

CURRICULUM VITAE

Suresh Kumar PhD

**Associate Professor
Department of Pathology
Division of Administration**

OFFICE ADDRESS:

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EDUCATION:

1990 - Present B.Sc Loyola college, Madras, India
1992 - Present M.Sc Madurai Kamaraj University, Madurai, India
1998 - Present Ph.D Osmania University, Hyderabad, India

POSTGRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS:

1998 - 2000 PDF, Linköping University, Linköping, Sweden
2000 - 2005 PDF, Medical college of Wisconsin, Milwaukee, WI
2005 - 2008 Research Scientist, Medical College of Wisconsin, Milwaukee, WI

FACULTY APPOINTMENTS:

2008 - Present Assistant Professor, Pathology, Medical College of Wisconsin, Milwaukee, WI

ADMINISTRATIVE APPOINTMENTS:

2008 - 2015 Imaging Specialist, Children's Research Institute Imaging Core, Medical College of Wisconsin, Milwaukee, WI
2015 - Present Scientific Director, Imaging Facility, Neuro Science Research Center, Milwaukee, WI
2015 - Present Director, Children's Research Institute Imaging Core, Medical College of Wisconsin, Milwaukee, WI

RESEARCH ADMINISTRATIVE APPOINTMENTS:

2015 - Present Director, Children's Research Institute Imaging Core, Medical College of
2015 - Present Scientific Director, Imaging Facility, Neuro Science Research Center, Milwaukee WI
Wisconsin, Milwaukee WI

AWARDS AND HONORS:

1990 - 1992 Scholarship award (Masters), Department of Biotechnology (India)
1993 - 1995 Junior Fellowship (Ph.D), Council of Scientific and Industrial Research (India)
1995 - 1998 Senior Research Fellow, Council of Scientific and Industrial Research (India)
2012 Travel Grant, American Society of Cell Biology (USA)

MEMBERSHIPS IN HONORARY AND PROFESSIONAL SOCIETIES:

2002 - 2005 American Society of cell Biology (Member)
2018 - Present American Heart Association (Member)

EDITORSHIPS/EDITORIAL BOARDS/JOURNAL REVIEWS:

Journal Review
2015 - Present IJBMB
2015 - Present PLOsone

RESEARCH GRANTS/AWARDS/CONTRACTS/PROJECTS:

Active

Peer Review

Title:	miRNA mediated cross talk in CRS4: The role of the miR21p/PPAR-alpha pathway
Source:	NIH
Role:	Cosultant
PI:	Dr. Kriegel A
Dates:	07/01/2016 - 04/30/2021
Direct Funds:	\$1,285,000 (total for all years)
Title:	Role of Mitochondrial Trifunctional Protein Mutations in
Source:	CRI
Role:	Principal Investigator
Dates:	04/01/2017 - 05/30/19
Direct Funds:	\$150,000 (total for all years)

Pending

Peer Review

Title:	Ovarian Cancer Chemoresistance Through CLPTM1L/GRP78
Source:	NIH
Role:	Co-Investigator
Dates:	07/01/2019 - 06/30/2023
Direct Funds:	\$1,285,000 (total for all years)

Prior

Peer Review

Title:	Role of MTP alpha variant in infant's growth and survival
Source:	NIH Advancing Translational Sciences
Role:	Principal Investigator
Dates:	10/31/2016 - 05/01/2017
Direct Funds:	\$12,000 (total for all years)

INVITED LECTURES/WORKSHOPS/PRESENTATIONS:

Local

Suresh Kumar, Another biomarker for, Department of Medicine Grand Rounds, Medical College of Wisconsin, 10/05/2005

COMMITTEE SERVICE:

Medical College of Wisconsin

2014 - 2018 Research Affairs Grant
2014 - 2017 Member (Adhoc) American Heart Association Grant Review Panel
2014 - 2017 Clinical & Translational Sciences Institute, Pilot grant
2014 - 2018 Cancer Center Basic Science Seed Grant

2014 - Present Member (Adhoc) of CSR-ECR Program
2016 - 2017 University of Wisconsin Milwaukee, Research Growth Initiative Grant

PROGRAMMATIC DEVELOPMENTS:

Research Programs

2007 - Present Director CRI imaging core
2016 - Present Scientific Director NRC imaging core

DISCOVERIES:

Identified a new isoform of Human Trifunctional protein alpha Jung-Ja P Kim, Paula E North and Suresh N Kumar (2009) NCBI : Nucleotide

