Favorable Prognosis of Patients with HPV-Positive Head and Neck Carcinomas. *Scientific Reports*, 6: 24927.

19) R. Du, D. Mercante, L. An, **Zhide Fang*** (2014). A statistical approach to correcting cross-annotations in a metagenomic functional profile generated by short reads. *Journal of Biometrics & Biostatistics*, 5: 208. (*Corresponding author)

20) S. Yang, X. Cui, **Zhide Fang*** (2014). BCRgt: A Bayesian Cluster Regression based genotyping algorithm for samples with Copy Number Alterations. *BMC Bioinformatics,* 2014, 15: 74. (*Corresponding author)

21) R. Du, **Zhide Fang*** (2014). Analysis of metagenomic data. In: Statistical Analysis of Next Generation Sequencing Data, Daniel Nettleton and Somnath Datta (eds), Springer, 335-353. (*Corresponding author)

22) W. Zhang, A. Edwards, **Zhide Fang**, P. Deininger and K. Zhang (2013). Inferring the expression variability of human transposable element-derived exons by linear model analysis of deep RNA sequencing data. *BMC Genomics, 2013, 14: 584.*

23) R. Du, D. Mercante, **Zhide Fang*** (2013). An Artificial Functional Family Filter in Homolog Searching in Next-generation Sequencing Metagenomics. *PLoS ONE, 8(3): e58669.* (*Corresponding author)

24) **Zhide Fang**, R Du, A Edwards, E Flemington, K Zhang (2013). The sequence structures of human microRNA molecules and their implications. *PLoS ONE*, 8(1): e54215.

25) S Yang, S Pounds, K Zhang, **Zhide Fang*** (2013). PAIR: Paired Allelic log-Intensity-Ratio based normalization method for SNP-CGH arrays. *Bioinformatics*, 29(3): 299-307. (*Corresponding author)

26) S. Zhang, **Zhide Fang**, G. Liu (2013). Characterization of admissible linear estimators in multivariate linear model with respect to inequality constraints under matrix loss function. *Communication in Statistics - Theory and Methods,* 42(15): 2837 - 2850.

27) **Zhide Fang***, JA Martin, Z Wang (2012). Statistical methods for identifying differentially expressed genes in RNA-Seq experiments. *Cell & Bioscience*, 2012, 2:26. (*Corresponding author)

28) Q Yu, B Li, **Zhide Fang**, L Peng (2012). Model Guided Adaptive Design and Analysis in Computer Experiment. *Statistical Analysis and Data mining*, 5(5): 399 - 409.

29) **Zhide Fang**, R Du, X Cui (2012). Uniform Approximation Is More Appropriate for Wilcoxon Rank-Sum Test in Gene Set Analysis. *PLoS ONE, 7(2): e31505.*

30) **Zhide Fang**, X Cui (2011). Design and validation issues in next generation sequencing experiments. *Briefing in bioinformatics, 12(3): 280 – 287.*

31) L Gao*, **Zhide Fang***, K Zhang, D Zhi, X Cui (2011). Length Bias Correction for RNA-seq data in gene set analysis. *Bioinformatics, 27(5), 662 -- 669*. **(*Co-first author)**

32) J Martin, V Bruno, **Zhide Fang**, X Meng, M Blow, T Zhang, G Sherlock, M Snyder, Z Wang (2010). Rnnotator: an automated de novo transcriptome assembly pipeline from stranded RNA-Seq reads. *BMC Genomics 2010*, 11:663.

33) S Zhang, **Zhide Fang**, H Qin, L Han (2011). Characterization of admissible linear estimators in the growth curve model with respect to inequality constraints. *Journal of Korean Statistical Association, 40(2), 173 – 179.*

34) **Zhide Fang**, X. Li, L. Xu (2010). A Multivariate method for normalization in Affymetrix Oligonucleotide Microarray Experiments. *Journal of Data Science, Vol. 8, No. 4, 505 -- 519.*

35) Q. Yu, B. Li, **Zhide Fang**, L. Peng (2010). An Adaptive Sampling Scheme Guided by BART – With an Application to Predict Processor Performance. *Canadian Journal of Statistics, Vol. 38, No. 1, 136 -- 152.*

36) **Zhide Fang** (2006). Some Robust Designs for Polynomial Regression Models. *Canadian Journal of Statistics,* Vol. 34, No. 4, 623 -- 638.

37) **Zhide Fang**, DP Wiens, Z Wu (2006). Locally D-Optimal Designs for Multi-Stage Models and Heteroscedastic Polynomial Regression Models. *Journal of Statistical Planning and Inference*, *Vol. 136, No. 11, 4059 – 4070*

38) **Zhide Fang**, DP Wiens (2004). Bayesian minimally supported D-optimal designs for an exponential regression models. *Communications in Statistics - Theory and Methods,* Vol. 33, No. 5, 1187 -- 1204,

39) **Zhide Fang** (2003). Extrapolation Designs With Constraints. *Canadian Journal of Statistics,* Vol. 31, No. 4, 457 - 468.

40) **Zhide Fang**, DP Wiens (2003). Robust Regression Designs for Approximate Polynomial Model. *Journal of Statistical Planning and Inference,* Vol. 117, No. 4, 305 - 321.

41) M. J. Zuo, **Zhide Fang**, J. Huang, X. Xu (2003). Performance Evaluation of Decreasing Multi-State Consecutive k-out-of-n: G Systems, *International Journal of Reliability, Quality and Safety Engineering,* Vol. 10, No. 3, 345 -- 358.

42) **Zhide Fang** (2003). D-Optimal Designs for Weighted Polynomial Regression. *Statistics & Probability Letters*, Vol. 63, No. 2, 205 -- 213.

43) J Huang, MJ Zuo, **Zhide Fang** (2003). Multi - State Consecutive k - out - of -n Systems, *IIE Transactions on Quality and Reliability Engineering*, Vol. 35, 527 -- 534.

44) **Zhide Fang** (2002). D-Optimal Designs for Polynomial Regression Through Origin, *Statistics & Probability Letters, Vol 57, No. 4, 343 -- 351.*

45) **Zhide Fang**, DP.Wiens (2000). Integer-valued, minimax robust designs for estimation and extrapolation in heteroscedastic, approximately linear models, *Journal of American Statistical Association, Vol. 95, No. 451, 807 -- 818.*

46) **Zhide Fang** (2000). Robust extrapolation designs for biased polynomial models. *Journal of Statistical Planning and Inference, 87(1), 135 -- 147.*

47) **Zhide Fang**, DP Wiens (1999). Robust extrapolation designs and weights for biased regression models with heteroscedastic errors. *Canadian Journal of Statistics, Vol 27, No 4, 751 -- 770.*

- **Collaboration papers**

48) P. Joslyn, **Zhide Fang**, B. Barkemeyer (2024). The effect of gestational age on the initial neonatal platelet count. *HSOA Journal of Neonatology & Clinical Pediatrics*, 2024, 11: 126. DOI: 10.24966/NCP-878X/100126.

