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## **EDUCATION**

1990 – 1994 B.S. in Microbiology, Osmania University, Hyderabad, India  
1994 – 1996 M.S. in Biotechnology, Madurai Kamaraj University, Madurai, India  
1996 – 2003 Ph. D., Indian Institute of Science, Bangalore, India  
2003 – 2009 Post Doctoral Research Scientist, Columbia University, New York, NY

## **ACADEMIC APPOINTMENTS**

2009 – 2010 Associate Research Scientist, Center for Infection and Immunity,  
Columbia University, New York, NY  
2010 – 2011 Instructor, Department of Medicine, University of Louisville, Louisville, KY  
2010 – 2011 Assistant Scientist, JG Brown Cancer Center, University of Louisville, Louisville, KY  
2011 – Assistant Professor, Department of Medicine, University of Louisville, Louisville, KY  
2011 – Associate Scientist, JG Brown Cancer Center, University of Louisville, Louisville, KY  
2013 – Faculty Member, Graduate School of Department of Medicine, University of Louisville, Louisville, KY  
2014 – Associate Faculty, Department of Microbiology & Immunology, University of Louisville

## **PROFESSIONAL MEMBERSHIPS AND ACTIVITIES**

2006 – New York Academy of Sciences (NYAS)  
2004 – National Alliance for Research on Schizophrenia and Depression (NARSAD)  
2012 – Faculty 1000  
2012 – American Association of Cancer Research (AACR)  
2013 – Society for Immunotherapy of Cancer (SITC)  
2013 – American Association of Immunologists (AAI)

## **HONORS AND AWARDS**

1994 – 1996 Student Fellowship, Department of Biotechnology, Govt. of India  
1996 – 2002 Junior and Senior Research Fellowship, IISc, Bangalore India  
1996 – 2002 Junior and Senior Research Fellowship, Council of Scientific and Industrial Research, Govt. of India  
2005 – 2007 National Alliance for Research on Schizophrenia and Depression (NARSAD) Young Investigator Award  
2011 Roger Herzig Junior Faculty Research Prize, University of Louisville  
2014 Roger Herzig Junior Faculty Research Prize, University of Louisville

## COMMITTEE ASSIGNMENTS AND ADMINISTRATIVE SERVICES

### University Administrative Activities

2010 – 2012	Organizer, Molecular Targets Seminar Series, University of Louisville
2010	Judge in Medical student's poster assessment at Brown Cancer Center Retreat, Louisville
2011	Judge in graduate poster assessment at Brown Cancer Center Retreat, Louisville
2011	Organizer, Molecular Targets Group Retreat, University of Louisville
2011	Lung Cancer Working Group
2012	Judge in graduate poster assessment at Brown Cancer Center Retreat, Louisville
2012	Monitor and provide training/technical help for Flow Cytometry facility, Room 428; CTR Building
2013	Judge in graduate poster assessment at Brown Cancer Center Retreat, Louisville
2013	Judge in graduate poster assessment at Research Louisville, University of Louisville
2014	Judge in Postgraduate/Junior Faculty poster assessment at Research Louisville, University of Louisville

## EDUCATIONAL ACTIVITIES

### Mentor:

1. Esther Li, Brown Cancer Center Summer Research Internship Program, 2011
2. Kalyani Putty, Ph. D. Post-doctoral fellow, University of Louisville.
3. Bharat Devapatla, Ph. D. Post-doctoral fellow, University of Louisville.
4. Maggie Yanting Chang, Brown Cancer Center Summer Research Internship Program, 2012
5. Abby Dilk, Brown Cancer Center Summer Research Internship Program, 2013
6. Tess Fasten, Brown Cancer Center Summer Research Internship Program, 2013
7. Jamaal Richie, Masters Student, Department of Biochemistry, University of Louisville
8. Numan Al Rayyan, Ph. D. Post-doctoral fellow, University of Louisville

### Co-Mentor:

9. Christopher Shidal, Graduate student, Department of Phama-Toxicology, University of Louisville
10. Enid Choi, MD. Ph. D. Graduate student, University of Louisville.

