Venkataswarup Tiriveedhi, MBBS, PhD

Office: Assistant Professor Department of Biological Sciences Tennessee State University 3500 John A. Merritt Blvd. PO Box 9536; Nashville, TN-37209 Phone: 615-963-5779; Email: vtirivee@tnstate.edu <u>Home:</u> 9678 Opal Ct Brentwood; TN-37027 Phone: 601-434-0834 Email: <u>swaruptv@yahoo.com</u>

Citizenship/ Immigration Status: US permanent resident (Green Card).

Personal Attributes:

- Highly Passionate to make outstanding contributions and improve patient health equity in the field of breast cancer and tumor immunology.
- Published more than 55 full length peer-reviewed articles, including acclaimed proof of concept studies in breast cancer vaccination, and proposing paradigm shift idea on salt-mediated tumor immune-editing phenomenon.
- Directing a highly productive cancer immunology laboratory with continued extramural funding for past 4 years.
- Improved the research laboratory fixed assets by 900% within 3 years.
- Provided structured mentorship to several graduate and undergraduate students.
- Provided acclaimed leadership in developing clinical translational, basic biomedical research and outreach program in breast cancer research at Nashville.

Current Employment: Sep 2013 to Current;

Assistant Professor (tenure-tracked) Department of Biology; Director of Cancer Immunology Laboratory; Tennessee State University; Nashville, TN **Responsibilities:** Teaching (20%); Research (70%); Administration/Service (10%).

Teaching: Cancer Immunology, Cell biology, Human anatomy and Physiology, Pathophysiology.

Research: Biomarkers, Solid-organ Transplantation, Inflammatory Cytokines, Cancer Immunology, Advanced Drug Delivery.

Administration/Service: Student advising, faculty board, Scientific Critique, Outreach, Life-Coach.

I. Education and Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
1) Tennessee State University, Nashville, TN	MBA	2015-current	Finance (part time)
1) Washington University, St Louis, MO	Staff Scientist	2011-2013	Tumor Immunology
2) Washington University, St Louis, MO	Postdoc	2009-2011	Tumor Immunology
3) Johns Hopkins University, Baltimore, MD	Postdoc	2007-09	Molecular Biology
4) The University of Southern Mississippi, MS	PhD	2003-07	Biochemistry
5) Osmania Medical College, India.	MBBS (MD)	1996-02	Medicine

1) Graduate Programs:

(A) Medical School (MBBS-US MD Equivalent): from Nov 1996 to June 2002; bachelors in medicine and surgery; Osmania Medical College; Hyderabad; India.

American Medical Certification: Passed USMLE step 1 examination (2003)

Passed USMLE step 2 CK examination (2004) Passed USMLE step 2CS examination (2004) Passed USMLE step 3 examination (2011) Education Commission for Foreign Medical Graduates (ECFMG): received full certification in 2005

(B) Doctoral School (PhD): Aug 2003 to Dec 2007.

Program: Chemistry and Biochemistry, The University of Southern Mississippi, MS, USA [American Chemical Society (ACS) accredited doctoral program].

Major: Biochemistry

Thesis Topic: Interaction of cell penetrating peptides with model lipid membranes.

Research Tools:

- Analytical Biochemical and biophysical techniques including liposome chemistry, protein chemistry, model lipid membrane, Fluorescence spectroscopy, Chromatography (GLC, HPLC), Mass Spectrometry, UV spectroscopy, Infra-Red spectroscopy etc.
- Proficient in using ORIGIN, Graphpad and SPSS based software programs for data analysis, statistical validation and determination of in vitro biochemical and pharmacological parameters including binding constants, Gibbs free energy changes, enzyme/protein kinetics, statistical power and significance analysis, biological correlation etc.
- Well-versed with KINEMAGE software application for protein modeling.
- Expertise in designing, executing and trouble-shooting analytical biochemistry based research protocols and tools including performance linearity, analytical sensitivity, precision, analytical sensitivity, accuracy, reference range, revalidation etc.