49) I.S. Mamidi, M.E. Dunham, L.K. Adkins, A.J. McWhorter, **Zhide Fang**, B.T. Banh (2024). Laryngeal Cancer Screening During Flexible Video Laryngoscopy Using Large Computer Vision Models. *Annals of Otology, Rhinology & Laryngology*, 05/2024. DOI: https://doi.org/10.1177/00034894241253

50) J.N. Poche, S.C. Hernandez, K.L. Melder, M.E. Dunham, D.W. Nuss, **Zhide Fang** (2024). Endoscopic Surgical Field Clarity Index: An Artificial Intelligence-based Measure of Transnasal Endoscopic Surgical Field Quality. *International Forum of Allergy & Rhinology*, 04/2024. PMID: 38648256. DOI: https://doi.org/10.1002/alr.23348

51) T.B. Ngo, W. Niu, **Zhide Fang**, L. Gold (2024). Dermatology residents' perspectives on virtual dermatopathology education. *Journal of Cutaneous Pathology*, 07/2024, Vol 51, Issue 7: 530 – 537. PMID: 38549184. DOI: https://doi.org/10.1111/cup.14618

52) H. Valdin, B. Gray, G. Cook, M. Creamer, **Zhide Fang**, Z. LeBlanc (2024). Primary Prevention of Clostridium Difficile Infection with Oral Vancomycin in Pediatric Hematopoietic Stem Cell Transplant Patients. *Transplantation and Cellular Therapy*, Elsevier, 02/2024, Vol 30, Issue 2, Supplement, pages: S148 – S149.

53) W.C. Gordon, M.I. Kautzmann, B. Jun, M.L. Cothern, **Zhide Fang**, N.G. Bazon (2023). Rod-specific downregulation of omega-3 very-long-chain polyunsaturated fatty acid pathway in age-related macular degeneration. Experimental Eye Research,

Elsevier, Vol. 235, 10/2023, 109639, PMID: 37659709. https://doi.org/10.1016/j.expr.2023.109639.

54) B. Moore, G. Sheets, J. Doss, A. Umrigar, M. Norman, **Zhide Fang**, P. Prasad, A. Musso, S. Clay, F. Tsien (2023). Is Methotrexate Ototoxic? Investigating the Ototoxic Late Effects of Pediatric Cancer Treatment. *American Journal of Audiology*, 9/2023, Vol 32, Issue 3, 657 - 664. PMID: 37532243, PMCID: PMC10558153. https://doi.org/10.1044/2023_AJA-22-00157.

55) G. Zhang, Z. Wang, J. Bavarva, K. Kuhns, J. Guo, E. Ledet, C. Qian, Y. Lin, **Zhide Fang**, J. Zabaleta, L.D. Valle, J. Hu, D. Mandal, W. Liu (2022). A recurrent ADPRHL1 germline mutation activates PARP1 and confers prostate cancer risk in African American families. *Molecular Cancer Research*, 12/02/2022, 20(12): 1776 – 1784. PMID: 35816343. https://doi.org/10.1158/1541-7786.MCR-21-0874.

56) A. Ponnath; M.J. Ryan; **Zhide Fang**; H. E. Farris (2022). Tuned in to communication sounds: neuronal sensitivity in the túngara frog midbrain to frequency modulated signals. PLoS ONE, 05/19/2022, 17(5): e0268383. PMID: 35587486, PMCID: PMC9119527. https://doi.org/10.1371/journal.pone.0268383.

57) H.Y. Lin, T.S. Tseng, X. Wang, **Zhide Fang**, etc. (2022). Intake Patterns of Specific Alcoholic Beverages by Prostate Cancer Status. *Cancers,* 04/14/2022, 14(8): 1981. PMID: 35454886, PMCID: PMC9024489.

58) J.R.E. Smaha, **Zhide Fang**, C. Pritchard, G.S. Ellis Jr. (2021). Accommodative esotropia greater at near fixation: can a patch test differentiate a novel subtype? *Journal of American Association for Pediatric Ophthalmology and Strabismus*, 08/2021, Vol. 25, Issue 4, E28.

59) H. Lin, X. Wang, TS. Tseng, YH. Kao, **Zhide Fang**… J.Y. Park, the Practical Consortium (2021). Alcohol intake and alcohol-SNP interactions associated with prostate cancer aggressiveness. *Journal of Clinical Medicine*, 02/02/2021,10 (3)*:* 553. PMID: 33540941, PMCID: PMC7867322. DOI: https://doi.org/10.3390/jcm10030553

60) J. A. David, J. A. Tran, C. Grenier, M. Morgan, **Zhide Fang**, L. J. Al-Dujaili (2021). Outcomes of Cataract Extraction with Kahook Dual Blade Goniotomy Versus iStent Trabecular Micro-Bypass Device With Minimum Two Year Follow-Up. *Investigative ophthalmology & visual science*, June 2021, Vol. 62, Issue 8, 3444.

61) M-A.I. Kautzmann, W.C. Gordon, B. Jun, K.V. Do, B.J. Matherne, **Zhide Fang**, N.G. Bazan (2020). Membrane-type frizzled-related protein regulates lipidome

and transcription for photoreceptor function. The FASEB Journal, 01/2020, **34(1)**: 912 – 929. PMID: 31914617, PMCID: PMC6956729. DOI: https://doi.org/10.1096/fj.201902359R.

62) C. M. Or, J. R. Gallagher, **Zhide Fang**, M. Reinoso (2020). The Use of Topical Steroids and NSAIDs in the treatment of Diabetic Macular Edema. *Investigative ophthalmology & visual science*, June 2020, Vol. 61, Issue 7, 4884.

63) R. Buckley, M. Heath, Z. Gerber, P. Davis, L. Linneman, Q. Gong, B. Barkemeyer, **Zhide Fang**, M. Good, D. Penn, S. Kim (2020). Intestinal alkaline phosphatase is a diagnostic biomarker for necrotizing enterocolitis in preterm infants. *FASEB Journal*, April 2020, Vol. 34, Issue S1. Biochemistry and Molecular Biology. DOI: https://doi.org/10.1096/fasebj.2020.34.s1.08937

64) J. A. David, C. Lieux, J. Grodsky, J. Nussdorf, A. Shi, M. Morgan, **Zhide Fang**, L.J. Al-Dujaili (2020). Multisurgeon, multisite retrospective study of the influence of multiple variables on outcomes with micropulse transscleral diode laser cyclophotocoagulation. *Investigative ophthalmology & visual science*, June 2020, Vol. 61, Issue 7, 5237.

65) M. Heath, R. Buckley, Z. Gerber, P. Davis, L. Linneman, Q. Gong, B. Barkemeyer, **Zhide Fang**, M. Good, D. Fenn, S. Kim (2019). Association of intestinal alkaline phosphatase with necrotizing enterocolitis among premature infants. *The Journal of American Medical Association (JAMA) Network Open*, 11/2019; 2(11): e1914996. PMID: 31702803, PMCID: PMC6902776. DOI:10.1001/jamanetworkopen.2019.14996.

66) S. Sinha, H. Brown, J. Tabak, **Zhide Fang**, M. Couetoux du Tertre, S. McNamara, K. Gambaro, G. Batist, JF. Buell (2019). Multiplexed real-time polymerase chain reaction cell-free DNA assay as a potential method to monitor stage IV colorectal cancer. Surgery, October 2019, **166 (4)**: 534 - 539. PMID 31378479. DOI: https://doi.org/10.1016/j.surg.2019.06.004

67) A.M. DiGiorgio, P.V. Mummaneni, J.L Fisher, A.G. Podet, C.L. Crutcher II, M.S. Virk, **Zhide Fang**, J.D. Wilson, G.C. Tender, F. Culicchia (2019). Change in policy allowing overlapping surgery decreases length of stay in an academic, safety- net hospital. *Operative Neurosurgery*, 2019 Mar 28; doi: 10.1093/ons/opz009. [Epub ahead of print] PubMed PMID: 30919890.

68) W.J. Lukiw, T.P.A. Kruck, M.E. Percy, A. I. Pogue, P, N. Alexandrov, W. J. Walsh, N. M. Sharfman, V. R. Jaber, Y. Zhao, W. Li, C. Bergeron, F. Culicchia, **Zhide Fang**, D. R.C. McLachla (2019). Aluminum in neurological disease – a 36 year

multicenter study. Journal of Alzheimers Disease & Parkinsonism. 2019, 8(6). doi: 10.4172/2161-0460.1000457. Epub 2018 Nov 29. PubMed PMID: 31179161; PubMed Central PMCID: PMC6550484.

