




University Faculty Details Page on DU Web-site

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Title	Dr	First Name	Tapasya	Last Name	Srivastava	
Designation		ASSISTANT PROFESSOR				
Department		GENETICS				
Address		Department of Genetics University of Delhi South Campus Benito Juarez Road New Delhi-110021				
Phone No	Office	011-24117338, 24117155				
	Residence	-				
	Mobile					
	Fax					
	Email	tapasya@south.du.ac.in				
	Web-Page					
Educational Qualifications						
Subject		Institution		Year		Details
Ph.D.		All India Institute of Medical Sciences		2004		
MSc Biochemistry		Hamdard University		1998		Ist div
BSc Zoology		Delhi University		1996		Ist div
Any other qualification						
Organization / Institution		Designation		Duration		Role
All India Institute of Medical Sciences		Research Associate		2008-2009		Research and mentoring
All India Institute of Medical Sciences		Young Scientist fellow		2005-2008		Independent SERC-DST fast track project
Research Interests / Specialization						
Regulation of Hypoxia signaling Response to cellular stress and epigenetic regulation of genomic instability Modulation of drug response in hypoxic stress Cancer genetics						
Teaching Experience (Subject / Courses Taught)						
Regulation of Gene expression: Epigenetics Concepts in Biochemistry Molecular Biology: Replication, Recombination and Repair Cancer Biology and Genetics Immunology						
Honors & Awards						
Fellowship						
Indo-US Science and Technology Fellowship 2011 for conducting research work in University of Minnesota						
Young Scientist Fellowship awarded by Fast-track SERC-DST (2005-2008)						
Senior Research fellowship (2004) awarded by Council of Scientific & Industrial Research,						
Junior Research fellowship (1999-2001) by Lady Tata Memorial Trust, Mumbai, India						
Honours						

Elected member, National Academy of Medical Sciences

Awards

SERB Women's Excellence in science research award 2013 with grant-in-aid

INSA young scientist medal award for Medical Sciences 2010

Awarded the **Best Poster Award** in **International Symposium on Cancer Biology**, 2007 organized by National Institute of Immunology, New Delhi

Awarded the **Young Investigator Award** in **ACBICON 2007** organized by Association of Clinical Biochemist of India

Publications (LAST FIVE YEARS)

In Indexed/Peer Reviewed Journal (last 5 years) (*corresponding author)

Gulati P, Kaur P, Rajam MV, **Srivastava T**, Mishra P, Islam SS. Single-wall carbon nanotube based electrochemical immunoassay for leukemia detection. *Sensors and Actuators B* 2018;236:1-10. doi: 10.1016/j.ab.2018.07.020.

Gulati P, Kaur P, Rajam MV, **Srivastava T**, Ali MA, Mishra P, Islam SS. Leukemia biomarker detection by using photoconductive response of CNT electrode transfer induced Fermi level fluctuation. *Sensors and Actuators B* 2018 Volume 270, Pages 45-55. <https://doi.org/10.1016/j.snb.2018.05.019>.

Singh P, Jenkins LM, Horst B, Alers V, Pradhan S, Kaur P, **Srivastava T**, Hempel N, Györfy B, Broude EV, Lee NY, Mythreye K. Inhibin is a novel paracrine factor in glioma. *Cancer Res.* 2018 Mar 13. pii: canres.2316.2017. doi: 10.1158/0008-5472.CAN-17-2316. [Epub ahead of print] PubMed PMID: 29535220.

Pandey N, Pal S, Sharma LK, Guleria R, Mohan A, **Srivastava T***. SNP rs16969968 as a Strong Predictor of Nicotine Dependence and Lung Cancer Risk. *PLoS One* 2017 Nov 26;18(11):3073-3079. PubMed PMID: 29172281; PubMed Central PMCID: PMC5773793.

Prasad P, Mittal SA, Chongtham J, Mohanty S, **Srivastava T***. Hypoxia-Mediated Epigenetic Regulation of Stemness in Brain Tumor Cells. *Stem Cells.* Epub 2017 Apr 24. PubMed PMID: 28376560.

