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OFFICE

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(Blue text hyperlinked throughout)

RESEARCH INTERESTS

THEORY AND METHODS: Bayes; big data, data science, functional data, graphical models, integrative modeling, machine learning, nonlinear/nonparametric models, spatial data, statistical computing

APPLICATIONS: Cancer, high-throughput genomics, epigenomics, transcriptomics and proteomics, high-resolution neuro- and cancer- imaging, clinical trials, precision medicine

PROFESSIONAL APPOINTMENTS AND ACADEMIC EXPERIENCE

- 2017 – **Professor (tenured)**
2012 – 2017 **Associate Professor (tenured) and Faculty Scholar (2014-2017)**
2005 – 2012 **Assistant Professor (tenure-track)**
Department of Biostatistics
The University of Texas M. D. Anderson Cancer Center, Houston, TX
- 2010 – **Assistant/Associate/Full Professor (adjunct)**
Department of Statistics
Texas A&M and Rice University, TX
- Department of Biostatistics
UT School of Public Health, Houston, TX
- 2010 – **Faculty Member, Biostatistics, Bioinformatics & Systems Biology Program,**
University of Texas Graduate School of Biomedical Sciences
- 2000 – 2005 **Instructor, Graduate Research Assistant and Pre-doctoral trainee,**
Training Program in Bioinformatics, Dept. of Statistics, Texas A&M University

EDUCATION

- 2005 **Ph.D., Statistics**, Dept. of Statistics, Texas A&M University
- Dissertation Topic: “Bayesian Methods in Bioinformatics”
 - Major Advisors: Raymond J. Carroll & Bani K. Mallick
 - Dean’s Graduate Merit Scholarship; Graduate Endowment Fellowship
- 2000 **M.A., Statistics**, Dept. of Biostatistics, University of Rochester, Rochester, NY
- 1999 **B.Sc. (Honors), Mathematics**,
Indian Institute of Technology (IIT), Kharagpur, India

VISITING/OTHER APPOINTMENTS

- June 2010 **Visiting Assistant Professor**
School of Mathematics, Statistics & Actuarial Science
University of Kent, Canterbury, UK
- July 2010 **Visiting Assistant Professor**
Department of Statistics and Oxford Centre for Gene Function
University of Oxford, Oxford, UK
- August 2011 – **Statistical Mentor**
NIDA Pre- and Post-doctoral fellowships in Statistical Genetics of Addiction
UT MD Anderson Cancer Center, Houston, TX

HONORS AND AWARDS

- Fellow, American Statistical Association, 2016**
Elected Member, International Statistical Institute, 2016
Faculty Scholar Award, UT MD Anderson Cancer Center, 2014+ [given to 5 outstanding mid-junior faculty across the institution]
Keynote Speaker, Genome Engineering for Cancer Treatment, Canberra, Australia, 2017
Young Researcher Award, International Indian Statistical Association, 2015
Highlighted newsworthy oral presentation at the Radiological Society of North America (RSNA) annual meetings, 2015
Selected participant, SAMSI Innovations Lab in Big Data and Precision Medicine, 2015
Biometrics Editor's Invited Paper, Joint Statistical Meetings, 2007
New Researchers Presentation, Ninth Case Studies in Bayesian Analysis Meeting, 2007
Best Graduate Student Presentation, Student Research Week, Texas A&M University, 2004
AUF Graduate Endowment Fellowship, Texas A&M University, 2003
Emanuel Parzen Graduate Research Fellowship Award, Texas A&M University, 2003.
R. L. Anderson Best Student Paper Award, SRCOS, 2003
Best Student Poster, Conference of Texas Statisticians, Texas A&M University, 2003
SPES Student Scholarship, Joint Statistical Meetings, Atlanta, 2001
Dean's Graduate Merit Scholarship, Texas A&M University, 2000
Mobile Aggie Merit Fellowship, Texas A&M University, 2000
Graduate Fellowship, University of Rochester, 1999

PROFESSIONAL MEMBERSHIPS

- Fellow, American Statistical Association (ASA)
Elected Member, International Statistical Institute (ISI)
Institute of Mathematical Statistics (IMS)
International Biometric Society Eastern North American Region (ENAR)
International Society for Bayesian Analysis (ISBA)
International Indian Statistical Association (IISA)
International Chinese Statistical Association (ICSA)
American Association for the Advancement of Science (AAAS)

BOOKS

- (1) Mallick, B. K., Gold, D. L. and **Baladandayuthapani, V.** (2009). Bayesian Methods for Gene Expression Data. Wiley, U.K.

PUBLICATIONS

* = student/post-doctoral trainee; ** = corresponding author

- (2) **Baladandayuthapani, V.**, Mallick, B. K., and Carroll, R.J. (2005). Spatially Adaptive Bayesian Penalized Regression Splines (P-splines). *Journal of Computational and Graphical Statistics*, 14, 378-394.
- (3) Phadke, A. P., de la Concha-Bermejillo A., Wolf, A. M., Andersen, P. R., **Baladandayuthapani, V.** and Collison, E. W. (2006). Pathogenesis of a Texas Feline Immunodeficiency Virus Isolate: An Emerging Subtype of Clade B, *Veterinary Microbiology*, 115, 64-76.
- (4) Nehete, P. N., Nehete B. P., Hill L., Manuri P. R., **Baladandayuthapani, V.**, Feng L., Simmons J. and Sastry K. J. (2007) Selective induction of cell-mediated immunity by prophylactic vaccination with a conserved HIV-1 envelope peptide-cocktail for protection of rhesus macaques from chronic SHIVKU2 infection. *Virology* 370(1):130-41.
- (5) Aggrawal B. B., Sethi G., **Baladandayuthapani, V.**, Krishnan S. and Sishodia S. Targetting Cell Signalling Pathways for Drug Discovery: An Old Lock Needs a New Key (2007). *Journal of Cellular Biochemistry*, 102(3):580-92.
- (6) **Baladandayuthapani, V.**, Mallick, B. K., Hong, M. Y., Lupton, J. R., Turner, N. D. and Carroll, R. J. (2008). Bayesian Hierarchical Spatially Correlated Functional Data Analysis with Application to Colon Carcinogenesis. *Biometrics*. 64, 64-73 [**Biometrics Editor's Invited Paper for JSM 2007**].
- (7) Hong, M. Y., **Baladandayuthapani, V.**, Li Y., Carroll, R. J., Turner, N. D., and Lupton, J. R. (2008) Coordinated p27 Kip1 expression as a function of distance between crypts - Potential inter-crypt signaling. *The FASEB Journal*, 22:865.4
- (8) Zhang N., Ge G., Meye R., Sethi S., Basu D, Pradhan S., Zhao Y-J., Li X-N., Cai W. W., El-Naggar K. A., **Baladandayuthapani, V.**, Kittrell F. S., Rao P. H., Medina D and Pati D. (2008). Overexpression of Separase induces aneuploidy and mammary tumorigenesis. *Proceedings of National Academy of Sciences, USA* 105(35):13033-8.
- (9) Nanda, U, Eisen S. J. and **Baladandayuthapani, V.** (2008) Undertaking An Art-Survey to Compare Patient vs. Student Art Preferences. *Journal of Environment Behavior*, 40, 269-301.
- (10) Wang J., Xu, J. and **Baladandayuthapani, V.** (2009) Contrast sensitivity of digital imaging display systems: Contrast threshold dependency on object type and implications for monitor quality assurance and quality control in PACS. *Medical Physics*, 36(8) 3682-3292.
- (11) Zhou L., Huang J. Z., Martinez J. G., Maity A., **Baladandayuthapani, V.** and Carroll R. J. (2010) Reduced rank mixed effects models for spatially correlated hierarchical functional data. *Journal of the American Statistical Association*, 105 (49) 390-400.
- (12) **Baladandayuthapani, V.**, Ji. Y., Talluri, R., Nieto-Barajas, L. E. and Morris J. S. (2010) Bayesian Random Segmentation Models to Identify Shared Copy Number Aberrations for Array CGH Data. *Journal of American Statistical Association* 105(492): 1358-1375.
- (13) Morris J. S., **Baladandayuthapani, V.**, Herrick R. C. and Gutstein H. Automated Functional Mixed Models and Isomorphic Basis-Space Modeling, with Application to Proteomics Data. *Annals of Applied*

Statistics 5(2A):894-923.