69) TF Ferguson, X Wang, L Dyer, S Straif-Bourgeois, D Rojas, P Maloney, Zhide Fang, L Besch (2018). Increasing CVD and CVD risk among PLWHA in Louisiana 2002-2012. Circulation, 2018, 137(Suppl_1): AP187.

70) H. Bazan, Y. Lu, B. Jun, **Zhide Fang**, T.C. Woods, S. Hong (2017). Circulating inflammation-resolving lipid mediators mediators RvD1 and DHA are decreased in patients with acutely symptomatic carotid disease. *Prostaglandins, Leukotrienes and Essential Fatty Acids (PLEFA),* **125**: 43 – 47. PMID: 28987721; PMCID: PMC5909403

71) C.D. Kim, R.E. Reed, M.A. Juncker, **Zhide Fang**, S.D. Desai (2017). Evidence for the Deregulation of Protein Turnover Pathways in Atm-deficient Mouse Cerebellum: An Organotypic Study. *Journal of Neuropathology and Experimental Neurology*, **76**(7): 578 – 584. PMID: 28535250.

72) A. E. Musto, R. F. Rosencrans, C. P. Walker, S. Bhattacharjee, **Zhide Fang**, C. M. Raulji, W. C. Gordon, N. G. Bazan (2016). Corrigendum: Dysfunctional epileptic neuronal circuits and dysmorphic dendritic spines are mitigated by platelet-activating factor receptor antagonism. *Scientific Reports, 6:* 32253.

73) L. Peres, E. Trapido, A. Rung, D. Harrington, E. Oral, **Zhide Fang**, E. Fontham, E. Peters (2016). The Deepwater Horizon Oil Spill and Physical Health among Adult Women in Southern Louisiana: The Women and Their Children's Health (WaTCH) Study. *Environmental Health Perspectives*, 124(8): 1208 - 1213. PMID: 26794669; PMCID: PMC4977051.

74) A. E. Musto, R. F. Rosencrans, C. P. Walker, S. Bhattacharjee, **Zhide Fang**, C. M. Raulji, W. C. Gordon, N. G. Bazan (2016). Dysfunctional epileptic neuronal circuits and dysmorphic dendritic spines are mitigated by platelet-activating factor receptor antagonism. *Scientific Reports, 6: 30289*. PMID: 27444269; PMCID: PMC4957208

75) T. Henagan, B. Stefansksa, **Zhide Fang**, A. Nevard, J. Ye, N. Lenard, P. Devarshi (2015). Sodium butyrate epigenetically modulates high fat diet-induced skeletal muscle mitochondrial adaptation, obesity and insulin resistance through nucleosome positioning. *British Journal of Pharmacology*, 172(11): 2782-2798.

76) L. Fu, Z. Shi, G. Luo, W.Tu, X. Wang, **Zhide Fang**, X. Li (2014). Multiple microRNAs regulate human FOXP2 gene expression by targeting sequences in its 3′ untranslated region. *Molecular Brain*, 2014, 7: 71.

77) Z. Elmageed, Y. Yang, R. Thomas, K. Moparty, M. Ranjan, D. Mondal, K. Moroz, **Zhide Fang**, B. Rezk, S. Sikka1, O. Sartor, A. Abdel-Mageed (2014). Neoplastic Reprogramming of Patient-Derived Adipose Stem Cells by Prostate Cancer Cell-Associated Exosomes. *Stem Cells, 32(4): 983-997.*

78) Z. Shi, G. Luo, L. Fu, **Zhide Fang**, X. Wang, X. Li (2013). miR-9 and miR-140-5p Target FoxP2 and Are Regulated by the Social Context of Song Behavior in Zebra Finches. *Journal of Neuroscience, 33(42): 16510-16521.*

79) Z. Elmageed, K. Moroz, S. K. Srivastav, **Zhide Fang**, B. Crawford, K. Moparty, R. Thomas and A. B. Abdel-Mageed (2013). High Circulating Estrogens and Selective Expression of ERβ in Prostate Tumors of African Americans: Implications for Racial Disparity of Prostate Cancer. *Carcinogenesis, 34(9): 2017-2023.*

80) C Conrad, J Zhu, C Conrad, D Schoenfeld, **Zhide Fang**, M Ingelsson S Stamm, G Church, B Hyman (2007). Single Molecule Exon Profiling of Tau Gene Expression in Alzheimer's Disease. *Journal of Neurochemistry*, *Vol. 103, Issue 3, 1228 -- 1236*.

## C. Other Publications

### [1] Recent Posters

1) TD. Hunter, S. Clay, G. Sheets, C. Nieves-Rivera, J. Doss, M. Norman, JW. Kinchen, **Zhide Fang**, P. Prasad, F. Tsien (2024). Neighborhood Deprivation Negatively Affects Survival Rate in Pediatric Oncology Patients. The Cancer Advocacy Group of Louisiana (CAGLA) conference, 2/29 – 3/2/2024, New Orleans LA.

2) Sloane Clay, Logan Sobiesk, **Zhide Fang**, Lacey Adkins (2023). Laryngeal injury in Hi-Lo Evac® Endotracheal Tubes versus Standard Endotracheal Tubes. Fall Voice Conference, Oct. 21 – 23, 2023, Washington, DC, USA.

3) TD. Hunter, S. Clay, G. Sheets, C. Nieves-Rivera, J. Doss, M. Norman, JW. Kinchen, **Zhide Fang**, F. Tsien (2023). Neighborhood Deprivation Negatively Affects Survival Rate in Pediatric Oncology Patients. LSUHSC 2023 Summer Internship Poster Session, July 28, 2023.

4) Lauren Cooper, Elyse Cleveland, **Zhide Fang**, Robert Owens (2023). Rehabilitation Emergencies: A Simulation Lab for PM&R Residents. LSU Annual Quality Improvement Forum, June 8, 2023.

5) Kaushik Annam, **Zhide Fang**, Jayne S. Weiss (2023). Assessing the role of subspecialty exposure in Ophthalmology residency on the decision to pursue fellowship. LSU Ophthalmology Resident Research Day and the Henry J. L. Van Dyk Memorial Lecture. New Orleans, June 3, 2023.

6) Banks Rieveschi, **Zhide Fang**, Jayne S. Weiss (2023). Assessment of surgical skills training using bioniko ophthalmic surgery models. LSU Ophthalmology Resident Research Day and the Henry J. L. Van Dyk Memorial Lecture. New Orleans, June 3, 2023.

7) Wei Niu MD, Tram Ngo MS, **Zhide Fang** PhD (2022). Dermatology residents' perspecives on virtual dermatopathology education. A "Peterkin Project" presented to Louisianan Dermatological Society, 06/16/2022, LSU Department of Dermatology

8) Kush Patel, MD, **Zhide Fang**, PhD, Jayne S. Weiss, MD (2022). Cracking the Ophthalmology code. LSU Ophthalmology Resident Research Day and the Henry J. L. Van Dyk Memorial Lecture. New Orleans, June 4, 2022.

9) Chris Lasecki, MD, **Zhide Fang** PhD, Claire Holmes*, Michael Morgan, MD (2022). Comparison of Outcomes After Ab Externo Placement of Xen Gel Stent With and Without Scleral Flap. LSU Ophthalmology Resident Research Day and the Henry J. L. Van Dyk Memorial Lecture. New Orleans, June 4, 2022.

10) Jack Morgan, MD, David Le*, MD, Zhide Fang, PhD, Kevin Kirchner, MD (2022). Papilledema Severity and Visual Field Defect Patterns in Idiopathic Intracranial Hypertension. LSU Ophthalmology Resident Research Day and the Henry J. L. Van Dyk Memorial Lecture. New Orleans, June 4, 2022.