(C) Business Management (MBA): Jan 2015 to current.

Program: Business management, Tennessee State University, Nashville, TN.

Major: Healthcare Finance

Course Work (to-date): Basic courses - Management Logistics, Economics and Finance, Information Systems, Biostatistics; Advanced courses – Biostatistics, Corporate Finance.

2) Additional Training:

(A) Postdoctoral Fellowship – Molecular Biology/Advanced drug Delivery: Johns Hopkins School of Medicine, MD, USA - Dec 2007 to June 2009.

Topic: Small molecule discovery and Voltage gated ion channels.

Research tools: Molecular biology and biochemical techniques including, DNA RNA extraction, gel electrophoresis, cloning, PCR, Western blot, radio-labeling, protein purification, cell culture, spectroscopic techniques etc. Expertise in advanced analytical molecular biology techniques.

(B) Postdoctoral Fellowship – Transplant and Tumor Immunology: Washington University School of Medicine, MO, USA - July 2009 to June 2011.

Topic: Immune mechanisms and novel biomarker discovery in Transplant rejection and Tumor therapy.

Research tools: Basic and advanced molecular biology and biochemistry techniques, Immunology techniques including flow cytometry, cell-sorting, qRT-PCR, ELISA, ELISpot, immunohistochemistry, human serum and tissue sample collection & storage, lymphocyte isolation, primary cell line cultures, animal experiments etc. Expertise in autoimmune assay development, performance analysis, advanced immunological techniques.

II. Previous Job/Educational Experience:

(1) Staff Scientist (July 2011 to Sep 2013): Transplant and Tumor Immunology/Biochemistry; Washington University School of Medicine; St. Louis; MO.

Duties: (1) Conducting research in transplant and cancer biology; (2) Assay development and analytical performance characterization; (3) Luminex bead based assay for detection of organ specific auto-antibodies (4) grant writing, research progress report preparation, manuscript writing and peer-review (5) scheduling weekly laboratory meeting; (6) coordinating invited speaker talks at immunology conferences by internationally renowned speakers; (7) Assisting with smooth functioning of the research and clinical immunology laboratory; (8) Conflict resolution within the research group.

(2) Graduate Teaching Duties (2003-2007): Mandatory teaching towards PhD degree. A total of 24 teaching credit hours; undergraduate junior and senior level organic chemistry labs. Work responsibilities include: organizing

organic chemistry labs, teaching the theory and practical aspects of organic chemistry experiments, addressing student questions, preparing quizzes, grading student's performance etc.

III. Honors and Awards

- **BEYA Outstanding STEM Investigator Award 2017,** for contributions in the field of breast cancer research. BEYA awardee are chosen from 134 universities. 10 distinguished scientists are selected for this prestigious award.
- Young Innovator Award. American Transplant Congress 2013, for outstanding research on the defining the immunological mechanism leading to the pathogenesis of lung allograft rejection
- Philp K Caves Young Investigator Award Presentation; International Society of Heart and Lung Transplantation 2011, for elucidating a novel proof-of-concept mechanism detailing the role of autoimmune responses to self-antigens leading to chronic allograft rejection following human lung transplantation.
- **Poster of Distinction award; American Transplant Congress 2011,** for defining a novel immunomodulatory affect of angiotensin converting enzyme (ACE) inhibitors and angiotensin receptor blockers through TNF-α signaling pathway.
- **Poster of Distinction award; American Transplant Congress 2011,** for demonstrating the potential role of antibody directed therapy (IVIG/rituximab) in the prevention of development of bronchiolitis obliterans syndrome following lung transplantation.
- Special jury pick: "Not-To-Be-Missed" abstract, International Society of Heart and Lung Transplantation 2011, for pioneering novel insights on the role of targeted therapy in the reduction of both alloimmune and autoimmune responses and preventing chronic allograft rejection.
- Young Scientist Award. American Society of Transplantation 2010, for outstanding research on the defining the autoimmune mechanism leading to the lung allograft rejection.
- Poster of Distinction award. American Transplant Congress 2010, for research contribution to better understanding of pathogenesis of chronic rejection.
- National Merit Scholarship for medical education, 1996 to 2002.
- Honors in Biochemistry, Physiology and Internal Medicine; Medical School.
- National and State Merit Scholarships for Junior College education, 1994 to 1996, India.