Pradhan S, Mahajan D, Kaur P, Pandey N, Sharma C, **Srivastava T***. Scriptaid overcomes hypoxia-induced cisplatin resistance in both wild-type and mutant cells. *Oncotarget* 2017;17(44):71841-71855. doi: 10.18632/oncotarget.12378. PubMed PMID: 27708247; PubMed Central PMCID: PMC5342127.

Pandey N, Dhiman S, **Srivastava T***, Majumder S*. Transition metal oxide nanoparticles are effective in inhibiting lung cancer cell survival in the hypoxic environment. *Journal of Cellular Biochemistry* 2016 Jul 25;254:221-30. doi: 10.1016/j.jcbi.2016.06.006. Epub 2016 Jun 4. PubMed PMID: 27270449.

Mittal S, Pradhan S, **Srivastava T***. Recent advances in targeted therapy for glioblastoma. *Expert Rev Neurother.* 2015; 15(8):935-46. doi: 10.1586/1547-0208.2015.15.8.935. PubMed PMID: 26118735.

Tyagi G, Pradhan S, **Srivastava T***, Mehrotra R*. Nucleic acid binding properties of allicin: spectroscopic analysis and estimation of anti-tumor potential. *Journal of Biophotonics* 2013 Oct 1;4(10):1016-1023. doi:10.1016/j.bbagen.2013.09.007. Epub 2013 Sep 13. PubMed PMID: 24041991.

Articles (last 5 years)

Chapters in books/ proceedings

1. **T Srivastava** and **LM Srivastava**; *Complement System; Textbook of Biochemistry, Biotechnology, Allied and Molecular Medicine*; ed: **GP Talwar**, SE 2016; New Delhi 4th edition, 2016: 1227-1237.

Conference Presentations (last 5 years)

As Invited Speaker at **World Neurocongress-2017**, Aligarh Muslim University, Aligarh, 9th and 10th December, 2017

As Invited Speaker at **Annual Meeting of Indian Academy of Neurosciences** in Odisha from October 29-31, 2017.

Jonitha Chongtham and Tapasya Srivastava Poster presentation Regulation of Cornichon Homolog Protein (CNIH1) in glioma. International congress on Neurobiology, **corresponding author**

As Invited Speaker at 1st international conference on 'Human Implications of Biotechnology', Centre for Biological Sciences, Central University of Jharkhand, Ranchi, India, 2015. As **Speaker**.

As Invited Speaker at 12th International Conference of Asian Clinical Oncology Society (ACOS) and 35th Annual Convention of Indian Association of Cancer Surgeons, New Delhi, April, 2016. As **Speaker**

Molecular signatures of cancer and biomarker discovery: an open field in a nutshell. 40th National Conference of Association of Clinical Biochemists, New Delhi, 2015. As **Speaker**

Invited lectures by academic institution (last five years)

Invited Speaker at National seminar on **Genes, Genetics and Epigenomics** being organised by **Human Genetics department, Guru Nanak Dev University, Amritsar, Punjab, India, 2015.**

Invited speaker at 3rd meeting on "Current Trends in Hypoxia Research" at **Indian Institute of Technology, New Delhi on 29th January, 2018**

Speaker at the Summer Undergraduate Research Programme (SURP-2015) **Lecture series at SURP-2015** programme at ACBR, 10th July 2015, Delhi University.

Ethical Issues in Biomedical Research. Continuing Medical Education (CME) Program on Research Methodology by Bakson Homoeopathic Medical College, Patna, Bihar, India, 2015.

Relevance of hypoxia in the tumor microenvironment. Lecture series at SURP-2013 programme at ACBR, Delhi University, New Delhi.

Addressing genetic heterogeneity in tumor therapy. Department of Biochemistry, Sir Ganga Ram Hospital, New Delhi, 2013

Tumor and its microenvironment: Two smoking guns, guilt by association. Hansraj College. Annual Day Celebration, Department of Zoology, 6th March, 2013.

Total Publication Profile

1. *Books/Monographs (Authored/Edited)*

Chapters in books/ proceedings

T Srivastava and LM Srivastava; Complement System; Textbook of Biochemistry, Biotechnology, Allied and Molecular Medicine; ed: GP Talwar, SE Hasnain and SK Sarin; Prentice-Hall of India Pvt Ltd, New Delhi 4th edition, 2016: 1227-1237.