11) Banks Rieveschl, MD, Zhide Fang, PhD, Jayne Weiss, MD (2022). Assessment of Surgical Skills Training Using Bioniko Ophthalmic Surgery Models. LSU Ophthalmology Resident Research Day and the Henry J. L. Van Dyk Memorial Lecture. New Orleans, June 4, 2022.

12) Jonathan S. Williams, MD, Zhide Fang, PhD, Austin M. Pharo, MD (2022). Does Administration of Proparacaine Hydrochloride 0.5% Ophthalmic Solution Prior to Canalicular Probing and Irrigation Decrease Patient Discomfort? LSU Ophthalmology Resident Research Day and the Henry J. L. Van Dyk Memorial Lecture. New Orleans, June 4, 2022.

13) Luke Zhu, MD, Olivia Purcell*, Zhide Fang, PhD, Kevin Kirchner, MD (2022). Neuroimaging and Pseudotumor Cerebri: Utility of Characterizing the Optic Nerve through Magnetic Resonance Imaging in Predicting Visual Outcome. LSU

Ophthalmology Resident Research Day and the Henry J. L. Van Dyk Memorial Lecture. New Orleans, June 4, 2022.

14) Lana Thaljeh MS, Rebecca Buckley PhD, Anne Tufton MD, Maya Heath MD, Brian Barkemeyer MD, **Zhide Fang** PhD, Lee McDaniel PhD, Andrew Chapple PhD, Kelly LaBorde RN, Beverly Ogden MD, Misty Good MD, Duna Penn MD, Steven Spedale MD, and Sunyoung Kim PhD (2021). Novel biomarkers for early and accurate detection of a fatal gut inflammatory disease in preemie babies. 2cd place winner in LSUHSC medical student symposium, Fall/2021.

15) Marlene Azar MD, Blane Edwards MS, **Zhide Fang** PhD, Kevin Kirchner MD (2021). *Identifying Factors Associated with a Positive Temporal Artery Biopsy in Giant Cell Arteritis.* LSU Department of Ophthalmology Resident Research Day, 6/12/2021.

16) Zachary Davis MD MS, Nicholas Reyes MS, Kelly Michanczyk MS, Josh Kirkorsky, **Zhide Fang** PhD, Dana Perez MD MS, and Jayne Weiss MD (2021). *Mask-Associated Dry Eye: A Survey Study of Ocular Surface Symptoms.* LSU Department of Ophthalmology Resident Research Day, 6/12/2021.

17) Ansuya Deosaran MD, Joshua King BS, Jayne Weiss MD, **Zhide Fang** PhD, Ginny Kullman MD (2021). *Prevalence of Obesity and Obstructive Sleep Apnea in Pediatric Keratoconus Patients.* LSU Department of Ophthalmology Resident Research Day, 6/12/2021.

18) Benjamin Lee MD, Maria A. Reinoso MD, **Zhide Fang** PhD, Jayne S. Weiss MD (2021)**.** *The COVID-19 Pandemic, Telemedicine, and Academic Ophthalmology*. LSU Department of Ophthalmology Resident Research Day, 6/12/2021.

19) Nicole Legare MD, **Zhide Fang** PhD, and Jayne Weiss MD (2021). *Musculoskeletal Pain Among Resident and Practicing Ophthalmologists.* LSU Department of Ophthalmology Resident Research Day, 6/12/2021.

20) Chris Or MD, **Zhide Fang** PhD, Joseph Benevento MD (2021). *Inter-Observer Reliability in Diabetic Retinopathy Grading Using 7 Standard Fundus Photo Fields.* LSU Department of Ophthalmology Resident Research Day, 6/12/2021.

21) Kush Patel MD, **Zhide Fang** PhD, Jayne Weiss MD, Maria Reinoso MD (2021). *Optimizing Didactic Sessions to Maximize Resident OKAP Performance.* LSU Department of Ophthalmology Resident Research Day, 6/12/2021.

22) Taylor Phelps MD, Blaine Edwards (M3), **Zhide Fang** PhD, and Lena Al-Dujaili MD (2021). *Drive Through Eye Pressure Checks: A Novel Idea in Time of a Global Pandemic.* LSU Department of Ophthalmology Resident Research Day, 6/12/2021.

23) RT Davis, **Zhide Fang**, M Bernal (2020). Examination of eyelid culture differences between patients with keratoconus and controls with signs and symptoms of

blephalitis. LSUHSC Ophthalmology Resident Research Day and the Henry J. L. Van Dyk memorial lecture, 5/30/2020.

24) B Lee, E Washington, **Zhide Fang**, C Leuba, J Nussdorf (2020). Baerbeldt 250 mm2 Glaucoma shunt outcomes in southeast Louisiana. LSUHSC Ophthalmology Resident Research Day and the Henry J. L. Van Dyk memorial lecture, 5/30/2020.

25) JRE Samaha, **Zhide Fang**, C Pritchard, G Ellis (2020). Accommodative Esotropia greater at near fixation: can a patch test differentiate a subtype of those with deviation greater and near? LSUHSC Ophthalmology Resident Research Day and the Henry J. L. Van Dyk memorial lecture, 5/30/2020.

26) MP Fernandez, **Zhide Fang**, JS Weiss (2020). Evaluation of the significance of version impairment as a factor for falls in elderly patients presenting to the emergence department. LSUHSC Ophthalmology Resident Research Day and the Henry J. L. Van Dyk memorial lecture, 5/30/2020.

27) C Or, **Zhide Fang**, J Benevento (2020). Comparison between automatic and manual segmentation of healthy retinas using optical coherence tomography. LSUHSC Ophthalmology Resident Research Day and the Henry J. L. Van Dyk memorial lecture, 5/30/2020.

28) W Tucker, M Evans, **Zhide Fang**, J Weiss (2020). Utility of ophthalmic screening in fungemia patients. LSUHSC Ophthalmology Resident Research Day and the Henry J. L. Van Dyk memorial lecture, 5/30/2020.

29) L A T Cobian, Zhide Fang, GD Fivgas (2020). Association between retina defects and epiretinal membrane development. LSUHSC Ophthalmology Resident Research Day and the Henry J. L. Van Dyk memorial lecture, 5/30/2020.

30) J David, J Grodsky, C Lieux, J Nussdorf, Shi, M Morgan, **Zhide Fang**, L Al-Dujaili (2019). Evaluating the Influence of Multiple Variables on Outcomes with Micropulse Transscleral Diode Laser Cyclophotocoagulation. LSUHSC Ophthalmology Resident Research Day, 5/15/2019.

31) J. Reeves Ellis Samaha, C Pritchard, **Zhide Fang**, G Ellis (2019). Accommodative Esotropia greater at near fixation: Can a patch test differentiate a subtype of those with deviation greater at near? LSUHSC Ophthalmology Resident Research Day, 5/15/2019.

32) M Hartma, **Zhide Fang**, M Doss, M Reinoso (2019). A prospective study of perceived indirect light intensity between fellow eyes during dilated fundoscopy. LSUHSC Ophthalmology Resident Research Day, 5/15/2019.

33) R Buckley, M Health, Z Gerber, P Davis, L Linneman, M Good, **Zhide Fang**, B Barkemeyer, D Penn, S Kim (2018). Intestinal Alkaline Phosphatase as a

diagnostic biomarker for necrotizing enterocolitis**.** LSUHSC Graduate Research Day, 11/2/2018.

**[2] Proceeding**

1) SK Sinha, H Brown, Zhide Fang, M Couetoux, K Gambaro, G Batist (2018). A multiplexed RE-qPCR cell-free DNA assay to assess response and resistance to cancer therapy [abstract]. In: Proceedings of the American Association for Cancer Research Annual Meeting 2018; 2018 Apr 14-18; Chicago, IL. Philadelphia (PA): AACR; Cancer Res 2018; 78(13 Suppl): Abstract nr 5575.

