SRINIVAS NAGARAJ BHARADWAJ M.S., Ph.D

(previously Srinivas Nagaraj) Assistant Professor Division of Translational Medicine, Department of Internal Medicine, Morsani College of Medicine, MDC 19 Room 4152, 12901 Bruce B. Downs Blvd. Tampa, FL 33612 Phone: 813-974-4585Fax: 813-905-9913 snagaraj@health.usf.edu

EDUCATION & TRAINING

INSTITUTION AND LOCATION	DEGREE	MM/YY	FIELD OF STUDY
St. Joseph's College, Bangalore, India	B.S	06/89-05/92	Microbiology,
Kasturba Medical College, Manipal, India	M.S	09/92-07/95	Human Anatomy
St. John's Medical College Bangalore, India	Ph.D.	10/96-05/01	Medicine
University Clinic I, Bonn, Germany	Postdoctoral training	10/01-02/04	Immunology
H. Lee Moffitt Cancer Center, Tampa, USA	Postdoctoral training	03/04-05/07	Immunology

EXPERIENCE

Research	
12/2009 - current	Assistant Professor, Dept. of Internal Medicine, Dept. of Molecular Medicine USF MCOM.
	Assistant Professor, USF, COPT, College of Pharmacy, USF Health, Tampa, FL Member, H. Lee Moffitt Cancer and Research Institute Tampa, FL
05/2007 - 11/2009	Research Assistant Professor, H. Lee Moffitt Cancer Tampa, College of Medicine, University of South Florida, Florida, Tampa
02/2004 - 05/2007 10/2001 - 02/2004	Postdoctoral Fellow, H. Lee Moffitt Cancer, Tampa, Florida, USA Scientist, Immune and Gene therapy lab, Internal Medicine I, Uni-Clinic, Bonn,
	Germany
10/1995 - 10/ 2001	Lecturer in Anatomy, St. John's Medical College, Bangalore, India
06/1993 - 06/1995	Lutor, Kasturba Medical College, MAHE (honorary) Manipal, India
Teaching	
12/2009 - current	Assistant Professor, Dept. of Internal Medicine, USF College of Medicine Tampa,
10/1995 - 10/2001	Lecturer in Anatomy St. John's Medical College, Bangalore, India
06/1993 - 06/1995	Tutor, Kasturaba Medical College, MAHE (nonorary) Manipal, India
Service	
2014- current	Elected member of USF MCOM MD Admissions Committee
2011- current	Director Nanomedicine Core
2010 - current	PhD candidate interview committee
2013- current	Academic Performance Review Committee MCOM and COPT
2012- 2014	Elected member Financial Oversight Committee, USF Health
2012 - 2013	Research Committee, USF Health
2011 - 2014	Appointed Faculty Council Member, USF

Leadership roles

2011- cu	rrent Direct	or Nanomedicine Core
2011 - cu	rrent PhD	candidate interview committee
2012	Co- C	hair Nano collaborative meeting
2011- cu	rrent Co Co	ourse Director GMS 6101 and GMS 7930
2013- cur	rent Direct	or BMS 6140 Musculoskeletal course (MD, DPT and IMS students)
2013- curi	rent Direct	or Preclerkship Structural Integration

HONORS

- National merit Scholarship
- FAGE 1995, Fellow of Academy of General Education, Manipal, India
- Young Scientist fellowship to attend the 10th ICHG at Vienna, Austria, May 2001
- Travel grant fellowship by the University Grants Commission, to attend 10th ICHG at Vienna, Austria, May 2001
- AACR-Busch Scholar-in-Training Award April 2007
- AAI Junior Faculty award 2009-2013
- Keystone Symposia Scholarship 2010

INTERESTS

Inflammation, myeloid cell immunology and nanomedicine

MEMBERSHIP

American Association of Cancer Research #118467 American Association of Immunologists # 212724 American Association for Advancement of Science

REVIEWER

Journals: Journal of Immunology Cancer Research Clinical Cancer Research Drug Delivery International Journal of Cancer Nature Medicine Journal of Experimental Medicine PLOS one Cytotherapy Vaccine