Funding Source	Grant Number	Role on Project	Grant Title	Project Period	Total Direct and Indirect Costs
NIH/U54	NIH 5U54CA163066 (Pilot Project/ sub- grant)	Principal Investigator [PI]	Critical role of inducible salt-sensing kinase SGK1 in the inflammatory cytokine induced oncogene signaling and breast cancer development	Oct 2014 to Sep 2016	\$213,000
NIH/U54	NIH 5U54CA163066-06 (Full Project/ Sub- grant#6611)	Principal Investigator [PI]	Defining immune footprint in tumor microenvironment following high salt synergized inflammatory	Oct 2016 to Sep 2019	\$874,380

IV. Research Support/ Grants

	cytokine mediated breast	
	cancer progression	

Other grants:

1. 2014: private funding from non-profit organization – women together to fight against cancer (\$5000)

2. June 2014 to Aug 2014: Supply grant from NIH/U54 cancer outreach intra-mural subgrant (\$10,000)

3. June 2015 to Aug 2015: Supply grant from NIH/U54 cancer outreach intra-mural sub-grant (\$15,000)

4. June 2016 to Aug 2016: Supply grant from NIH/U54 cancer outreach intra-mural sub-grant (\$15,000)

5. June 2017 to Aug 2017: Supply grant from NIH/U54 cancer outreach intra-mural sub-grant (\$35,000)

V. Memberships and Licensure & Board Certification

- American Association of Immunology (2010 2014).
- American Association of Cancer research (2014 to current)
- International Society of Heart and Lung Transplant (2009 2012).
- American Society of Transplantation (2009 2012) honorary award member.
- American Society for Histocompatibility and Immunology (2010 2011).
- Biophysical society (2005-2009).
- American Society of Biochemistry and Molecular Biology (2006-2007)

VI. Editorial Board Member and Journal Reviewer

- World Research Journal of Biosciences (Editor-in-Chief)
- International Journal of Biology (Editorial board member)
- American Journal of Immunology (Editorial board member)
- Clinical Biochemistry (Reviewer)
- Internal Journal of Immunogenetics (Reviewer)
- Transplantation (Reviewer)
- PLOS one (Reviewer)

VII. Publications (Full-length, peer-reviewed)

- Alotaibi D, Amara S, Johnson TL, Tiriveedhi V^{\$} (2017) Potential anti-cancer effect of prostratin through SIK3 inhibition. *Oncology Letter* (Accepted-in press). ^{\$}Corresponding author.
- Amara S, Majors C, Roy B, Hill S, Rose K, Myles, EL, Tiriveedhi V^{\$} (2017) Critical role of SIK3 in mediating high salt and IL-17 synergy leading to breast cancer cell proliferation. *PLOSone* 12(6):e0180097.
 ^{\$}Corresponding author.
- 3) Amara S, **Tiriveedhi V**^{\$} (2017) Inflammatory role of high salt in tumor microenvironment. *International Journal of Oncology* 50:1477-1481. ^{\$}Corresponding author.
- 4) Amara S, **Tiriveedhi V**^{\$} (2017) The five immune forces impacting DNA-based cancer immunotherapeutic strategy. *International Journal of Molecular Sciences* 18: 650. ^{\$}Corresponding author.
- 5) Amara S, Whalen M, **Tiriveedhi V^{\$}** (2016) High salt induces anti-inflammatory MΦ2-like phenotype in peripheral macrophages. *Biochemistry and Biophysics Reports* 7: 1-9. **^{\$}Corresponding author**.
- 6) Amara S, Zheng M, **Tiriveedhi V**^{\$} (2016) Oleanolic acid inhibits high salt induced exaggeration of Warburg-like metabolism in breast cancer cells. *Cell Biochemistry and Biophysics* 74 (3): 427-434. ^{\$}Corresponding author.
- 7) Amara S, Lopez K, Alotaibi D, Tiriveedhi V^{\$} (2016) NFAT-5/STAT-3 interaction mediates synergism of high salt with IL-17 towards induction of VEGF-A expression in breast cancer cells. *Oncology Letter* 12(2):933-943. ^{\$}Corresponding author.

