

CURRICULUM VITAE

Name: Praveenkumar Shetty

Campus Address: **Research Co-Ordinator/Professor**
Central Research Lab/Dept. of Biochemistry
SDM College of Medical Sciences and Hospital
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Adjunct Professor in Biochemistry, Manipal University, Manipal

Visiting Professor, Department of Molecular Medicine, University of North Texas Health Science Center (UNTHSC) at Fort Worth, Texas, USA

Date of Birth : 20-07-1971

Education:

Post Doctorate: UT Health Science Center at Tyler, Texas, USA - Lung Fibrosis, Lung Cancer -2005-2008
: UNT Health Science Center at Fort Worth, Texas, USA- Cancer Biology - 2008-2011

Ph. D: Biochemistry -2000

"Proteases, protease inhibitors and glycoproteins in oral fluids in health and diseases."

M.Sc. Medical Biochemistry. 1995

Teaching and Training Experience:

Twenty two years of teaching Medical, (PhD, Medical, Dentistry and Physiotherapy graduate and post graduate students. Teaching theory and practical core classes on Chemistry, Metabolism, Nutrition and Clinical Biochemistry to Graduate and Postgraduate students.

- Curriculum development of the I year BPT, BDS and MBBS Biochemistry courses, pre PhD and PhD students
- Assignment of lecturers for the core courses
- Administration of exams and assignment of final grades

Worked as Examiner of Medical Biochemistry for Karnataka University, Dharwad, Rajiv Gandhi University of Health Sciences, Bangalore, Goa University and Manipal University

Recognised Ph.D guide in RGUHS Bangalore, Nitte University, Mangalore and BLDE University Vijayapura

Areas of Special Interest:

Proteases & Protease inhibitors
Carbohydrate chemistry
Metabolic Disorders-Screening and further work up.
Diagnostic enzymology
Lung injury and fibrinolysis
Breast cancer Research (Triple Negative Breast Cancer)
Prostate Cancer Research
miRNA mediated regulation of Oncogenes and Tumor Suppressors
Stem cell Biology
Rheumatoid Arthritis
Nanoparticle formulation and Characterization

Academic Appointments:

July 2016- Till date **Research Co-ordinator/Professor**, Central Research Laboratory/
Department of Biochemistry, SDM College of Medical Sciences & Hospital, Dharwad,
Karnataka
2011-June 2016 **Research Co-Ordinator/ Associate Professor**, Central Research
Laboratory/Department of Biochemistry, SDM College of Medical Sciences & Hospital,
Dharwad, Karnataka, India
2009- March 2011 Research Scientist, Dept. of Molecular Biology and Immunology, UNT
Health Science Center at Fort Worth
2008-June 2009 Post Doctoral Research associate, Department of Molecular Biology and
Immunology, University of North Texas Health Science Center at Fort Worth, TX, USA
2005-May 2008 Post Doctoral Research Associate, Department of Specialty Care Services,
Biomedical Research Center, The University of Texas Health Center at Tyler, TX, USA
2004-2005 Assistant Professor, Dept. of Biochemistry, SDM college of Medical Sciences,
Dharwad, Karnataka, India
2001-2003 Assistant Professor, Acting Head of the Dept. of Biochemistry, SDM college of
Dental Sciences, Dharwad, Karnataka, India
1996-2001 Lecturer, Dept. of Biochemistry, SDM college of Dental Sciences, Dharwad,
Karnataka, India
1995-1996 Research Associate, Department of Science and Technology, India

Honors/Awards

Alcon Research award, for Triple Negative Breast Cancer research from University of North
Texas Health Science Center-2009.

Tech Fort Worth Research Innovation award-2009.

Research award-2010 from Cancer Research Foundation of North Texas, USA

Invited Presentations at International meetings:

Presented research data on “Identification and Characterization of Biomarker and Therapeutic
Target for Triple Negative Breast Cancer” in Asia Pacific Clinical Oncologists conference-2016
held at Hotel Ashoka, New Delhi, India on 7-9th April 2016

Gave a presentation on “Characterization of Biomarker and Therapeutic Target for Triple Negative Breast Cancer” in Global Cancer Summit-2015 held at J.N.Tata Auditorium, Indian Institute of Science, Bengaluru, India on 18-20th November 2015

Invited speaker in Carcinogenesis 2015 International conference organized by Carcinogenesis Foundation, USA and ACTREC Mumbai “Molecular pathways to Therapeutics: Paradidgms and challngs in Oncology” 11-13th February 2015.