2) K Robert, **Zhide Fang**, T Solanky (2007). Textile Fiber-length Properties of Seed Cotton – Part 1: Textile Mathematical Properties of the Normal Length Distribution. Proceeding of 2007 Beltwide Cotton Conference (New Orleans), 2140 - 2145.

3) L Xu, **Zhide Fang**, G Maresh, S Pincus (2005). Multiple test correction in statistical filter: A pitfall in microarray data analysis. *Selected abstract and Poster in Affymetrix Annual Meeting, Boston, USA, May 24 - 25, 2005*.

## 2. Recent Presentations

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1) Neighborhood Deprivation Negatively Affects Survival Rate in Pediatric Oncology Patients. Southern Regional Meeting of Southern Society for Clinical Investigation, New Orleans, LA, February 22-24, 2024. (Authors: T Hunter, C Nieves (presenter), SM Clay, G Sheets, J Doss, M Norman, J Kinchen, Z Fang, P Prasad and F Tsien)
2) *Defining the preclinical window of necrotizing enterocolitis using host proteins found in stool*. Pediatric Academic Societies, Washington, DC; April 27 – May 1, 2023. (Authors: R. Buckley (presenter), A. Tufton, V. Ronchi, M. Heath, K. LaBorde, D. Wiltz, L. Thaljeh, M. Good, B. Barkemeyer, S. Spedale, L. McDaniel, Z. Fang, and S. Kim)
3) *Noninvasive monitoring biomarker for neonatal necrotizing enterocolitis*. Presented in Southern Regional Meeting of Southern Society for Clinical Investigation, Feb 2-4, 2023, New Orleans, LA. (Authors: Anne Tufton MD (presenter), Virginia Ronchi PhD, Rebecca Buckley PhD, Maya Heath, Kelly LaBorde, Derek Wiltz, Lana Thaljeh, Beverly Ogden, Andrew Chapple, Misty Good, Brian Barkemeyer, Steven Spedale, Lee McDaniel, Zhide Fang, Sunyoung Kim PhD)
4) *Natural history of biomarker changes associated with gut inflammatory disease in postnatal human development*. Accepted for presentation in DiscoverBMB 2023 of American Society for Biochemistry and Molecular Biology, March 23 – 28, Seattle, WA. (Authors: Virginia Ronchi PhD (presenter), Anne Tufton MD, Rebecca Buckley PhD, Kelly LaBorde, Misty Good Steven Spedale, Zhide Fang, Sunyoung Kim PhD).
5) *An Analysis of Age at Cleft Surgery Based on Gender, Race, Distance from Treatment Center, and Payor Status*. Poster accepted for presentation in ACPA's 80th Annual Meeting of American Cleft Palate-Craniofacial Association, May 2 – 6, 2023, Raleigh, NC. (Authors: Jonathan Richard MD, Sarah Rimmer MD, Zhide Fang PhD, Mohamad Masoumy MD, Delora Mount MD, Gregory Fulton MD (presenter)).

6) *PEDF and DHA improve Deficits after Experimental Spinal Cord Injury*. International conference on Bioactive Lipids in Cancer, Inflammation and Related Diseases, New Orleans, USA, 10/30 – 11/02/2022. Authors: Eric J. Knott (presenter), Cornelius E. Regan, Zhide Fang, Nicholas G. Bazan.
7) *Normalization in Metagenomics*. 2019 Lloyd Roeling Mathematics Conference: Statistics, University of Louisiana at Lafayette, LA, 10/25-26/2019.
8) *Multiplexed Re-qPCR Cell-Free DNA Assay to Assess Metastatic Colorectal Cancer to Therapy.* The Central Surgical Association 76th Annual Meeting, March 3 – 7, 2019, Palm Harbor, Florida (Authors: JF Buell (presenter), S Sinha, H Brown, J. Tabak, Zhide Fang, G Batist, M Couetoux du Tertre, K Kambaro).
9) *Sterility of Expired Intraocular Lenses.* LSUHSC Ophthalmology Resident Research Day, 5/15/2019. (Authors: J Vinet (presenter), Zhide Fang, J. Sturtevant).
10) *The Use of Topical Steroids and NSAIDs in the treatment of Diabetic Macular Edema.* LSUHSC Ophthalmology Resident Research Day, 5/15/2019. (Authors: J. Gallagher (presenter), A. Pham, Zhide Fang, M. Reinoso).
11) *Early and Late Adulthood Risk Factors in the Development of Carotid Plaque: The Bogalusa Heart Study*. The Southern Society for Clinical Investigation Meeting, February 21 – 23, 2019, New Orleans, USA. (Authors: R. Trivedi (presenter), X. Wang, J. Xu, Zhide Fang, F. Smart, G. Berenson)

## 3. Other Scholarly Activities

### A. Journal Editorships

2008 -- Associate Editor, European Journal of Pure and Applied Mathematics.
2014 – Review Editor**,** Frontiers in Genetics, Epigenomics and Epigenetics.
2021 – Statistical Reviewer, JAMA Network Open, the American Medical Association.

### B. Contributions to Refereed Publications – Ad-Hoc referee for (multiple times for some journals)

1) Statistical Papers
2) Statistics in Medicine
3) Acta Mathematica Scientia
4) Statistica Neerlandica
5) Comunications in Statistics – Simulation and Computation
6) Annals of Epidemiology
7) Scientific Reports
8) Statistics Papers
9) Frontiers in Genetics – Statistical Genetics and Methodology
10) Computational Statistics
11) Bioinformatics
12) BMC Bioinformatics
13) Experimental Biology and Medicine
14) METRON -International Journal of Statistics
15) 2011 International Conference on Intelligent Computing.

16) American Journal of Hypertension
17) BMC Cancer
18) Journal of Combinatorics, Information & System Sciences
19) Test
20) Canadian Journal of Statistics
21) Journal of Multivariate Analysis.
22) Statistics.
23) Statistica Sinica
24) Statistics & Probability Letters.
25) Journal of Statistical Planning and Inference
26) The Computational Statistics and Data Analysis.
27) International Journal of Applied Mathematics and Statistics.
28) ACM Transactions on Knowledge Discovery from Data.
29) Journal of Statistics computation and simulation.
30) Metron - International Journal of Statistics
31) Communications in Statistics – Theory and Method
32) Linear Algebria and its applications

## C. University and Community Service

1) LSUHSC Student Discipline (SDC) Committee (10/2023 - ), member.
2) University Faculty Senator (01/2012 - 06/2012), LSUHSC-New Orleans.

3) Grievance Committee (09/2022 – ), member, School of Public Health, LSUHSC-New Orleans
4) LSUHSC Scool of Public Health Administractive Council and Faculty Affairs (10/2013 – 09/2022).
5) LSUHSC Scool of Public Health Research Committee (10/2013 – 09/2022).
6) LSUHSC Scool of Public Health Bachelor of Public Health ad hoc curriculum committee (10/2018 – 2/2019).
7) Liaison to Bioinformatics/Biocomputing Expertise, Biomedical Informatics Core, Louisiana Clinical & Translational Science Center (09/2011 – 06/2017).
8) APT Committee (09/2009 – 06/2013), member. School of Public Health, LSUHSC – New Orleans
9) Grievance Committee (08/2013 – 10/2013), member, School of Public Health, LSUHSC-New Orleans
10) Recuitment Open House Committee (01/2012 – 09/2022), member, School of Public Health, LSUHSC – New orleans
11) Graduate Coordinator (11/2008 ~ 07/2015), Biostatistics, School of Public Health, LSUHSC – New Orleans
12) Ph.D qualifying Examination Committee (07/2017 – now), chair, Biostatistics, School of Public Health, LSUHSC – New Orleans
13) Ph.D qualifying Examination Committee (04/2009 – 06/2017), member, Biostatistics, School of Public Health, LSUHSC – New Orleans

14) Providing Biostatistics Problems and Solutions to PhD Ph.D qualifying Examination in Epidemeology Program, School of Public Health, LSUHSC, and grading the exam, 06/2016.