- Amara S, Ivy MT, Myles E, Tiriveedhi V^{\$} (2016) Sodium channel γENaC mediates IL-17 synergized high salt induced inflammatory stress in breast cancer cells. *Cellular Immunology* 302: 1-10. ^{\$}Corresponding author.
- 9) Amara S, Lopez K, Banan B, Brown S-K, Whalen M, Myles E, Ivy MT, Johnson T, Schey KL, Tiriveedhi V^{\$} (2015) Synergistic effect of pro-inflammatory TNFα and IL-17 in periostin mediated collagen deposition: Potential role in liver fibrosis. *Molecular Immunology* 64 (1): 26-35. ^{\$}Corresponding author.
- 10) Platt D, Amara S, Mehta T, Vercuyssee K, Myles EL, Johnson T, Tiriveedhi V^{\$} (2014) Violacein inhibits matrix metalloproteinase mediated CXCR4 expression: Potential anti-tumor effect in cancer invasion and metastasis. *Biochemical Biophysical Research Communications* 455 (1-2): 107-112. ^{\$}Corresponding author.
- 11) Tiriveedhi V, Tucker N, Herndon J, Li L, Sturmoski M, Ellis MJ, Ma CX, Naughton M, Lockhart AC, Gao F, Fleming TP, Goedegebuure PS, Mohanakumar T, Gillanders WE. (2014) Safety and preliminary evidence of biological efficacy of a mammaglobin-A DNA vaccine in patients with stable metastatic breast cancer. Clinical 20 (23): 5964-75. (Press Report Cancer Research on this article in TIME magazine http://time.com/3611635/breast-cancer-vaccine-safety-trial/)
- 12) Soysal SD, Muenst S, Kan-Mitchell J, Huarte E, Zhang X, Wilkinson-Ryan I, Flemin T, Tiriveedi V, Moanakumar T, Li L, erndon J, Oertli D, Goedegebuure SP, Gillanders WE. (2014) Identification and translational validation of novel mammaglobin-A CD8 T cell epitopes. *Breast Cancer Research and Treatment* 147 (3): 527-537.
- 13) Tiriveedhi V^{\$}, Upadhya GA, Busch RA, Gunter KL, Dines JN, Knolhoff BL, Jia J, Sarma NJ, Ramachandran S, Anderson CD, Mohanakumar T, Chapman WC. (2014) Protective role of bortezomib in steatotic liver ischemia/reperfusion injury through abrogation of MMP activation and YKL-40 expression. *Transplant Immunology* 30 (2-3):93-8. ^{\$}Corresponding author.
- 14) **Tiriveedhi** V, Banan B, Deepti S, Nataraju A, Hachem R, Trulock E, Patterson AG, Mohanakumar T. (2014) Role of defensins in chronic lung allograft rejection. *Human Immunology* 75(4): 370-7.
- 15) Baskaran G, Tiriveedhi V, Ramachandran S, Aloush A, Grossman B, Hachem R, Mohanakumar T. (2014) Efficacy of extracorporeal photopheresis in clearance of antibodies to donor-specific and lung-specific antigens in lung transplant recipients. *Journal of Heart Lung Transplantation* 33(9): 950-6.