Invited speaker in 41st National Conference of Association of Clinical Biochemists of India, “Integration in Lab Medicine: The emerging Paradigm” held at AIIMS Jodhpur Rajasthan from 10-13th December,2014.

Gave a Lecture in 33rd Annual Convention of Indian Association for Cancer Research “Discovery, Innovation and Translation in Cancer Research” held in Rajiv Gandhi Center for Biotechnology, Thiruvananthapuram from 13-15th February, 2014.

Invited speaker in “Glycobiology of Cancer; Lectins as Tools and Targets” GCLTT 2013 (UK-India Education and Research Initiative) held in Karnataka University, Dharwad on 7-9th November 2013.

Worked as convenor and invited speaker in 33rd Annual Conference of Indian Association of Biomedical Scientists “Recent trends and advances in biomedical research-an integrated approach” held in Nitte University, Mangalore on November 1-3rd, 2012.

Reciprocal regulation of Her-2 and annexin A2 in Her-2 negative breast cancer.**Shetty PK** and Vishwanatha JK., Mechanisms and Models of Cancer held at Cold spring Harbour laboratories, New York, USA during August 2010.

Annexin A2 as a biomarker and potential therapeutic target for Triple Negative Breast Cancer.**Shetty PK** and Vishwanatha JK., 4th annual Texas Conference on Health Disparities held at University of North Texas Health Science Center at Fort Worth, USA during May 2009.

Attended Cellular energy metabolism and cancer symposium held in MD Anderson Cancer Research Institute, Houston, USA on April 3rd and 4th 2009.

Regulation of urokinase receptor expression by urokinase is through tyrosine phosphorylation of Phosphoglycerate kinase. **Shetty PK**, Velusamy T, Bhandary YP, Liu MC, Idell S, Shetty S. American Thoracic Society Conference held at Sanfransisco,USA during May 2007.

DNA damage in peripheral blood leucocytes in Tobacco users. **Shetty PK** and Pattabiraman TN. ACBI Conference held at Belgaum, India during December 2004.

DNA damage in squamous cell carcinoma.**Shetty PK** and Pattabiraman TN. ACBI conference held in Bangalore, India during January 2004.

Serum glycoproteins in Head and Neck Malignancy. **Shetty PK**, KeerthiN.andPattabiraman TN. ACBI Conference held at Jaipur, India during February 2003.

Salivary glycoproteins as indicators of oral diseases. **Shetty PK** and Pattabiraman TN. ACBI conference held at Nagpur, India during January 2002.

Salivary proteases and protease inhibitors. **Shetty PK** and Pattabiraman TN. ACBI conference held at Vellore, India during February 2000.

Peer-reviewed publications:

■ HLA-B*27Allele Subtype Prevalence and Disease Association of Ankylosing spondylitis among South Indian Population., VikramHaridas., **Praveenkumar Shetty.**, Nirmal Kumar M., Vasanthakumar KC., Kiran Haridas., Vitthal Khode., Anil Bargale., Indian Journal of Rheumatology (In press)

■ Cdc20directs proteasome-mediated degradation of the tumor suppressor SMAR1 in higher grades of cancer through the anaphase promoting complex., Debasish Paul, Suvankar Ghorai, US Dinesh, **Praveenkumar Shetty**, Samit Chattopadhyay and Manas Kumar Santra., **Cell Death and Disease** (2017) 8, doi:10.1038/cddis.2017.270

■ A microRNA/Ubiquitin Ligase feedback loop regulates Slug-mediated invasion in breast cancer., Rajesh Kumar Manne, Yashika Agrawal, Anil Bargale, Asha Patel, Debasish Paul, Neha Anilkumar Gupta, Srikanth Rapole, Vasudevan Seshadri, Deepa Subramanyam, **Praveenkumar Shetty** and Manas Kumar Santra., **Neoplasia**, 2017, Volume 19 Number xx pp. 483–495

■ Pyoderma gangrenosum in sjogrens syndrome and its successful treatment with topical application of Etanercept., VikramHaridas, **Praveenkumar Shetty**, Leonard Clinton Dsouza, Dinesh U. S, KiranHaridasand Anil Bargale, **International Journal of Rheumatic Diseases**. 2017 Apr 17. doi: 10.1111/1756-185X.13086

■ Effects of salivary e-cadherin (CDH1-160) gene promoter polymorphism on the risk of development of oral cancer in Indian origin., Karkera, Namratha; Guttal, Kruthika ; **Shetty, Praveen ;** Bargale, Anil ; Kulkarni, Raghavendra; Kulkarni, Bhushan; Hiremath, Shivaprakash., **International Journal of Current Research.**, 2017., Vol. 9, Issue, 04, pp.49449-49454.

