CURRICULUM VITAE

DR. HARIBABU BODDULURI

Professor

Department of Microbiology and Immunology
The James Graham Brown Cancer Center
Room 324, CTRB
505- South Hancock
University of Louisville Health Sciences Center
Louisville, KY- 40202
E-Mail: H0bodd01@louisville.edu

Phone: (502) 852-7503
Fax: (502) 852-2123

Residence: 4024-White Blossom Estates Court
Louisville, KY, 40241
(502) 836 9810

EDUCATION

	Degree	Place	Field of Study
1973 - 1976	B.S	Andhra University, India	Chemistry & Biology
1976 - 1978	M.S	Andhra University, India	Biochemistry
1978 - 1983	PhD	Indian Institute of Science, India	Biochemistry

Dissertation: Studies on Microbial Degradation of Isophthalic Acid and 4-Hydroxyisophthalic Acid.

POSTGRADUATE TRAINING

1984 - 1987	Postdoctoral Fellow, Department of Biology, The Johns Hopkins University, Baltimore, MD
1987 - 1992	Senior Research Associate, Department of Biological Sciences, Hunter College, City University of New York, New York, NY

ACADEMIC APPOINTMENTS

1992 - 2000	Research Assistant Professor, Department of Medicine, Duke University Medical Center, Durham, NC
1996 - 2001	Member, Specialized Center of Research in Rheumatoid Arthritis, Duke University Medical Center, Durham, NC
1997 - 2000	Member, Center for AIDS Research, Duke University Medical Center, Durham, NC
2000 - 2000	Research Associate Professor, Department of Medicine, Duke University Medical Center, Durham, NC
2001 - 2002	Associate Professor (with Tenure), Department of Pathology, University of Louisville Health Sciences Center, Louisville, KY
2001 - 2006	Associate Professor, Department of Pharmacology and Toxicology, University of Louisville Health Sciences Center, Louisville, KY
2001 - Present	Member, The James Graham Brown Cancer Center, University of Louisville Health Sciences Center, Louisville, KY
2001 - Present	Member, Center for Genetics and Molecular Medicine, University of Louisville Health Sciences Center, Louisville, KY
2002 – 2006	Associate Professor, Department of Microbiology and Immunology, University of Louisville Health Sciences Center, Louisville, KY
2004 – Present	Program Leader, Tumor Immunobiology Program, The James Graham Brown Cancer Center, University of Louisville Health Sciences Center, Louisville, KY

2006 – Present	Professor, Department of Microbiology and Immunology, University of Louisville Health Sciences Center, Louisville, KY
2006 - 2014	Professor, Department of Pharmacology and Toxicology, University of Louisville Health Sciences Center, Louisville, KY
2015-Present	Vice Chair, Department of Microbiology and Immunology, University of Louisville Health Sciences Center, Louisville, KY

TEACHING

1990-1991:	Signal transduction lectures in Developmental Biology 306 Cell cycle lecture for Cell Biology-202 course
Fall 1991:	Biology 306 (Developmental Biology) for undergraduates. 50% of three credit course, topics covered includes molecular and cellular mechanisms of early embryonic development in amphibians, mammals and vertebrate organ system development, cell-cell communication, signal transduction and differential gene regulation in developmental processes.

Spring 2002:	Lecture on Chemokine Receptors for Pharmacology 661
Fall 2002:	Innate Immunity module in Advanced Immunology Course (3 lectures)
Fall 2002:	Mechanisms of Tumor Cell Migration in Molecular Basis of Cancer Course
Fall 2003:	Chemokines and Chemotaxis for Advanced Immunology Course (3 lectures)
Fall 2003:	Fluorescence Digital Video Microscopy for Research Methods Course
Fall 2004:	Chemokines and Chemotaxis for Advanced Immunology Course (2 lectures)

Spring 2005 through spring 2019: Chemokines and Chemotaxis for Advanced Immunology Course (2 lectures)
Fall 2014 through-Fall 2019: Immune surveillance and inflammation promotion of cancers for Advanced Immunology II (2 lectures)
Spring 2005 through spring 2019: Inflammation and Chemokines for Molecular toxicology (Pharmacology 661)
2015- Through 2019: MBIO 689-01: MICROBIOTA (one lecture)

HONORS & AWARDS

1976-1978 State Merit Scholarship for two years of Masters Program at Andhra University
1978 University First Rank in M.S. Andhra University, Waltair, India
2010- The James Graham Brown Cancer Center, Julep Ball Scientist of the Year 2010 (http://vimeo.com/11627040)

AWARDS FROM TRAINEES

Venkatakrishna R. Jala, PhD
First Place (Postdoctoral Fellow) Research Louisville 2003, Louisville, KY

Elangovan Krishnan, PhD
First place, Graduate student research
James Graham Brown Cancer Center Annual Research Retreat, 2005

Wen-Hai Shao, PhD
Third Place (Graduate student) Research Louisville 2005, Louisville, KY

Elangovan Krishnan, PhD
First place, Annual IMD3 Symposium, 2006

Institute for Molecular Diversity & Drug Design, Louisville, KY

Elangovan Krishnan, PhD
Third place, Graduate student research
James Graham Brown Cancer Center Annual Research Retreat, 2007

Paramahamsa Maturu, PhD
First place, Postdoctoral research
James Graham Brown Cancer Center Annual Research Retreat, 2008

Venkatakrishna R. Jala, PhD
Young Scientist award (Bioactive Lipids Meeting; Cancun, Mexico 2009)

Zinal Chheda, PhD
AAI carriers in Immunology Fellowship (2014-15)

PROFESSIONAL MEMBERSHIPS

American Association of Immunologists
American Association for Cancer Research

EDITORIAL SERVICE

Associate Editor
Frontiers in Immunology; 2019- Section Cytokines and Soluble Mediators in Immunity

Adhoc Reviewer for

American Journal of Pathology
Arthritis &Rheumatism
Blood
BMC Immunology
FASEB Journal
International Journal of Allergy and Inflammation
Journal of Biological Chemistry
Journal of Leukocyte Biology
Journal of Cell Science
Journal of Clinical Investigation
Journal of Immunology
European Journal of Immunology
Nature Communications
Pharmacological Reviews
PLoS ONE
Proceedings of National Academy of Sciences (USA)
Scientific Reports
Science Signaling
Thrombosis and Haemostasis
Trends in Immunology

GRANT PEER REVIEW

2004-05 NIH/NIAID Program Project (Arthritis P01) Review Panel

2005, 2006, 2007 Phillip Morris External Grants Review Panel
2007 Arthritis Foundation Research Grant Review Panel
2007 American Association for Cancer Research, Immunology Program Review Panel
2007, NIH U19-Asthma program
2009 Special Emphasis Panel ZRG1 DKUSA
2011 NIH U19-Asthma program - March 2011
2012 NIH Special Emphasis Panel- March 2012 ZCA1SRLB-D (K1)
2012 NIH Special Emphasis Panel- December 2012 ZCA1 RTRB-8
2013 NIH review panel III Study section ad hoc member November 2013
2015 NIH Special Emphasis panel-February 2015 ZCA1 SRB-2(M2)
2017 NIH review panel III Study section ad hoc member June 2017
2018 NIH Special Emphasis panel ZRG DKUS-N (04) June 2018
2019 NIH review panel III Study section ad hoc member June 2019
2019 NIH review panel III Study section ad hoc member Oct 2019

COMMITTEES AND ADMINSTRATIVE SERVICE

2001-2001	Member, Research Committee Department of Pathology
2003-04	Chair, Brown Cancer Center Tumor Immunobiology Program Faculty Search Committee
2002-04	Member, Award Administration Task Force, University of Louisville
2004-Present	Program Leader, Tumor Immunobiology Program, James Graham Brown Cancer Center
2005-07	Member, Institutional Animal Care and Use Committee
2006-Present	Reviewer, Clinical Scientific Review Committee, James Graham Brown Cancer Center
2008-10	Member, Graduate admissions committee, Department of Microbiology & Immunology
2008-10	Member, Integrated Program in Biomedical Sciences (IPIBS) committee
2008-2014	Member, School of Medicine Graduate Council
2008- 2014	Elected member, University of Louisville graduate council and faculty of School of Integrated Graduate Studies (SIGS)
2014	Chair, Microbiology and Immunology department Faculty Search Committee
2016	Member, Microbiology and Immunology department Faculty Search Committee
2019	Member, Microbiology and Immunology department Faculty Search Committee
2019	U of L Promotion and Tenure (PAT) committee
2019	Member, Graduate admissions committee, Department of Microbiology & Immunology

GRADUATE STUDENTS (Advisor)

Wenhai Shao (2001-05) was awarded PhD in 2005 for thesis entitled "Leukotriene B_4 Receptors in Inflammation". He is currently an assistant professor at University of Cincinnati College of Medicine.

Steven Mathis (2002-07) was awarded PhD in 2007 for thesis entitled 'Non-Redundant and Critical Roles for Leukotriene B_4 Receptors BLT1 and BLT2 in Mouse Models of Inflammatory Arthritis". After being a postdoctoral fellow in our laboratory at the Brown Cancer Center, University of Louisville Steven taken up a research associate position at Penn State University, Hershey. He is currently back in our research group as manager of the Internal RFP grant "University of Louisville Program in Metagenomics and Health"

Sudeep Basu (2004-2007) was awarded PhD in 2007 for thesis entitled "Structure-Function Analysis of the Leukotriene B_4 Receptor: BLT1". During his tenure in the department he received the American Heart

Association-Predoctoral Award. He is currently working as a Practice Leader, in the division of Innovation Services at Frost & Sullivan, CA.

Elangovan Krishnan (2003-2008) was awarded PhD in 2008 for thesis entitled "Inflammation and Cancer: Roles of D6 and Leukotriene B_4 Receptors. He is currently working as Research Associate at the MD Anderson Cancer Center in Dallas, Texas

Soujanya Rajgopal (2005-20007) received MS in 2007. Her work was supported by an American Heart Association-Predoctoral Award. She is currently a Laboratory Scientist at Johnson &Johnson, NewJersy.

Zinal Chheda (2010-15) was awarded PhD in 2015 for thesis entitled "Regulation of $CD8^+$ T cell trafficking to melanoma tumors by chemoattractant receptors BLT1 and CXCR3". Currently a Research Scientist at Sonafi, USA.