### Thesis Committees:

11. Christopher Shidal, Graduate student, Department of Pham-Toxicology, University of Louisville
12. Amanda Lasnik, Graduate student, Department of Pham-Toxicology, University of Louisville

## GRANTS AND CONTRACTS

### Current Support

NIH, NCI R01, Mitchell (PI)	05/01/14 – 06/30/19	1.8 calendar
NIH	\$300,000/yr	
Small molecule targeting of MIF as a novel melanoma therapeutic		

**Role: Co-Investigator**

National Lung Cancer Partnership (**Yaddanapudi**)      03/01/14 – 02/28/16      2.4 calendar  
 2014 Young Investigator Grant      \$54,000/yr  
*A broad spectrum stem cell vaccine*

Kentucky Lung Cancer Research Program (**Yaddanapudi**)      5/01/12 – 4/31/15      1.2 calendar  
 KLCRP      \$75,000/yr  
*New Approaches for Eliminating Lung Cancer Initiating Stem Cells*

The goal of this project is to identify new therapeutic strategies for eliminating lung cancer initiating stem cells.

1P30GM106396-01 (PI: Donald Miller)      10/01/13 – 6/30/15      1.2 calendar  
 NIH/COBRE Phase III pilot project      \$112,499/yr  
*A broad spectrum stem cell vaccine*

The goal of this project was to investigate the potential of using embryonic stem cell antigens a novel immunotherapeutic approach to vaccinating against lung cancer-initiating stem cells.

**Role: Project Leader**

#### Pending Support

NIH, NCI R21 (**Yaddanapudi**)      07/01/15 – 06/30/17      3.0 calendar  
 NIH-NCI-Omnibus      \$206,250/yr  
*A novel stratagem for lung cancer*

#### Completed Research Support

2010 – 2013      5P20RR0108733      Eaton and Miller (PI)  
 NIH/NCRR  
 Molecular Targets CoBRE Project 12: A Broad Spectrum Lung Cancer Stem Cell Vaccine  
 The aims of this Project is to investigate the efficacy of embryonic cell vaccination in a model of spontaneous lung tumorigenesis and to demonstrate that lung cancer stem cells are targets of embryonic stem cell vaccination-induced anti-tumor immunity.  
**Role: Project Director**

2006 – 2011      1U01AI070411      Lipkin, W (PI)  
 NIH/NIAID  
 Viral Arrays for Biodefense  
 Establish and validate a viral sequence database and its complementary oligonucleotide array technology for detection and differentiation of influenza viruses and hemorrhagic fever viruses.  
**Role: Research scientist**

2006 – 2008      NARSAD Young Investigator Award  
 Defining Pathogenesis of Autoimmune-Mediated Pediatric Neuropsychiatric Disorders:  
**Role: PI**

**PATENTS** A patent titled "Filoviral immunosuppressive peptides and uses thereof"  
U.S. Pat. Appl. Publ. (2007), 133pp. US 2007185025

## **EDITORIAL WORK**

### ***Ad hoc Reviewer***

Infection and Immunity  
PLOS One  
Journal of Infectious Diseases  
Cytokine  
European Journal of Immunology  
Cancer Journal

## **ABSTRACTS AND PRESENTATIONS**

### **ORAL PRESENTATIONS**

"Novel Immunotherapeutic Strategies for Cancer Treatment", Department of Microbiology and Immunology Seminar Series, May, 2014, Louisville, KY

"Targeting Galectin-1 as a Novel Therapeutic Strategy for Melanoma", Brown Cancer Center *Colloquia On Cancer Biology and Therapeutics*, November, 2014, Louisville, KY

"Development of a Lung Cancer Vaccine using Embryonic Stem Cells", *Cancer Immunotherapy Clinical Trials: Concepts and Challenges* Workshop, Society for Immunotherapy of Cancer, February, 2013, Bethesda, MD

"A Broad Spectrum Lung Cancer Stem Cell Vaccine", JG Brown Cancer Center Summer Internship Talks, July, 2013, Louisville, KY

"Control of Tumor Associated Macrophage Alternative Activation", Fifth International MIF Symposium, September, 2012, Louisville, KY

"Defining Pathogenesis of Autoimmune-Mediated Pediatric Neuropsychiatric Disorders", Molecular Targets Seminar Series, August, 2010, University of Louisville, Louisville