■ Glucose Induced activation of canonical wnt signaling pathway in hepatocellular carcinoma is regulated by DKK4., SurbhiChouhan, Snahlata Singh, DiptiAthavale, Vimal Pandey, Jomon Joseph, Rajashekar Mohan, **Praveenkumar Shetty** and Manoj Kumar Bhat., **Scientific Reports** 6., DOI: 10.1038/srep27558

■ Annexin A2 and its Downstream IL-6 and HB-EGF as Secretory Biomarkers in the Differential Diagnosis of Her-2 Negative Breast Cancer., **Praveenkumar Shetty***¹, Vidya S Patil¹, Rajashekar Mohan, Leonard Clinton Desouza¹, Anil B¹, Basavraj R. Patil, Dinesh U. S, VikramHaridas, Srirang Kulkarni¹., **Annals of Clinical Biochemistry** 2016, 0(0) 1-9 DOI: 10.1177/0004563216665867

- Cell Surface Interaction of Annexin A2 and Galectin-3 Modulates Epidermal Growth Factor Receptor Signaling in Her-2 Negative Breast Cancer Cells., **PraveenkumarShetty**, Anil B, Basavraj R. Patil, Rajashekar Mohan, Dinesh U. S, JamboorK.Vishwanatha, Pramod B. Gai, Vidya S Patil, Amsavardani TS., **Mol Cell Biochemistry**. 2016, 411 (1), 221-233
- MIEN1, a novel interactor of AnnexinA2, promotes tumor cell migration by enhancing AnxA2 cell surface expression. MarilyneKpetemey, SubhamoyDasgupta, SmtithiRajendiran, Sushoban Das, Lee D Gibbs, **PraveenkumarShetty**, ZygmuntGryczynski, Jamboor K Vishwanatha., **Molecular Cancer**. 2015, 14 (1), 1
- Inhibition of Triple-negative and Herceptin-resistant Breast Cancer cell Proliferation and Migration by Annexin A2 antibodies. P Chaudhary, S I Thamake, **P Shetty**, J K Vishwanatha.,**British Journal of Cancer**, 111 (12), 2328-2341
- Reciprocal regulation of AnxA2 and EGFR with Her-2 in Her-2 negative and Herceptin-resistant breast cancer.**ShettyPraveenkumar**,Thamake Sanjay, Biswas S, Johansson S, Vishwanatha JK **PLOS ONE**.7(9): 2012, e44299. doi:10.1371/journal.pone.0044299
- Shwetha K. Shetty, Amarnath S. Marudamuthu, Daniel Abernathy, Rashmi S. Shetty, **PraveenkumarShetty**,Jian Fu, Steven Idell, Yashodhar P. Bhandary, HonglongJi, Ming-ChehLiu,andSreeramaShetty.,Regulation of Urokinase expression at the posttranscriptional level in lung epithelial cells, **Biochemistry**. 2012, 51, 205-213
- Signal transducer and activator of transcription 6 (STAT6) is a novel interactor of Annexin A2 in Prostate cancer cells. Susobhan Das, **PraveenkumarShetty**,MallikaValapala, SubhamoyDasgupta, ZygmuntGryczynski, and Jamboor K. Vishwanatha.,**Biochemistry**.2010, 49, 2216–2226
- Urokinase receptor expression involves tyrosine phosphorylation of phosphoglycerate kinase. **Shetty PK**,Velusamy T, Bhandary YP, Liu MC, Shetty S. **Mol Cell Biochem**. 2010 Feb;335 (1-2):235-47. PMID: 19784757
- Stabilization of uPA mRNA: a regulatory role of p53 in urokinase expression. **Shetty PK**, Velusamy T, Bhandary YP, Idell S, Shetty S. **American Journal of Respiratory Cell and Molecular Biol** .2008. 39, 364-372.
- Induction of tissue factor by urokinase in lung epithelial cells and in the lungs. Shetty S, Bhandary YP, Velusamy T, **Shetty PK**, Khalil B, Gyetko MR, Cines DC, Idell S, Neuenschwander PF, Clemens R, Gunther A, Abraham E and Shetty RS. **Am. J. Respir. Crit. Care Med.**, Volume 181, Number 12, June 2010, 1355-1366.
- Posttranscriptional Regulation of Plasminogen Activator Inhibitor-1 Expression in Human Pleural Mesothelial cells. Sreerama Shetty, ThirunavukkarasuVelusamy, Rashmi S Shetty, AmarnathSatheeshMarudamuthu, Shwetha K. Shetty, Galina Florova, Torry Tucker, Kathy Koenig, **PraveenkumarShetty**,Yashodhar P Bhandary and StevenIdell. **Am J Respir Cell Mol Biol**. 2010 Sep; 43(3):358-67.