- (14) Lin, Y-X., **Baladandayuthapani, V.**, Bonato, V., Do, K-A. (2010) Estimating Shared Copy Number Aberrations for Array CGH Data: the Linear-Median Method. *Cancer Informatics*, 9 229-249.
- (15) Navas, M.*, Ordonez C., and **Baladandayuthapani, V.** (2010) On the Computation of Stochastic Search Variable Selection in Linear Regression with UDFs. *Proc. IEEE ICDM Conference*, p. 941-946, 2010. 941-946.
- (16) Navas, M.*, Ordonez C. and **Baladandayuthapani, V.** (2011) Fast PCA and Bayesian variable selection for large data sets based on SQL and UDFs. *Proc. ACM KDD Workshop on Large-scale Data Mining: Theory and Applications (LDMTA, KDD Conference Workshop)*
- (17) Bonato V.*, **Baladandayuthapani, V.****, Broom, B. M., Sulman E. P., Aldape K. D and Do, K-A. (2010) Bayesian ensemble methods for survival prediction in gene expression data. *Bioinformatics*
- (18) Jones, R. J., **Baladandayuthapani, V.**, Neelapu, S., Sharma, R., Fayad, L., Romaguera, J. E., Wang, M., Yang, D. and Orlowski, R. Z. (2011) HDM-2 inhibition suppresses expression of ribonucleotide reductase subunit M2, and synergistically enhances gemcitabine-induced cytotoxicity in mantle cell lymphoma. *BLOOD*,
- (19) Thompson, P. A., Brewster A., Broom B., Do, K-A, **Baladandayuthapani, V.**, B., Edgerton, M.; Hahn, K.; Murray, J.; Sahin, A., Tsavachidis, S., Wang, Y., Zhang, L., Hortobagyi, G., Mills, G. and Bondy, M. (2011) Selective genomic copy number imbalances and probability of recurrence in early- stage breast cancer. *PLoS One*
- (20) Zheng, Y., Yang, J., Qian, J., Zhang, L., Lu, Y., Li, H., Lan, Y., Liu, Z., He, J., Hong, S., Thomas, S., Shah, J., **Baladandayuthapani, V.**, Kwak, L. W., and Yi. Q. (2012) Novel Phosphatidylinositol 3-Kinase Inhibitor NVP-BKM120 Induces Apoptosis in Myeloma Cells and Shows Synergistic Anti-Myeloma Activity with Dexamethasone. *Journal of Molecular Medicine*
- (21) Hrafnkelsson, B., Morris J. S., and **Baladandayuthapani, V.** Spatial Modeling of Annual Minimum and Maximum Temperature in Iceland. *Meteorology and Atmospheric Physics*
- (22) Garrett, C. R., Hassabo, M. H., Bhadkamkar, N. A., Wen, S, **Baladandayuthapani, V.**, Kee, K. K. and Hassan, M. H. (2012) Survival Advantage Observed with the Use of Metformin in Patients with Type II Diabetes and Colorectal Cancer *British Journal of Cancer*
- (23) Garrett CR, George B, Viswanathan C, Bhadkamkar NA, Wen S, **Baladandayuthapani, V.**, You YN, Kopetz ES, Overman MJ, Kee BK, Eng C. (2012) Survival Benefit Associated With Surgical Oophorectomy in Patients With Colorectal Cancer Metastatic to the Ovary. *Clin Colorectal Cancer*
- (24) Prasad S, Yadav VR, Sung B, Reuter S, Kannappan R, Deorukhkar A, Diagaradjane P, Wei C, **Baladandayuthapani, V.**, Krishnan S, Guha S, Aggarwal BB. (2012) Ursolic Acid Inhibits Growth and Metastasis of Human Colorectal Cancer in an Orthotopic Nude Mouse Model by Targeting Multiple Cell Signaling Pathways: Chemosensitization with Capecitabine. *Clin Cancer Res*
- (25) Jones RJ, Bjorklund CC, **Baladandayuthapani, V.**, Kuhn DJ, Orlowski RZ. (2012) Drug Resistance to Inhibitors of the Human Double Minute-2 E3 Ligase Is Mediated by Point Mutations of p53, but Can Be Overcome with the p53 Targeting Agent RITA. *Mol Cancer Ther*
- (26) Kuhn DJ, Berkova Z, Jones RJ, Woessner R, Bjorklund CC, Ma W, Davis RE, Lin P, Wang H, Madden TL, Wei C, **Baladandayuthapani, V.**, Wang M, Thomas SK, Shah JJ, Weber DM, Orlowski RZ.

- (2012) Targeting the insulin-like growth factor-1 receptor to overcome bortezomib resistance in preclinical models of multiple myeloma. *Blood*
- (27) Garcia-Alvarado, C.*, Ordonez, C., **Baladandayuthapani, V.** (2012) Querying external source code files of programs connecting to a relational database *Proc. ACM Ph.D. Workshop on Information and Knowledge Management (PIKM, CIKM Conference Workshop)*
- (28) Jennings, E.*, Morris, J.S., Carroll, R., Manyam G, and **Baladandayuthapani, V.** (2012) Hierarchical Bayesian Methods for Integration of Various Types of Genomics Data. *IEEE International Workshop on Genomic Signal Processing and Statistics, GENSIPS*
- (29) Gregory, K.*, Coombes, K.R.C, Momin, A, Girard, L, Byers, L., Lin, S, Peyton, M, Heymach, J, Minna J and **Baladandayuthapani, V.** Latent Feature Decompositions for Integrative Analysis of Diverse High-throughput Genomic Data. (2012) *IEEE International Workshop on Genomic Signal Processing and Statistics, GENSIPS*
- (30) Srivastava, S*. Wang, W, Zinn, P, Colen R, and **Baladandayuthapani, V.** (2012) Multi-Platform Genomic Data Using Hierarchical Bayesian Relevance Vector Machines *IEEE International Workshop on Genomic Signal Processing and Statistics, GENSIPS*
- (31) Lu C, Stewart DJ, Lee JJ, Ji L, Ramesh R, Jayachandran G, Nunez MI, Wistuba II, Erasmus JJ, Hicks ME, Grimm EA, Reuben JM, **Baladandayuthapani, V.**, Templeton NS, McMannis JD, Roth JA. (2012) Phase I clinical trial of systemically administered TUSC2(FUS1)-nanoparticles mediating functional gene transfer in humans. *PLoS One*
- (32) Wang W*, **Baladandayuthapani, V.****, Morris JS, Broom BM, Manyam G, Do KA. (2012) iBAG: integrative Bayesian analysis of high-dimensional multiplatform genomics data. *Bioinformatics*
- (33) Rawal S, Chu F, Zhang M, Park HJ, Nattamai D, Kannan S, Sharma R, Delgado D, Chou T, Lin HY, **Baladandayuthapani, V.** Luong A, Vega F, Fowler N, Dong C, Davis RE, Neelapu SS. (2013) Cross talk between follicular Th cells and tumor cells in human follicular lymphoma promotes immune evasion in the tumor microenvironment. *Journal of Immunology*.
- (34) Ordonez, C, Garcia, J. Garcia-Alvarado, C, Cabrera, W, **Baladandayuthapani, V.**, Mohammed S. Quraishi. (2013) Data mining algorithms as a service in the cloud exploiting relational database systems *Proc. ACM SIGMOD Conference*
- (35) Pemmaraju N, Tanaka MF, Ravandi F, Lin H, **Baladandayuthapani, V.**, Rondon G, Giralt SA, Chen J, Pierce S, Cortes J, Kantarjian H, Champlin RE, De Lima M, Qazilbash MH. (2013) Outcomes in patients with relapsed or refractory acute promyelocytic leukemia treated with or without autologous or allogeneic hematopoietic stem cell transplantation. *Clin Lymphoma Myeloma Leuk 13(4):485-92*,
- (36) Matusevich, D.*, Ordonez, C., **Baladandayuthapani, V.** (2013) A fast convergence clustering algorithm merging MCMC and EM methods. *Proc. ACM CIKM Conference*,
- (37) Cabrera, W*, Ordonez, C, Matusevich, D. S., **Baladandayuthapani, V.** (2013) Bayesian Variable Selection for Linear Regression in High Dimensional Microarray Data. *Proc. ACM DTMBIO Workshop (CIKM Conference Workshop)*
- (38) Olivares, R*, Rao, A, Rao, G, Morris, J. S. and **Baladandayuthapani, V.** (2013) Integrative analysis of Multi-modal Correlated Imaging-Genomics Data in Glioblastoma. *IEEE Genomic Signal Processing and Statistics (GENSIPS)*