Consultant Citi Health investment group

Study section

Neuroblastoma Panel – CDRMP MRC, UK Science Foundation, Italy

Graduate / Ph.D Committee

2014- Vivianna Sampoya – SIPAIID Graduate student

2014 – Goel – Masters Student

- 2014 Ryan SIPAIID Graduate student
- 2012 Jessica Heinrichs Molecular medicine Graduate Student
- 2010- Yvonne Davis SIPAIID Graduate student
- 2011- Michael Cheung SIPAIID Graduate student

Research faculty and postdoctoral Fellows

2010- present	Allison Nelson
2012- present	Monica
2010-2012	Christina McMillan
2011- 2012	Sajitha Nair

Collaborations

Dr. Subhra Mohapatra – Molecular Medicine, USF, Tampa, FL

Dr. Shyam Mohapatra – Internal Medicine, USF, Tampa, FL

Dr. Gabrilovich – Moffitt Cancer Center, Tampa, FL

- Dr. Yu- Moffitt Cancer Center, Tampa, FL
- Dr. Lesley Cotrell, WVU, Morgantown, WV
- Dr. John Hadden IRX therapeutics

A.RESEARCH

Research support

Ongoing

2015 - HHSN261201500065C (NCI); A fiber--inspired smart scaffold for expanding cancer stem cells. Role: Co-I

2013 - USF Research Support - Mechanism of myeloid cell mediated tumor escape Role: PI

Pending

- 2015- Microfluidic-Acoustic Biosensing-Multicell Tumoroid Platform Targeting TM Role: Co-I
- 2015- Atrial natriuretic peptide receptor signaling and chronic lung inflammation Role: PI
- 2015- (JEK Discovery Science): Multifunctionalized Phospholipid Micellar Nanoparticles for Cell-targeted Inhibition of Chronic Lung Inflammation Role: PI
- 2015- Multicell perfused and biosensible tumoroids for anti-cancer drug discovery Role: PI
- 2015- R21: Immune modulation of Myeloid Derived Suppressor cells Role: PI
- 2015- Targeted virotherapy for metastatic lung cancers Role: Co-I

Completed

2004 - 2009	Correction of dendritic cell defect Co-investigator 5R01CA084488 2004-
2009 - 2013	Nanocenter Co-investigator 5P30HL101265-02 2009-2012
2013 – 2014	New Researcher grant Role of miR in cancer induced immune suppression

Patent:

No.: 11B188PR, A Method of Modulating Immune senescence

PEER- REVIEWED PUBLICATIONS



Citation Index 23 and i10 index - 27

https://scholar.google.com/citations?user=0sKv1igAAAAJ&hl=en

Contribution to Science

1. My early pioneer publications on myeloid cells discovered a group of immature myeloid cells with suppressive properties and involved in T cell tolerance in cancer. These studies have led to research on Myeloid suppressive Cells (MDSC) not only in cancer but all pathologically conditions. The following publications document evidence and ground breaking research on mechanism of T cell mediated tolerance in cancer. I served as the primary investigator or co-investigator in all of these studies.

a. Nagaraj S, Kusmartsev S, Gabrilovich DI. Tumor--associated CD8+ T cell tolerance induced by bone marrow--derived immature myeloid cells. J Immunol. 2005 Oct 1;;175(7):4583--92. PubMed PMID: 16177103.

b. Nagaraj S, Gupta K, Pisarev V, Kinarsky L, Sherman S, Kang L, Herber DL, Schneck J, Gabrilovich DI. Altered recognition of antigen is a mechanism of CD8+ T cell tolerance in cancer. Nat Med. 2007 Jul;;13(7):828--35. Epub 2007 Jul 1. PubMed PMID: 17603493.

c. Nagaraj S, Schrum AG, Cho HI, Celis E, Gabrilovich DI. Mechanism of T cell tolerance induced by myeloid--derived suppressor cells. J Immunol. 2010 Mar 15;;184(6):3106--16. PMC2832724 d. Nagaraj S*, Nelson A, Youn JI, Cheng P, Quiceno D, Gabrilovich DI. Antigen--specific CD4(+) T cells regulate function of myeloid--derived suppressor cells in cancer via retrograde MHC class II signaling Cancer Res. 2012 Feb 15;;72(4):928--38. PMC4062074 e. Nagaraj S, Youn JI, Collazo M, Gabrilovich DI. Subsets of myeloid--derived suppressor cells in tumor--bearing mice. J Immunol. 2008 Oct 15;;181(8):5791--802. PMC 2575748.