Srivastava T, Chosdol K, Misra A, Chattopadhyay P, Sarkar C, Mahapatra AK and Sinha S. Molecular Staging of Glial Tumors. Proceeding of 14th International Conference on 'Emerging Frontiers in Management of Advanced Stage Cancers 2008.

T Srivastava and K Chosdol. The Muscular System; in E-book on Biochemistry, National Institute of Science Communication and Information Resources (Council of Scientific and Industrial Research, Govt of India), <http://nsdl.niscair.res.in/> 2007.

T Srivastava and K Chosdol. Clinical Enzymology; in E-book on Biochemistry, National Institute of Science Communication and Information Resources (Council of Scientific and Industrial Research, Govt of India), <http://nsdl.niscair.res.in/> 2007.

T Srivastava and S Sinha. The Complement System; in E-book on Biochemistry, National Institute of Science Communication and Information Resources (Council of Scientific and Industrial Research, Govt of India), <http://nsdl.niscair.res.in/> 2007.

T Srivastava and S Sinha Antigens: in E-book on Biochemistry, National Institute of Science Communication and Information Resources (Council of Scientific and Industrial Research, Govt of India), <http://nsdl.niscair.res.in/> 2007.

T Srivastava and S Sinha An Overview of Immunity: Innate And Adaptive Immunity: in E-book on Biochemistry, National Institute of Science Communication and Information Resources (Council of Scientific and Industrial Research, Govt of India), <http://nsdl.niscair.res.in/> 2007.

T Srivastava and S Sinha; Elementary Knowledge of Major Histocompatibility Complex and HLA Typing, in E-book on Biochemistry, National Institute of Science Communication and Information Resources (Council of Scientific and Industrial Research, Govt of India), <http://nsdl.niscair.res.in/> 2007

A Makkar T Srivastava and LM Srivastava ; Human Genome Project;. Biochemistry for Medical Students ed L.M. Srivastava. CBS publishers and Distributors, New Delhi, 1st edition, 2003: 225-230.

K.R. Raju and T Srivastava; Specialized Techniques: Immunodiffusion techniques, Radio Immunoassay (RIA) and ELISA; in Essentials of Practical Biochemistry ed L.M. Srivastava. CBS publishers and Distributors, New Delhi, 1st edition, 2003: 225-230.

B. Naganna and T. Srivastava ; Plasma Proteins in **Textbook of Biochemistry and Human Biology**. ed G.P. Talwar and L.M. Srivastava. Prentice Hall, 2003: 74.

LM Srivastava, V Anand and T. Srivastava; Complement system; in **Textbook of Biochemistry and Human Biology**. ed G.P. Talwar , L.M. Srivastava. Prentice Hall, 2003: 1020-1029.

2. All Research papers published in Refereed/Peer Reviewed Journals

Gulati P, Kaur P, Rajam MV, Srivastava T, Mishra P, Islam SS. Single-wall carbon nanotube based electrochemical immunoassay for leukemia detection. *Sensors* 2018;18(7):2020. doi: 10.1016/j.ab.2018.07.020.

Gulati P, Kaur P, Rajam MV, Srivastava T, Ali MA, Mishra P, Islam SS. Leukemia biomarker detection by using photoconductive response of CNTs. *Sensors and Actuators B* 2018 Volume 270, Pages 45-55. <https://doi.org/10.1016/j.snb.2018.07.020>

Singh P, Jenkins LM, Horst B, Alers V, Pradhan S, Kaur P, Srivastava T, Hempel N, Gyórfy B, Broude EV, Lee NY, Mythreye K. Inhibin is a novel prognostic marker for glioblastoma metastasis. *Cancer Res*. 2018 Mar 13. pii: canres.2316.2017. doi: 10.1158/0008-5472.CAN-17-2316. [Epub ahead of print] PubMed PMID: 29530000

Pandey N, Pal S, Sharma LK, Guleria R, Mohan A, Srivastava T*. SNP rs16969968 as a Strong Predictor of Nicotine Dependence and Lung Cancer. *PLoS One*. 2017 Nov 26;18(11):3073-3079. PubMed PMID: 29172281; PubMed Central PMCID: PMC5773793.

Prasad P, Mittal SA, Chongtham J, Mohanty S, Srivastava T*. Hypoxia-Mediated Epigenetic Regulation of Stemness in Brain Tumor Cells. *Stem Cells*. 2017 Apr 24. Epub 2017 Apr 24. PubMed PMID: 28376560.