- 16) Sarma NJ, Tiriveedhi V, Crippin JS, Chapman WC, Mohanakumar T. (2014) Hepatitis C virus-induced changes in microRNA 107 (miRNA-107) and miRNA-449a modulate CCL2 by targeting the interleukin-6 receptor complex in hepatitis. *Journal of Virology* 88(7):3733-43.
- 17) Angaswamy N, Klein C, Tiriveedhi V, Gaut J, Anwar S, Rossi A, Phelan D, Wellen JR, Shenoy S, Chapman WC, Mohanakumar T. (2014) Immune responses to collagen-IV and fibronectin in renal transplant recipients with transplant glomerulopathy. *American Journal of Transplantation* 14(3):685-93.
- 18) Amara S, Tiriveedhi V, Tiriveedhi K (2014) Hepatosplenic T-Cell Lymphoma Mimicking Infiltrative Chronic Myelomonocytic Leukemia. *Family Medcine & Medical Science Research* 3:119 (1-3).
- 19) Tiriveedhi V, Gautam B, Sarma NJ, Askar M, Budev M, Aloush A, Hachem R, Trulock E, Myers B, Patterson AG, and T Mohanakumar. (2013) Pre-transplant antibodies to Kα1 tubulin and collagen-V in lung transplantation: Clinical correlations. *Journal of Heart Lung Transplantation* 32(8):807-14.
- 20) **Tiriveedhi V**, Takenaka M, Sarma NJ, Gelman AE, Patterson GA, and T Mohanakumar. (2013) Anti-major histocompatibility complex-induced obliterative airway disease: Selective role for CD4 and CD8 T cells in inducing immune responses to self-antigens. *Journal of Heart Lung Transplantation* 32(7):714-22.
- 21) Angaswamy N*, Tiriveedhi V*, Sarma NJ, Subramanian V, Klein C, Wellen J, Shenoy S, Chapman WC and T Mohanakumar. (2013) Interplay between Immune responses to HLA and Non-HLA tissue restricted self-antigens in allograft rejection. *Human Immunology* 74(11): 1478-1485. *Co-first author on this article.
- 22) Sarma NJ, Tiriveedhi V, and Mohanakumar T. (2013) Detection of Antibodies to Self-Antigens (K-alpha 1 Tubulin, Collagen I, II, IV, and V, Myosin, and Vimentin) by Enzyme-Linked Immunosorbent Assay (ELISA). *Methods Molecular Biology* 1034:335-341.
- 23) Tiriveedhi V, Fleming TP, Goedegebuure PS, Naughton M, Ma C, Lockhart C, Gao F, Gillanders WE, and T. Mohanakumar. (2013) Mammaglobin-A cDNA vaccination of breast cancer patients induces antigen-specific cytotoxic CD4+ICOShi T-cells. *Breast Cancer Research & Treatment* 138(1):109-118.
- 24) Basha HI, Ramachandran S, Tiriveedhi V, Takenaka M, Nath DS, Benshoff N, Patterson GA, and T Mohanakumar. (2013) Critical role for IL-17A/F in the immunopathogenesis of obliterative airway disease induced by anti-MHC I antibodies. *Transplantation* 95(2):293-300.
- 25) **Tiriveedhi V**, Takenaka M, Ramachandran S, Gelman AE, Patterson GA, and T Mohanakumar. (2012) T Regulatory cells play a significant role in modulating the MHC Class I antibody Induced Obliterative Airway Disease. *American Journal of Transplantation* 12 (10): 2663-2674.