f. Cheng P, Corzo CA, Luetteke N, Yu B, Nagaraj S, Bui MM, Ortiz M, Nacken W, Sorg C, Vogl T, Roth Gabrilovich DI. Inhibition of dendritic cell differentiation and accumulation of

myeloid-- derived suppressor cells in cancer is regulated by S100A9 protein. J Exp Med. 2008 Sep 29;;205(10):2235--49. PMC2556797

g. Herber DL, Cao W, Nefedova Y, Novitskiy SV, Nagaraj S, Tyurin VA, Corzo A, Cho HI, Celis E, Lennox B, Knight SC, Padhya T, McCaffrey TV, McCaffrey JC, Antonia S, Fishman M, Ferris RL, Kagan VE, Gabrilovich DI. Lipid accumulation and dendritic cell dysfunction in cancer. Nat Med. 2010 Aug;;16(8):880-- 6. PMC2917488.

Patent No.: 11B188PR, A Method of Modulating Immunesenescence

2. As both a PI and Co--PI we found that cancerous and inflammatory conditions push the over production of MDSC to encounter hostile conditions, necessitated by chemokines, cytokines and other tumor derived factors, thereby breaking the balance in cell numbers. The following studies have

discovered ways of modulating the immune suppressive cells leading to differentiation of the suppressive cells, altering their suppressive function and correcting the myeloid cell defect.

a. Nagaraj S, Youn JI, Weber H, Iclozan C, Lu L, Cotter MJ, Meyer C, Becerra CR, Fishman M, Antonia S, Sporn MB, Liby KT, Rawal B, Lee JH, Gabrilovich DI. Anti--inflammatory triterpenoid blocks immune suppressive function of MDSCs and improves immune response in cancer. Clin Cancer Res. 2010 Mar 15;;16(6):1812--23. PMC2840181

b. Ramakrishnan R, Assudani D, Nagaraj S, Hunter T, Cho HI, Antonia S, Altiok S, Celis E, Gabrilovich DI. Chemotherapy enhances tumor cell susceptibility to CTL--mediated killing during cancer immunotherapy in mice. J Clin Invest. 2010Apr;;120(4):1111--24. PMC2846048

c. Nagaraj S, Pisarev V, Kinarsky L, Sherman S, Muro--Cacho C, Altieri DC, Gabrilovich DI. Dendritic cell--based full--length survivin vaccine in treatment of experimental tumors. J Immunother. 2007 Feb--Mar;;30(2):169--79. PubMed PMID: 17471164.

d. Nefedova Y, Nagaraj S, Rosenbauer A, Muro--Cacho C, Sebti SM, Gabrilovich DI. Regulation of dendritic cell differentiation and antitumor immune response in cancer by pharmacologic-- selective inhibition of the janus--activated kinase 2/signal transducers and activators of transcription 3 pathway.Cancer Res. 2005 Oct 15;;65(20):9525--35. PubMed PMID: 16230418

e. Nagaraj S*, Nelson A, Youn JI, Cheng P, Quiceno D, Gabrilovich DI. Antigen--specific CD4(+) T cells regulate function of myeloid--derived suppressor cells in cancer via retrograde MHC class II signaling. Cancer Res. 2012 Feb 15;;72(4):928--38. PubMed PMID: 22237629.

3. My collaborative efforts have contributed to the role played by MDSC in non cancerous inflammatory conditions. This studies suggest that these cells might have evolved as a regulatory component of the immune system play a role in asthma, angiogenesis, GVHD and sepsis.

a. Mallela J, Ravi S, Jean Louis F, Mulaney B, Cheung M, Sree Garapati U, Chinnasamy V, Wang C, Nagaraj S*, Mohapatra SS, Mohapatra S. Natriuretic Peptide receptor a signaling regulates stem cell recruitment and angiogenesis: a model to study linkage between inflammation and tumorigenesis. Stem Cells. 2013 Jul;;31(7):1321--9. PMC3982194.