15) Providing Biostatistics Problems and Solutions to PhD Ph.D qualifying Examination in Epidemeology Program, School of Public Health, LSUHSC, and grading the exam, 06/2015
16) Providing Biostatistics Problems and Solutions to PhD Ph.D qualifying Examination in Epidemeology Program, SoPh, LSUHSC, Grading the exam, 06/2014

17) Colloquium Committee (08/2007 ~ 08/2008), Chair. Department of Mathematics, University of New Orleans
18) Cources and Curricula Committee (08/2001 ~ 08/2008), member. Department of Mathematics, University of New Orleans
19) Course Coordinating Committee – Elementary Statistics (08/2006 ~ 08/2008), Chair. Department of Mathematics, Univerity of New Orleans
20) Serving in a University Grievance Committee at University of New Orleans, 02/2006 – 05/2006

## D. Professional Service and Public Outreach

**[1] External reviewer for promotions**

1) Reviewer for Dr. Angela Chiu's promotion to Associate Professor - Research in Health Policies & Systems Management Program, LSU School of Public Health. 10/2021

2) Reviewer for Dr. Santu Ghosh's promotion to Associate Professor with tenure in Department of Population Sciences, Medical College of Georgia at Augusta University, 6/2021

3) Reviewer for Dr. Jeannette Simino's promotion to Associate Professor with tenure in Department of Data Science, John D. Bower School of Population Health, University of Mississippi Medical Center, 1/2021

4) Reviewer for Dr. Yanqing Yi's promotion to Full Professor in Faculty of Medicine at Memorial University of Newfoundland, 11/2020

5) Reviewer for Dr. Yuefeng Wu's promotion to Associate Professor with tenure in Department of Mathematics and Computer Science, University of Missouri at St. Louis, 7/2019

6) Reviewer for Dr. Beibei Guo's promotion to Associate Professor with tenure in Department of Experimental Statistics, LSU – Baton Rouge, 2/2019

7) Reviewer for Dr. Peggy Honore's promotion to Full Professor in Health Policies & Systems Management Program, LSU School of Public Health. 9/2017

8) Reviewer for Dr. Qi Zheng's promotion to Full Professor in Department of Epidemiology and Biostatistics, Texas A&M University, 08/2017

9) Reviewer for Dr. Yan Daniel Zhao's tenure promotion in Department of Biostatistics and Epidemiology, University of Oklahoma Health Sciences Center. 08/2016

10) Reviewer for Dr. Ryan Gill's promotion to Full Professor in Department of Mathematics, University of Louisville. 05/2016.

11) Reviewer for Dr. Yanqing Yi's promotion to Associate Professor with tenure in Faculty of Medicine at Memorial University of Newfoundland. 06/2014

**[2] Grant reviewer**

1) Grant reviewer for LSUHSC Wide Intramural Research Grants. 11/2023.

2) Grant reviewer for the Natural Sciences and Engineering Research Council of Canada. 01/2021.

3) Grant reviewer for the Natural Sciences and Engineering Research Council of Canada. 01/2020

4) Grant reviewer for the Natural Sciences and Engineering Research Council of Canada. 12/2018

5) Grant reviewer for LSUSHC School of Public Health Pilot grant program, total 6 grant applications, 02/2016.

6) Grant reviewer for the Natural Sciences and Engineering Research Council of Canada. 01/2015

7) Grant reviewer for Louisiana Clinical & Translational Center pilot grant program, total 12 grant applications, 10/2013.

8) Grant reviewer for Louisiana Clinical & Translational Center pilot grant program, total 3 grant applications, 07/2013.

**[3] Statistical Consulting to**

- Residents and Fellows, School of Medicine, LSUHSC at New Orleans.
- InnoGenomics Technologies, LLC, New Orleans
- Dr. Hamilton Farris (Neuroscience), Dr. Michelle Loch (Hematology and Oncology), Drs. Kyle Happel, Sarah Jolley, Mathew Lammi, David Welsh (Pulmonary/Critical Care and Allergy/Immunology). Drs. Sunyoung Kim, Shyamal Desai, Suresh k. Alahari (Biochemistry), Drs. Patricia Malina, Ping Zhang (Physiology), Dr. Xiao Ching Li (Cell Biology and Anatomy, Neurosciences), Dr. Doan Nguyen (Microarray and Genome Bioinformatics Ceneter), etc. in School of Medicine, LSUHSC-New Orlean,
- Dr. Lorrie Powel in School of Nursing, LSUHSC-New Orleans

- Dr. Stuard Chalew, Dr. Seth Pincus, Dr. Lizhe Xu in New Orleans Children's Hospital,
- Dr. Ifeanyi Iwuchukwu in Ochsner Hospital.
- Dr. Kun Zhang in Xavier University of New Orleans,
- Dr. Kearny Q. Robert in Southern Research Center, New Orleans, USDA
- Drs. Asim Abdel-Mageed, Zack A. Elmageed in School of Medicine,Tulane University.
- Dr. Tara M. Henagan in Pennington Biomedical Research Center, LSU

## 4. Grants and Contracts

### A. Funded

1) Statistical support for Department of Pediatrics, LSUHSC, and New Orleans Children Hospital. 08/2023 –
Role: Statistician.

2) Statistical support for Department of Otolaryngology, LSUHSC, and Our Lady of the Lake Regional Medical Center. 09/2023 –
Role: Statistician.

3) 1R01DC020243-01A1, NIH
Vestibular dysfunction and the development of therapies for Usher syndrome
PI: J. Lentz, PhD, 01/01/2023 – 12/31/2027
Role: Co-Investigator

4) U54 GM104940, NIH/NIGMS
Louisiana Clinical and Translational Science Center
PI: John Kirwan, PhD (Pennington Biomedical Research Center),
7/1/2022 – 6/30/2027
Role: Biostatistician

5) 1UG1HD107696-01, NIH
LA-Nutrition Precision Health Clinical Center
PIs: E. Ravussin; PhD; C. Bogardus, PhD; LM. Redman, PhD
12/01/2021 - 11/30/2026
Role: AI team lead and Biostatistician

6) 2 R44HD095779-02, NIH
Noninvasive biomarkers for gastrointestinal disease in preterm infants
PIs: R. Buckley, PhD, and S. Kim, PhD
09/22/2021 – 08/31/2023
Roles: Senior/Key Personnel - Biostatistician

7) 5R01CA224381-03, NIH
Mechanistic investigation of malignant rhabdoid childhood tumor using the Drosophila model
PI: W. Deng, PhD, 08/01/2018 – 07/31/2023
Role: Sub-award PI. 05/1/2021 – 07/31/2021

8) 1R41HD095779, NIH
Noninvasive biomarkers for gastrointestinal disease in preterm infants
PI: R. Buckley, PhD, and S. Kim, PhD, 09/24/2019 – 8/31/2021
Role: Senior/Key Personnel - Biostatistician

9) 1R01EY030499-01, NIH
Antisense therapy for the treatment of visual loss in Usher syndrome
PI: J. Lentz, PhD, 09/01/2019 – 06/30/2024
Role: Co-Investigator

10) 1R21CA223119-01A1, NIH/NCI
AR-V7 acetylation in castration resistant prostate cancer
PI: W. Liu, PhD, 08/01/2018 – 05/31/2020
Role: Co-Investigator

11) 1R01NS104117-01A1, NIH/NINDS
Novel combinatory therapy for experimental ischemic stroke
PI: N. Bazan, MD, PhD, 5/1/2018 – 4/30/2023
Role: Co-Investigator

12) 2 U54 GM104940-02, NIH/NIGMS
Louisiana Clinical and Translational Science Center
PI: John Kirwan, PhD (Pennington Biomedical Research Center),
7/1/2017 – 6/30/2022

13) LSUHSC School of Medicine Dean's office
Residents training project, 07/2017 – present
Role: Biostatistician

14) 6 NU58DP006332-02-00, CDC
Cancer Prevention and Control Programs for State, Territorial and Tribal Organizations
PI: Donna William, ScD. 1/1/2019 – 6/29/2019
Role: Biostatistician

15) LSUHSC School of Medicine
Health aging project
PI: Gerald Berenson, MD, 1/1/2018 – 6/30/2019
Role: Biostatistician

16) CDC 1 NU58DP006111-01-00
Using Survivorship Care Planning to Improve Low-Income, Cancer Patient Health Outcomes
PI: Donna Williams, ScD, 09/30/2015 – 09/30/2018
Role: Biostatistician.