Bindu Hegde (2012- 2018) was awarded PhD in 2018 for thesis entitled "Inflammasome Independent Leukotriene-B4 Production Drives Crystalline Silica Induced Sterile Inflammation" Currently a postdoctoral fellow at UCSF

Ruqaih Alghsham (2014-2019) was awarded PhD in 2019 for thesis entitled "A Distinct Pattern of Sterile Inflammation Induced by Zinc Oxide Nanowires" currently taking a position as assistant professor at Alqassim University in Saudi Arabia.

GRADUATE STUDENT COMMITTEES (member)

Doreen Nebane, PhD. 2005 "Sex-based differences in autoimmune disease may be mediated by differential expression of regulatory T cell responses in females versus males" (Mentor- Michele Kosiewicz)

Smita Karandikar-Ghare, Ph.D. 2006 "Mechanisms of ethanol associated immunosuppression: Effect on activation-induced lipid raft-mediated TCR signal transduction in CD4+ T lymphocytes" (Mentor- Barve/ Suttles)

Lichun Wang, Ph.D. 2007 "Importin ß1 Interaction Mediates Nuclear Localization of Sphingosine-1-Phosphate Receptor 1" (Mentor- Men-Jer Lee)

Stephanie Watkins, Ph.D. 2007 "Therapeutic Targeting of Tumor Associated Macrophages" (Mentor-Robert Stout)

Chad Aaron Dumstorf, PhD 2007 (Department of Pharmacology and Toxicology) "Participation of Mouse DNA Polymerases IOTA, ETA and REV1 in Mutagenic Bypass of Carcinogen Induced Adducts and Suppression of Cancer (Mentor-W Glenn McGregor)

Arlixer McGhee Coleman, PhD. 2008 "Cooperative Regulation by Cytokine Family Members MIF and D-DT in Non-Small Cell Lung Cancer-derived Angiogenic Growth Factor Production" (Mentor- R. Mitchell/ Suttles)

Chelsea Eaves, PhD. 2010 "Reconcilation of IL-1beta loss with the TRIF-biased TLR-4 signaling of Monophosphate Lipid A" (Mentor Thomas Mitchell)

Amlan Chakraborty, PhD 2011 (School of Engineering) "Fluid Dynamic Analysis of Flow in Orbiting Dishes and the Effects of Flow on Shear Stress and Endothelial Cellular Responses**"** (Mentor-Eric Berson)

Shayam Sundar Bansal, PhD 2011 (Department of Pharmacology and Toxicology) "Development and Evaluation of Polymeric Implants of Curcumin for Enhanced Chemopreventive Activity (Mentor Ramesh C. Gupta).

Jason Meier, PhD 2012 (Department of Biochemistry) "Structure-Based Design of Inhibitors of CXCR4" (Mentor- John Trent)

Megan Macintosh, PhD 2012 (Microbiology and Immunology) Blockade of CXCR4 Inhibits *P.Gingivalis* Persistence *in vivo* and Induction of Periodontal Bone loss (Mentor – George Hajishengalis)

Anita Chhabra, PhD 2014 (Microbiology and Immunology) Role for Tolerogenic Gut Cd103+ Dendritic Cells in the Protection of Male Lupus-Prone Mice from Disease (Mentor- Michele Kosiewicz)

Gunes Dinc, PhD 2014 (Microbiology and Immunology) SA-4-1BBL as a platform to develop adjuvant systems for prophylactic and therapeutic vaccines (Mentor- Haval Shirwan)

Joey Kolb, PhD 2014 (Microbiology and Immunology) a mechanism for TRIF-adaptor-biased signaling by Toll-like receptor 4 (Mentor- Thomas Mitchell)

Carolyn Roberson, PhD 2014 (Microbiology and Immunology) Modulation of the Ovarian Cancer Humoral Response by Tumor-Derived Exosomes (Mentor- Jill Suttles/Doug Taylor)

Rachel Gerlac, PhD 2014 (Microbiology and Immunology) Early Host Responses and Immune Signaling to 2009 pandemic influenza A (H1N1) viruses in Primary Cell Culture Models (Mentor- Colleen Jonsson)

Kyle Woodward	Microbiology and Immunology	2010-2017
Chris Flemming	Microbiology and Immunology	2012-2017
Keegan Baldauf	Pharmacology and Toxicology	2012-2017
Harshul Pandit	Pharmacology and Toxicology	2014-2018
Neal Bhutiani		
Samantha Morrisey		

POSTDOCTORAL FELLOWS:

Past Trainees:	**Role**	**term**	**Current Position**
Krishnaprasad Subbarao	Post-doc	2001-04	Scientist in Aurigene, India
Venkatakrishna R. Jala	Post-doc	2001-04	Assistant Professor, M&I, U of L
Emanuela Galliera	Visiting Fellow	2003-04	Scientist, University of Milan, Italy
Annalisa DelPrete	Visiting Scientist	2005-06	Scientist, Humanitas, Milan, Italy
Paramahamsa Maturu	Post-doc	2005-09	Post-doc; MD Anderson, Houston
Steven Mathis	Post-doc	2007-11	Research Associate, UofL
Min Wang	Post-doc	2010-11	Research Fellow, U of L
Shuchismita Roy	Post-doc	2009- 16	UofL Med School
Rajesh Sharma	Assistant Professor	2010-15	Senior Scientist,
Steven Mathis	Research Associate	2017-	

BOOKS

Transmembrane Signaling Protocols 2nd Edition for the ***"Methods in Molecular Biology Series"*** Editors: Ali, H and **Haribabu, B**; Humana Press, New Jersey. Feb 2006.

PEER REVIEWED PUBLICATIONS

1. **Haribabu, B.** and Vaidyanathan, C.S. Catabolism of isophtalic acid by a soil bacterium. ***F.E.M.S. Microbiol. Lett***., 14:101-106, (1982).
2. **Haribabu, B.**, Kamath, A.V. and Vaidyanathan, C.S. Degradation of substituted benzoic acids by a *Micrococcus species*. ***F.E.M.S. Microbiol. Lett***., 21:197-200, (1984).
3. **Haribabu, B.** and Vaidyanathan, C.S. Metabolism of 4-hydroxyisophthalic acid by a *Pseudomonas species*. ***Curr. Sci.,*** 54:419-421, (1985).
4. **Haribabu, B.** Appaji Rao, N., and Vaidyanathan, C.S. An essential arginine residue at the substrate-binding site of 4-hydroxyisophthalate hydroxylase. ***Biochem. Int***., 11:773-780, (1985).
5. Fishel, B.R., Ragheb, J.A., Rajkovic, A., **Haribabu, B**., Schweinfest, C.W. and Dottin, R.P. Molecular Cloning of a cDNA Complementary to a UDP Glucose Pyrophosphorylase mRNA of *Dictyostelium discoideum*. ***Dev. Biol***., 110:369-381, (1985).
6. **Haribabu, B.**, Rajkovic, A. and Dottin, R.P. Cell-Cell Contact and cAMP Regulate the Expression of a UDP Glucose Pyrophosphorylase Gene of *Dictyostelium discoideum*. ***Dev. Biol***., 113:436-442, (1986).
7. **Haribabu, B.** and Dottin, R.P. Pharmacological Characterization of the cAMP Receptors Mediating Gene Regulation in *Dictyostelium discoideum*. ***Mol. Cell. Biol***., 6:2402-2408, (1986).
8. Pavlovic, J., **Haribabu, B.** and Dottin, R.P. Transmembrane Signal Transduction Regulates Gene Expression in *Dictyostelium discoideum*. ***Dev. Gen***., 9:371-382, (1988).
9. **Haribabu, B.**, Pavlovic, J. and Dottin, R.P. Regulation of the Rates of Transcription of Several Specific Genes in Response to Exogenous cAMP in *Dictyostelium discoideum*. ***Mol. Gen***., 8: 1- 5, (1989).
10. Pavlovic, J., **Haribabu, B.** and Dottin, R.P. Identification of a Signal Transduction Response Sequence Element Necessary for Induction of a *Dictyostelium discoideum* Gene by Extracellular Cyclic AMP. ***Mol. Cell Biol***., 9:4659-4668, (1989).
11. **Haribabu, B.** and Dottin, R.P. Homology Cloning of Protein Kinase and Phosphoprotein Phosphatase Sequences of *Dictyostelium discoideum*. ***Dev. Gen***., 12: 45-49, (1991).
12. **Haribabu, B.**, Pavlovic, J., Bodduluri, S.R., Doody, J.F., Ortiz, B.D., Mullings, S., Moon, B and Dottin, R.P. Signal Transduction Pathways Involved in the Expression of the UDP-Glucose Pyrophosphorylase gene of *Dictyostelium discoideum*. ***Dev. Gen***., 12: 35-44, (1991).
13. Dottin, R.P., Bodduluri, S.R., Doody, J.F. and **Haribabu, B.** Signal Transduction and Gene Expression in *Dictyostelium discoideum*. ***Dev. Gen***., 12: 2-5, (1991).
14. **Haribabu, B**. and Dottin, R.P. Identification of a Protein Kinase Multigene Family of *Dictyostelium discoideum*: Molecular cloning of a cDNA Encoding a Developmentally Regulated Protein Kinase. ***Proc. Natl. Acad. Sci. USA***., 88: 1115-1119 (1991).

15. **Haribabu, B.** and Snyderman, R. Identification of Additional Members of Human G-Protein Coupled Receptor Kinase Multigene Family. ***Proc. Natl. Acad. Sci. USA***., 90: 9398-9402, (1993).

16. Ali, H., Richardson, R.M., Tomhave, E.D., DuBose, R.A. **Haribabu, B.** and Snyderman, R. Regulation of Stably Transfected Platlet Activating Factor (PAF) Receptor in RBL-2H3 Cells: Role of Multiple G Proteins and Receptor Phosphorylation. ***J Biol Chem.***, 269: 24557-24563, (1994).

17. **Haribabu, B**., Hook, S., Selbert, M.A., Goldstein, E.G., Tomhave, E.D., Edelman, A., Snyderman, R. and Means, A.R. Human Calcium/Calmodulin Dependent Protein Kinase I: cDNA Cloning, Domain Structure, and Activation by Phosphorylation at Threonine-177 by Calcium Calmodulin Dependent Protein Kinase I Kinase***.*** ***EMBO J***. 14: 3679-3686, (1995).

18. Richardson, R.M., DuBose, R.A., Ali, H., Tomhave, E.D., **Haribabu, B.** and Snyderman. R. Regulation of Human Interleukin-8 Receptor A: Identification of a Specific Phosphorylation Site Involved in Modulating Receptor Functions. ***Biochemistry***. 34: 14193-14201, (1995).