b. Wang D, Yu Y, Haarberg K, Fu J, Kaosaard K, Nagaraj S*, Anasetti C, Gabrilovich, Yu Z. Dynamic change and impact of myeloid--derived suppressor cells in allogeneic bone marrow transplantation in mice. Biol Blood Marrow Transplant. 2013 May;;19(5):692--702. PMC4011929

c. Delano MJ, Scumpia PO, Weinstein JS, Coco D, Nagaraj S, Kelly--Scumpia KM, O'Malley KA, Wynn JL, Antonenko S, Al--Quran SZ, Swan R, Chung CS, Atkinson MA, Ramphal R, Gabrilovich DI, Reeves WH, Ayala A, Phillips J, Laface D, Heyworth PG, Clare--Salzler M, Moldawer LL. MyD88--dependent expansion of an immature GR--1(+)CD11b(+) population induces T cell suppression and Th2 polarization in sepsis. J Exp Med. 2007 Jun 11;;204(6):1463--74. Epub 2007 Jun 4. PubMed PMID: 17548519.

Complete List of Published Work in MyBibliography:

http://www.ncbi.nlm.nih.gov/sites/myncbi/181k8ENYZDK/bibliography/40349332/public/?sort=date&dire cti on=ascending.

Book Chapters

Role of reactive oxygen species in T-cell defects in cancer in Tumor- induced Immune suppression 259-281 Springer

Myeloid derived suppressor cells Adv Exp Med Biol. 2007;601:213-23, Springer publications Dendritic Cells. Encylopedia of Medical Genomics and Proteomics 2006 http://www.dekker.com/sdek/abstract~db=enc~content=a713623336

Journals

The publications with <u>Nagaraj S</u>* are independent studies or collaborations as a senior author funded by research grants to Srinivas Nagaraj. The ideas are independent and/ or developed in the lab of Srinivas Nagaraj. Current name is Srinivas Nagaraj Bharadwaj

Mohapatra S, Nagaraj S, Mohapatra SS. <u>Nano/bio interface:impact on drug delivery</u> <u>applications.</u>Drug Deliv Transl Res. 2013 Aug;3(4):295-6. 1. PMID:25788278

<u>Nagaraj S</u>*, Youn JI, Gabrilovich DI. Reciprocal Relationship between Myeloid-Derived Suppressor Cells and T Cells. *J Immunol*. 2013 Jul 1;191(1):17-23. PubMed PMID: 23794702; PubMed Central PMCID: PMC3694485.

Mallela J, Ravi S, Jean Louis F, Mulaney B, Cheung M, Sree Garapati U, Chinnasamy V, Wang C, <u>Nagaraj S*</u>, Mohapatra SS, Mohapatra S. Natriuretic Peptide receptor a signaling regulates stem cell recruitment and angiogenesis: a model to study linkage between inflammation and tumorigenesis. *Stem Cells.* 2013 Jul;31(7):1321-9. PubMed PMID: 23533187.

Wang D, Yu Y, Haarberg K, Fu J, Kaosaard K, <u>Nagaraj S*</u>, Anasetti C, Gabrilovich D, Yu XZ. Dynamic change and impact of myeloid-derived suppressor cells in allogeneic bone marrow transplantation in mice. *Biol Blood Marrow Transplant*. 2013 May;19(5):692-702. PubMed PMID: 3376089.

Nelson A, Nair S, <u>Nagaraj S*</u>. CD4(+) T cells suppress immune response to cancer: novel targets for antitumor efforts. *Expert Rev Clin Immunol.* 2012 Jul;8(5):401-3. PubMed PMID: 22882213.

<u>Nagaraj S*</u>, Gabrilovich DI. Regulation of suppressive function of myeloid-derived suppressor cells by CD4+ T cells. *Semin Cancer Biol.* 2012 Aug;22(4):282-8. PubMed PMID: 22313876.

<u>Nagaraj S*</u>, Nelson A, Youn JI, Cheng P, Quiceno D, Gabrilovich DI. Antigen-specific CD4(+) T cells regulate function of myeloid-derived suppressor cells in cancer via retrograde MHC class II signaling. *Cancer Res.* 2012 Feb 15;72(4):928-38. PubMed PMID: 22237629.

Brar T, <u>Nagaraj S*</u>, Mohapatra S. Microbes and asthma: the missing cellular and molecular links. *Curr Opin Pulm Med*. 2012 Jan;18(1):14-22. PubMed PMID: 22113000.