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- (39) Bhadra, A. and **Baladandayuthapani, V.** (2013) Integrative Sparse Bayesian analysis of high-dimensional multi-platform Genomic data in Glioblastoma. *IEEE Genomic Signal Processing and Statistics (GENSIPS)*
- (40) Jennings EM*, Morris JS, Carroll RJ, Manyam GC, **Baladandayuthapani, V.** (2013) Bayesian methods for expression-based integration of various types of genomics data *EURASIP Journal on Bioinformatics and Systems Biology* [[Top 50 All time most downloaded articles](#)],(accessed Oct 25, 2015)
- (41) Srivastava S*, Wang W, Manyam G, Ordonez C, **Baladandayuthapani, V.** (2013) Integrating multi-platform genomic data using hierarchical Bayesian relevance vector machines. *EURASIP Journal on Bioinformatics and Systems Biology* [[Top 50 All time most downloaded articles](#)],(accessed Oct 25, 2015)
- (42) Wang W*, **Baladandayuthapani, V****, Holmes CC, Do KA. (2013) Integrative network-based Bayesian analysis of diverse genomics data. *BMC Bioinformatics*
- (43) Phillip CJ, Zaman S, Shentu S, Balakrishnan K, Zhang J, **Baladandayuthapani, V.**, Taverna P, Redkar S, Wang M, Stellrecht CM, Gandhi V. (2013) Targeting MET kinase with the small-molecule inhibitor amuvatinib induces cytotoxicity in primary myeloma cells and cell lines. *J Hematol Oncol*
- (44) Talluri R*, **Baladandayuthapani, V.**, Mallick BK. (2014) Bayesian sparse graphical models and their mixtures. *STAT*
- (45) Bailey AM, Zhan L, Maru D, Shureiqi I, Pickering CR, Kiriakova G, Izzo J, He N, Wei C, **Baladandayuthapani, V.**, Liang H, Kopetz S, Powis G, Guo GL. (2014) FXR Silencing in Human Colon Cancer by DNA methylation and KRAS Signaling. *Am J Physiol Gastrointest Liver Physiol*
- (46) Westin JR, Chu F, Zhang M, Fayad LE, Kwak LW, Fowler N, Romaguera J, Hagemeister F, Fanale M, Samaniego F, Feng L, **Baladandayuthapani, V.**, Wang Z, Ma W, Gao Y, Wallace M, Vence LM, Radvanyi L, Muzzafar T, Rotem-Yehudar R, Davis RE, Neelapu SS. (2014) Safety and activity of PD1 blockade by pidilizumab in combination with rituximab in patients with relapsed follicular lymphoma: a single group, open-label, phase 2 trial. *Lancet Oncology*
- (47) Ajani JA, Wang X, Song S, Suzuki A, Taketa T, Sudo K, Wadhwa R, Hofstetter WL, Komaki R, Maru DM, Lee JH, Bhutani MS, Weston B, **Baladandayuthapani, V.**, Yao Y, Honjo S, Scott AW, Skinner HD, Johnson RL, Berry D. (2013) ALDH-1 expression levels predict response or resistance to preoperative chemoradiation in resectable esophageal cancer patients. *Molecular Oncology*
- (48) Bjorklund CC, **Baladandayuthapani, V.**, Lin HY, Jones RJ, Kuitatse I, Wang H, Yang J, Shah JJ, Thomas SK, Wang M, Weber DM, Orlowski RZ. (2013) Evidence of a role for CD44 and cell adhesion in mediating resistance to lenalidomide in multiple myeloma: therapeutic implications. *Leukemia*
- (49) Zhang, L*, **Baladandayuthapani, V.****, Mallick, B. K., Thompson, P. A., Bond, M. L., and Do, K-A. (2014) Bayesian hierarchical structured variable selection methods with application to MIP studies in breast cancer. *Journal of Royal Statistical Society, Series C* [[Winner of SBSS best student paper award](#)]
- (50) Gregory, K. *, Coombes, K.R.C, Momin, A and **Baladandayuthapani, V.**(2014) Latent Feature Decompositions for Integrative Analysis of Diverse High-throughput Genomic Data.*IEEE/ACM Transactions on Computational Biology and Bioinformatics.*
- (51) El-Mabhough AA, Ayres ML, Shpall EJ, **Baladandayuthapani, V.**, Keating MJ, Wierda WG, Gandhi V. (2014) Evaluation of bendamustine in combination with fludarabine in primary chronic lymphocytic leukemia cells. *Blood*

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- (52) Pemmaraju N, Shah D, Kantarjian H, Orlowski RZ, Noguera Gonzalez GM, **Baladandayuthapani, V**, Jain N, Wagner V, Garcia-Manero G, Shah J, Ravandi F, Pierce S, Takahashi K, Daver N, Nazha A, Verstovsek S, Jabbour E, De Lima M, Champlin R, Cortes J, Qazilbash MH. (2014) Characteristics and Outcomes of Patients With Multiple Myeloma Who Develop Therapy-Related Myelodysplastic Syndrome, Chronic Myelomonocytic Leukemia, or Acute Myeloid Leukemia. *Clin Lymphoma Myeloma Leukemia*
- (53) Wu W, Merriman K, Nabaah A, Seval N, Seval D, Lin H, Wang M, Qazilbash MH, **Baladandayuthapani, V**, Berry D, Orlowski RZ, Lee MH, Yeung SC. The association of diabetes and anti-diabetic medications with clinical outcomes in multiple myeloma. *British Journal of Cancer*
- (54) Nute JL, Le Roux L, Chandler AG, **Baladandayuthapani, V**, Schellingerhout D, Cody DD. (2014) Differentiation of Low-Attenuation Intracranial Hemorrhage and Calcification Using Dual-Energy Computed Tomography in a Phantom System. *Investigative Radiology*
- (55) Fowler NH, Davis RE, Rawal S, Nastoupil L, Hagemester FB, McLaughlin P, Kwak LW, Romaguera JE, Fanale MA, Fayad LE, Westin JR, Shah J, Orlowski RZ, Wang M, Turturro F, Oki Y, Claret LC, Feng L, **Baladandayuthapani, V.**, Muzzafar T, Tsai KY, Samaniego F, Neelapu SS. (2014). Safety and activity of lenalidomide and rituximab in untreated indolent lymphoma: an open-label, phase 2 trial. *Lancet Oncology*
- (56) Voo KS, Foglietta M, Percivalle E, Chu F, Nattamai D, Harline M, Lee ST, Bover L, Lin HY, **Baladandayuthapani, V**, Delgado D, Luong A, Davis RE, Kwak LW, Liu YJ, Neelapu SS. (2014) Selective targeting of Toll-like receptors and OX40 inhibit regulatory T-cell function in follicular lymphoma. *International Journal of Cancer*
- (57) Guha S, Ji Y, **Baladandayuthapani, V**. (2014) Bayesian disease classification using copy number data. *Cancer Informatics*.
- (58) Ni Y*, Stingo FC, **Baladandayuthapani, V**. (2014) Integrative bayesian network analysis of genomic data. *Cancer Informatics*.
- (59) Gregory K, B, Carroll, RJ, **Baladandayuthapani, V** and Lahiri S. (2014) A Two-Sample Test for Equality of Means in High Dimension. *Journal of the American Statistical Association Theory and Methods*.
- (60) Zhang, L*, Morris, JS, Zhang, J, Orlowski, R and **Baladandayuthapani, V** (2014) Bayesian Joint Selection of Genes and Pathways: Applications in Multiple Myeloma Genomics. *Cancer Informatics*.
- (61) Kuitatse I, **Baladandayuthapani, V**, Lin HY, Thomas SK, Bjorklund CC, Weber DM, Wang M, Shah JJ, Zhang X, Jones RJ, Ansell SM, Yang G, Treon SP, Orlowski RZ. (2015) Targeting the Spleen Tyrosine Kinase with Fostamatinib as a Strategy Against Waldenstroms Macroglobulinemia. *Clinical Cancer Research*
- (62) **Baladandayuthapani, V**, Talluri, R, Ji Y., Coombes, K., Hennessy, B., Davies, M., Mallick B. K. Bayesian Sparse Graphical Models for Classification with Application to Protein Expression Data. (2015) *Annals of Applied Statistics*.
- (63) Ordonez, C., Garcia-Alvarado, C. and **Baladandayuthapani, V**. Bayesian Variable Selection in Linear Regression in One Pass for Large Data Sets,. (2015) *ACM Transactions on Knowledge Discovery from Data (TKDD)*.
- (64) Ha M J*, **Baladandayuthapani, V** and Do, K-A. (2015) Prognostic Gene Signature Identification Using Causal Structural Learning: Applications in Kidney Cancer. *Cancer Informatics*.