19. Richardson, R.M., Ali, H., Tomhave, E.D., **Haribabu, B.** and Snyderman. R. Cross Desensitization of Chemoattractant Receptors Occurs at Multiple Levels: Evidence for a Role for Inhibition of Phospholipase C Activity. ***J Biol Chem.*** 270: 27829-27833, (1995).

20. Ali, H., Tomhave, E.D., Richardson, R.M., **Haribabu, B.** and Snyderman. R. Thrombin Primes Responsiveness of Selective Chemoattractant Receptors at a Site Distal to G Protein Activation. ***J Biol Chem.*** 271: 3200-3206, (1996).

21. Richardson, R.M., **Haribabu, B.** Ali, H., and Snyderman. R. Cross-Desensitization Amongst Receptors for Platelet Activating Factor and Peptide Chemoattractants: Evidence for Independent Regulatory Pathways. ***J Biol Chem.*** 271: 28717-28724, (1996).

22. Ali, H., Fisher, I., **Haribabu, B.,** Richardson, R.M. and Snyderman. R. Role of Phospholipase Cβ3 Phosphorylation in the Desensitization of Cellular Responses to Platelet Activating Factor. ***J Biol Chem.*** 272: 11706-11709, (1997).

23. **Haribabu, B.,** Steeber, D. A., Ali, H., Richardson, R.M., Snyderman. R. and Tedder, T.F. Chemoattractant Receptor-Induced Phosphorylation of L-Selectin. ***J Biol Chem.*** 272: 13961-13965, (1997).

24. **Haribabu, B.,** Richardson, R.M., Fisher, I., Sozzani, S., Peiper, S.C., Horuk, R., Ali, H., and Snyderman. R. Regulation of Human Chemokine Receptors CXCR4: Role of Phosphorylation in Desensitization and Internalization. ***J Biol Chem.*** 272: 28726-28731, (1997).

25. Richardson, R.M., Ali, H., Pridgen, B., **Haribabu, B.** and Snyderman. R. Multiple Signaling Pathways of Human Chemokine Receptors CXCR1: Independent Regulation by Phosphorylation. ***J Biol Chem.*** 273: 10690-10695, (1998).

26. Richardson, R.M., Pridgen, B., **Haribabu, B.,** Ali, H. and Snyderman. R. Differential Cross-Regulation of Human Chemokine Receptors CXCR1 and CXCR2: Evidence for Time Dependent Signal Generation. ***J Biol Chem.*** 273: 23830-23836, (1998).

27. Ali, H., Sozzani, S., Fisher, I., Barr, A.J., Richardson, R.M., **Haribabu, B.** and Snyderman. R. Differential Regulation of Formylpeptide and Platelet Activating Factor Receptors: Role of Phospholipase Cβ3 Phosphorylation by Protein Kinase A. ***J Biol Chem.*** 273: 11012-11016, (1998).

28. Ali, H., Richardson, R.M., **Haribabu, B.** and R. Snyderman. Chemoattractant Receptor Cross Desensitization. ***J Biol Chem.*** 274: 6207-6030, (1999).

29. **Haribabu, B.,** Zhelev, D.V., Pridgen, B., Richardson, R.M., Ali, H., and Snyderman. R. Chemoattractant Receptors Activate Distinct Pathways for Chemotaxis and Secretion: Role of G-Protein Usage. ***J Biol Chem.*** 274: 37087-37092 (1999).

30. Richardson, R.M., Pridgen, B., **Haribabu, B.** and Snyderman. R. Regulation of Human Chemokine Receptor CCR1: Cross Regulation by CXCR1 and CXCR2. ***J Biol Chem.*** 275: 9201-9208 (2000).

31. **Haribabu, B.,** Verghese, M.W., Steeber, D.A., Sellers D.W., Bock, C. and Snyderman. R. Targeted Disruption of Leukotriene B_4 Receptor in Mice Reveals its Role in Inflammation and Platelet Activating Factor Induced Anaphylaxis**.** ***J Exp Med.*** 192: 433-438 (2000).

32. Barr, A.J., Ali, H., **Haribabu, B.,** Snyderman. R. and Smrcka, A.V. Identification of Phospholipase C-β3 Regions involved in Activation by G-protein βγ Subunits: Role of a Sequence Adjacent to the Pleckstrin Homology Domain. ***Biochemistry***. 39: 1800-1806 (2000).

33. **Haribabu, B.,** Richardson, R.M., Verghese, M.W., Barr, A.J. and Snyderman. R. Function and Regulation of Leukocyte Chemoattractant Receptors. ***Immunol Res.*** 22: 271-279 (2001).

34. Fermor, B., **Haribabu, B**., Weinberg, J.B., Pisetsky, D.S. and Guilak, F. The effects of Mechanical Compression and Nitric Oxide on Leukotriene Production by Articular Cartilage**.** ***Biochem Biophys Res Commun.*** 285(3): 806-810 (2001).

35. Locati, M., Riboldi, E., Bonecchi, R., Transidico, P., Bernasconi, S., **Haribabu, B**., Morris, A.J., Mantovani, A. and Sozzani. S. Selective Induction of Phospholipase D1 in Pathogen-activated Human Monocytes. ***Biochem J.*** 358: 119-125 (2001).

36. Ahamed, J., **Haribabu, B.** and Ali, H. Distinct Regulation of Chemoattractant Receptor-Induced Degranulation and Chemokine Production by Receptor Phosphorylation and G Protein Coupling. ***J Immunol***. (Cutting edge) 167: 3559-3563 (2001).

37. Zhang, W., Navenot, J-M., **Haribabu, B**., Tamamura, H., Hiramatu, K., Omagari, A., Pei, G., Manfredi, J.P., Fuji, N., Broach, J.R and Peiper, SC. A Point Mutation That Confers Constitutive Activity To CXCR4 Reveals T140 Is An Inverse Agonist And AMD3100 And ALX40-4c Are Weak Partial Agonists. ***J Biol Chem.*** 277: 24515-24521 (2002).

38. Fong, AM., Alam, A.M., Imai, T., **Haribabu B.** and Patel, DD. CX3CR1 Tyrosine Sulfation Enhances Fractalkine-induced Cell Adhesion. ***J Biol Chem.*** 277: 19418-19423 (2002).

39. Smith, JR., Subbarao, K, Franc, D, **Haribabu, B** and Rosenbaum, JT. Susceptibility to Endotoxin-Induced Uveitis is Not Reduced in Mice Deficient in the High Affinity Leukotriene B_4 Receptor, BLT1. ***Br J Ophthalmol.*** 88: 273-275 (2004).

40. Subbarao, K., Jala, VR, Mathis, S., Zacharias, W., Suttles, J., Ahamed, J, Ali, H., Tseng, MT. and **Haribabu, B.** Role of Leukotriene B_4 Receptors in the Development of Atherosclerosis: Potential Mechanisms. ***Arterioscler Thromb Vasc Biol.*** 24: 369-375 (2004).

41. Bonecchi, R., Locati, M., Galliera, E., Vulcano, M., Sironi, M., Fra, AM, Gobbi, M., Vecchi, A., Sozzani, S., **Haribabu, B.,** Van Damme, J and Mantovani, A. Differential recognition and scavenging of native and truncated macrophage-derived chemokine (MDC/CCL22) by the D6 decoy receptor. ***J Immunol***. 172: 4972-4976 (2004)**.**

42. Scott, MJ., Cheadle, WG., Hoth, JJ., Peyton, JC., Subbarao, K., Shao, WH. and **Haribabu, B.** Leukotriene B_4 Receptor BLT-1 Modulates PMN Influx into the Peritoneum but not the Lung and Liver During Surgical Peritonitis. ***Clin Diagn Lab Immunol.*** 11: 936-941 (2004).

43. Galliera, E., Jala, VR., Trent, JO., Bonecchi, R., Lefkowitz, RJ., Mantovani, A., Locati, M. and **Haribabu, B.** β-Arrestin Dependent Constitutive Internalization of the Chemokine Decoy Receptor D6. ***J Biol Chem.*** 279: 251590-25597 (2004).

44. Uriarte, SM., Joshi-Barve, S., Song, Z., Sahoo, R., Gobejishvili, L., Jala, VR., **Haribabu, B**., McClain, C and Barve, S. Akt Inhibition Upregulates FasL, Downregulates c-$FLIP_s$ and Induces

Caspase-8 Dependent Cell Death in Jurkat T Lymphocytes. ***Cell Death & Differentiation*** 12: 233-242 (2005).

45. Jala, VR, Shao, WH. and **Haribabu, B.** Phosphorylation Independent β-Arrestin Translocation and Internalization of Leukotriene B_4 Receptors. ***J Biol Chem.*** 280: 4880-4887 (2005).

46. Allendorf, DJ., Yan, J., Ross, GD., Hansen, RD., Baran, JT., Subbarao, K., Wang, L, and **Haribabu, B.** C5a-Mediated Leukotriene B_4 Amplified Neutrophil Chemotaxis is Essential in Tumor Immunotherapy Mediated by Anti-Tumor mAb and □□Glucan. ***J Immunol*** 174: 7050-7056 (2005).

47. Miyahara, N., Takeda, K., Miyahara, S., Matsubara, S., Koya, T., Joetham, A., Dakhama, A., Krishnan, E., **Haribabu, B**., and Gelfand, E. Requirement for Leukotriene B4 Receptor-1 (BLT1) in the Development of Allergen-Induced Airway Hyperresponsiveness. ***Am J Respir Crit Care Med***. **172**(2):161-167 (2005)

48. Tseng, M.T., Dozier, A, **Haribabu, B** and U.M. Graham. Transendothelial migration of ferric ion in FeCl3 injured murine common carotid artery. ***Thrombosis Research*** **118**(2):275-80 (2006)**.**

49. Liao, T., Ke, Y., Shao, WH., **Haribabu, B**, Kaplan, H.J., Sun, D and Shao, H. Blockade of the interaction of leukotriene B_4 with its receptor prevents development of autoimmune uveitis. ***Invest Ophthalmol Vis Sci.*** 47(4):1543-1549 (2006).

50. Shao, WH., Del Prete, A., Bock, CB and **Haribabu, B.** Targeted Disruption of Leukotriene B_4 Receptors BLT1 and BLT2: A Critical Role for BLT1 in Collagen-Induced Arthritis in Mice. ***J. Immunol*** 176**:** 6254-6261 (2006).

51. Brown, SL., Jala, VR, Raghuwanshi, SK, Nasser, MW, **Haribabu, B** and Richardson, RM. Activation and Regulation of Platelet-Activating Factor Receptor: Role of G_i and G_q in receptor-mediated chemotactic, cytotoxic and cross-regulatory signals. ***J. Immunol*** 177: 3242–3249 (2006).