<u>Nagaraj S*</u>, Gabrilovich DI. Myeloid-derived suppressor cells in human cancer. *Cancer J*. 2010 Jul-Aug;16(4):348-53. PubMed PMID: 20693846.

Herber DL, Cao W, Nefedova Y, Novitskiy SV, <u>Nagaraj S</u>, Tyurin VA, Corzo A, Cho HI, Celis E, Lennox B, Knight SC, Padhya T, McCaffrey TV, McCaffrey JC, Antonia S, Fishman M, Ferris RL, Kagan VE, Gabrilovich DI. Lipid accumulation and dendritic cell dysfunction in cancer. *Nat Med.* 2010 Aug;16(8):880- 6. PubMed PMID: 20622859.

Ramakrishnan R, Assudani D, <u>Nagaraj S</u>, Hunter T, Cho HI, Antonia S, Altiok S, Celis E, Gabrilovich DI. Chemotherapy enhances tumor cell susceptibility to CTL-mediated killing during cancer immunotherapy in mice. *J Clin Invest.* 2010Apr;120(4):1111-24. PubMed PMID:20234093.

<u>Nagaraj S</u>, Youn JI, Weber H, Iclozan C, Lu L, Cotter MJ, Meyer C, Becerra CR,Fishman M, Antonia S, Sporn MB, Liby KT, Rawal B, Lee JH, Gabrilovich DI. Anti-inflammatory triterpenoid blocks immune suppressive function of MDSCs and improves immune response in cancer. *Clin Cancer Res*. 2010 Mar 15;16(6):1812-23. PubMed PMID: 20215551.

<u>Nagaraj S</u>, Schrum AG, Cho HI, Celis E, Gabrilovich DI. Mechanism of T cell tolerance induced by myeloid-derived suppressor cells. *J Immunol.* 2010 Mar 15;184(6):3106-16. PubMed PMID:20142361.

<u>Nagaraj S*,</u> Collazo M, Corzo CA, Youn JI, Ortiz M, Quiceno D, Gabrilovich DI. Regulatory myeloid suppressor cells in health and disease. *Cancer Res*. 2009 Oct 1;69(19):7503-6. PubMed PMID: 9752086.

Gabrilovich DI, <u>Nagaraj S</u>. Myeloid-derived suppressor cells as regulators of the immune system. *Nat Rev Immunol.* 2009 Mar;9(3):162-74. PubMed PMID: 19197294.

<u>Nagaraj S,</u> Youn JI, Collazo M, Gabrilovich DI. Subsets of myeloid-derived suppressor cells in tumorbearing mice. *J Immunol*. 2008 Oct 15;181(8):5791-802. PubMed PMID: 18832739.

<u>Nagaraj S</u>, Neumann J, Winzen B, Frank S, Ziske C, Sievers E, Koch N, Schmidt-Wolf IG. Pancreas carcinoma antigen fused to invariant chain elicits T-cell response and tumor growth inhibition. *Pancreas*. 2008 Oct;37(3):321-7. PubMed PMID: 18815556.

Cheng P, Corzo CA, Luetteke N, Yu B, <u>Nagaraj S</u>, Bui MM, Ortiz M, Nacken W, Sorg C, Vogl T, Roth J, Gabrilovich DI. Inhibition of dendritic cell differentiation and accumulation of myeloid-derived suppressor cells in cancer is regulated by S100A9 protein. *J Exp Med.* 2008 Sep 29;205(10):2235-49. PubMed PMID: 18809714. *Also featured in Nature Reviews Immunology, published online 10 Oct 2008*

<u>Nagaraj S</u>, Gabrilovich DI. Tumor escape mechanism governed by myeloid-derived suppressor cells. *Cancer Res*. 2008 Apr 15;68(8):2561-3. PubMed PMID: 18413722.

Ziske C, Tiemann K, Schmidt T, <u>Nagaraj S</u>, Märten A, Schmitz V, Clarenbach R, Sauerbruch T, Schmidt-Wolf IG. Real-time high-resolution compound imaging allows percutaneous initiation and surveillance in an orthotopic murine pancreatic cancer model. *Pancreas*. 2008 Mar;36(2):146-52. PubMed PMID: 18376305.