Pradhan S, Mahajan D, Kaur P, Pandey N, Sharma C, Srivastava T*. Scriptaid overcomes hypoxia-induced cisplatin resistance in both wild-type and hypoxia-resistant glioblastoma cells. *Oncotarget*. 2017 Nov 1;7(44):71841-71855. doi: 10.18632/oncotarget.12378. PubMed PMID: 27708247; PubMed Central PMCID: PMC5342127.

Pandey N, Dhiman S, Srivastava T*, Majumder S*. Transition metal oxide nanoparticles are effective in inhibiting lung cancer cell survival in the presence of hypoxia. *Journal of Interpersonal Violence*. 2016 Jul 25;25(4):221-30. doi: 10.1016/j.jiv.2016.06.006. Epub 2016 Jun 4. PubMed PMID: 27270449.

Mittal S, Pradhan S, Srivastava T*. Recent advances in targeted therapy for glioblastoma. *Expert Rev Neurother*. 2015; 15(8):935-46. doi: 10.1586/1547-0207.2015.15.8.935. Review. PubMed PMID: 26118735.

Tyagi G, Pradhan S, Srivastava T* and Mehrotra R*, Nucleic acid binding properties of allicin; spectroscopic analysis and estimation of anti-tumor activity. *Journal of Food Biochemistry*. 2014;38(4):350-356,2014.

Srivastava T, Now Percieving: The complete genome package. *Biol Med J* 2014, 6:1 (Editorial)

Srivastava T, Molecular targets for therapy in malignant gliomas. *Journal of Proteins and Proteomics* 2010 Vol 1, No 2, 65-69.

Jha P, Agarwal S, Pathak P, Srivastava A, Suri V, Sharma MC, Chosdol K, Srivastava T, Gupta D, Gupta A, Suri A, Sarkar C. Heterozygosity status of EGFR and its correlation with EGFR expression and EGFR amplification in patients with astrocytic tumors: novel series from India. *Cancer Genet Cytogenet*. 2010 Apr 15;198(2):121-126. doi: 10.1016/j.cyg.2010.02.006. Epub 2010 Mar 10. PubMed PMID: 20370000

Pal A¹, Srivastava T¹, Sharma MK, Mehndiratta M, Das P, Sinha S, Chattopadhyay P. Aberrant methylation and transcriptional mobilization of ALU elements in glioblastoma cells under hypoxia. *J Cell Mol Med*. 2010 Nov;14(11):2646-54 [1 equal authorship]

Chosdol K, Misra A, Puri S, Srivastava T, Sarkar C, Mahapatra AK and Sinha S. Frequent LOH and altered expression of tumor suppressor FAT1 in glioblastoma. *Journal of Cellular Biochemistry* 2010;99:5.

Srivastava T, Chosdol K, Chattopadhyay P, Mahapatra AK, Sarkar C, Sinha S. Frequent loss of heterozygosity encompassing the hMLH1 locus in glioblastoma. *Journal of Cellular Biochemistry* 2010;99:249-55.

Srivastava T, Chosdol K, Misra A, Chattopadhyay P, Sarkar C, Mahapatra AK and Sinha S. The hMLH1 gene locus shows frequent loss of heterozygosity in glioblastoma. *Clin Biochem* Vol 27 Pg 354.

Srivastava T, Seth A, Datta K, Chosdol K, Chattopadhyay P, Sinha S. Inter-alu PCR detects high frequency of genetic alterations in glioma cells exposed to hypoxia. *Journal of Cellular Biochemistry* (4), 683–689. (Cover Page Article)

Srivastava T, Chattopadhyay P, Mahapatra AK, Sarkar C and Sinha S. Increased hMSH2 Protein Expression in Glioblastoma Multiforme. *J Neuro-Oncol* 2010;100:103-108.

Datta K, Shah P, Srivastava T, Mathur SG, Chattopadhyay P, Sinha S. Sensitizing glioma cells to cisplatin by abrogating the p53 response with anti-oxidant. *Int J Cancer* Aug; 11(8): 525-531.