- 26) **Tiriveedhi V**, Gelman AE, T Mohanakumar (2012) HIF-1α signaling by airway epithelial cell K-α1-tubulin: Role in fibrosis and chronic rejection of human lung allografts. *Cellular Immunology* 273(1): 59-66.
- 27) Sarma NJ, **Tiriveedhi V**, Subramanian V, Shenoy S, Crippin J, Chapman W, Mohanakumar T. (2012) Hepatitis C virus mediated changes in microRNA-449a modulate expression of the inflammatory biomarker YKL40 through components of the NOTCH Signaling Pathway. *PLOSone* 2012; 7(11):e50826.
- 28) Sarma NJ, Tiriveedhi V, Ramachandran S, Crippin J, Chapman W, and Mohanakumar T. (2012) Modulation of immune responses following solid organ transplantation by microRNA. *Experimental Molecular Pathology* 93(3):378-85.
- 29) Tiriveedhi V, Sarma NJ, and T. Mohanakumar. (2012) An important role for autoimmunity in the immunopathogenesis of chronic allograft rejection. *International Journal of Immunogenetics* 39(5): 373-380.
- 30) Tiriveedhi V, Angaswamy N, Brand D, Weber J, Hacheem R, Aloush A, Phelan D, Trulock E, Meyers B, Patterson GA, and T Mohanakumar. (2012) Epitope shift of collagen V leads to T-helper switch: Role in chronic lung allograft rejection. *Clinical and Experimental Immunology* 167(1): 158-168.
- 31) Tiriveedhi V, Sarma NJ, Subramanian V, Fleming TP, Gillanders WE, T Mohanakumar. (2012) Identification of HLA-A24 restricted CD8⁺ Cytotoxic T-Cell Epitopes Derived from Mammaglobin-A, A Human Breast Cancer Associated Antigen. *Human* Immunology 73(1): 11-16.
- 32) Tiriveedhi V, Conzen KD, Liaw-Conlin J, Upadhya G, Malone J, Townsend RR, Kerns R, Jia J, Csontos K, Ramachandran S, Mohanakumar T, Anderson CD, and Chapman WC. (2012) The Role of Molecular Chaperonins In Warm Ischemia and Reperfusion Injury in the Steatotic Liver: A Proteomic Study. *BMC Biochemistry* 2012, 13(1):17 (1-9).
- 33) Takenaka M*, Tiriveedhi V*, Subramanian V, Hoshinaga K, Patterson GA, and T Mohanakumar. (2012) Antibodies to MHC Class II Molecules Induce Autoimmunity: Critical Role for Macrophages in the Immunopathogenesis of Obliterative Airway Disease. *PLOS one* 2012, 7(8):e42370 (1-11). *Co-first author on this article.
- 34) Weber J*, **Tiriveedhi V***, Hacheem R, Trulock E, Patterson GA, and T Mohanakumar. (2012) Angiotensin Converting Enzyme inhibitors and Angiotensin Receptor Blockers cause Abrogation of Obliterative Airways Disease in murine model of lung allograft. *Journal of Heart Lung Transplantation* 31:419-426. *Co-first author on this article.
- 35) Tiriveedhi V, Miller M, Butko P, and Li M. (2012) Autonomous S4 transmembrane segment of voltage sensor domain partitions into the hydrophobic core of the membrane. *Biochimica et Biophysica Acta –Biomembranes* 1818(7): 1698-1705.
- 36) Sarma NJ, Tiriveedhi V, Angaswamy N, and T. Mohanakumar. (2012) Role of antibodies to self-antigens in chronic allograft rejection: potential mechanism and therapeutic implications. *Human Immunology* 73(12):1275-81.
- 37) Hachem RR, Tiriveedhi V, Aloush A, Phelan D, Trulock E, Meyers B, Patterson GA, and T Mohanakumar. (2012) Antibodies to K-α 1 tubulin and collagen V and the impact of their depletion on chronic rejection after lung transplantation. *American Journal of Transplantation* 12(8):2164-71.
- 38) Takenaka M, Subramanian V, Tiriveedhi V, Phelan D, Hachem RR, Trulock E, Gelman AE, Patterson GA, and T Mohanakumar. (2012) Complement activation is not required for obliterative airway disease induced by antibodies to MHC molecules : Implications for Bronchiolitis Obliterans Syndrome following human lung transplantation. *Journal of Heart Lung Transplantation* 31(11):1214-22.
- 39) Nataraju A, Fukami N, Tiriveedhi V, Cianciolo GJ, Chapman WC, and T Mohanakumar. (2012) LMP-420, A Small Molecular Inhibitor of TNF-α, Prolongs Islet Allograft Survival by Induction of Suppressor of Cytokine Signaling-1: Synergistic effect with cyclosporin-A. *Cell Transplantation* 21(6):1285-96.
- 40) Basha HI*, **Tiriveedhi V***, Fleming TP, Gillanders WE, Mohanakumar T. (2011) Identification of immunodominant HLA-B7-restricted CD8(+) cytotoxic T cell epitopes derived from mammaglobin-A expressed on human breast cancers. *Breast Cancer Research&Treatment* 127(1):81-9. *Co-first author on this article.
- 41) Tiriveedhi V, Kitchens KM, Nevels K, Ghandehari H, and Butko P. (2011) Kinetic analysis on the interaction of Polyamidoamine (PAMAM) Dendrimers with model lipid membrane. *Biochimica et Biophysica Acta - Biomembranes* 1808(1):209-218.
- 42) Nath DS*, Tiriveedhi V*, Basha HI, Phelan D, Ewald GA, Moazami N, Mohanakumar T. (2011) A role for antibodies to HLA, Collagen-V and K-α1-Tubulin in antibody mediated rejection and cardiac allograft vasculopathy. *Transplantation* 91(9):1036-1043. *Co-first author on this article.