52. Del Prete, A., Shao, WH., Mitola, S., Santoro, G., Sozzani, S and **Haribabu, B**. Regulation of Dendritic Cell Migration and Adaptive Immune Response by Leukotriene B_4 Receptors: A role for LTB_4 in Up-regulation of CCR7 Expression and Function. ***Blood*** 109:626-631 (2007)

53. Basu, S., Jala, VR., Mathis, S., Del Prete, A., Maturu, P., Trent, JO., and **Haribabu, B.** Critical role for polar residues in coupling leukotriene B_4 binding to signal transduction in BLT1 ***J Biol Chem.*** 282: 10005-10017 (2007).

54. Jog, NR, Jala, VR, Rane, MJ., Ward, RA **Haribabu, B** and McLeish, KR Heat Shock Protein 27 (Hsp27) Regulates Neutrophil Chemotaxis and Exocytosis through Two Independent Mechanisms. ***J. Immunol*** 178: 2421-2428 (2007).

55. de la Torre, YM, Buracchi, C., Borroni, EM., Dupor, J, Bonecchi, R Nebuloni, M., Pasqualini, F., Doni, A., Agostinis, C., Bulla, R., Cook, DN., **Haribabu, B**., Meroni, P., Rukavina, D., Vago, L., Vecchi, A., Tedesco, F., Lira, SA., Locati, M and Mantovani, A. Protection against inflammation- and autoantibody-caused fetal loss by the chemokine decoy receptor D6. ***Proc. Natl. Acad. Sci. USA*.,** 104:2319-2324 (2007)**.**

56. Ohnishi H, Miyahara N, Dakhama A, Takeda K, Mathis S, **Haribabu B** and Gelfand EW. Corticosteroids Enhance CD8+ T Cell-Mediated Airway Hyperresponsiveness and Allergic Inflammation by Upregulating Leukotriene B_4 Receptor-1. ***The Journal of Allergy and Clinical Immunology*** 121(4):864-71 (2008).

57. Bonecchi, R, Borroni, EM, Anselmo, A, Doni, A, Savino, B, Mirolo, N, Fabbri, M, Jala, VR, **Haribabu, B**, Mantovani, A and Locati, M. Regulation of D6 chemokine scavenging activity by ligand and Rab11-dependent surface upregulation. ***Blood*** 112(3):493-503 (2008).

58. Miyahara N, Dakhama A, Takeda K, Ohnishi H, **Haribabu B** and Gelfand EW. Leukotriene B4 Receptor-1(BLT1) Expression on Dendritic Cells is required for the Development of Th2 Responses and Allergen-Induced Airway Hyperresponsiveness ***J. Immunol*** 181(2):1170-1178 (2008).

59. Estrada R, Zeng Q, Lu H, Sarojini H, Lee JF, Mathis SP, Sanchez T, Wang E, Kontos CD, Lin CY, Hla T, **Haribabu B**, Lee MJ. Up-regulating sphingosine-1-phosphate receptor-2 signaling impairs chemotactic, wound-healing, and morphogenetic responses in senescent endothelial cells. ***J Biol Chem.*** 283(44):30363-75 (2008).

60. Estrada R, Wang L, Jala VR, Lee JF, Lin CY, Gray RD, **Haribabu B**, Lee MJ (2008). Ligand-induced nuclear translocation of S1P(1) receptors mediates Cyr61 and CTGF transcription in endothelial cells. ***Histochem Cell Biol.*** 131(2):239-49 (2009).

61. Dumstorf CA, Mukhopadhyay S, Krishnan E, **Haribabu B**, McGregor WG. REV1 Is Implicated in the Development of Carcinogen-Induced Lung Cancer. ***Mol Cancer Res.*** 7(2):247-54 (2009).

62. Salogni L, Musso T, Bosisio D, Mirolo M, Jala VR, and **Haribabu B**, Locati, M. and Sozzani, S. Activin A induces dendritic cell migration through the polarized release of CXCL12 and CXCL14. ***Blood.*** 113(23):5848-56 (2009).

63. Mathis S, Jala VR, Lee DM, **Haribabu B**. Non-redundant roles for leukotriene B4 receptors BLT1 and BLT2 in mouse models of inflammatory arthritis ***J. Immunol*** 185: 3049-3056 (2010).

64. Chou RC, Kim, ND, Sadik, CD, Seung, E, Lan Y, Byrne, MH, **Haribabu B**, Iwakura, Y and Luster**,** AD**.** Lipid-Cytokine-Chemokine Cascade Drives Neutrophil Recruitment in a Murine Model of Inflammatory Arthritis ***Immunity*** 33: 266-278 (2010).

65. Jala VR and **Haribabu B.** Real-Time imaging of Leukotriene B_4 Mediated Cell Migration and BLT1 Interactions with β-Arrestin ***J Vis Exp.*** 46 pii: 2315. doi: 10.3791/2315 (2010).

66. Li RC, **Haribabu B**, Mathis SP, Kim, J and Gozal D. Leukotriene B_4 Receptor-1 mediates Intermittent Hypoxia-induced Atherogenesis. ***Am J Respir Crit Care Med*** 184(1):124-31 (2011).

67. Spite M, Hellmann J, Tang Y, Mathis SP, Kosuri M, Bhatnagar A, Jala VR and **Haribabu, B**. Deficiency of leukotriene B_4 receptor, BLT-1, protects from systemic insulin resistance in diet-induced obesity. ***J. Immunol***. 187:1942-9 (2011).

68. Chakraborty, A, Chakraborty S, Jala VR, **Haribabu B**, Sharp MK and Berson, ER. Effects of Bidirectional Oscillatory Shear Stress on Endothelial Cell Proliferation and Morphology ***Biotechnology & Bioengineering***, 109(3):695-707. doi: 10.1002/bit.24352 (2012).

69. Yaddanapudi K, Mitchell RA, Putty K, Willer S, Sharma RK, Yan J, **Bodduluri H**, Eaton JW. Vaccination with embryonic stem cells protects against lung cancer: is a broad-spectrum prophylactic vaccine against cancer possible? PLoS One. 7(7):e42289. doi: 10.1371/journal.pone.0042289 (2012).

70. Jala VR, Radde BN, **Haribabu B** and Klinge, CM Enhanced expression of G-protein coupled estrogen receptor (GPER/GPR30) in lung cancer. ***BMC Cancer***. 12:624. doi: 10.1186/1471-2407-12-624 (2012).

71. Sharma RK, Chheda Z, Jala VR, **Haribabu B**. Expression of leukotriene B_4 receptor-1 on $CD8^+$ T cells is required for their migration into tumors to elicit effective antitumor immunity. ***J Immunol***. 191(6):3462-70. doi: 10.4049/jimmunol.1300967 (2013).

72. Gorla SK, McNair NN, Yang G, Gao S, Hu M, Jala VR, **Haribabu B,** Striepen B, Cuny GD, Mead JR and Hedstrom L. Validation of IMP dehydrogenase inhibitors in a mouse model of cryptosporidiosis ***Antimicrob. Agents Chemother*** 58(3):1603-14. doi: 10.1128/AAC.02075-13 (2014).

73. Houthuijzen J, Daenen L, Roodhart J, Kersbergen A, Govaert K, Smith M, Thomale J, Sadatmand S, Rosing H, Kruse F, Nijkamp M, van Rooijen N, Beijnen J, Rottenberg S, **Haribabu B** and Voest, E.

Splenic macrophages induce chemotherapy resistance via DNA damage repair ***Nat Commun***. 2014 Nov 12;5:5275. doi: 10.1038/ncomms6275. PMID:25387467

74. Roy BC, Subramaniam D, Ahmed I, Jala VR, Hester C, Greiner KA, **Haribabu B**, Anant S and Umar S. Role of bacterial infection in the epigenetic regulation of Wnt antagonist WIF1 by PRC2 protein EZH2, ***Oncogene*** : 2015 Aug 20;34(34):4519-30. doi: 10.1038/onc.2014.386. Epub 2014 Dec 8.

75. Hester CM, Jala VR, Langille MG, Umar S, Greiner KA and **Haribabu B**. Differences in Fecal Microbiota and Short Chain Fatty Acid Content across Older Adults from Various Racial/Ethnic groups: Assessing Factors Related to Colorectal Cancer Risk ***World J Gasteroenterology*** 2015 Mar 7;21(9):2759-69. doi: 10.3748/wjg.v21.i9.2759.

76. Deng Z, Wang B, Mu J, Tseng M , Zhuang X, Egilmez N, Wang Q, Jiang H, Zhang L, Norris J, Guo H, Yan J, **Haribabu B**, Miller D, and Zhang H-G. Overproduction of intestinal mucus exosomal S1P drives Th17-mediated tumor growth. ***Nature Commun*** 2015 Apr 24;6:6956. doi: 10.1038/ncomms7956.

77. Satpathy SR, Jala VR, Bodduluri SR, Krishnan E, Hegde B, Hoyle G, Fraig M, Luster AD and **Haribabu B**. Crystalline silica-induced LTB_4 mediated inflammation promotes lung tumor growth. ***Nature Commun*** 2015 Apr 29;6:7064. doi: 10.1038/ncomms8064.

78. Sharma RK, Chheda ZS, Das Purkayastha BP, Gomez-Gutierrez JG, Jala VR, **Haribabu B**. A spontaneous metastasis model reveals the significance of claudin-9 overexpression in lung cancer metastasis. ***Clin Exp Metastasis***. 2016 Mar;33(3):263-75. doi: 10.1007/s10585-015-9776-4. Epub 2015 Dec 15. PMID: 26669782

79. Mell B, Jala VR, Mathew AV, Byun J, Waghulde H, Zhang Y, **Haribabu B**, Vijay-Kumar M, Pennathur S, Joe B. Evidence for a link between Gut Microbiota and Hypertension in the Dahl rat model. ***Physiol Genomics.*** 2015 Mar 31:physiolgenomics.00136.2014. doi: 10.1152/physiolgenomics.00136.2014.

80. Zheng S, Coventry S, Cai L, Powell DW, Jala VR, **Haribabu B**, Epstein PN. Renal Protection by Genetic Deletion of the Atypical Chemokine Receptor ACKR2 in Diabetic OVE Mice. ***J Diabetes Res.*** 2016;2016:5362506. doi: 10.1155/2016/5362506. Epub 2015 Dec 20.