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- (65) Ni, Y*, Stingo S. and **Baladandayuthapani, V.** Bayesian Non-linear Directed Acyclic Graphical Models for Gene Regulatory Networks.(2015) *Biometrics* [**Winner of Laplace award for best Bayesian paper, JSM 2014**]
- (66) Nieto-Barajas, L E, Ji Y., and **Baladandayuthapani, V.** A Semiparametric Bayesian Model for Comparing DNA Copy Numbers. (2016) *Brazilian Journal of Probability and Statistics*
- (67) Ha MJ*, **Baladandayuthapani, V**** and Do K-A. (2015) DINGO: Differential Network Analysis in Genomics. *Bioinformatics*
- (68) Wait JM, Cody D, Jones AK, Rong J, **Baladandayuthapani, V**, Kappadath SC. Performance Evaluation of Material Decomposition With Rapid-Kilovoltage-Switching Dual-Energy CT and Implications for Assessing Bone Mineral Density. *AJR Am J Roentgenol*
- (69) Zhang S, Lu Z, Mao W, Ahmed AA, Yang H, Zhou J, Jennings N, Rodriguez-Aguayo C, Lopez-Berestein G, Miranda R, Qiao W, **Baladandayuthapani, V**, Li Z, Sood AK, Liu J, Le XF, Bast RC. (2015) CDK5 Regulates Paclitaxel Sensitivity in Ovarian Cancer Cells by Modulating AKT Activation, p21Cip1- and p27Kip1-Mediated G1 Cell Cycle Arrest and Apoptosis. *PLoS One*
- (70) Dai B, Yan S, Lara-Guerra H, Kawashima H, Sakai R, Jayachandran G, Majidi M, Mehran R, Wang J, Bekele BN, **Baladandayuthapani, V**, Yoo SY, Wang Y, Ying J, Meng F, Ji L, Roth JA. (2015) Exogenous Restoration of TUSC2 Expression Induces Responsiveness to Erlotinib in Wildtype Epidermal Growth Factor Receptor (EGFR) Lung Cancer Cells through Context Specific Pathways Resulting in Enhanced Therapeutic Efficacy. *PLoS One*
- (71) Sathyan, P., Zinn, P, Marisetty, A, Liu, B, Kamal, M, Singh, S, Bady, P, ...,**Baladandayuthapani. V** , ..., Hegi, M Majumder S. (2015) Mir-21-Sox2 axis delineates glioblastoma subtypes with prognostic impact. *Journal of Neuroscience*
- (72) Azadeh, S*, Hobbs, B., Moeller, F., Nielsen, D., **Baladandayuthapani, V****. Integrative Bayesian Analysis of Neuroimaging-Genetic Data with Application to Cocaine Dependence. *Neuroimage* (2015) [**Highlighted as newsworthy oral presentation at the Radiological Society of North America (RSNA) annual meetings 2015**] [[Radio interview here](#)]
- (73) Azadeh, S*, Hobbs, B., Moeller, F., Nielsen, D., **Baladandayuthapani, V.** (2016) Integrative Bayesian Analysis of Neuroimaging-Genetic Data through Hierarchical Dimension Reduction. *IEEE International Symposium on Biomedical Imaging*
- (74) Zhang X, **Baladandayuthapani, V**, Lin H, Mulligan G, ..., Barlogie B.,..., Davis R. E., Ma W. C., Wang Z., Yang L., and Orlowski R. Z. (2016) Tight Junction Protein 1 Modulates Proteasome Capacity and Proteasome Inhibitor Sensitivity in Multiple Myeloma Through EGFR/JAK1/STAT3 Signaling. *Cancer Cell*
- (75) Wang, H., **Baladandayuthapani, V**, Wang Z., Lin, H., Berkova, Z., Davis R. E., Yang, L. and Orlowski R. Z. (2016) Truncated Protein Tyrosine Phosphatase Receptor Type O Suppresses AKT Signaling Through IQ Motif Containing GTPase Activating Protein 1 and Confers Sensitivity to Bortezomib in Multiple Myeloma. *British Journal of Haematology*
- (76) Lee, H,C. Wang, H, **Baladandayuthapani, V.,** Lin, H, He, J Jones, R. J., Kuitatse, I, Gu, D, Wang, Z, Brien, S. O., Keats, J, Yang, J, Davis,R. E. and Orlowski, R. Z. (2016) RNA Polymerase I Inhibition with CX-5461 as a Novel Therapeutic Strategy to Target c-MYC in Multiple Myeloma. *British Journal of Hematology*

- (77) Zoh, R, Mallick, B, K, Ivanov, I, **Baladandayuthapani, V**, Manyam G, Chapkin R, Lampe, J, and Carroll R. J. (2016) PCAN: Probabilistic Correlation Analysis of Two Non-normal Data Sets. *Biometrics*
- (78) Kim, S*, **Baladandayuthapani, V.**, Lee, J. J. (2016) Prediction Oriented Marker Selection (PROMISE) With application to high dimensional regression. *Statistics in Biosciences*
- (79) Mikell JK, Mahvash A, Siman W, **Baladandayuthapani, V.**, Mourtada F, Kappadath SC. Selective Internal Radiation Therapy With Yttrium-90 Glass Microspheres: Biases and Uncertainties in Absorbed Dose Calculations Between Clinical Dosimetry Models (2016). *Int J Radiat Oncol Biol Phys* .
- (80) Xiaobo C, Majidi M, Feng M, Shao R, Wang J, Zhao Y, **Baladandayuthapani. V .**, Song J, Fang B, Ji L, Mehran R, Roth JA. (2016) TUSC2(FUS1)-erlotinib Induced Vulnerabilities in Epidermal Growth Factor Receptor(EGFR) Wildtype Non-small Cell Lung Cancer(NSCLC) Targeted by the Repurposed Drug Auranofin. *Scientific Reports*
- (81) Noren, D, Long, B, Norel, R, Rhissorrakrai, Hess, K, Wendy W, , DREAM 9 AML-OPC Consortium (includes **Baladandayuthapani, V.**), Norman, T, Kornblau, S., Qutub, A. A. (2016) A Crowdsourcing Approach to Developing and Assessing Prediction Algorithms for AML Prognosis. *PLOS Computational Biology*.
- (82) Roszik, J., Haydu, L., Joon, A., Siroy, A.E., Stingo, F.C., **Baladandayuthapani, V.**, Hess, K.R., Tetzlaff, M., Wargo, J., Chen, K., Forget, M., Haymaker, C.L., Chen, J.Q., Meric-Bernstam, F., Eterovic, A.K., Mills Shaw, K., Mills, G., Gershenwald, J., Hwu, P., Futreal, A.P., Bernatchez, C., Radvanyi, L.G., Lazar, A., Davies, M.A. and Woodman, S.E. (2015). A novel algorithm determines tumor mutation load and predicts immune-therapy clinical outcome using a small set of gene mutations. *BMC Medicine* (accepted)
- (83) Bock F, Lu G, Srour SA, Gaballa S, Lin HY, **Baladandayuthapani, V.**, Honhar M, Stich M, Shah ND, Bashir Q, Patel K, Popat U, Hosing C, Korbling M, Delgado R, Rondon G, Shah JJ, Thomas SK, Manasanch EE, Isermann B, Orlowski RZ, Champlin RE, Qazilbash MH. Outcome of Patients with Multiple Myeloma and CKS1B Gene Amplification after Autologous Hematopoietic Stem Cell Transplantation. *Biol Blood Marrow Transplant*. (in press)
- (84) Baljevic, M, **Baladandayuthapani. V** Lin, H.Y, Partovi, C.M, Berkova, ... Zaman, S, and Gandhi, V. V. and Orlowski, R.Z, Phase II Study of the c-MET Inhibitor ARQ 197 (Tivantinib) in Patients with Relapsed or Relapsed/Refractory Multiple Myeloma. *Annals of Hematology* (in press)
- (85) Lin, JS, Fuentes,D, Chandler, A Prabhu, S., Weinberg, J, MD, **Baladandayuthapani. V .**, Hazle, JD, Schellingerhout, D. Performance Assessment for Brain Magnetic Resonance Imaging Registration Methods. *Investigative Radiology* (in press).
- (86) Gentile, E., Xiaobo C, Majidi M, Feng M, Shao R, Wang J, Zhao Y, **Baladandayuthapani. V .**, Song J, Fang B, Mehran R, Roth JA, Ji L.. Cationic liquid crystalline nanoparticles for the delivery of synthetic RNAi-based therapeutics. *Oncotarget* (to appear)
- (87) Wadhwa R, Wang X, Baladandayuthapani V, Liu B, Shiozaki H, Shimodaira Y, Lin Q, Elimova E, Hofstetter WL, Swisher SG, Rice DC, Maru DM, Kalhor N, Bhutani MS, Weston B, Lee JH, Skinner HD, Scott AW, Kaya DM, Harada K, Berry D, Song S, Ajani JA. (2017) Nuclear expression of Gli-1 is predictive of pathologic complete response to chemoradiation in trimodality treated oesophageal cancer patients. *British Journal of Cancer*
- (88) L. Zhang*, **Baladandayuthapani, V**, Zhu, H, Baggerly, K. A., Majewski, T, Czerniak, B. A., and Morris, J. S. (2016) Functional CAR models for large spatially correlated functional datasets. *Journal of the American Statistical Association – Theory and Methods*.