"Viral Infection in the Brain and its effects on the Immune response" XXV All India Cell Biology Conference, November 1-3, 2001, IISc Bangalore, India

### **POSTERS**

"MIF is necessary for human melanoma MDSC differentiation and function", Brown Cancer Center Retreat, Louisville, 2014

- “Galectin-1 as a novel therapeutic target for Melanoma”, Brown Cancer Center Retreat, Louisville, 2014
- “Vaccination with Embryonic Stem Cells Protects against Lung Cancer “, Brown Cancer Center Retreat, Louisville, 2014
- “MIF controls human myeloid-derived immunosuppressive phenotype/function in melanoma educated CD14<sup>+</sup> monocytes”, AACR, Tumor Microenvironment conference, San Diego, 2014
- “Control of Tumor Associated Macrophage Alternative Activation”, AACR Annual Meeting, Washington DC, 2013
- “Vaccination with Embryonic Stem Cells Elicits Anti-tumor Immunity”, Brown Cancer Center Retreat, Louisville, 2013
- “Control of Tumor Associated Macrophage Alternative Activation”, Brown Cancer Center Retreat, Louisville”, Brown Cancer Center Retreat, Louisville, 2013
- “Galectin-1 as a novel therapeutic target for Melanoma”, Brown Cancer Center Retreat, Louisville, 2013
- “Control of Tumor Associated Macrophage Alternative Activation”, Brown Cancer Center Retreat, Louisville”, Brown Cancer Center Retreat, Louisville, 2012
- “Vaccination with Embryonic Stem Cells Elicits Anti-tumor Immunity”, Brown Cancer Center Retreat, Louisville, 2012
- “MIF-dependent promotion of tumor-induced macrophage alternative activation and melanoma progression”, Brown Cancer Center Retreat, Louisville, 2011
- “Vaccination with Embryonic Stem Cells Elicits Anti-tumor Immunity”, Brown Cancer Center Retreat, Louisville, 2010
- “Modulation of T lymphocyte activation and potential tumor-immune response modifier activity by small molecule inhibitors of MIF”, Brown Cancer Center Retreat, Louisville, 2010
- “Evidence that AS1411, an anti-cancer aptamer, targets cancer stem cells”, Brown Cancer Center Retreat, Louisville, 2010
- “Polyinosinic-polycytidylic acid induces cytokine production through a RIG-I/MDA-5 pathway in murine astrocytes”, 37th Annual Meeting of the Society for Neuroscience, 2007
- “Defining Pathogenesis of Auto-Immune Mediated pediatric Neuropsychiatric disorders”, sixth Annual Columbia Neuroscience Poster-Fest, Columbia University, January 18, 2007
- “Zinc homeostatic mechanisms are impaired in the brains of Lewis rats with Neonatal Borna Disease” 6th International Symposium on Neurovirology, HIV, Neuroprotection Workshop, Sardinia, Italy, September 10-14, 2004