- 43) Subramanian V, **Tiriveedhi V**, T Mohanakumar. (2011) Biology and function of CD4+regulatory T cells: How close are we to translating into clinical application? *American Society of Histocompatibility and Immunogenetics (ASHI) Quarterly* 35(4): 18-23.
- 44) Subramanian V, Seetharam AB, Vachharajani N, **Tiriveedhi V**, Angaswamy N, Ramachandran S, Crippin JS, Shenoy S, Chapman WC, T Mohanakumar, Anderson CD. (2011) Donor graft steatosis influences immunity to Hepatitis C virus and allograft outcome following liver transplantation. *Transplantation* 92(11): 1259-1268.
- 45) Saini D, Weber J, Ramachandran S, Phelan D, **Tiriveedhi V**, Liu M, Steward N, Aloush A, Hachem R, Trulock E, Patterson GA and Mohanakumar T. (2011) Alloimmunity induced autoimmunity as a mechanism in the pathogenesis of chronic rejection of human lung allografts. *Journal of Heart Lung Transplantation* 30(6):624-631.
- 46) Anderson CD, Upadhya G, Conzen KD, Jia J, Brunt EM, Tiriveedhi V, Xie Y, Ramachandran S, Mohanakumar T, Davidson NO, and William C. Chapman WC. (2011) Endoplasmic Reticulum Stress is a Mediator of Post-Transplant Injury in Severely Steatotic Liver Allografts. *Liver Transplantation* 17(2):189-200.
- 47) **Tiriveedhi V**, Angaswamy N, Weber J, and Mohanakumar T. (2010) Lipid Raft Facilitated Ligation of K-α1-Tubulin by specific Antibodies on Epithelial cells: Role in pathogenesis of chronic rejection following Human Lung Transplantation. *Biochemical Biophysical Research Communications* 399(2), 251-255.
- 48) Golocheikine A*, **Tiriveedhi V***, Angaswamy N, Benshoff N, Sabarinathan R, and Mohanakumar T. (2010) Cooperative signaling for angiogenesis and neovascularization by VEGF and HGF following Islet Transplantation. *Transplantation* 90(7), 725-731. ***Co-first author on this article.**
- 49) **Tiriveedhi V**, Weber J, Seetharam A, and Mohanakumar T. (2010) Cross-talk of alloimmune response and autoimmunity: role in pathogenesis of chronic rejection. *Discovery Medicine* 9(46):229-35.
- 50) Seetharam A, **Tiriveedhi V**, Mohanakumar T. (2010) Alloimmunity and autoimmunity in chronic rejection. *Current Opinions in Organ Transplantation* 15(4):531-536
- 51) Saini D, Angaswamy N, Tiriveedhi V, Fukami N, Ramachandran S, Hachem R, Trulock EP, Meyers B, Patterson A, and Mohanakumar T. (2010) Synergistic effect of antibodies to human leukocyte antigens and defensins in pathogenesis of bronchiolitis obliterans syndrome after human lung transplantation. *Journal of Heart Lung Transplantation* 29(12), 1330-1336.
- 52) Nath DS, Basha HI, **Tiriveedhi V**, Alur C, Phelan D, Ewald GA, Moazami N, Mohanakumar T. (2010) Characterization of immune responses to cardiac self-antigens myosin and vimentin in human cardiac allograft recipients with antibody-mediated rejection and cardiac allograft vasculopathy. *Journal of Heart Lung Transplantation* 29(11): 1277-1285.
- 53) **Tiriveedhi V**, and Butko P. (2008) Soluble glycosaminoglycans Inhibit the Interaction of TAT-PTD with Lipid Vesicles. *International Journal of Peptide Research & Therapeutics* 14(3): 209 214.
- 54) Lowe A B, Wang R, **Tiriveedhi V**, Butko P, and McCormick C L. (2007) RAFT Synthesis and Aqueous Solution Properties of pH-Responsive AB Diblock Styrenic-Based Copolymers of 4-Vinylbenzyltrimethylphosphonium Chloride with N,N-Dimethylbenzylvinylamine. *Macromolecular Chemistry & Physics* 208 (21): 2339-2347.
- 55) **Tiriveedhi V**, and Butko P. (2007) A fluorescence spectroscopy study on the Interactions of the TAT-PTD peptide with model lipid membranes. *Biochemistry* 46 (12): 3888 3895.
- VIII. Abstracts/Conference Presentations: Published more than 70 abstracts at various national and international conferences (available upon request).