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- (89) Saha, A.*, Banerjee, S., Narang, S., Rao, G., Martinez, J., Rao, A.U.K., **Baladandayuthapani, V.** (2016) DEMARCATE: Density-based Magnetic Resonance Image Clustering for Assessing Tumor Heterogeneity in Cancer. *Neuroimage: Clinical* (to appear).
- (90) Zhang, Y., Linder, M., Shojaie, A., Ouyang, Z., Shen, R., Baggerly, K. A., **Baladandayuthapani, V.**, Zhao H. Dissecting Pathway Disturbances Using Network Topology and Multi-platform Genomics Data. *Statistica in Biosciences*
- (91) Guha, S. and **Baladandayuthapani, V.** (2016) Nonparametric Variable Selection, Clustering and Prediction for High-Dimensional Regression. *Electronic Journal of Statistics*
- (92) Yu, K., Zhang, Y., Yuc, Y. Huang, C. Liu, R., Li, T, Yang, T, Morris, J.S., **Baladandayuthapani, V.**, Zhu, H. Radiomic analysis in prediction of Human Papilloma Virus status. *Clinical and Translational Radiation Oncology* (in press)
- (93) Ye, X, Wang, R, Bhattacharya, R, Boulbes, D, Fan, F, Xia, L, Adoni, H, Ajami, N, Wong, M, Smith, D, Petrosino, J, Venable, S, Qiao, W., **Baladandayuthapani, V.**, Maru, D, Ellis, L.M. (2017) Fusobacterium nucleatum subspecies animalis influences pro-inflammatory cytokine expression and monocyte activation in human colorectal tumors. *Cancer Prevention Research Cancer Prev Res (Phila)*
- (94) Shoemaker K, Hobbs BP, Bharath K, Ng CS, **Baladandayuthapani, V** (2018) Tree-based Methods for Characterizing Tumor Density Heterogeneity. *Pacific Symposium of Biocomputing*.
- (95) Class CA, Ha MJ, **Baladandayuthapani, V**, Do KA. iDINGO - Integrative Differential Network Analysis in Genomics with Shiny Application. *Bioinformatics* (in press)
- (96) Bhadra, A., Rao A., and **Baladandayuthapani, V.** Inferring network structure in non-normal and mixed discrete-continuous genomic data. *Biometrics* (to appear).
- (97) Morris J. S. and **Baladandayuthapani, V.** (2017) Statistical Modeling, Structured Learning, and Integration in Bioinformatics. *Statistical Modeling*. **Discussion Paper with Rejoinder**
- (98) Zhu, B., Song N., Shen R., Arora, A., Machiela M., Song, L., Landi, M., Ghosh, D., Chatterjee, N., **Baladandayuthapani, V** Zhao, H. Integrating Clinical and Multiple Omics Data for Prognostic Assessment across Human Cancers. *Scientific Reports* (in press)
- (99) K. Yu, Y. Zhang, Y. Yu, C. Huang, R. Liu, T. Li, L. Yang, J.S. Morris, **Baladandayuthapani, V.** and H. Zhu. Radiomic analysis in prediction of Human Papilloma Virus status (2017). *Clinical and Translational Radiation Oncology*
- (100) Ni, Y*, Stingo S. and **Baladandayuthapani, V.** Sparse Multi-dimensional Graphical Models: A Bayesian Unified Framework. (2017) *Journal of the American Statistical Association – Theory & Methods* (to appear)
- (101) Kundu, S*, **Baladandayuthapani, V.** and Mallick, B. K. Bayes Regularized Graphical Model Estimation in High Dimensions, *Bayesian Analyses* (accepted)
- (102) Bharath K, Kambadur, P., Dey D., Rao. A, and **Baladandayuthapani, V.** Statistical Tests For Large Tree-structured Data. *Journal of the American Statistical Association – Theory & Methods* (to appear).
- (103) Ni, Y*, Stingo S. and **Baladandayuthapani, V.** Bayesian Graphical Regression. *Journal of the American Statistical Association – Theory & Methods* (accepted)

INVITED EDITORIALS

- (104) Jiang H, An L, **Baladandayuthapani, V**, Auer PL. Classification, predictive modelling, and statistical analysis of cancer data (a). (2014) *Cancer Informatics*.

BOOK CHAPTERS

- (105) **Baladandayuthapani, V.**, Ray, S., and Mallick, B. K. (2005). Bayesian Methods for DNA Microarray Data Analysis. In Rao C. R. and Dey D. K. (eds.) *Handbook in Statistics Bayesian Statistics: Modeling and Computation*. Elsevier: Amsterdam.
- (106) **Baladandayuthapani, V.**, Holmes, C. C., Mallick, B. K. and Carroll, R. J. (2006). Modeling Nonlinear Gene Interactions using Bayesian MARS. In Do K. A., Müller P. and Vannucci M. (eds.) *Bayesian Inference for Gene Expression and Proteomics*. Cambridge University Press.
- (107) Rossell, D*, **Baladandayuthapani, V.** and Johnson, V. E. (2008). Bayes Factors Based on Test Statistics under Order Restrictions. In Hoijtink H., Klugkist I. , Boelen P (eds) *Bayesian Evaluation of Informative Hypotheses in Psychology*. Springer.
- (108) Wang, W*. **Baladandayuthapani, V** , Holmes, C. C. and Do, K-A. (2013) Bayesian graphical models for integrating multiplatform genomics data. In: *Advances in Statistical Bioinformatics: Models and Integrative Inference for High-Throughput Data*.
- (109) **Baladandayuthapani, V**, Wang X, Mallick BK, Do K-A. (2014). Bayesian functional mixed models for survival responses with application to prostate cancer. In: *Recent Advances in Applied Statistics: Slected Papers from the 2013 ICSA Applied Statistics Symposium*.
- (110) Jennings EM*, Morris JS, Manyam G, Carroll R J., **Baladandayuthapani, V** (2015) Bayesian models for flexible integrative analysis of multi-platform genomics data. In: *Integrating omics data: statistical and computational methods* (in press)
- (111) Ni, Y*, Marcetti, G, **Baladandayuthapani, V** and Stingo, F. C. (2015) Bayesian approaches for large biological networks. In *Nonparametric Bayesian Inference in Biostatistics*. Editors: Peter Mueller and Riten Mitra
- (112) Guha, S, Banerjee, S*, Gu, C, and **Baladandayuthapani, V**. (2015) Nonparametric Variable Selection, Clustering and Prediction for Large Biological Datasets In *Nonparametric Bayesian Inference in Biostatistics*. Editors: Peter Mueller and Riten Mitra

PUBLICATIONS (UNDER REVIEW/SUBMITTED)

- (113) Ha, M, Banerjee S., Akbani R, Liang H, Mills, G, Do K-A, **Baladandayuthapani, V**. Proteomics-based Integrated Subject Specific Networks in Cancer. *Proceedings of National Academy of Sciences* (under review)
- (114) Bharath, K, Kurtek, S, Rao, A.U.K., **Baladandayuthapani, V**. Radiologic Image-based Statistical Shape Analysis of Brain Tumors. *Journal of Royal Statistical Society* (invited revision)
- (115) Lee W, **Baladandayuthapani, V.**, Fazio M, Downs, C, Morris J. S. Semiparametric Functional Mixed Models for Longitudinal Functional Data with Application to Glaucoma Data. *JASA Applications & Case Studies* (invited revision)

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- (116) Zhang, L., **Baladandayuthapani, V**, Versace F, Morris, J.S. Bayesian functional graphical modeling. *Journal of American Statistical Association* (in submission)
- (117) Ni, Y, Stingo S. and **Baladandayuthapani, V**. Bayesian Hierarchical Varying-sparsity Model with Application to Cancer Proteogenomics. *Journal of American Statistical Association* (invited revision)
- (118) Zhang Y, Morris J. S., Rao A, **Baladandayuthapani, V**. Radio-iBAG: Radiogenomics - integrative Bayesian analysis of high dimensional multiplatform genomics data. *Annals of Applied Statistics* (under review)
- (119) Banerjee, S.*, Akbani, R. and **Baladandayuthapani, V.****. (2015). Bayesian Nonparametric Graph Clustering. *Computational Statistics and Data Analyses* (submitted)
- (120) Kundu, S.*, Cheng, Y, Shin, M. Manyam G, Mallick B, **Baladandayuthapani, V** Bayesian Variable Selection with Structure Learning: Applications in Integrative Genomics *Plos One* (invited revision)
- (121) Guha, N., **Baladandayuthapani, V**, Mallick, B. K. Quantile Graphical Models: Bayesian Approaches. *Journal of Machine Learning Research* (under revision)
- (122) Coles, A., Maity, A., Manyam, G and **Baladandayuthapani, V** Nonlinear Functional Regression Models with Application to Copy Number Data. *Genetic Epidemiology* (submitted)
- (123) Davenport, T, Maity, A and **Baladandayuthapani, V** Joint modeling of gene expression and copy number variation data using functional regression models. *Biometrics* (submitted)
- (124) Bugbee B*, **Baladandayuthapani, V.**, Kopetz, S, Morris, J. S. Bayesian Adaptive Functional Linear Models for Gene-specific Epigenetic Profiling. *JASA – Applications & Case Studies* (in submission)
- (125) Jennings EM*, Morris JS, Manyam G, Carroll R J., **Baladandayuthapani. V** Pathway-based Integrative Bayesian Modeling of Multi-platform Genomics Data. *JASA Applications & Case Studies* (in submission)
- (126) Ha M. J.*, Stingo F. C., and **Baladandayuthapani. V** Bayesian multi-layered Gaussian graphical models. *Journal of the American Statistical Association.* (under review)
- (127) Yang, H*, **Baladandayuthapani. V** and Morris, J.S. Quantile Functional Regression using Quantlets. *Journal of the American Statistical Association.* (under review)
- (128) Hale S, Maity A, **Baladandayuthapani. V** Causal Functional Mediation Analysis Using Principal Components with an Application to Multiple Myeloma and Copy Number Variation Data. *Statistics in Medicine* (submitted)
- (129) Zinn, P.O. Singh, S. K., ..., de Groot, J. F, **Baladandayuthapani. V** ,Sulman, E. P, Sawaya,R, Lang, F. F., Piwnicka-Worms D, Colen, R. R. Radiome sequencing reveals genomic landscape of glioblastoma and predicts patient survival. *Nature Medicine* (submitted)