81. Saha P, Yeoh BS, Singh R, Chandrasekar B, Vemula PK, **Haribabu B**, Vijay-Kumar M, Jala VR. Gut Microbiota Conversion of Dietary Ellagic Acid into Bioactive Phytoceutical Urolithin A Inhibits Heme Peroxidases. ***PLoS One.*** 2016 Jun 2;11(6):e0156811. doi: 10.1371/journal.pone.0156811. eCollection 2016.

82. Chakraborty A, Chakraborty S, Jala VR, Thomas JM, Sharp MK, Berson RE, **Haribabu B**. Impact of Bi-Axial Shear on Atherogenic Gene Expression by Endothelial Cells. ***Ann Biomed Eng.*** 2016 Oct;44(10):3032-45. doi: 10.1007/s10439-016-1626-2. Epub 2016 May 2.

83. Chheda ZS, Sharma RK, Jala VR, Luster AD, **Haribabu B**. Chemoattractant Receptors BLT1 and CXCR3 Regulate Antitumor Immunity by Facilitating CD8+ T Cell Migration into Tumors. ***J Immunol.*** 2016 Jul 27. pii: 1502376. [Epub ahead of print] PMID: 27465528

84. Baldauf, KJ, Royal, JM, Kouokam, JC, **Haribabu, B**, Jala, VR, Yaddanapudi, K, Hamorsky, KT, Dryden, GW and Matoba, N. Oral administration of a recombinant cholera toxin B subunit promotes 2 mucosal healing in the colon. ***Mucosal Immunology*** 2017 Jul;10(4):887-900. doi: 10.1038/mi.2016.95. Epub 2016 Nov 2.

85. Fleming C, Cai Y, Sun X, Jala VR, Xue F, Wang Q, Duan, X, 3, Morrissey S, Wei T-L, Chien Y, Fu Y, Zhang HG, Wang H, Lamont RJ, **Haribabu B**, Huang J, Yan J. Microbiota Activated CD103+ DCs Stemming from Oral Microbiome Adaptation Specifically Drive γδT17 Proliferation and Activation. ***Microbiome.*** 2017 Apr 24;5(1):46. doi: 10.1186/s40168-017-0263-9.

86. Miyabe Y, Miyabe C, Murooka TT, Kim EY, Newton GA, Kim ND, **Haribabu B**, Luscinskas FW, Mempel TR and Luster AD. Complement C5a Receptor is the Key Initiator of Neutrophil Adhesion Igniting Immune Complex-induced Inflammation. 2016 ***Science Immunology*** 2017 Jan;2(7). pii: eaaj2195. doi: 10.1126/sciimmunol.aaj2195. Epub 2017 Jan 20.

87. Jala VR, Maturu P, Bodduluri, SR, Mathis S, Krishnan, E, Subbarao, K, Wang M, Jenson, B, Procter ML, Rouchka, EC, Knight, R and **Haribabu B**. Leukotriene B4-receptor-1 mediated host response shapes gut microbiota and controls colon tumor progression ***Oncoimmunology.*** 2017 e1361593, doi:10.1080/2162402X.2017.1361593.

88. Bodduluri SR, Mathis S, Maturu P, Krishnan E, Satpathy, S, Chilton P, Mitchell T, Lira, S, Locati M, Mantovani A, Jala VR and **Haribabu B**. Mast cell dependent T-cell activation mediates immune surveillance of intestinal cancer in *Apc*$^{Min+}$ mice ***Cancer Immunol Res***.. 2018 Jan 30. pii: canimm.0424.2017. doi: 10.1158/2326-6066.CIR-17-0424. [Epub ahead of print] PMID: 29382671

89. Hegde B, Bodduluri SR, Satpathy SR, Alghsham, R, Jala VR, Uriarte, SM, Chung, D-H, Lawrenz, MB and **Haribabu B**. 2018 Inflammasome Independent Leukotriene-B_4 Production Drives Crystalline Silica Induced Sterile Inflammation. ***J Immunol.*** 200 (10), 3556-3567

90. Teng Y, Ren Y, Sayed M, Hu X, Lei C, Kumar A, Hutchins E, Mu J, Deng Z, Luo C, Sundaram K, Sriwastva MK, Zhang L, Hsieh M, Reiman R, **Haribabu B**, Yan J, Jala VR**,** Miller DM, Van Keuren-Jensen K, Merchant ML, McClain CJ, Park JW, Egilmez NK, Zhang HG. Plant-Derived Exosomal MicroRNAs Shape the Gut Microbiota. ***Cell Host Microbe***. 2018;24(5):637-52 e8. Epub 2018/11/20. doi: 10.1016/j.chom.2018.10.001. PubMed PMID: 30449315.

91. Singh R, Chandrashekharappa S, Bodduluri S, Baby B, Hegde B, Kotla N, Hiwale A, Saiyed T, Patel P, Vijay-Kumar M, Langille G, Douglas G, Cheng X, Rouchka R, Waigel S, Dryden G, Alatassi H, Zhang HG, **Haribabu B**, Vemula P*, Jala VR* Enhancement of Gut Barrier Integrity by a Microbial Metabolite through Nrf2 Pathway, ***Nat Commun***. 2019;10(1):89. doi: 10.1038/s41467-018-07859-7. PubMed PMID: 30626868.

92. Roy BC, Ahmed I, Ramalingam S, Jala V, **Haribabu B**, Ramamoorthy P, Ashcraft J, Valentino J, Anant S, Sampath V, Umar S. Co-localization of autophagy-related protein p62 with cancer stem cell marker dclk1 may hamper dclk1's elimination during colon cancer development and progression. ***Oncotarget.*** 2019 Mar 22;10(24):2340-2354. doi: 10.18632/oncotarget.26684. eCollection 2019 Mar 22.

93. Alghsham RS, Satpathy SR, Bodduluri SR, Hegde B, Jala VR, Twal W, Burlison JA, Sunkara M, and **Haribabu B.** Zinc Oxide Nanowires Exposure Induces a Distinct Inflammatory Response via CCL11-Mediated Eosinophil Recruitment. ***Frontiers in Immunology*** 10 (2019). 08 November 2019 | https://doi.org/10.3389/fimmu.2019.02604

94. Pulsifer AR, Vashishta A, Reeves SA, Wolfe JK, Palace SG, Proulx MK, Goguen J, Bodduluri SR, **Haribabu B**, Uriarte SM, Lawrenz MB. Redundant and Cooperative Roles for Yersinia pestis Yop Effectors in the Inhibition of Human Neutrophil Exocytic Responses Revealed by Gain-of-Function Approach. ***Infect Immun.*** 2020 Feb 20;88(3):e00909-19. doi: 10.1128/IAI.00909-19. Print 2020 Feb 20

95. Singh R, Chandrashekharappa S, Vemula PK, **Haribabu B**, Jala VR. Microbial Metabolite Urolithin B Inhibits Recombinant Human Monoamine Oxidase A Enzyme. ***Metabolites.*** 2020 Jun 19;10(6):258. doi: 10.3390/metabo10060258.

Citation metrics: https://scholar.google.com/citations?user=I2RuixgAAAAJ&hl=en

REVIEWS AND BOOK CHAPTERS

1. **Haribabu, B.**, Kamath, A.V. and Vaidyanathan, C.S. Microbial metabolism of benzoic acids. ***J. Ind. Inst. Sci***., 65:69-107, (1984).

2. Dottin, R.P., **Haribabu, B.**, Schweinfest, C.W. and Manrow, R.E. Activity gels: Reformation of functional proteins from SDS-Polyacrylamide gels. In ***Genetic Engineering*** (J.K. Setlow ed.), 9:121-133, (1987).

3. **Haribabu, B.**, Ragheb, J.A. and Dottin, R.P. A Transmembrane Signal Transduction Model for cAMP Mediated of Gene Regulation in *Dictyostelium discoideum*. In U.C.L.A. Symposia on Molecular and Cellular Biology 51: ***Molecular Approaches to Developmental Biology***, Eds. R.A. Firtel and E.H. Davidson. Alan R. Liss, Inc., 385-399, (1987).

4. Peters, D., Schaap, P., **Haribabu, B**. and Dottin, R.P. Regulation of Gene Expression by Hormone like Signals in *Dictyostelium discoideum*. in ***Signal Transduction: Prokaryotic and simple eukaryotic systems.*** Eds. J. Kurjan and B. F. Taylor., eds. (Orlando, Florida: Academic Press, pp 353-376 (1993).

5. **Haribabu, B**. and Dottin, R. P. 1994 Dictyostelium Protein Kinase 2. In The Protein Kinase Facts book, Editors D. G. Hardie and S. Hanks. Academic Press Ltd.

6. Ali, H., **Haribabu, B.,** Richardson, R.M., and Snyderman. R. Mechanisms of Inflammation and Leukocyte Activation. ***Medical Clinics of North America***. (Review) 81: 1-28, (1997).

7. **Haribabu, B.** and Patel. D D. Role of Chemokines in Rheumatoid Arthritis. *in* ***Current Research in Rheumatoid Arthritis***. 2: 280-285, (1998).

8. Richardson, R.M., Snyderman. R. and **Haribabu, B.** Chemokine Receptor Expression and Regulation. *in* Chemokine Receptors, Human Genetics and AIDS: Insights into Pathogenesis and new Therapeutic Options. (Thomas O'Brien. ed) Marcel Decker Inc., New York, NY. (Page: 31-54 2001).

9. **Haribabu, B.** Leukotrienes: Novel Targets for Vascular Disease. ***Discovery Medicine*** 4:281-287 (2004)

10. Jala, VR. and **Haribabu B.** Leukotrienes and Atherosclerosis: New Roles for Old Mediators. ***Trends in Immunology*** 25: 315-322 (2004).

11. Locati M, Torre YM, Galliera E, Bonecchi R, **Bodduluri H**, Vago G, Vecchi A, Mantovani A. Silent chemoattractant receptors: D6 as a decoy and scavenger receptor for inflammatory CC chemokines. ***Cytokine Growth Factor Rev.*** **16**(6):679-86. (2005).

12. Jala, VR, and **Haribabu, B.** Real time analysis of G-protein coupled receptor signaling in live cells. **Transmembrane Signaling Protocols 2nd Edition** for the **"*Methods in Molecular Biology Series*" 332**: 159-168 (2006) Editors: Ali, H and **Haribabu, B**; Humana Press, New Jersey.

13. Mathis, S., Jala, VR, and **Haribabu, B.** Role of Leukotriene B_4 Receptors in Rheumatoid Arthritis. ***Autoimmunity Reviews***. 7: 12-17 (2007).