<u>Nagaraj S,</u> Gabrilovich DI. Myeloid-derived suppressor cells. *Adv Exp Med Biol.* 2007;601:213-23.Review. PubMed PMID: 17713008.

<u>Nagaraj S</u>, Gupta K, Pisarev V, Kinarsky L, Sherman S, Kang L, Herber DL, Schneck J, Gabrilovich DI. Altered recognition of antigen is a mechanism of CD8+ T cell tolerance in cancer. *Nat Med.* 2007 Jul;13(7):828-35. Epub 2007 Jul 1. PubMed PMID: 17603493. *Also featured in Nature Reviews Immunology 7. Aug 2007 p580 Research Highlights Nature Reviews Cancer. 7 Aug 2007p573 Research Highlights Molecular Therapy (2007)* **15** *9, 1575. Research Highlights Science 11 January 2008: Figure Vol. 319. no. 5860, pp. 154 – 156*

Dmitry Gabrilovich, **Srinivas Nagaraj,** Kapil Gupta and Jonathan Schneck Evaluation of antigen binding by CD8+ T cells after in vivo treatment with myeloid derived suppressor cells : **Nature protocols**

Srinivas Nagaraj and Dmitry Gabrilovich Evaluation of nitrotyrosine expression on the surface of CD8+ T cells **Nature protocols**

Delano MJ, Scumpia PO, Weinstein JS, Coco D, <u>Nagaraj S</u>, Kelly-Scumpia KM, O'Malley KA, Wynn JL, Antonenko S, Al-Quran SZ, Swan R, Chung CS, Atkinson MA, Ramphal R, Gabrilovich DI, Reeves WH, Ayala A, Phillips J, Laface D, Heyworth PG, Clare-Salzler M, Moldawer LL. MyD88-dependent expansion of an immature GR-1(+)CD11b(+) population induces T cell suppression and Th2 polarization in sepsis. *J Exp Med.* 2007 Jun 11;204(6):1463-74. Epub 2007 Jun 4. PubMed PMID: 17548519.

<u>Nagaraj S</u>*, Herber DL, Djeu JY, Gabrilovich DI. Mechanism and therapeutic reversal of immune suppression in cancer. *Cancer Res.* 2007 Jun 1;67(11):5067-9. PubMed PMID: 17545581.

<u>Nagaraj S</u>, Pisarev V, Kinarsky L, Sherman S, Muro-Cacho C, Altieri DC, Gabrilovich DI. Dendritic cell-based full-length survivin vaccine in treatment of experimental tumors. *J Immunother*. 2007 Feb-Mar;30(2):169-79. PubMed PMID: 17471164.

Nefedova Y, <u>Nagaraj S</u>, Rosenbauer A, Muro-Cacho C, Sebti SM, Gabrilovich DI. Regulation of dendritic cell differentiation and antitumor immune response in cancer by pharmacologic-selective inhibition of the janus-activated kinase 2/signal transducers and activators of transcription 3 pathway. *Cancer Res.* 2005 Oct 15;65(20):9525-35. PubMed PMID: 16230418;

<u>Nagaraj S</u>, Kusmartsev S, Gabrilovich DI. Tumor-associated CD8+ T cell tolerance induced by bone marrow-derived immature myeloid cells. *J Immunol.* 2005 Oct 1;175(7):4583-92. PubMed PMID: 16177103.

Also featured in Journal of Immunology 2005 Oct 1; 175: 4159-4160. Also featured in Nature Reviews Immunology 5. Nov 2005 831 Research highlights <u>Nagaraj S</u>, Ziske C, Schmidt-Wolf IG. Human cytokine-induced killer cells have enhanced in vitro cytolytic activity via non-viral interleukin-2 gene transfer. *Genet Vaccines Ther.* 2004 Aug 25;2(1):12. PubMed PMID: 15329148.

Ziske C, <u>Nagaraj S</u>, Märten A, Gorschlüter M, Strehl J, Sauerbruch T, Abraham NG, Schmidt-Wolf IG. Retroviral IFN-alpha gene transfer combined with gemcitabine acts synergistically via cell cycle alteration in human pancreatic carcinoma cells implanted orthotopically in nude mice. *J Interferon Cytokine Res*. 2004 Aug;24(8):490-6. PubMed PMID: 15320962.