- Posttranscriptional Regulation of uPAR Expression in Lipopolysaccharide induced Acute Lung Injury. Bhandary YP, Velusamy T, **Shetty PK**, Shetty RS, Idell S, Cines DB, Khalil B, Abraham E, Yuko T and Shetty S. *Am J Respir Crit Care Med.* 2009 Feb 15;179(4):288-98.
- Regulation of plasminogen activator inhibitor-1 expression by tumor suppressor protein p53. Shetty S, **Shetty PK**, Idell S, Velusamy T, Bhandary YP and Shetty RS. *J. Biol. Chem.* 2008, 283 (28), 19570-19580.
- Posttranscriptional regulation of urokinase receptor expression by heterogeneous nuclear ribonuclear protein C. Velusamy T, **Shetty PK**, Bhandary YP, Liu MC, Shetty S. *Biochemistry,* 200847 (24), 6508–6517.
- Regulation of urokinase receptor expression by protein tyrosine phosphatases. Shetty S, Velusamy T, Idell S, Tang H, **Shetty PK**. *Am J Physiol Lung Cell Mol Physiol.* 2007 Feb;292(2):L414-21.
- Regulation of urokinase receptor expression by p53: novel role in stabilization of uPAR mRNA. Shetty S, Velusamy T, Idell S, Shetty PK, Mazar AP, Bhandary YP, Shetty RS. *Mol Cell Biol.* 2007; 27:5607-18.
- Salivary proteolytic activities in gingivitis, periodontitis and diabetes mellitus, **Shetty PK** and Pattabiraman TN. *Indian Journal of Clinical Biochemistry,* 1998, 13(1), 46-51.
- Evaluation of glycoproteins as prognosticators in head and neck malignancy, Keerthi N, Kannan N, **Shetty PK**, *Indian Journal of Dental Research,* 2001,12(2).
- Salivary glycoproteins as indicators of oral diseases, *Indian Journal of Clinical Biochemistry,* **Shetty PK** and Pattabiraman TN. 2004, 19(1),97-101.

Details of Research Projects being implemented/ completed by the Investigator

***Financial support received**

Past : **Cancer Research Foundation of North Texas** (PI), 2009-2011. The research focus was on TNBC, towards understanding the mechanisms for prevalence of TNBC in African Americans (Health disparity) and to elucidate the signaling cascade at the molecular level.

ICMR Adhoc research project “Identification and characterization of novel biomarker and therapeutic target for triple negative breast cancer” (PI) 2012-2016

***Present :**

Advanced Research Unit RGUHS (2015-2017)

- Standardization of Ex-vivo cultured limbal epithelial stem cell transplantation-A collaborative study between Ophthalmologist and Cell Scientist (PI) 2015-2017

Rheumatoid Arthritis Research foundation,Hubli (PI) (private) 2016-2020:

- “Identification of Proinflammatory Regulators and their Role in Pathogenesis of Rheumatoid Arthritis”

Science and Engineering Research Board (SERB) DST, Government of India 2016-2018

- “Diagnostic and Therapeutic Implications of miRNA mediated regulation of Prostate cancer Progression”

Co-Ordinator BiSEP, KBITS Gov. of Karnataka 2017-2022

Academic funding from Department of IT/BT, Government of Karnataka for Biotechnology skill enhancement programme (BiSEP) in Cellular and Molecular Diagnostics Domain