14. Sharma RK, Chheda Z, Jala VR, **Haribabu B**. Regulation of cytotoxic T-Lymphocyte trafficking to tumors by chemoattractants: implications for immunotherapy. ***Expert Rev Vaccines*** 2015 Apr;14(4):537-49. doi: 10.1586/14760584.2015.982101.PMID:25482400

15. Jala VR, Bodduluri SR, Satpathy SR, Chheda Z, Sharma RK, **Haribabu B**. The yin and yang of leukotriene B_4 mediated inflammation in cancer. ***Semin Immunol***. 2017 Oct;33:58-64. doi: 10.1016/j.smim.2017.09.005. Epub 2017 Oct 2. Review.

16. **Haribabu B**. Back to the future of targeting leukotriene B_4 mediated inflammation. ***Semin Immunol***. 2017 Oct;33:1-2. doi: 10.1016/j.smim.2017.09.010. Epub 2017 Oct 4.

SEMINARS PRESENTED

1990 Roche Institute of Molecular Biology, Nutley, NJ

1991 Department of Pharmacology, Albert Einstein School of Medicine, New York, NY
Department of Pharmacology, Mount Sinai School of Medicine New York, NY
Department of Biochemistry, Indian Institute of Science, Bangalore, India

1992 Developmental Biology Section, National Institute of Child Health and Human Development, National Institutes of Health, USA.
School of Osteopathic Medicine, UMDNJ, Stratford, NJ
School of Dental Medicine, Rochester, NY
Department of Medicine, Rheumatology Division, Duke University Medical Center, Durham, NC

1996 Department of Biochemistry, Indian Institute of Science, Bangalore, India
Center for Cellular and Molecular Biology, Hyderabad, India

1997 Rheumatology Division, Department of Medicine, Duke University Medical Center, Durham, NC

2000 James Graham Brown Cancer Center, University of Louisville School of Medicine, Lousiville, KY
Department of Pharmacology and Toxicology, University of Louisville School of Medicine, Louisville, KY
Istituto di Ricerche Farmacologiche Mario Negri, Milan, Italy

2001 Department of Infectious Diseases, St. George's Hospital Medical School, London SW17 ORE, United Kingdom.
Department of Biochemistry, University of Madras, Madras, India
Department of Biotechnology, Indian Institute of Technology, Mumbai, India

2002 University of Kentucky, Lexington, KY

2004 Searle Center, Duke University Medical Center, Durham, NC
Center for Cellular and Molecular Biology, Hyderabad, India
National Institute of Immunology, New Delhi, India
Vela Pharmaceuticals, Princeton, NJ

2005 Eli Lilly and Company, Indianapolis, IN
Istituto Clinico Humanitas, Milan, Italy

2006 Faculty of Medicine, University of Brescia, Brescia, Italy

2007 BBRI, North Carolina Central University, Durham, NC
Cardiovascular Disease Division, Boehringer Ingelheim Pharmaceuticals, Inc. Ridgefield, CT

2008 Resolvyx Pharmaceuticals, Inc. Bedford, MA

2010 Istituto Clinico Humanitas, Milan, Italy

2011 Department of Microbiology, Genetics and Immunology, University of Kansas Medical School, Kansas, KS.

2015 Department of Immunology, Mayoclinic, Rochester, MN.

2018 Department of Pathology, Wayne State University, Detroit, MI

INVITED PRESENTATIONS AT MEETINGS

2001 All India Cell Biology Conference, Indian Institute of Science, Bangalore, India

2003 Chemokines and Chemokine Receptors, Keystone meeting, Beaver Run Resort. Breckenridge, Colorado

2004 American Heart Association, Dallas TX

2006 Chemotactic Cytokines, Gordon Research Conference, Centre Paul Langevin, Aussois, France

2009 Bioactive Lipids in cancer inflammation and related diseases, 11th International conference Cancun, Mexico

2010 Innochem 5th Annual Meeting, Berlin, Germany

2012 Chemotactic Cytokines, Gordon Research Conference, Luca-Barga, Italy

2013 International Immunology Congress, Milan Italy

2014 Chemotactic Cytokines, Gordon Research Conference, Vermont, USA

2014 3rd CONFERENCE OF TRANSLATIONAL MEDICINE ON PATHOGENESIS AND THERAPY OF IMMUNE-MEDIATED DISEASES, Milan Italy

2016 International Immunology Congress, Melbourne, Australia

PUBLISHED ABSTRACTS

1. **Haribabu, B**., J. Pavlovic, and R.P. Dottin. 1986. Cell-Surface cAMP Receptor Regulates Gene-Expression in Dictyostelium Discoideum. Journal of Cell Biology 103:A450-A450.
2. **Haribabu, B**., R.P. Dottin, J.A. Ragheb, and J. Pavlovic. 1986. cAMP Regulation of Gene-Expression in Dictyostelium-Discoideum. Federation Proceedings 45:1698-1698.
3. **Haribabu, B**., and R.P. Dottin. 1986. Regulation of Gene-Expression in Dictyostelium Discoideum. Journal of Cellular Biochemistry: 35-35.
4. Ali, H., R. Richardson, E. Tomhave, **B. Haribabu**, and R. Snyderman. 1994. Regulation of Stably Transfected Human Platelet-Activating- Factor (Paf) Receptor - Role of Multiple G-Proteins and Phosphorylation. Clinical Research 42:A333-A333.
5. Edelman, A.M., K.A. Anderson, **B. Haribabu**, S. Hook, M.A. Selbert, O.H. Huang, E.G. Goldstein, E.D. Tomhave, R. Snyderman, and A.R. Means. 1995. Activation of Calcium-Calmodulin-Dependent Protein-Kinase-I and Protein-Kinase-Iv by Phosphorylation at Threonine-177 and Threonine-196, Respectively. FASEB Journal 9:A1408-A1408.

6. Dottin, R.P., B.C. Moon, B. **Haribabu, B**. Ortiz, M. Rabino, G. Reichel, S. Porcelli, P. Skehel, J. Williams, S. Bouzid, M. Veron, and F. Puta. 1995. Targeted Disruption in Dictyostelium of a Human Rac Protein- Kinase Homolog Gene Encoding a Pleckstrin Homology (Ph) Domain Causes Heterochronic Development. Journal of Cellular Biochemistry:337-337.

7. Ali, H., E. Tomhave, R.M. Richardson, **B. Haribabu**, R. Dubose, and R. Snyderman. 1995. Priming of Fmlp and C5a-Induced Phospholipase C-Mediated Responses by Thrombin. FASEB Journal 9:A226-A226.

8. Lindberg, R.A., **B. Haribabu**, R. Syal, R. Snyderman, and M.W. Dewhirst. 1997. L-selectin-dependent leukocyte rolling on endothelial monolayers under flow. FASEB Journal 11:1752-1752.

9. **Haribabu, B**., D.A. Steeber, H. Ali, R.M. Richardson, T.F. Tedder, and R. Snyderman. 1997. Chemoattractant receptor-induced phosphorylation of L-selectin. Journal of Allergy and Clinical Immunology 99:1005-1005.

10. Barr, A.J., H. Ali, **B. Haribabu**, A.V. Smrcka, and R. Snyderman. 1999. Identification of phospholipase C-beta 3 binding regions for G protein beta gamma subunits. FASEB Journal 13:A1509-A1509.

11. **Haribabu, B**., D.A. Steeber, D.D. Sellars, C.B. Bock, R. Synderman, and M.W. Verghese. 2000. Knockout mice reveal role of Leukotriene B4 receptors (BLTR) in inflammation. FASEB Journal 14:A1094-A1094.

12. Ross GD, Hansen RD, Allendorf DJ, Baran JT, Yan J, Subbarao K, **Haribabu B**, Lambris JD. 2003. Tumor regression mediated by beta-glucans against iC3b-opsonized tumors requires CR3(+) neutrophils recruited via C5a and leukotriene B-4 (LTB4) FASEB Journal17 (7): C128-C128 Suppl. S APR 14

13. Allendorf DJ, Baran JT, Hansen RD, Subbarao K, Walsh D, Hong F, Marroquin J, Yan J, Lambris JD, **Haribabu B**, Ross GD 2003. Orally administered beta-glucan functions via anti-tumor mAbs and the complement system to recruit CR3(+) neutrophils and macrophages that produce tumor regression and tumor-free survival Molecular Immunology 40 (2-4): 195-196.

14. Jala VR, Shao WH and **Haribabu B**. Beta-arrestin translocation and internalization of leukotriene B-4 receptor 1 are independent of receptor phosphorylation FASEB JOURNAL 18 (4): A468-A468 Suppl. S MAR 23 2004

15. Subbarao K, Shao WH, Gao JL, Murphy, PM and **Haribabu B**. Distinct roles for leukotriene B-4 and n-formyl peptide receptors in host response to infection in mice FASEB JOURNAL 18 (4): A468-A469 Suppl. S MAR 23 2004.

16. **Haribabu B**, Subbarao K, Jala VR, et al. Leukotriene B4 receptors promote atherosclerosis by multiple mechanisms. FASEB JOURNAL 18 (5): A1134-A1134 Suppl. S MAR 24 2004

17. Uriarte S, Joshi-Barve S, Song ZY, Sahoo R, Gobejishvili L, Jala VR, **Haribabu B**, McClain C, Barve S: Akt inhibition upregulates FasL, downregulates c-FLIP, and induces caspase-8 dependent cell death in Jurkat T lymphocytes FASEB JOURNAL 19 (4): A547-A547 Part 1 Suppl. S, MAR 4 2005

18. Ohnishi, H., Miyahara, N., Swasey, C. H., Takeda, K., Dakhama, A., Domenico, J., Lucas, J. J., Mathis, S., **Haribabu, B**., Gelfand, E. W. Activation of effector memory CD8(+) T cells following ligation of BLT1 by leukotriene B-4 JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY Volume: 119 Issue: 1 Pages: S287-S288 Supplement: Suppl. 1 Meeting Abstract: 1126 Published: JAN 2007

19. Borroni EM, de la Torre YM, Buracchi C, et al The chemokine scavenger receptor D6 protects the fetus from inflammation-induced abortion PLACENTA 28 Issue: 8-9 Pages: A7-A7 AUG-SEP 2007

20. de la Torre YM, Buracchi C, Borroni EM, et al. Protection against inflammation- and antiphospholipid antibody-caused fetal loss by the chemokine decoy receptor D6. CLINICAL AND EXPERIMENTAL RHEUMATOLOGY 25 (2) Pages: 157-157 Published: MAR-APR 2007