GRANT SUPPORT (CURRENT/FUNDED)

- (1) **Principal Investigator**, 5%, Integrative methods for high-dimensional genomics data, 5 R01 CA160736 03, NIH/NCI, 8/23/2011-12/31/2017 (on no cost extension), \$830,000 (\$195,050/year)
- (2) **Principal Investigator**, 25%, Collaborative Research: New Bayesian Nonparametric Paradigms of Personalized Medicine for Lung Cancer, NSF 13-570, National Science Foundation (NSF), 9/1/2015-8/31/2019, \$800,000 (\$200,000/year)
- (3) **Principal Investigator**, (MPI with Bani Mallick) 25%, Bayesian Graphical Models for Integration of Omics Data, R01 CA194391-01, NIH/NCI, , 12/1/2015-11/30/2020, \$1,500,000 (\$300,000/year)
- (4) **Director, Biostatistics and Bioinformatics Core** (at MDACC), 7%, UT SPORE Lung Cancer (PC-C) - Core C: Biostatistics, 5 P50 CA070907 15, NIH/NCI Subcontract from the University of Texas Southwestern Medical Center, PI - John Minna, 5/1/2015-4/30/2020, \$415,104 (\$100,181/year)
- (5) **Co-Director Biostatistics & Computational Biology**, 8%, Pathogenesis and Early Progression of Lung Cancer, CPRIT MIRA RP150521, Cancer Prevention & Research Institute of Texas (CPRIT), PI - Wis-tuba, 6/1/2016-5/31/2021, \$609,140 (\$121,828/year)
- (6) **Co-Director, Biostatistics & Bioinformatics Core, University of Texas PDX Development and Trial Center**, 5%, NCI U54 PI - Jack Roth, 9/1/2017-08/31/2022
- (7) **Director Biostatistics & Bioinformatics Core**, 5%, High-Risk Multiple Myeloma Moon Shot, 710449-80-114307-21, MDACC Myeloma Moonshot, PI - Orłowski, 9/1/2015-8/31/2017, \$8,640 (\$8,640/year)
- (8) **Director, Biostatistics and Bioinformatics Core**, 15%, MD Anderson Cancer Center SPORE in Multiple Myeloma, 5 P50 CA142509 04, NIH/NCI, PI - Robert Z. Orłowski, 9/22/2010-8/31/2017 (NCE), \$1,559,583 (\$96,485/year)
- (9) Statistician, 10%, Cancer Center Support Grant - Biostatistics Shared Resource , P30 CA016672, NIH/NCI, PI - Ethan Dmitrovsky, 9/4/1998-6/30/2018, \$3,178,030 (\$653,606/year)
- (10) Co-Investigator, 10%, Bayesian methods for complex, high dimensional functional data in cancer research, 1R01CA178744-01A1, NIH/NCI, PI - Jeffrey Morris, 9/10/2015-8/31/2020, \$1,250,000 (\$250,000/year)
- (11) Co-Investigator, Decoding the Niche Specific Imaging Genomic Landscape and Heterogeneity of Glioblastoma, CABI/GE IN-KIND Research Grant, MDACC, PI - Rivka Colen, 10/1/2015-9/30/2020, \$1,599,390 (\$320,882/year)
- (12) Co-Investigator, Radiogenomic Screen to Identify Novel Proliferation-associated Glioblastoma Genomic Therapeutic Targets: Discovery and Mechanistic Validation Study, RP160150, Cancer Prevention & Research Institute of Texas (CPRIT), PI - Rivkah Colen, 3/1/2016-2/28/2019, \$852,747 (\$283,288/year)
- (13) Co-Investigator, 3%, Inhibition of Hedgehog Signaling in Gli-1+Adeno CA of the Esoph or GE junction, 1R01CA172741-01A1, NIH/NCI, PI - Jaffer Ajani, 9/1/2013-6/30/2018, \$954,500 (\$190,900/year)

GRANT SUPPORT (PENDING)

- (14) **Principal Investigator**, (MPI with MJ Ha) 10%, Proteomic-based integrated subject-specific networks in cancer, R21 NIH/NCI 04/01/2018- 03/31/2020, \$275,000 **Scored at 7th percentile** (Dec 2017)
- (15) Co-Investigator, 15% Synthesizing Image-derived Heterogeneity with Genomic measurements for Assessing Disease Aggressiveness in Lower Grade Gliomas, R01 NIH/NCI, PI - Arvind Rao, 9/1/2017-8/31/2022, \$2,446,991 (\$476,308/year) **Scored at 3rd percentile** (Dec 2017)

GRANT SUPPORT (COMPLETED)

- (16) **Principal Investigator**, ARRA: Collaborative Research: Efficient Bayesian Model Computation for Large and High Dimensional Data Sets (No-Cost Extension), IIS-0915196 01, National Science Foundation (NSF), 8/1/2009-7/31/2013, 110, 790(36,930/year)
- (17) Co-Investigator, UT SPORE Lung Cancer (PC-C) - Core C: Biostatistics, 5 P50 CA070907 15, NIH/NCI Subcontract from the University of Texas Southwestern Medical Center, PI - John Minna, 5/1/2008-4/30/2013, 415, 104(100,181/year)
- (18) Statistician, Cancer Center Support Grant Biostatistics Shared Resource (PPSR-21), 5 P30 CA016672 37, NIH/NCI, PI - Ronald DePinho, 8/28/2008-6/30/2013, 3, 040, 976(611,160/year)
- (19) Statistician, SPORE in Brain Cancer - Biostatistics Core (PC-C), 5 P50 CA127001 03, NIH/NCI, PI - W K Alfred Yung, 9/1/2008-8/31/2011, \$303,943 (\$61,597/year)

RESEARCH ADVISING/MENTORING**Junior Faculty**

- Francesco C Stingo, Associate Professor of Statistics, University of Florence
- Brian P Hobbs, Associate Professor of Biostatistics, UT MD Anderson Cancer Center
- Arvind U Rao, Assistant Professor of Bioinformatics and Computational Biology, UT MD Anderson Cancer Center
- Karthik Bharath, Dept of Statistics, University of Nottingham
- Anindya Bhadra, Dept. of Statistics, Purdue University
- Min Jin Ha, Assistant Professor of Biostatistics, UT MD Anderson Cancer Center
- Christine B Peterson, Assistant Professor of Biostatistics, UT MD Anderson Cancer Center

Postdoctoral Researchers

- David Rossell Ribera, 2006-2007, (with Valen E. Johnson), Current position: Assistant Professor, Dept of Statistics, University of Warwick
- Suprateek Kundu, 2012-2014, (with Bani K Mallick), Current position: Assistant Professor, Dept. of Biostatistics, Emory University
- Wenting Wang, 2010 - 2013 (with Kim-Ahn Do), Current position: Biostatistician, Biogen Inc.
- Lin Zhang, 2012-present (joint with Jeff Morris), Current position: Assistant Professor, Dept. of Biostatistics, University of Minnesota
- Bruce Bugbee, 2014 – 2015 (with Jeffrey S. Morris) Current position: Computational Statistician, National Renewable Energy Laboratory, Colorado
- Sayantan Banerjee, 2014 – 2016 Current position: Assistant Professor, Indian Institute of Management, Indore.
- Min Jin Ha, 2013 – 2016 Current position: Assistant Professor of Biostatistics, UT MD Anderson Cancer Center.
- Priyam Das, 2017 – present
- Hojin Yang, 2016 – present
- Abhishek Saha 2016 – present
- Arnab Kumar Maity 2016 – present

Ph.D. Students (as primary advisor/co-advisor)

- Rajesh Talluri (Ph.D. 2011) Texas A&M University (joint with Bani K. Mallick) Current position: Post-doctoral Fellow: UT MD Anderson Cancer Center.
- Lan Zhang (Phd 2012) Texas A&M University (joint with Bani K Mallick) **winner of SBSS best paper award 2012** Current position: Assistant Professor, Dept. of Biostatistics, University of Minnesota
- Yang Ni (Phd 2015), Rice University (joint with Francesco Stingo) **Winner of Laplace Award 2014; Boyd Harshbarger Travel Award; Jiann-Ping Hsu Pharmaceutical and Regulatory Sciences Award; Young Investigator Travel Award, G70 Conference;** Current position: Post-doctoral Fellow, UT Austin.