Gross C, Schmidt-Wolf IG, <u>Nagaraj S</u>, Gastpar R, Ellwart J, Kunz-Schughart LA, Multhoff G. Heat shock protein 70-reactivity is associated with increased cell surface density of CD94/CD56 on primary natural killer cells. *Cell Stress Chaperones*. 2003 Winter;8(4):348-60. PubMed PMID: 15115287.

<u>Nagaraj S</u>, Ziske C, Schmidt-Wolf IG. Dendritic cell, the immunotherapeutic cell for cancer. **Indian J Med Res**. 2004 Apr;119(4):133-8.

<u>Srinivas N</u>, Sayee R.. Anatomical causes in patients with bad obstetric history. **Journal of Anatomical Society of India**. 52, June 2002

Rema Devi , <u>Srinivas N.,</u> Sayee R. BOH and infectious causes. **International Journal of Human Genetics:** 12: (4) 269-271.Dec 2002

<u>Srinivas Nagaraj</u> and Sayee Rajangam Cytogenetic studies in patients with bad obstetric history. **European Journal of Human Genetics** Vol 9, Supplement 1, May 2001, 150

Papers and invited talks (selected)

- Srinivas Nagaraj Role of NPRA in MDSC mediated suppression AAI, Hawaii May 2013
- Srinivas Nagaraj MHC II retrograde signaling in MDSC AAI, May 2012
- Srinivas Nagaraj Role of NPRA in MDSC AAI ,May 2011
- Srinivas Nagaraj Myeloid Derived Suppressor Cells SIPAIID, Florida March 2011

• **Srinivas Nagaraj** Myeloid Derived Suppressor Cells Tumor microenvironment Network, New York May 2010

• **Srinivas Nagaraj**, David Quiceno, Pingyan Cheng, Dmitry I. Gabrilovich Regulation of Myeloid Derived Suppressor Cell Activity in Cancer by CD⁴⁺ T cells. Talk Keystone Symposia, Feb 2010.

• **Srinivas Nagaraj,** Hyun-II Cho, Esteban Celis, Dmitry I. Gabrilovich. Mechanism of MDSC induced tolerance in cancer . Talk AAI, May 2009 Seattle. USA – Junior Faculty travel Award

• **Srinivas Nagaraj,** Hyun-II Cho, Esteban Celis, Dmitry I. Gabrilovich. Mechanism of MDSC induced tolerance in cancer . Talk Symposium on Regulatory Myeloid Suppressor Cells in Health and Disease, Clearwater, FI, March 2009

• Srinivas Nagaraj, Kapil Gupta, Vladimir Pisarev, Leo Kinarsky, Simon Sherman, Loveleen Kang, Donna Herber, Jonathan Schneck, Dmitry I. Gabrilovich. Mechanism of CD8⁺ T cell tolerance in cancer mediated by myeloid derived suppressor cells. Talk AACR, April 2007 Los Angeles. USA – Scholar in training Award

• Nagaraj S, Kusmartsev S, Gabrilovich D Mechanism of CD8+ T cell tolerance induced by bone marrow derived immature myeloid cell Talk AAI, May 2006 Boston, USA

• **Cesar Alexander Corzo**, Nagaraj S, Kusmartsev S, Gabrilovich Role of reactive oxygen species in immune suppression in cancer. AAI, May 2006 Boston, USA

• **Nagaraj S**, Kusmartsev S, Gabrilovich D Tumor associated CD8+ T cell tolerance induced by bone marrow derived immature myeloid cells. ISBTc Washington DC, Oct 2005

• Nagaraj S, **Kusmartsev S, Gabrilovich D** T cell tolerance induced by immature myeloid cells in cancer. Talk AACR, April 2005 Anaheim. USA

• **Srinivas Nagaraj**, Nicholas Williams, Amsler Rosenbauer, Vladimir Pisarev, Dario Altier, Dmitry I Gabrilovich Dominant- negative survivin in cancer immunotherapy. AACR, April 2005 Anaheim,. USA

• **Srinivas Nagaraj**, Amsler Rosenbauer, Vladimir Pisarev, Dario Altieri,Dmitry I Gabrilovich Immunotherapeutic effect of dominant negative survivin at the 3rd Molecular targets in cancer therapy, St.Pete, Florida, USA 2004