BIBLIOGRAPHY

Refereed Journal Publications/Original Papers

1. Suresh N Kumar and Guntupalli Venkateswerlu. (1997) Involvement of an endogenous metalloprotease in the activation of protoxin in *Bacillus thuringiensis* subsp. *Kurstaki*. *Biochem. Mol. Biol. Internat.* 42(5): 901-908.
2. Suresh N Kumar and Guntupalli Venkateswerlu. (1998) Endogenous protease activated 66 kDa toxin from *Bacillus thuringiensis* subsp. *kurstaki* active against *Spodoptera littoralis*. *FEMS Microbiol. Lett.* 159(1): 113-120.
3. Suresh N Kumar, Sreelatha T Reddy and Guntupalli Venkateswerlu. (1998) Effect of SDS on Con A-sepharose during affinity chromatography of high-affinity binding toxin protein of *Bacillus thuringiensis* subsp. *Kurstaki*. *Anal. Lett.* 31 (10): 1677-1687.
4. Suresh N Kumar and Guntupalli Venkateswerlu. (1998) Intracellular proteases in sporulated *Bacillus thuringiensis* subsp. *kurstaki* and their role in protoxin activation. *FEMS Microbiol. Lett.* 166 (2): 377-382.
5. Suresh N Kumar, Eugene A Konorev, Deepika Aggarwal and Balaraman Kalyanaraman. (2011) Analysis of proteome changes in doxorubicin treated adult rat cardiomyocyte. *Journal of Proteomics* 74(5): 683-697 PMID : 21338723
6. Noah P Zimmerman, Suresh N Kumar, Jerrold R Turner, Michael B Dwinell (2011) Cyclic AMP dysregulates intestinal epithelial cell restitution through PKA and the small GTPase RhoA. *Inflammatory Bowel Diseases* (Special accept without external review) [Epub ahead of publication] PMID : 21993975
7. Marija Renic, Suresh N Kumar, Mathew A Florence, Nashaat Z Gerges, Debebe Gebremedhin, J Russell Falck, David R Harder and Richard J Roman (2012) Protective effect of 20-HETE inhibition in a model of oxygen-glucose deprivation in hippocampal slice cultures. *Am. J. Physiol. Heart & Circ. Physiol.* 302(6): H1285-1293 PMID : 22245774
8. Soonyean Hwang, Noah P Zimmerman, Kimberle A Agle, Suresh N Kumar, Michele A Battle, Jerrold R Turner and Michael B Dwinell. (2012) E-cadherin is a critical effector of basal and inducible intestinal epithelial restitution. *J. Biol. Chem.* 287 (26): 22227-22240 PMID : 22549778.
9. Kathryn E Marshall, Amber J Tomasini, Khadijah Makky, Suresh N Kumar and Alan N Mayer (2010) Dynamic Lkb1-TORC1 signaling as a possible mechanism for regulating the endoderm intestine transition. *Developmental Dynamics* 239: 3000-3012 PMID: 21204094 Erratum published - (2011) *Developmental Dynamics* 240(2): 459
10. Hong W, Khampang P, Erbe C, **Kumar S**, Taylor SR, Kerschner JE. Nontypeable *Haemophilus influenzae* inhibits autolysis and fratricide of *Streptococcus pneumoniae* in vitro. *Microbes Infect.* (2014) 16(3):203-13. PMID: 24269704
11. Tabatabai NM, North PE, Regner KR, **Kumar SN**, Duris CB and Blodgett AB. De novo expression of sodium-glucose cotransporter SGLT2 in Bowman's capsule coincides with replacement of parietal epithelial cell layer with proximal tubule-like epithelium. *J Membr Biol.* (2014) 247(8):675-83 PubMed PMID: 24906870
12. Cossette SM, Bhute VJ, Bao X, Harmann LM, Horswill MA, Sinha I, Gastonguay A, Pooya S, Bordas M,

- Kumar SN**, Mirza SP, Palecek SP, Strande JL, and Ramchandran R. Sucrose Nonfermenting-Related Kinase Enzyme-Mediated Rho-Associated Kinase Signaling is Responsible for Cardiac Function. *Circ Cardiovasc Genet.* (2016):474-486. PMID: 27780848
13. Jin Y, Hu W, Liu T, Rana U, Aguilera-Barrantes I, Kong A, **Kumar SN**, Wang B, Gao P, Wang X, Duan Y, Shi A, Song D, Yang M, Li S, Han B, Zhao G, Fan Z and Miao QR (2018) Nogo-B receptor increases the resistance of estrogen receptor positive breast cancer to paclitaxel. *Cancer Lett.* 419: 233-244
 14. Cheng G, Zielonka M, Dranka B, **Kumar SN**, Myers CR, Bennett B, Garces AM, Dias Duarte Machado LG, Thiebaut D, Ouari O, Hardy M, Zielonka J, Kalyanaraman B. Detection of mitochondria-generated reactive oxygen species in cells using multiple probes and methods: Potentials, pitfalls, and the future. *J Biol Chem.* (2018) 293(26):10363-10380. PMID: 29739855
 15. Jeschke JC, Mayne CG, Ziegelbauer J, DeCiantis CL, Singh S, **Kumar SN**, Suchi M, Iwakura Y, Drobyski WR, Salzman NH, Williams CB. A model of TH17-associated ileal hyperplasia that requires both IL-17A and IFN γ to generate self-tolerance and prevent colitis. *Mucosal Immunol.* (2018) 11(4):1127-1137. PMID: 29728642
 16. Chowdhury TA, Koceja C, Eisa-Beygi S, Kleinstiver BP, **Kumar SN**, Lin CW, Li K, Prabhudesai S, Joung JK, Ramchandran R. Temporal and Spatial Post-Transcriptional Regulation of Zebrafish tie1 mRNA by Long Noncoding RNA During Brain Vascular Assembly. *Arterioscler Thromb Vasc Biol.* (2018) 38(7):1562-1575 PMID: 29724820
 17. Zemanovic S, Ivanov MV, Ivanova LV, Bhatnagar A, Michalkiewicz T, Teng RJ, **Kumar S**, Rathore R, Pritchard KA Jr, Konduri GG, Afolayan AJ. Dynamic Phosphorylation of the C Terminus of Hsp70 Regulates the Mitochondrial Import of SOD2 and Redox Balance. *Cell Rep.* (2018) 25(9):2605-2616.e7. PMID: 30485823