21. Ohnishi H, Dakhama A, Takeda K, **Haribabu, B** and Gelfand EW. Corticosteroid-resistance and leukotriene B-4 receptor-1 upregulation on effector memory CD8(+) T cells are accompanied by increased IL-2 receptor expression. JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY Volume: 121 Pages: S115-S115 Supplement: Suppl. 1 Meeting Abstract: 445 Published: FEB 2008

22. Shin Y, Takeda K, Shiraishi, Y, Jeong, Y, Jia, Y, Mathis, S, **Haribabu, B** and Gelfand, E. W. Absence of the Low Affinity Receptor for Leukotriene B4, BLT2, on NKT Cells Results in Failure to Develop Allergen-Induced Airway Hyperresponsiveness and Inflammation JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY Volume: 127 Pages: AB56-AB56 (2011)

23. Sharma R, Jala, V, Chheda, Z and **Haribabu, B**. Leukotriene B4 receptor BLT1 expression on CD8+T cells is critical for antitumor immunity JOURNAL OF IMMUNOLOGY Volume: 188 Published: MAY 1 2012

24. Sharma R, Jala, V, Chheda, Z and **Haribabu, B**. Enhanced Claudin-9 expression is associated with lung cancer metastasis JOURNAL OF IMMUNOLOGY Volume: 188 Published: MAY 1 2012

25. Sharma, R, Chheda, Z, Jala, VR and **Haribabu, B**. Expression of Leukotriene B4 receptor 1 on CD8+T cells is essential for their migration to tumors, immunesurveillance and cancer immunity. JOURNAL OF IMMUNOLOGY Volume: 190 Meeting Abstract: 587 Published: MAY 1 2013

RESEARCH SUPPORT

ACTIVE

Title of the Project: Innate immune mechanisms regulating silicosis
Source: NIH/NIAID
Type of Grant: 1R21AI130756-01A1
Role on Project: Principal Investigator ***1.2 calendar months***
Dates of the Project: 6/1/2017 to 5/30/2020
Total Costs: $ 423,500 ***Annual Direct Costs:*** $ 150,000

The goal of the project is to determine molecular and cellular mechanism of silicosis and define the role of leukotrienes and inflammasome in the pathogenesis of silicosis.

Title of the Project: Functional Microbiomics, Inflammation and Pathogenicity (PI: Richard Lamont)
Subproject title: Functional Microbiomics Core
Source: NIH/NCRR
Type of Grant: P20-GM125504-01
Role on Project: Principal Investigator ***2.4 calendar months***
Subproject title: Functional Microbiomics Core
Dates of the Project: 3/1/2018 to 02/28/2023
Total Costs: $ 2,316,583 ***Annual Direct Costs:*** $ 332,556.00

The goal of this core project is to establish germ free and metagenomics facility at UofL. Dr. Bodduluri as the director of the core will oversee the establishment and operation of this germ-free mice and microbiomics core facility.

Title of the Project: Functional Microbiomics, Inflammation and Pathogenicity (PI: Richard Lamont)
Subproject title: Novel synthetic analogue of microbial metabolite, Urolithin A, mitigates inflammatory bowel diseases
Source: NIH/NCRR
Type of Grant: P20-GM125504-01
Role on Project: Co-mentor (PI: Jala) ***0.48 calendar months***
Dates of the Project: 3/1/2018 to 02/28/2023
Total Costs: $ $1,066,160 ***Annual Direct Costs:*** $ 140,000

The goal of this project is to examine the mechanism of actions, how Urolithin A and its synthetic analogue (UAS03) reduce inflammation and gut epithelial barrier dysfunction. We proposed to examine therapeutic applications to mitigate inflammatory bowel diseases as well as identify the bacteria responsible for UroA production.

Title of the Project: The role of bioactive lipids in CMC-induced myocardial repair
Source: NIH/NHLBI
Type of Grant: 1R01HL141191-01A1
Role on Project: Co Investigator (PI-Wysoczynski, Marcin)
Dates of the Project: 4/1/2019 to 3/31/2024
Total Costs: $ $1,925,000 ***Annual Direct Costs:*** $ 250,000

Title of the Project: Center for Cancer Immunology and Immunotherapy (CCII) (PIs: Jun Yan and Jason Chesney)
Subproject title: Functional Immunomics Core
Source: NIH/NIGMS

Type of Grant: 1P20GM135004-01
Role on Project: Co-Director
Dates of the Project: 02/1/2020 to 1/31/2025
Total Costs: $ 2,316,583 ***Annual Direct Costs:*** $ 332,556.00

The goal of this project is to provide integrated services to CCII-COBRE investigators for conducting studies by establishing a Immunotherapy sample collection and analysis core facility at UofL.

Title of the Project: Functional Microbiomics, Inflammation and Pathogenicity (PI: Richard Lamont)
Subproject title: Administrative supplement to Functional Microbiomics Core (Core Director)
Source: NIH/NIGMS
Type of Grant: P20-GM125504-3S1
Role on Project: Principal Investigator
Dates of the Project: 06/1/2020 to 5/31/2021
Total Costs: $ 345003 ***Annual Direct Costs:*** $ 232,000

The goal of this Administrative supplement is to establish germ-free mouse models to promote research in Alzheimer's disease at the UofL.

PAST

Title of the Project: Regulation of HIV-1 Coreceptors CXCR4
Source: NIH/NIAID
Type of Grant: R29 -AI43184
Role on Project: Principal Investigator
Dates of the Project: 4/1/1998-3/31/2004
Total Costs: $ 525,000

The overall objective of this project is to delineate the signaling pathways, desensitization and internalization of HIV-1 Coreceptors CXCR4.

Title of the Project: Regulation of HIV-1 Coreceptors
Source: NIH/FIC
Type of Grant: R03 TW01198
Role on Project: Principal Investigator
Dates of the Project: 1/1/2000-12/31/2003
Total Costs: $ 118,000

This is an AIDS-FIRCA (Fogarty International Research Collaboration Award) to work on various aspects related to signal transduction of HIV-1 coreceptors with Dr. Silvano Sozzani from Italy.

Title of the Project: Video Microscopy Facility at Brown Cancer Center
Source: NIH/NIAID
Type of Grant: Administrative supplement to R29 -AI43184 (Regulation of HIV-1 Coreceptors CXCR4)
Role on Project: Principal Investigator
Dates of the Project: 4/1/2001-3/31/2004
Total Costs: $ 91,030
This is an equipment grant to establish a Video Microscopy Facility in Brown Cancer Center.

Title of the Project: Targeting of Phagocyte and NK Cell CR3 to Tumor bound iC3b
Source: NIH/NCI
Type of Grant: Competitive supplement to 5 R01 CA86412 (Program Director: Gordon D. Ross)
Role on Project: Co-investigator
Dates of the Project: 6/1/2001-5/31/2003

Total Costs: $ 344,549

This is a collaborative research project between three independent NIH funded investigators. A major goal of this study is to determine the interaction of chemoattractant receptors with adhesion molecules in leukocyte recruitment during tumor immunotherapy.

Title of the Project: Chemoattractant Receptor Mediated Gene Regulation
Source: James Graham Brown Cancer Center
Type of Grant: Microarray Pilot Projects
Role on Project: Principal Investigator
Dates of the Project: (9/1/2001-12/31/2002)
Total Costs: $ 5,000

The goal of this study is to determine the changes in gene expression induced by Leukotriene B_4 through activation of its receptor BLT-1.

Title of the Project: Role of Leukotriene B_4 Receptors in Rheumatoid Arthritis
Source: University of Louisville
Type of Grant: Competitive Enhancement Grant
Role on Project: Principal Investigator
Dates of the Project: (9/1/2002-8/31/2003)
Total Costs: $ 14,925

This Competitive Enhancement Grant supported the research to acquire additional preliminary data for the pending RO1 project.

Title of the Project: Role of G-Protein Coupled Receptor Mediated Motility in Lung Cancer
Source: Kentucky Lung Cancer Research Board
Type of Grant: Basic Research
Role on Project: Principal Investigator
Dates of the Project: 10/1/2001-09/31/2005
Total Costs: $ 225,000

The goal of this research is to identify the mechanisms of G-protein coupled receptor mediated migration in the development and metastasis of lung cancer. Novel video imaging techniques will be applied to identify signaling intermediates and mechanisms involved in chemokine receptor mediated motility of lung cancer cells.

Title of the Project: Role of Leukotriene B_4 Receptors in Rheumatoid Arthritis
Source: NIH/NIAID
Type of Grant: R01 AI52381
Role on Project: Principal Investigator
Dates of the Project: 03/01/2003-02/28/2009
Total Costs: $ 1,125,083 ***Annual Direct Costs:*** $ 200,000
The overall goal of this study is to determine the role of Leukotriene B_4 receptors (BLTR) in Rheumatoid Arthritis using mice deficient in BLT-1 and BLT-2 in Collagen Induced Arthritis models. Signal transduction pathways and role of phosphorylation in regulation of BLT-2 will be studied in cellular models.

Title of the Project: The Role of Early Chemoattractants in Surgical Peritonitis
Source: VA
Type of Grant: Merit Review
Role on Project: Co-Investigator (Cheadle, W PI)
Dates of the Project: 6/1/2003-5/31/2008
Total Direct Costs: $ 800,000 ***Annual Direct Costs:*** $ 200,000

The goal of this study is to determine the role of early chemoattractants in surgical peritonitis. Mice deficient in BLT-1, CXCR2 and C5a receptors will be utilized to determine the role of neutrophil specific chemoattractants in surgical sepsis model.

Title of the Project: Potential Antagonists of Leukotriene B_4 Receptors
Source: Vela Pharmaceuticals, Inc
Type of Grant: Industry Sponsored Research Grant
Role on Project: Principal Investigator
Dates of the Project: 10/01/2004-03/31/2005
Total Costs: $ 40,000 ***Annual Direct Costs:*** $ 32,000

The purpose of this industry contract was to test few compounds from Vela Pharmaceuticals, Inc for their antagonist activity on leukotriene B4 receptors.

Title of the Project: Role of Chemoattractant Mediated Inflammation in Development and Progression of Lung Cancer
Source: Kentucky Lung Cancer Research Board
Type of Grant: Basic Research
Role on Project: Principal Investigator
Dates of the Project: 7/1/2003-06/31/2008
Total Costs: $ 300,000 ***Annual Direct Costs:*** $ 90,910

The goal of this research is to identify the relationship of chemoattractant mediated inflammation to appearance of induced mutations and development of lung tumors. 3MC induced lung tumor promotion by BHT-induced inflammation will be studied in mouse models deficient in chemoattractant receptors.