17) LSU Health – New Orleans Health Care Services Division Healthcare Effectiveness
Project: Aging and chronic illnesses among people living with HIV/AIDS,
PI: John Couk, MD, 06/01/2015 – 3/30/2018
Role: Co-Investigator.

18) LSU Health – New Orleans Health Care Services Division Healthcare Effectiveness
Project: Diabetes research
PI: John Couk, MD, 06/01/2015 – 3/30/2018
Role: Co-Investigator.

19) NIH NCI (R21CA185213-01)
Germline Mutations in African American Families with Aggressive Prostate Cancer
PI: Wanguo Liu, PhD, 04/01/2015 – 03/31/2017
Role: Co-Investigator

20) NIH NIGMS (5P30GM103340-03)
Mentoring Neuroscience in Louisiana: A Biomedical Program to Enhance Neuroscience
PI: Nicolas Bazan, MD, PhD, 02/2015 – 05/2017
Role: Biostatistician

21) NIH NIGMS (1 U54GM104940-01)
Louisiana Clinical and Translational Science Center
PI: William T. Cefalu, MD (Pennington Biomedical Research Center), 08/15/2012 – 06/30/2017
Role: Biostatistician

22) NIH NCI (5R21CA157263-02)
Feasibility of Community Based Tampon Self-Sampling to Prevent Cervical Cancer.
PI: Donna Williams, ScD, 09/2014 – 6/30/2015
Role: Biostatistician

23) NIH INBRE LBRN (NIH NCRR P20RR016456)
PI: Thomas Klei (LSU)
Pilot project PI: Kun Zhang (Xavier University of Louisiana), 05/01/2011 – 04/30/2012
Title: Enhanced microRNAs Research Through Bioinformatics Tool Development.
Role: Site PI

24) La BoR (LEQSF(2002-04)-ENH-TR-92)
Enhancement of Industry Oriented Statistical Education at UNO.
PI: T. Solanky, PhD, University of New Orleans, 06/01/2002 – 06/30/2004.
Role: Co-PI.

# 5. Thesis / Dissertation committee service

## A. Ph.D Students supervised.

1) Yaqi Zou (02/2024 – , Biostatistics, School of Public Health, LSUHSC)
2) Harum Mazumder (08/2019 – 05/2024, Biostatistics, School of Public Health, LSUHSC).
Current position: Senior Biostatistician, HCA Healthcare, Nashville, TN.
3) Xiaodan Zhu (08/2019 – 05/2024, Biostatistics, School of Public Health, LSUHSC)
4) Qiufan Fu (08/2018 – 12/2023, Biostatistics, School of Public Health, LSUHSC).
Dessertation: Differentially Methylated Region Analysis and Application on Integrative Analysis of Multi-omics Data.
5) Xinnan Wang (08/2015 – 12/2019), Biostatistics, School of Public Health, LSUHSC).
Current position: Associate Director of Statistics at Teva Pharmaceutical Industries Ltd. USA.
First position: Biostatistician in Medpace, Inc.
Dissertation: Overlapping group Lasso screening tests and applications in genomic data analysis.
6) Yi Zhai (08/2014 – 05/2017, Biostatistics, School of Public Health, LSUHSC).
Current Position: Assistant Professor, Qilu University of Technology, China.
Dissertation: Optimal Designs for Some Dose-Response Models
7) Ruofei Du (08/2009 – 12/2013, Biostatistics, School of Public Health, LSUHSC)
Current Position: Assistant Professor in Department of Biostatistics, University of Arkansas, Little Rock, AR.
First Position: Assistant Professor at University of New Mexico Cancer Center Biostatistics Shared Resource, Albuquerque, NM.
Dissertation: Functional profiling of next-generation sequencing metagenomes by statistical methods
8) Shengping Yang (08/2010 – 05/2013, Biostatistics, School of Public Health, LSUHSC).
Current Position: Assistant Professor at Pennington Biomedical Research Center, Baton Rouge, LA.
First Position: Assistant Professor at Texas Tech University, Lubbock, TX.
Dissertation: Normalization and genotyping methodologies for single nucleotide polymorphism array and next-generation sequencing data.
9) Xiaohu Li (08/2007 – 08/2008), Department of Mathematics, University of New Orleans. Advising stopped after I moved to LSUHSC
Current position: Teaching Associate Professor, Stevens Institute of Technology, Hoboken, NJ.

## B. MS Students Supervised

1) Jacob Maronge (08/2014 – 05/2016, Biostatistics, School of Public Health, LSUHSC)
   Current position: Post-doctoral fellow at MD Anderson Cancer Center, University of Texas.
   First position: Admitted to PhD program in Biostatistics, University of Wisconsin – Madison.
2) S. Cao (08/2014 – 05/2016, Biostatistics, School of Public Health, LSUHSC)
   SAS Programmer.
3) Yuan Zhou (08/2007 – 05/2010, Biostatistics, School of Public Health, LSUHSC)
   First position: Biostatistician, Covance.

## C. Ph.D Dissertation Committee member

1) Indrani Sarkar (08/2018 – 05/2024), Biostatistics, School of Public Health, LSUHSC-NO.
2) Heng-Yuan (Henry) Tung (08/2015 – 12/2020), Biostatistics, School of Public Health, LSUHSC-NO.
3) Yue Yi (Defense: 06/20/2017), Mathematics and Statistics, University of Victoria, Canada. Served as External Examiner.
4) Weiwei Ouyang (defended: 04/03/2017), Department of Global Biostatistics and Data Science, Tulane University School of Public Health.
5) Tat Yau (08/2013 – 05/2019), Biostatistics, School of Public Health, LSUHSC-NO.
6) Omar Aldibasi (08/2013 – 12/2018), Biostatistics, School of Public Health, LSUHSC-NO.
7) Jonathon Joseph (08/2012 – 08/2018, not defended), Biostatistics, School of Public Health, LSUHSC-NO.
8) Han Zhu (08/2011 – 05/2016). Biostatistics, School of Public Health, LSUHSC-NO.
9) Denis Danos (08/2010 – 05/2016). Biostatistics Program, School of Public Health, LSUHSC-New Orleans.
10) Lauren Cole (Defense: 05/2015). Epidemiology Program, School of Public Health, LSUHSC-New Orleans.
11) Yuan Zhou (08/2010 – 12/2014). Biostatistics, School of Public Health, LSUHSC-NO.
12) Myungok Lee (Defended: 05/2012). Biostatistics Program, School of Public Health, LSUHSC-NO.
13) Syed Ahmed (Defense: 12/2006), Department of Naval Architecture and Marine Engineering, University of New Orleans.
14) Zhanlue Zhao (Defense: 03/17/2006), Department of Electrical Engineering, University of New Orleans.
15) Joshua P. Boltz (Defense: 04/04/2005), Department of Civil and Environmental Engineering, University of New Orleans.
16) Keshu Zhang (Defense: 12/02/2003), Department of Electrical Engineering, University of New Orleans.