Datta K, Mathur SG, Srivastava T, Shah P, Chattopadhyay P, Sinha S. Hydroxylamine potentiates the effect of low dose hydrogen peroxide in glioma cells. *Int J Cancer* 2003 Dec;35(12):1639-44.

Datta K, Babbar P, Srivastava T, Sinha S, Chattopadhyay P. p53 dependent apoptosis in glioma cell lines in response to hydrogen peroxide induced oxidative stress. *Int J Cancer* Feb;34(2):148-57.

Misra A, Chosdol K, Srivastava T, Chattopadhyay P, Mahapatra AK, Sarkar C, Sinha S. Glial tumorigenesis: Molecular alterations and identification of novel targets. *Int J Cancer* No.1, 49-72

3

- a) *Research papers published in Academic Journals other than Refereed/Peer Reviewed Journals*
- b) **Research papers published in Refereed/Peer Reviewed Conferences**

Pradhan S, Pandey N, Sharma MK, Srivastava T. Histone deacetylase inhibitor sensitizes non-Small cell lung cancer cells to low dose cisplatin. Int J Cancer 2012, Vol 8, Supplement 1; 41.

Pandey N, Mohan A, Srivastava T. Genetic variant in $\alpha 5$ cholinergic nicotinic receptor subunit gene CHRNA5 at 15q25 (rs16969968): a novel marker for glioma. Int J Cancer Jan 2012, Vol 8, Supplement 1; 41.

Prasad P, Sharma M, Sinha S, Srivastava T. Alu mediated regulation of FBOX proteins in hypoxia. J Can Res Ther. Jan 2012, Vol 8, Supplement 1; 41.

Srivastava T, Chosdol K, Sarkar C, Mahapatra AK, Sinha S. Heterozygosity analysis at mismatch repair gene loci reveals frequent LOH at 17p13.1 in glioma. Int J Cancer 2008 Vol. 27 – No. 3 (208).

Chosdol K, Misra A, Puri S, Srivastava T, Chattopadhyay P, Sarkar C, Mahapatra A, Sinha S. Low expression of FAT, a human homolog of the Drosophila fat gene, in glioma and astrocytic tumors. Clin Neuropathol, 2008 Vol. 27 – No. 3 (208).

Srivastava T, Chosdol K, Misra A, Chattopadhyay P, Sarkar C, Mahapatra AK and Sinha S. The hMLH1 gene locus shows frequent loss of heterozygosity in glioma. Indian J Clin Biochem Vol 27 Pg 354.

- c) **Research papers Published in Conferences/Seminar other than Refereed/Peer Reviewed Conferences (last 3 years only)**

Sharma MK, Srivastava T, Husain SA, Bhagat M, Chattopadhyay P, Chosdol K, Sinha S. 'A differential behavior of HIF1 α and its downstream targets in glioma cell lines varying in their p53 status' at Advances in Hypoxic Signaling: From Bench to Bedside, Banff, Alberta, Canada 2012

Srivastava T, Pal A, Sharma MK, Chattopadhyay P and Sinha S; An in vitro model of genomic instability under hypoxia reveals selection of p53 independent pathways. at Mechanisms and Models of Cancer, August 2010 at Cold Spring Harbor Laboratory, New York.

Public Service/University Service /Consulting Activity

Member of the Institutional Ethics Committee of University of Delhi South Campus (till 2017)
Member of the Institutional Committee of Stem Cell Research, National Institute of Immunology
Member of the Institutional Ethics Committee of CCRH, Ayush.

Professional Societies Memberships

Project (Major/Grants/Collaborations)

Research Grant

Elucidating the molecular basis and functional relevance of hypoxia-mediated aberrant methylation in glioma cells funded by SERB

Specificity and complexity of Integrin actin signaling in tumor cells funded by DBT

Targeting the tumor microenvironment: quest for novel targets for cancer therapy funded by ICMR 2012-2015

Other Details

Research Guidance

List against each head (If applicable)

1. *Supervision of awarded Doctoral Thesis: - **Three***
2. *Supervision of submitted Doctoral Thesis: **One***
3. *Supervision of Doctoral Thesis, under progress: **Three***
4. *Supervision of awarded M.Phil dissertations : **Two***
5. *Supervision of M.Phil dissertations, under progress: **None***

Signature of Faculty Member

Signature & Stamp of Head of the Department