- Shabnam Azadeh (Phd 2015) UT School of Public Health (with Brian P Hobbs) Current position: FDA
- Elizabeth Jennings (PhD, 2015) Texas A&M University (with Jeffrey S Morris and Raymond J. Carroll). Current position: Assistant Professor, US Naval Academy.
- Soyeon Kim (Phd, 2015), Rice University (with J Jack Lee). Current position: Post-doctoral Fellow, University of Texas
- Youyi Zhang (current), GSBS (with J. S. Morris)
- Katherine Shoemaker (current), Rice University (with B. P. Hobbs)
- Yabo Niu (current), Texas A&M University
- Neel Desai (current), Rice University

Ph.D. Students (as external collaborator)

- Karthik Bharath, 2011-2014, Department of Statistics, University of Connecticut, Currently Assistant Professor, Department of Statistics, Nottingham University.
- Adrian Coles, 2012-2015, Dept. of Statistics, North Carolina State University
- Clemontina A. Davenport, 2013-2014, Dept. of Statistics, North Carolina State University
- Sanvesh Srivastava, 2012-2015, Dept of Statistics, Purdue University; Currently Assistant Professor, University of Iowa
- Karl Gregory, 2012-2015, Dept. of Statistics, Texas A & M University; currently Assistant Professor, University of South Carolina
- Chiyu Gu 2015-present, Dept. of Statistics, University of Missouri

Masters Students

- Vinicius Bonato (M.S. 2010) Graduate School of Biomedical Sciences (joint advisor with Kim-ahn Do)
- Lori Jackson (M.S. 2007) UT Graduate School of Biomedical Sciences

Dissertation/Supervisory/Examination Committees

- Violeta Hennessey, UT Graduate School of Biomedical Sciences (Advisor: Gary L. Rosner)
- Zhibo Chen, Department of Computer Science, University of Houston (Advisor: Carlos Ordonez)
- Brad Barney, Texas A&M University (Advisor: Valen E Johnson)
- Yanqing Wang, Ph.D, 2011-present Texas A&M University (Advisor: Raymond J Carroll)
- Jessica Nute, 2012-present, UT Graduate School of Biomedical Sciences (Advisor: Dianna Cody)
- Matthew Wait, 2012-2014, UT Graduate School of Biomedical Sciences (Advisor: Cheenu Kappadath)
- Xuebei An, 2014-present, UT Graduate School of Biomedical Sciences (Advisor: K-A Do)
- Xuebei Xu, 2014-present, UT Graduate School of Biomedical Sciences (Advisor: Sanjay Shete)
- Megan Jacobson, 2014-present, UT Graduate School of Biomedical Sciences (Advisor: Dianna Cody)
- Yihua Liu., 2014-present, UT Graduate School of Biomedical Sciences (Advisor: Paul Scheet)
- Neda Shahidi, 2013-present, UT Health Sciences Center (Advisor: V Dragoi)
- Justin Mikell, 2012-present, UT Graduate School of Biomedical Sciences (Advisor: Cheenu Kappadath)
- Dennis Ruder, 2012-present, UT Graduate School of Biomedical Sciences (Advisor: Ignacio Wistuba)

Research/Rotation/Intern Students

- Neel Desai [2017]; Chiyu Gu [2016-17]; Yabo Niu [2017]; Youyi Zhang (PhD) [2014]; Adrian Coles [2013]; Sanvesh Srivastava [2012]; Karl Gregory [2012]; Karthik Bharath [2011]; Yanqing Wang [2011]; Lin Zhang [2010]; Mario Navas [2010]; Rajesh Talluri [2009]; Violeta Hennessey [2007]

PROFESSIONAL ACTIVITIES AND ACADEMIC SERVICE

Study Section and Grant Review Panels

- CSR Special Emphasis Panel ZRG1 BDA-A (58) R, NIH, Ad Hoc Member, Biostatistics reviewer, 2009
- National Science Foundation, Statistical Panel B, National Science Foundation, Member, 2012-2013
- Study section member NIH ZHD1 DRG-H (92) B, NIH, Member, 2013-2014
- Biostatistical Methods and Research Design Study Section [BMRD], NIH, Ad Hoc Member, 2014
- Genomics, Computational Biology and Technology Study Section [GCAT], NIH, Ad Hoc Member, 2014
- Special Emphasis Review Panel, NIH Global "Omics" Approaches Targeting Adverse Pregnancy and Neonatal Outcomes Utilizing Existing Cohorts, 2015-2016
- Grant reviewer for Florida Department of Health Biomedical Research Programs, 2015
- Grant Reviewer for Cancer Prevention Research Opportunity (CPRO); Alberta Cancer Prevention Legacy Fund 2015
- Grant Reviewer for Research Initiation Awards for Historically Black Colleges and Universities, National Science Foundation, 2015
- NSF/NIGMS Panel, 2016
- Cancer Target Discovery and Development Network (U01s) Study Section, 2017

Conference Organization

- Program Committee, Biomedical Engineering and Informatics Conference 2009
- Session organizer, Frontiers of Interface between Statistics and Sciences, 2009
- Session organizer, IISA Conference, 2010; JSM 2010; JSM 2012; ENAR 2011, ENAR 2012, JSM 2014, ISBA 2012, IISA 2017
- Session co-organizer, Eastern North American Region (ENAR) Spring Meeting, Atlanta, GA, 2007
- Session Chair - IBS 2006; ENAR 2006,2007; JSM 2006, 2007, 2010, 2012,2013, 2014
- Scientific Committee Member, Conference on Latent Gaussian Models, Reykjavik, Iceland, 2013
- Program Committee Member, Integrative Biostatistics Research for Imaging, Genomics, & High-throughput Technologies in Precision Medicine (iBRIGHT) conference, UT MD Anderson Cancer Center
- Program Committee Member for International Indian Statistical Association (IISA) 2015
- Program Committee Member, IEEE International Workshop on Genomic Signal Processing and Statistics (GENSIPS), 2012 and 2013
- Co-leader, Statistical Challenges in Omics Data Integration Working group, SAMSI, 2015
- Organizing Committee member, ENAR Junior Researchers Workshop, 2015
- **Associate Program Chair**, Joint Statistical Meetings, 2016
- **Program Chair**, ENAR, 2018

Advisory/Executive/Leadership Committees

- Heart of Leadership program, UT MD Anderson Cancer Center, 2015
- External tenure review member, Memorial Sloan Kettering Cancer Center & Oregon State University
- Executive Board Member, International Indian Statistical Association, 2008-2012
- Treasurer, Houston Chapter of the American Statistical Association, 2006-2008
- Co-leader, TCGA Data Integration working group, Statistical and Applied Mathematical Sciences Institute (SAMSI), 2014-2015
- Statistical Mentor, NIDA Pre- and Post-doctoral fellowships in Statistical Genetics of Addiction, UTM-DACC, 2011-present
- Chair, Faculty Search Committee, Department of Biostatistics, 2016-2018.

Institutional Service at UT MD Anderson Cancer Center

- Member of Clinical Research Committee, 2011 - present
- Member of Faculty Senate, 2010-present
- Member of Multidisciplinary Research Advisory Committee (MRAC), 6/2011 – 2014
- Member of Data and Safety Monitoring Board, 9/2011 – 2013
- Seminar Co-ordinator, Department of Biostatistics, 2006 – 2012
- Biostatistics co-leader, Multiple Myeloma and Melanoma Moonshot Programs, 2013-present
- Member Faculty Search committee 2012-2014; mid-tenure review committee for various junior faculty

EDITORIAL ACTIVITIES

Editorial Board(s)

- Associate Editor, Biometrics (current)
- Associate Editor, Journal of American Statistical Association – Applications & Case Studies (current)
- Associate Editor, Sankhya Series B (current)
- Guest Editor, Cancer Informatics, *Libertas Academica*, 2013

Journal Reviewer

Annals of Applied Statistics, Australian and New Zealand Journal of Statistics, Biometrics, Canadian Journal of Statistics, Cancer Informatics, Communications in Statistics – Theory and Methods, Computational Statistics and Data Analysis, Human Heredity, Journal of American Statistical Association - Theory & Methods and Applications & Case Studies, Journal of Computational and Graphical Statistics, Journal of Multivariate Analysis, Journal of the Royal Statistical Society - Series B and C, Statistics in Medicine, Genetic Epidemiology, Blood, AISTATS

Book Chapter Reviewer

Elsevier: Amsterdam; Chapman & Hall/CRC

TEACHING

University of Texas Graduate School of Biomedical Sciences and Rice University

- Bayesian Data Analysis (graduate course) Fall 2008, Fall 2009, Fall 2010, Spring 2012, Fall 2013
- Advanced Statistical Methods for the Analysis of Gene Expression and Proteomics, Spring 2008