• **Srinivas Nagaraj**, Bettina Winzen, Juergen Neumann, Norbert Koch, Ingo G.H. Schmidt-Wolf Class II associated invariant chain –C2GnT epitope against pancreatic carcinoma, ASGT Washington DC, 2003. Molecular Therapy Volume 7, Issue 5, Supplement 1 (May 2003)

• **Nagaraj S**, Ziske C, Schmidt-Wolf IG Cytokine-induced killer cells have enhanced cytolytic activity via non-viral interleukin-2 gene transfer. DGHO Basel, Switzerland 2003

• **Nagaraj S**, Märten A, Strehl J, Schmidt-Wolf I Transfection of DC for efficient antigen presentation at the 7th International Symposium on Dendritic cells, Bamberg, Germany 2002

• Buttgereit P, Schakowski F, **Nagaraj S**, Märten , Ziske C, Gorschlüter M, Schmidt-Wolf IGH. Non-viral transfection of CD3+ CD56+ enriched immunologic effector cells. DGHO, Munich, Germany 2002

B.TEACHING

Teaching Interests

Anatomy – **Initial** training in masters and PhD has given me an opportunity to teach different aspects of Anatomy including Gross, Neuro, Embryology and Histology through Active Learning which includes Problem-based, Self-based or Small group teaching

Immunology and Cancer biology – The experience gained during postdoctoral training at University Clinic, Bonn, Germany and Moffitt Cancer Center and currently my lab at USF, MCOM has amalgamated my research skills in Immunology and Cancer Biology. This has given me the expertise to actively involve students and develop teaching in current concepts and advances in Cancer and Immunology.

B.1. COURSES TAUGHT

2010- current MD program, USF, MCOM

BMS6041.721M12: Medical Sciences 5 BMS6639.714M12: Med Sci 4: GI, Renal, Endocrine BMS6640.711M12: Med Sci 1: Musculoskeletal – **Course Director 2013** BMS6641.712M12: Med Sci 2: Neurological System Integrated Preclerkship Director

BMS 6837.7 BMS6920.7- Evidence Based Medicine

BMS-6920- Colloqium

<u>2010-current - Masters, Ph.D., USF, MCOM</u> GMS 6001 - Foundation in Basic Medical Sciences GMS 6101-Cellular and Molecular Immunology, -**Course Director** GMS 7930 -Select topics in Immunology -**Course Director**

<u>2002-2010 -PhD and Masters University of Bonn, Medical College, Moffitt Cancer Center</u> Immunology

<u>1995 – 2002- MD, and Allied Biomedical Sciences</u> St. John's Medical College, Bangalore, India Gross Anatomy, Histology, NeuroAnatomy, Comparative Anatomy, Embryology

<u>1992-1995</u> *MD and Allied Biomedical Sciences Kasturaba Medical College, India* Gross Anatomy, Histology, NeuroAnatomy, Comparative Anatomy, Embryology

B.1.2. TEACHING AWARDS, DISTINCTIONS

<u>Teaching Awards and Other Recognition:</u> Best Teacher in Neuroanatomy -2000 Best Teacher 2001 –Evaluated by students

New Courses Developed:

Cellular and Molecular Immunology Musculoskeletal and Anatomy Year 1 MD Course 1- Reorganization

Scholarly Papers Published on Teaching in Your Field:

• Collaborating with stakeholders and Subject matter experts to Design Learning Modules for the Medical School Environment, Mckeown, **Bharadwaj, 2014** AECT14, FL

• Balasubramanyam V, **Srinivas N**, Sayee Rajangam, Flossie Jayakaran, Purushottam Manvikar, IM Thomas Video approach to Anatomy teaching - A theme presentation. Anatomica Karnataka Vol 1,2, June 2001

• Balasubramanyam V, **Srinivas N** Virtual Embryology on the net – A new dimension in embryology teaching Anatomica Karnataka Vol 1,2, June 2001

• Srinivas N, Balasubramanyam Computer Archival Systems

• Shubha R, Sayee Rajangam, **Srinivas N.** One Year curriculum in Anatomy - Student's view point Anatomica Karnataka Vol 1,1, June 2000

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