Title of the Project: Lung Cancer Research Consortium
Source: James Graham Brown Cancer Center
Type of Grant: Basic Research
Role on Project: Principal Investigator
Dates of the Project: 7/1/2004-06/31/2006
Total Costs: $ 40,000 ***Annual Direct Costs:*** $ 40,000

The goal of this project is to establish a "Lung Cancer Research Consortium" to develop and study primary lung tumor models in mice.

Title of the Project: Biology of D6 Chemokine Decoy Receptors
Source: University of Louisville
Type of Grant: Competitive Enhancement Grant
Role on Project: Principal Investigator
Dates of the Project: (10/1/2005-9/30/2006)
Total Costs: $ 14,800
This Competitive enhancement Grant supported the research to acquire additional preliminary data for the pending R01 project on chemokine decoy receptors, D6.

Title of the Project: Inflammation and Infection in Development of Colon Cancer
Source: James Graham Brown Cancer Center, Pilot Project Grant
Type of Grant: Basic Research
Role on Project: Principal Investigator
Dates of the Project: 3/1/2007-02/28/2009
Total Costs: $ 50,000 ***Annual Direct Costs:*** $ 50,000

The goal of this project is to determine the basis for enhanced tumor colon tumor development in Apc^{Min} BLT1-/- compound mice.

Title of the Project: Resolvins and Leukotriene B_4 Receptors
Source: Resolvyx Pharmaceuticals, Inc
Type of Grant: Industry Sponsored Research Grant
Role on Project: Principal Investigator
Dates of the Project: 10/01/2007-09/31/2008
Total Costs: $ 49, 896 ***Annual Direct Costs:*** $ 39,600

The goal of this project is to determine the biological activities of Resolvins on leukotriene B_4 receptors.

Title of the Project: Interplay of Inflammation and infection in colon cancer
Source: Charlotte Geyer Foundation
Type of Grant: Research grant
Role on Project: Principal Investigator ***0.6 calendar months***
Dates of the Project: 01/01/2009-06/30/2009
Total Costs: $50,000 ***Annual Direct Costs:*** $45,454/6 months

The overall goal of this study is to determine the role of Leukotriene B_4 receptors in the interplay of inflammation in the development and progression of colon cancer.

Title of the Project: Interplay of Inflammation and infection in colon cancer
Source: University of Louisville
Type of Grant: Competitive Enhancement Grant
Role on Project: Principal Investigator
Dates of the Project: (11/1/2008-10/30/2009)
Total Costs: $ 15,000 ***Annual Direct Costs: $***15,000

This is a Competitive Enhancement Grant to support the research and acquire additional preliminary data for the pending R01 project. The R01 has been funded.

Title of the Project: Antiviral lectins as microbicides
Source: NIH/NIAID
Type of Grant: 5R01AI076169
Role on Project: Co-investigator (Ken Palmer PI) ***0.6 calendar months***
Dates of the Project: 04/01/2008-03/30/2012
Total Costs: $ 1,600,000 ***Annual Direct Costs:*** $ 263,000

The overall goal of this study is develop and characterize antiviral lectins as microbiocides.

Title of the Project: CXCR4 Targeted Chemotherapeutic Agents
Source: University of Louisville
Type of Grant: Clinical Translational Science Pilot Research Grant
Role on Project: Co Investigator (JO Trent PI)
Dates of the Project: 7/01/2010-6/30/2012
Total Costs: $225,000 ***Annual Direct Costs:*** $ 222,772

The overall goal of this study is to develop and characterize novel CXCR4 receptor antagonists.

Title of the Project: Leukotriene B_4 receptor antagonists for inflammatory diseases
Source: University of Louisville
Type of Grant: Clinical Translational Science Pilot Research Grant
Role on Project: Principal Investigator
Dates of the Project: 6/01/2010-2/28/2012
Total Costs: $99,960 ***Annual Direct Costs:*** $ 98,000

The overall goal of this study is to develop and characterize novel leukotriene B_4 receptor antagonists.

Title of the Project: Mouse Models of Spontaneous Cancers-Core Facility
Source: Robert W. Rounsavall Foundation, Inc.
Type of Grant: Core Facility Support Grant
Role on Project: Principal Investigator
Dates of the Project: 1/01/2010-12/31/2011
Total Costs: $115,000 ***Annual Direct Costs:*** $ 115,000

The overall goal of this study is to establish a core facility and house mouse strains developing spontaneous cancers of colon, lung, breast and prostate.

Title of the Project: Inflammation Airways Reactivity and Asthma
Source: NIH/NHLBI
Type of Grant: P01 HL036577
Role on Project: Principal Investigator of U of L subcontract ***1.2 calendar months***
Dates of the Project: 07/01/2007-06/30/2012
Total Costs: $ 448,350 ***Annual Direct Costs:*** $ 57,060

The overall goal of this study is to determine the role of Leukotriene B_4 receptors in Asthma using mice deficient in BLT-1 and BLT-2 in ovalbumin sensitization models. Our project is a subcontract to National Jewish Medical and Research Center in Denver, Colorado.

Title of the Project: Decoy receptors as probes for the function of inflammatory chemokines in lung cancer development
Source: Kentucky Lung Cancer Research Board
Type of Grant: Research grant
Role on Project: Principal Investigator ***1.2 calendar months***
Dates of the Project: 11/01/2009-10/30/2012 (*no salary support*)
Total Costs: $150,000 ***Annual Direct Costs:*** $ 68,182

The overall goal of this study is to determine the role of inflammatory chemokines in promoting lung cancer using various KO and transgenic strains with altered decoy receptor expression.

Title of the Project: Sphingolipid Signaling in Endothelial Function.
Source: NIH/NHLBI
Type of Grant: 1 R01 HL07107
Role on Project: Co-Investigator (Lee, Menq-Jer- PI**)** ***0.6 calendar months***
Dates of the Project: 07/01/2003-03/31/2013
Total Costs: $1,480,000 ***Annual Direct Costs:*** $250,000

The goal of this project is to study signaling and functions of S1P1 in vascular endothelial cells.
Title of the Project: Resolution of inflammation in Obesity and Diabetes: Role of lipid mediators.
Source: NIH/NHLBI
Type of Grant: R01
Role on Project: Co-Investigator (Matt Spite PI) ***0.6 calendar months***
Dates of the Project: 7/01/2011-6/30/2016
Total Costs: $1,850,000 ***Annual Direct Costs:*** $ 250,000

The goal of this study is to determine the role of inflammation resolving lipid mediators in obesity related diabetes.

Title of the Project: Leukotriene B_4 receptor Agonists and Antagonists for cancer Immunotherapy
Source: from JGBCC for CoBRE
Type of Grant: Pilot Grant
Role on Project: Principal Investigator ***0.12 calendar months***

Dates of the Project: 10/01/2013-6/30/2015
Total Costs: $150,000 ***Annual Direct Costs:*** $ 75,000

The goal of this study is development of structure and mechanism based inhibitors for BLT1 that will provide unique opportunities for targeting cancer related inflammation.

Title of the Project: Role of Leukotriene B_4 Receptors in the Interplay of Inflammation and Infection
Source: NIH/NCI/
Type of Grant: 1R01CA138623
Role on Project: Principal Investigator ***3.0 calendar months***
Dates of the Project: 4/01/2009-1/31/2016
Total Costs: $ 1,529,175 ***Annual Direct Costs:*** $ 207,750

The goal of this study is to determine the mechanisms of paradoxical observations made with BLT1 KO mice in $APC^{Min/+}$ model of colon cancer.

Title of the Project: Careers in Immunology Fellowship
Source: American Association of Immunologists, Inc. (AAI)
Type of Grant: fellowship
Role on Project: Principal Investigator
Dates of the Project: 12/01/2014-9/30/2015
Total Costs: $ 18730 ***Annual Direct Costs:*** $ 18,730

The fellowship provides salary support for the graduate student, Zinal Chheda for the upcoming year. The goal of the research is to understand mechanisms of CTL migration into tumors.

Title of the Project: Role of neutrophils in crystalline silica-mediated lung cancer promotion
Source: Kentucky Lung Cancer Research Board
Type of Grant: Research grant
Role on Project: Principal Investigator ***1.2 calendar months***
Dates of the Project: 7/01/2015-6/30/2018 (*no salary support*)
Total Costs: $150,000 ***Annual Direct Costs:*** $ 68,182

The overall goal of this study is to determine the role of inflammatory chemokines in promoting lung cancer using various KO and transgenic strains with altered decoy receptor expression.

Title of the Project: CCR2 mediated inflammation and gut microbiota in promoting intestinal cancer
Source: NIH/NCI
Type of Grant: R21CA191683-01
Role on Project: Co Investigator (VR Jala PI) ***0.48 calendar months***
Dates of the Project: 1/1/2015 to 12/31/2017
Total Costs: $412,000 ***Annual direct costs:*** $ 150,000

The goal of this project is to determine to role of CCR2 in controlling the gut microbiota and thereby colon tumorigenesis. The project scored at 5% and will likely be funded by the NCI.

Title of the Project: Epigenetic and infection induced EMT of colonic crypts: a target for chemoprevention
Source: NIH/NCI
Type of Grant: 1R01CA-185322-01
Role on Project: PI of U of L subcontract (Shahid Umar PI/ Kansas) ***0.24 calendar months***
Dates of the Project: 1/1/2015 to 12/31/2018
Total costs of subcontract: $ 206,000

The goal of this project to define epigenetic and infection induced changes in colonic crypts that form basis to developing chemoprevention agents.

Title of the Project: Interplay of androgens, microbiota and immunoregulation in lupus.
Source: NIH/
Type of Grant: R01AR067188
Role on Project: CoI (PI: Michele M. Kosiewicz) ***0.36 calendar months***
Dates of the Project: 7/1/2015 to 6/30/2020
Total Costs: $ 2,474,883 ***Annual Direct Costs:*** $ 280,000

The major goals of this project are to determine the role that androgens play in altering male microbiota and the mechanisms underlying male microbiota-mediated prevention of lupus in female mice.

Title of the Project: Microbial metabolite Urolithin A is a potent immunomodulatory and chemo-sensitizing agent in colon cancer.
Source: NIH/NCI
Type of Grant: R21 CA216090-01
Role on Project: Co Investigator (VR Jala PI) ***0.36 calendar months***
Dates of the Project: 4/1/2017 to 3/31/2019
Total Costs: $413,000 ***Annual direct costs:*** $ 150,000