Texas A&M University

- Elementary Statistical Inference, Fall 2001

Other

- Tutorial on Integrative Analyses of High-through-put Multi-platform Genomics Data, ENAR, Atlanta, 2018
- Workshop on Network-based Bayesian Models for High-dimensional Genomics Data, CSIRO, Brisbane, Australia, 2017
- Webinar on Bayesian models for high-dimensional genomics data, Bayesian forum at Ely Lilly, 2011
- Webinar on Bayesian modeling of high-dimensional object data, Hierarchical Methods for Object Data Working Group, Statistical and Applied Mathematical Sciences Institute (SAMSI), 2011
- Short course on Statistical Methods for Genomics Data, University of Puerto Rico, 2006
- TA and tutor for numerous introductory and intermediate statistics courses at University of Rochester and Texas A&M University

ACADEMIC PRESENTATIONS

National or International Conferences (invited)

- (1) **Keynote Speaker**, Genome Engineering for Cancer Treatment, Canberra, Australia, 2017
- (2) ERCIM/CMS Stats, London, 2017
- (3) IISA Annual Meeting, Hyderabad, 2017
- (4) Workshop on Applications-Driven Geometric Functional Data Analysis, Tallahassee, 2017
- (5) ISI World Statistics Congress, Morocco, 2017
- (6) Southern Regional Council on Statistics, Jekyll Island, 2017
- (7) American Association for the Advancement of Science Annual Meeting, 2017
- (8) 2nd Seattle Symposium on Health Care Data Analytics, 2016
- (9) SIAM Conference on Uncertainty Quantification (UQ16), Lausanne, Switzerland, 2016

- (10) Joint Statistical Meeting, Chicago, 2016
- (11) ISNPS Meeting, Avignon, France, 2016
- (12) ISBA World Meeting, Sardinia, 2016
- (13) ICSA Meeting, Shanghai, 2016
- (14) International Indian Statistical Association Conference, Pune, India, 2015
- (15) Alan Gelfand's 70th Birthday Conference, 2015
- (16) International Society for Non-Parametric Statistics (ISNPS) meeting, Graz, Austria
- (17) Panel on Big Data, ISNPS Meeting, Austria, 2015
- (18) Joint Statistical Meeting, Seattle, 2015
- (19) Asian Regional Section of the IASC meeting, Singapore, 2015,
- (20) iBRIGHT conference, Houston, 2015
- (21) Institute of Applied Statistics Sri Lanka (IASSL) Conference, Colombo, Sri Lanka, 2014
- (22) Joint Statistical Meetings, Boston, 2014
- (23) International Biometric Society Conference, Florence, Italy, 2014
- (24) Bioinformatics: Opening Workshop, SAMSI, 2014
- (25) International Bayesian Meeting, Cancun, Mexico, 2014
- (26) ISBIS 2014 and SLDM Meeting, Durham, North Carolina, 2014
- (27) Eastern North American Region Spring Meetings, 2014
- (28) Bayesian Biostatistics and Bioinformatics Conference, Houston, Texas, 2014
- (29) STATISTICS 2013, C R Rao Institute, Hyderabad, India, 2013
- (30) ICSA/ISBS Joint Statistical Conference, Washington, DC, 2013
- (31) Joint Statistical Meetings, Montreal, Canada, 2013
- (32) Latent Gaussian Models, Reykjavik, Iceland, 2013
- (33) Bayesian methods in Biostatistics and Bioinformatics, IRB, Barcelona, Spain, 2012
- (34) IEEE International Workshop on Genomic Signal Processing and Statistics, Washington DC, 2012
- (35) Biotechnology and Bioinformatics Symposium, Provo, UT, 2012
- (36) Interface 2012, Houston, Texas, 2012
- (37) International Society for Bayesian Analysis (ISBA) World Meeting, 2012
- (38) Joint Statistical Meetings, San Diego, 2012
- (39) Eastern North American Region Spring Meetings, Washington D.C., 2012
- (40) New Grantee Workshop, National Cancer Institute, 2011
- (41) Joint Statistical Meetings, Miami, 2011
- (42) 8th Workshop on Bayesian Nonparametrics, Veracruz, 2011
- (43) IISA Conference, Raleigh, NC, 2011
- (44) Eastern North American Region Spring Meetings, Miami, 2011
- (45) Eighth ICSA International Conference, Guangzhou, China, 2011
- (46) Eastern North American Region Spring Meetings, New Orleans, 2010
- (47) Frontier of Statistical Decision Making and Bayesian Analysis, San Antonio, 2010
- (48) International Indian Statistical Association (IISA) Conference, Vishakapatnam, 2010
- (49) Frontiers of Interface between Statistics and Sciences, Hyderabad, 2010
- (50) Joint Statistical Meetings, Washington D.C, 2009
- (51) Bayesian Biostatistics Conference, UT MD Anderson Cancer Center, 2009
- (52) 9th World Conference of the International Society for Bayesian Analysis (ISBA), 2008
- (53) Southern Regional Council on Statistics Summer Research Conference (SRCOS), 2008
- (54) International Indian Statistical Association (IISA) Conference, Storrs 2008
- (55) International Conference on Statistical Paradigms, ISI Kolkata, 2008
- (56) Joint Statistical Meetings, Salt Lake City, Utah, 2007
- (57) International Indian Statistical Association (IISA) Conference, Cochin 2007
- (58) Eastern North American Region Spring Meetings, Tampa, 2006
- (59) International Biometric Conference in Montréal, Québec, Canada, 2006

Academic Departments (invited)

- (60) Department of Statistics, Virginia Tech University, 2018
- (61) CSIRO Research Group, Brisbane, Australia, 2017

- (62) Department of Biostatistics, University of Michigan, 2017
- (63) Department of Biostatistics, Columbia University, 2017
- (64) Department of Biostatistics, Fred Hutchinson Cancer Center, 2015
- (65) Department of Statistics, Rutgers University, 2015
- (66) UT MD Anderson Grand Rounds, 2015
- (67) Department of Biostatistics, Memorial Sloan Kettering Cancer Center, 2015
- (68) Department of Biostatistics, Columbia University, 2015
- (69) Department of Statistics, Purdue University, 2013
- (70) Department of Statistics & Computer Science, C.R.Rao Institute of Mathematics, Hyderabad, India, 2012
- (71) Public Health Foundation of India, New Delhi, 2012
- (72) Department of Statistics, North Carolina State University, Raleigh, NC, 2012
- (73) Department of Biostatistics, UT School of Public Health, Houston, TX, 2012
- (74) Department of Electrical Engineering, Texas Tech University, Lubbock, TX, 2012
- (75) Department of Statistics, University of Texas at Austin, TX, 2012
- (76) Department of Biostatistics, University of California, Davis, 2012
- (77) Department of Statistics, University of Connecticut, 2011
- (78) Machine learning group, Eli Lilly and Company, 2011 (via web broadcasting)
- (79) School of Mathematics, Statistics & Actuarial Science, University of Kent, UK, 2010
- (80) Department of Statistics, University of Oxford, UK, 2010
- (81) Department of Management Science and Statistics, University of Texas at San Antonio, 2008
- (82) Department of Epidemiology, UT MD Anderson Cancer Center, 2008
- (83) Department of Biostatistics, UT School of Public Health, Houston 2008
- (84) Department of Statistics, Rice University, 2008
- (85) Department of Computer Science, University of Houston, 2008
- (86) Department of Statistics, University of Missouri - Columbia, 2008
- (87) Indian School of Business, Hyderabad, India, 2007
- (88) Department of Statistics, University of Puerto Rico - Mayaguez Campus, 2006
- (89) School of Medicine, University of Puerto Rico - San Juan Campus, 2006
- (90) Richard F. Barry Mathematics & Statistics Colloquium, Old Dominion University, 2005
- (91) Department of Statistics, University of Kentucky, 2005
- (92) Department of Biostatistics, Section on Statistical Genetics, University of Alabama, 2005
- (93) Department of Statistics, Michigan State University, 2005
- (94) Department of Biostatistics, University at Buffalo The State University of New York, 2005
- (95) Division of Biostatistics, University of Minnesota, 2005
- (96) Department of Statistics, University of California, Riverside, 2005
- (97) Department of Biostatistics & Applied Mathematics, M. D. Anderson Cancer Center, 2005
- (98) Department of Integrative Studies , Arizona State University West, 2005
- (99) Statistics and Data Mining Research, Bell Laboratories, 2005
- (100) Department of Statistical Science, Southern Methodist University, 2005
- (101) Department of Statistics, Texas A&M University, 2004

Academic Presentations (contributed)

- (102) Joint Statistical Meetings, Denver, Colorado 2008
- (103) Ninth Case Studies in Bayesian Analysis Meeting, Pittsburgh, 2007
- (104) Joint Statistical Meetings, Seattle, Washington 2006
- (105) Joint Statistical Meetings, Toronto, Canada 2004
- (106) International Workshop on Bayesian Data Analysis, Santa Cruz, 2003
- (107) Joint Statistical Meetings, San Francisco, 2003
- (108) Summer Research Conference in Statistics (SRCOS), Jekyll Island, 2003
- (109) Conference of Texas Statisticians, Texas A&M University, 2003
- (110) Department of Biostatistics, University of Rochester, 2000