## E. MS thesis committee member

1) Catherine Callan (08/2016 – 05/2018), Biostatistics Program, School of Public Health, LSUHSC-NO
2) Samantha Spiers (08/2015 – 08/2017), Biostatistics Program, School of Public Health, LSUHSC-NO

**F. MS Examination Committee for more than 60 (non-thesis) graduate students** in the Department of Mathematics, University of New Orleans.

# 6. Teaching Activities

## A. Course Director and Instructor at LSUHSC – New Orleans

- 2024 Spring BIOS 6212 – Survival Analysis
- 2023 Fall BIOS 7204 – Advanced Statistical Theory
  BIOS 6210 – Categorical Data Analysis
- 2023 Spring BIOS 6308 – Longitudinal data analysis
  BIOS 6212 – Survival Analysis
- 2022 Fall BIOS 7204 – Advanced Statistical Theory
  NRSC 201 – Investigative neuroscience (2-hour lecture)
- 2022 Spring BIOS 6308 – Multivariate Statistical Methods
  BIOS 6700 – Biostatistical Seminar
- 2021 Fall BIOS 7204 – Advanced Statistical Theory
  NRSC 201 – Investigative neuroscience (2-hour lecture)
- 2021 Spring BIOS 6302 – Longitudinal Data Analysis
  BIOS 6700 – Biostatistical Seminar
- 2020 Fall BIOS 7204 – Advanced Statistical Theory
  NRSC 203 – Investigative neuroscience (2-hour lecture)
- 2020 Spring BIOS 6308 – Multivariate Statistical Methods
  BIOS 6700 – Biostatistical Seminar
- 2019 Fall BIOS 7204 – Advanced Statistical Theory
- 2019 Spring BIOS 6302 – Longitudinal Data Analysis
- 2018 Fall BIOS 7204 – Advanced Statistical Theory
  NEURO 203 – Investigative neuroscience (2-hour lecture)
- 2018 Spring BIOS 6308 – Multivariate Statistical Methods
  BIOS 6700 – Biostatistical Seminar (1 credit)

- 2017 Fall BIOS 7204 – Advanced Statistical Theory
- 2017 Spring BIOS 6302 – Longitudinal Data Analysis
- 2016 Fall BIOS 6318 – Nonparametric Statistics
  NEURO 203 – Investigative neuroscience (2-hour lecture)
- 2016 Spring BIOS 6700 – Research seminar in Biostatistics
- 2015 Fall BIOS 6210 – Categorical Data Analysis
  BIOS 6304 – Design and Analysis of Experiments
  NEURO 203 – Investigative neuroscience (2-hour lecture)
- 2015 Spring BIOS 6302 – Longitudinal Data Analysis
- 2014 Fall BIOS 6500 – Time Series Analysis
- 2014 Spring BIOS 6500 (Now 6318) – Nonparametric Statistics
- 2013 Fall BIOS 6304 – Design and Analysis of Experiments
- 2013 Spring BIOS 6212 – Survival Analysis
- 2012 Fall BIOS 6210 – Categorical Data Analysis
- 2011 Fall BIOS 6500 – Mathematical techniques for Statistics
- 2011 Spring BIOS 6304 – Design and Analysis of Experiments
- 2010 Fall BIOS 6500 – Section2. Statistical Genetics
- 2009 Fall BIOS 6450 – Design and Analysis of Gene Expression Study
- 2009 Spring BIOS 6500 – Nonparametrics

**B. New Courses developed at LSUHSC – New Orleans**

1) BIOS 6318 – Nonparametric Statistics, 3 credit hours.
2) BIOS 6450 – Design and Analysis of Gene Expression Study, 3 credit hours
3) BIOS 6500 – Time Series Analysis, 3 credit hours.
4) BIOS 6500 – Statistical Genetics, 3 credit hours.
5) BSPH 3300 – Introduction to Biostatistics, 3 Credit hours.
6) BSPH 3302 – Data analysis in Public Health, 3 Credit hours.

**C. Course director and Instructor at the University of New Orleans**

- 2008 Summer MATH 6300 Statistical Programming SAS
  MATH 2314 – Elementary Statistics

- 2008 Spring MATH 6390 – Nonparametric Statistics
  MATH 6304 – Regression Analysis
  MATH 2314 – Elementary Statistics

- 2007 Fall MATH 6303 – Multivariate Statistical Analysis
  MATH 2314 – Elementary Statistics – Session I
  MATH 2314 – Elementary Statistics – Session II

- 2007 Summer MATH 6300 Statistical Programming SAS
  MATH 2314 – Elementary Statistics

- 2007 Spring MATH 6304 – Regression Analysis
  MATH 6342 – Designs of Experiments
  MATH 2314 – Elementary Statistics

- 2006 Fall MATH 6341 – Linear Statistical Models
  MATH 2314 – Elementary Statistics – Session I
  MATH 2314 – Elementary Statistics – Session II

- 2006 Summer MATH 6300 Statistical Programming SAS
  MATH 2314 – Elementary Statistics

- 2006 Spring MATH 6304 – Regression Analysis
  MATH 6331 – Categorical Data Analysis
  MATH 2314 – Elementary Statistics

- 2005 Fall MATH 6390 – Nonparametric Statistics
  (reduced load due to Hurricane Katrina)

- 2005 Summer MATH 2314 – Elementary Statistics – Session I
  MATH 2314 – Elementary Statistics – Session II

- 2005 Spring MATH 6331 – Categorical Data Analysis
  MATH 2314 – Elementary Statistics – Session I
  MATH 2314 – Elementary Statistics – Session II

- 2004 Fall MATH 6303 – Multivariate Statistical Analysis
  MATH 6390 – Nonparametric Statistics
  MATH 2314 – Elementary Statistics

- 2004 Summer MATH 6351 – Time Series Analysis
  MATH 2314 – Elementary Statistics

- 2004 Spring MATH 1126 – Precalculus Trigonometry
  MATH 6304 – Regression Analysis
  MATH 6331 – Categorical Data Analysis

- 2003 Fall MATH 2314 – Elementary Statistics
  MATH 6362 – System Reliability Analysis
  MATH 6301 – Applied Statistics

- 2003 Summer MATH 6361 – Statistical Quality Control
  MATH 2314 – Elementary Statistics

- 2003 Spring MATH 2314 – Elementary Statistics (Session 1)
  MATH 6304 – Regression Analysis
  MATH 2314 – Elementary Statistics (Session 2)

- 2002 Fall MATH 1126 – Precalculus Trigonometry
  MATH 6362 – System Reliability Analysis
  MATH 6301 – Applied Statistics

- 2002 Spring MATH 1115 – College Algebra
  MATH 6303 – Multivariate Statistical Analysis
  MATH 6331 – Categorical Data Analysis

- 2001 Fall MATH 1115 – College Algebra
  MATH 6361 – Statistical Quality Control
  MATH 6301 – Applied Statistics
- 2001 Spring MATH 1115 – College Algebra
  MATH 2314 – Elementary Statistics
  MATH 6304 – Regression Analysis

- 2000 Fall MATH 2314 – Elementary Statistics
  MATH 6301 – Applied Statistics

## 7. Honors and Awards

- Faculty Initiative for Technology in Teaching, 2002, University of New Orleans
- University of Alberta travel award, 1998
- Eoin L. Whitney University of Alberta Graduate Scholarship, 1997
- University of Alberta PhD Scholarship, 1994 -- 1996