**PUBLICATIONS**

1. Mitchell RA and **Yaddanapudi K. (2014)** Stromal-dependent tumor promotion by MIF family members. *Cell Signal*. Sep 30; 26(12). PMID: 2527753
2. Brock SE, Rendon BE, Xin D, **Yaddanapudi K**, Mitchell RA (2014) MIF family members cooperatively inhibit p53 expression and activity. *PLoS One*. Jun 16; 9(6):e99795.
3. **Yaddanapudi K\*** and Eaton JW\*. (2013) Multi-peptide immunotherapeutic vaccine for renal cell carcinoma: getting the troops all worked up. *Transl Androl Urol*. 1(4):229-233. DOI:10.3978/j.issn.2223-4683.2012.10.03  
\*Corresponding author
4. **Yaddanapudi K\***, Putty K, Rendon BE, Lamont GL, Faughn JD, Satoskar A, Lasnik A, Eaton JW and Mitchell RA\*. (2013) Control of tumor-associated macrophage alternative activation by MIF. *J. Immunol*. Mar 15; 190 (6). \*Corresponding author
5. **Yaddanapudi K**, Mitchell RA and Eaton JW. (2013) Cancer vaccines: Looking to the future. *Oncoimmunol*. 2 (3); Mar. 2013; eLocation ID: e23403
6. Brock SE, Rendon BE, **Yaddanapudi K**, Mitchell RA (2012) Negative Regulation of AMP-activated Protein Kinase (AMPK) Activity by Macrophage Migration Inhibitory Factor (MIF) Family Members in Non-small Cell Lung Carcinomas. *J Biol Chem*. Nov 2; 287(45):37917-25. doi: 10.1074/jbc.M112.378299. Epub 2012 Sep 17
7. **Yaddanapudi K**, Mitchell RA, Putty K, Willer S, Sharma RK, Yan J, Bodduluri H, Eaton JW (2012) Vaccination with embryonic stem cells protects against lung cancer: is a broad-spectrum prophylactic vaccine against cancer possible? *PLoS One*. 7(7): e42289. Epub 2012 Jul 31
8. **Yaddanapudi K**, Miranda JD, Hornig M, Lipkin, WI (2011) Toll-like receptor 3 regulates neural stem cell proliferation by modulating the Sonic hedgehog pathway. *PLoS One* 6(10): e26766. doi:10.1371/journal.pone.0026766
9. **Yaddanapudi K**, Miranda JD, Hornig M, Villar G, Serge R, Lipkin, WI (2010) Gestational induction of TLR3-mediated immunity inhibits cortical neurogenesis and causes behavioral disturbances. *American Society of Microbiology, mBio*; doi: 10.1128/mBio.00176-10 5 October 2010 *mBio* vol. 1 no. 4 e00176-10
10. **Yaddanapudi K**, Hornig M, Serge R, Miranda JD, Baghban A, Villar G, Lipkin, WI (2009) Passive transfer of streptococcus-induced antibodies reproduces behavioral disturbances in a mouse model of pediatric autoimmune neuropsychiatric disorders associated with streptococcal infection (PANDAS). *Mol. Psychiatry*. 15(7), 712-726
11. Miranda JD, **Yaddanapudi K**, Hornig M, Lipkin WI (2009) Astrocytes recognize intracellular polyinosinic-polycytidylic acid via MDA-5. *FASEB J*. 23(4): 1064-71
12. Abraham S, **Yaddanapudi K**, Thomas S, Damodaran A, Ramireddy B, Manjunath R (2008). Nonclassical MHC-I and Japanese encephalitis virus infection: Induction of H-2Q4, H-2T23 and H-2T10. *Virus Res*. 133(2): 239–49
13. Williams BL, Hornig M, **Yaddanapudi K**, Lipkin WI (2008) Hippocampal poly (ADP-Ribose) polymerase 1 and caspase 3 activation in neonatal bornavirus infection. *J Virol*. 82(4): 1748–58

14. **Kavitha Y**, Manjunath R (**2007**) Replication of JEV in mouse brain induces alterations in lymphocyte response. *Acta Virol.* 51(3): 179–187
15. Williams BL, **Yaddanapudi K**, Hornig M, Lipkin WI (**2007**) Spatiotemporal Analysis of Purkinje Cell Degeneration Relative to Parasagittal Expression Domains in a Model of Neonatal Viral Infection. *J Virol.* 81(6): 2675–2687
16. **Yaddanapudi K**, Palacios G, Towner JS, Nichol ST, Chen I, Sariol CA, Lipkin WI (**2006**) Implication of a retrovirus-like glycoprotein peptide in Ebola virus and Marburg virus immunopathogenesis. *FASEB J.* 20: 2519–2530
17. Williams BL, **Yaddanapudi K**, Kirk CM, Soman A, Hornig, M, Lipkin I (**2006**) Metallothioneins and zinc dysregulation contribute to neurodevelopmental damage in a model of perinatal viral infection. *Brain Pathol.* 16(1): 1–14
18. Hoffman KL, Hornig M, **Yaddanapudi K**, Jabado O, Lipkin WI (**2004**) A murine model for neuropsychiatric disorders associated with group A beta-hemolytic streptococcal infection. *J Neurosci.* 24: 1780–91
19. **Kavitha Y**, Manjunath R (**2004**) Induction of MHC 1 and thymic depletion due to replication of JEV in mouse brain. *Arch Virol.* 149: 2079–2093