IX. Faculty Committee:

- Departmental Committee: Facilities/ Faculty Development/ Strategic Planning Committee
- University Committee: Budget Committee; Professional Development Committee; Research Committee
- Thesis/Dissertation Committee:
 - Thesis mentor (committee Chair) for 4 master's students (3 graduated) and 1 PhD students Worked on Thesis Dissertation Committee for 12 graduate students.

X. Outreach/Community Service:

- **Promotion of breast cancer awareness and education in Nashville, TN (2013-current):** Leader and Volunteer member in organizing breast cancer survivor education and awareness in Nashville through collaboration with Cancer survivors, clinicians, researchers, church groups and community leaders.
- **Promotion of science and research in Nashville, TN (2013-current):** Volunteer member in STEM education promotion geared towards science and mathematics in middle and high school students.
- **Promotion of science and research in St Louis, MO (2010-2012):** Volunteer member in St Louis Academy of Sciences to promote enthusiasm towards science and research in middle and high school students at St Louis, Missouri.
- **Promotion of science and research among high school students, Mississippi (2005-2007):** Promotion of science and research interest through University of Southern Mississippi education outreach program among the minority and underserved high school students at Hattiesburg, Mississippi.
- Work for cause against female infant foeticide (1999-2002): Organized camps, work-shops and education guides to increase public awareness on the stigma of infant foeticide and implications on society in India. Strongly campaigned to advocate a law on restricting the physicians to deliver the foetal sex information and sex-determination by ultrasonography.
- **Promotion of adult education and literacy in rural India (1994-1996):** Volunteer as a part of high school outreach program in India to promote literacy in underserved/ rural communities of Hyderabad, India.
- XI. Languages: English, Telugu, Hindi. Fluent in all three languages with good written and oral communication skills.

XII. Professional Profile:

- Broad knowledge and skilled training in various analytical, research, clinical and management skills.
- Highly organized and dedicated, with a positive attitude.
- Ability to handle multiple assignments under high pressure and consistently meet tight deadlines.
- Have excellent written, oral and interpersonal communication skills.
- Good team player and team leader.
- Thrive to work in challenging environments.